THE IMPACT OF POLITICAL LEGITIMACY ON THE MANAGEMENT OF VETERINARY SERVICES IN THE FORMER STATE OF BOPHUTHATSWANA

by

ANIS MAHOMED KARODIA

BVSc and A.H. (BOM), ADV. DIP. PUB. ADMIN. (UNISA),

B. ADMIN (Hons) (UNISA), M.P.H. (MINNESOTA),

M.B.A. (B'SHIRE CUC and MANCOSA)

submitted in accordance with the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

PUBLIC MANAGEMENT AND ADMINISTRATION

at the

NORTH-WEST UNIVERSITY

Vaal Triangle Campus

PROMOTER: Prof. E. P. ABABIO

CO-PROMOTER: Prof. J. W. N. TEMPELHOFF

November 2007

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS
2008 04 02
Academic Administration
PO Box 1174
VANDERBIJLPARK
1900

ACKNOWLEDGEMENTS

This thesis has grown from the efforts of many people, to whom I am greatly indebted. It would be impossible to acknowledge all of them, because some of the ideas which are contained in this study have grown out of discussion held over the years. In that sense this thesis owes much to persons who helped to synthesize my views, and thus gave the intellectual impetus to my concern for the role of agriculture and rural development, and particularly extension, training and the political concerns within the former Bophuthatswana. All of these have contributed to the processes and dynamics of uneven development.

First among these, I would like to acknowledge my great debt to Professor E. P. Ababio for his unstinting advice, encouragement and guidance. Second, to Professor J.W.N. Templehoff for reading the initial manuscript and consenting to be the co-promoter of this study. His advice and encouragement together with his professional and intellectual inputs will always be highly valued.

In addition, I record my sincere thanks and appreciation to the following persons:

- Isabel Schmidt of the Development Research Department (Agricor), for undertaking the much-needed research on "Customer Needs and Perceptions" in order to prove some of the assertions I have made in this study.

- Miss Mavis Modiegi Manthi (Mehnaaz) in particular for her support, positive criticism and encouragement and also for typing the manuscript over a rather protracted period of time. Her advice, time and dedication, friendship, coupled with her resilience for hard work and professionalism made it possible for my completing the study. I remain eternally grateful to her and hope and pray that, this study will serve as a source of inspiration

in respect to her own academic pursuits. May Allah (God) always protect, guide, and afford her happiness in abundance.

- My family – wife Fahmida, son Saif and daughter Laila, who were a constant source of inspiration and encouragement throughout the long period of this study and my continuous absence from home, whilst gathering information and during the pre - and post -'revolutionary periods' that ultimately culminated in the popular uprising and overthrow of the Mangope regime. Without them this study would not have been completed.

- Last, but not least, the peasantry and subsistence farmers, state veterinarians and animal health officers and numerous agricultural workers whom I engaged for countless hours in very serious discussion. I dedicate this work to all of them.

- My intellectual and personal debts are many and too various. In this regard, I take this opportunity of thanking my friends and colleagues in the erstwhile Bophuthatswana for an experience which I shall never forget.

Lastly, I wish to place on record that the conclusions, recommendations, mistakes or errors are solely my own responsibility.

Dedication

I dedicate this effort to the memory of my late maternal Uncle (Father) Dr. M.M. (Chota) Motala, harassed, imprisoned and banned for his political beliefs, and one, who quite literally loved mankind. An outstanding intellectual, philanthropist, humanitarian and freedom fighter within the ranks of the African National Congress and society as a whole. Imprisoned by the apartheid government of the Republic of South Africa and charged with 156 other patriots for treason in the historic treason trial (1956-1961). It is also my bounden duty to dedicate this study to my elder brother Dr. Yusuf Mahomed Karodia, for his immense love, care, guidance and inspiration throughout the troubled times of our lives, living in abject poverty and growing up, in the ghettos of Greyville, Durban, against all odds. This has allowed both of us to emerge as persons and to understand the effects of poverty. Intellectually we have not always agreed on issues, even on the most mundane facets of life but, have always attempted to pursue the truth and justice, irrespective of the consequences, and to this end we will continue to do so. More importantly to the peasantry of the erstwhile Bophuthatswana and the present North West Province, in gratitude for the inspiration of their lives.

DECLARATION

I declare that "The impact of political legitimacy on the management of veterinary services in the former state of Bophuthatswana" is my work and that all the resources that I have used or quoted have been identified and acknowledged by means of complete reference.

ABSTRACT

This study attempts to capture the role and limits of the erstwhile Bophuthatswana state in implementing a set of reforms directed at the contradictions of uneven development, created by itself. This was undertaken on the basis of an internal hegemony perpetrated upon the rural masses, political patronage, and the role of the land-grabbing elite in supporting the regime on the basis of the resilience of its power. The realization that the Bophuthatswana state lacked the legitimacy, politically required to meet the aspirations of the majority of the people, in respect to sustained development on a democratic basis and, owing to a lack of popular support, resulted in a state which suffered from a fiscal, administrative and discontinuity crisis.

The agrarian crisis was characterized in its objective and subjective dimensions in terms of sharply uneven development among the rural power base and in terms of massive rural poverty and political tensions. On this basis the study attempted to look at the management and role of general agriculture, extension, state veterinary services, training, and the failure of rural development initiatives within the former Bophuthatswana. The research hypothesis of the study was that efficient and effective management of veterinary services in the erstwhile Bophuthatswana were flawed due to the legitimacy crisis in state power. An urgent need thus exists and existed for a unifying framework that is sufficiently comprehensive to explain the fact of underdevelopment, and yet simple enough to provide a set of guidelines that can and could be more specific in historical, geographical and ideological contexts, in order to serve as a basis for policy formulation and political action in an emerging new South Africa.

The hypothesis and research objectives of the study were validated by means of subjecting them to analysis and, in so doing qualitative open-ended interview schedules were utilized. In addition, discussion by the process of interview with personnel within specific organizations in the agricultural sector and other state

departments within the administrative services were conducted overtime. In further validating the hypothesis and research objectives, quantitative structured questions were constructed with the study leader and tested with a pilot group. Field work was conducted at selected sites within the erstwhile Bophuthatswana. The collection and use of statistical data made available by government institutions at the time was also utilized. These methodologies lent themselves to validating the hypothesis and research objectives.

The research findings highlight the outcomes of the research and verify the assertions made in this study. Amongst others, it was found that

- The Bophuthatswana state, entered into a fiscal administrative and discontinuity crisis from the very beginning of its so-called independence.
- Land reform and rural development programmes can be effective mechanisms in the creation of social articulation and mass based democratic regimes and that; this was not possible in the erstwhile Bophuthatswana; owing to a host of factors which were articulated and confirmed in the study.
- The study confirms that extension and training within agricultural development can play a pivotal role in accommodating change through the effective development of human resources.
- The study further confirms the view that non-formal education, extension, training and agricultural development must be pursued and coordinated, in the interest of a more acceptable society.
- Finally, the contradictions of the agrarian question and unequal development, against the equation of food and massive poverty, can only be expected to deepen in this region of South Africa.

The study concludes with a host of recommendations for veterinary services reform, and for further research.

TABLE OF CONTENTS

Acknowledgements ii

Dedication iv

Declaration v

Abstract vi

Table of Contents viii

List of Tables xvi

List of Figures xvii

CHAPTER 1: INTRODUCTION: PROBLEM STATEMENT AND RESEARCH OUTLINE

1.1 Introduction 1
1.2 Orientation and Problem Statement 1
1.3 Significance of Study 5
1.4 Research Questions 5
1.5 Research Objectives 6
1.6 Research Hypothesis 7
1.7 Research Method 7
1.7.1 Literature Study 7
1.7.2. Empirical Study 8
1.8. Chapter Outline 10

CHAPTER 2: THEORETICAL OVERVIEW OF LEGITIMACY AS A CONCEPT

2.1 Introduction. 11
2.2 Politics and Public Administration 13
2.3 Legitimacy and Human Rights 16
2.4 The Criteria for Statehood 21
2.4.1 Permanent Population 21
2.4.2 Defined Territory 22
2.4.3 Government 24
2.4.4 Capacity 24
2.4.5 Position: TBVC States 25

2.4.6 Bophuthatswana: Politics and its Emergence 27
2.5 Irredentism and Ethnicity 32
2.5.1 Subordination of the Rural Masses 36
2.5.2 Further Acts and Forms of State Repression 55
2.5.3 The Authoritative Force 61
2.5.4 Bafokeng Conflict 64
2.5.5 The Donkey Massacre 67
2.6 Conclusion 72

CHAPTER 3: GEOGRAPHICAL LOCATION, AND THE FISCAL AND ADMINISTRATIVE CRISIS OF THE FORMER BOPHUTHATSWANA STATE
3.1 Introduction 75
3.2 Geography, Location And Demographic Characteristics 76
3.3 Historical Review Of Bophuthatswana's Agriculture 79
3.3.1 Pre-Colonial: Up To 1884 79
3.3.2 Colonial Period: 1884 To 1936 80
3.3.3 Pre-Independence: 1936 To 1977 81
3.3.4 Independence: 1977 To 1994 83
3.3.5 Institutional Support 85
3.3.5.1 The Department Of Agriculture 85
3.3.5.2 Bophuthatswana Agricultural Development Corporation 85
3.3.5.3 The Agricultural Marketing Board 86
3.3.5.4 Agricultural Bank Of Bophuthatswana (Agribank) 87
3.3.5.5 Bophuthatswana National Parks Board And Agricultural Services 87
3.3.5.6 Land Allocation Board 88
3.3.5.7 Strategy 88
3.4 Fiscal Crisis 90
3.4.1 Reliance On Fiscal Aid From South Africa 91
3.4.2 Administrative Crisis 94
3.5 The Region's Future 97
3.6 Relevant Issues 99
3.6.1 Introduction 99
3.6.2 The African Peasantry As An Anomaly 101
3.6.3 The Role Of Women In Agricultural Development 105
3.6.4 Factors Affecting Access To Credit 108
3.6.5 Health Issues 110

3.6.6 Farm Animal Production 113
3.6.7 Some Issues In Agrarian Reform 115
3.6.8 Participatory Development 118
3.6.9 Synthesis Of Culture And Appropriate Technology 121
3.7 Conclusion 126

CHAPTER 4: FACTORS CONTRIBUTING TO THE PROCESS OF UNEVEN DEVELOPMENT IN AGRICULTURE WITHIN BOPHUTHATSWANA
4.1 Introduction 128
4.2 Problems in Respect to Agricultural Policy 129
4.3 The Key Role of Agriculture 139
4.4 Rise and Fall of The African Peasantry 141
4.4.1 Why Our Farmers Do So Badly 144
4.5 Implications of Under-Funding Research and Extension 146
4.5.1 Conceptual Framework 148
4.5.2 The Model 149
4.5.3 Effects of Under-Funding 151
4.5.4 The Consequences of Under-Funding 153
4.6 Manpower Problems 156
4.6.1 Manpower Problems and Shortages of Staff in the Agricultural and Extension Sectors 163
4.7 The Primacy of Industrialisation 168
4.7.1 Some Development Indicators 169
4.7.2 Causes for the Breakdown of Extension and Development 173
4.8 Financial Priorities 177
4.9 Personnel 178
4.9.1 Supervision 179
4.9.2 Planning and Structure 180
4.9.3 Extension Workers' Needs 180
4.10 Population Growth 182
4.10.1 Role of Agriculture 182
4.10.2 Policy Issues 185
4.10.3 Statistical Problems 187
4.10.4 Project Implementation Problems 187
4.10.5 Underdevelopment 188
4.10.6 Growth Parameters 190
4.10.7 Infrastructure 190

4.10.8 Co-Operatives 193
4.11 Conclusion 196

CHAPTER 5: POLICY ISSUES IN RESPECT TO AGRICULTURE

5.1 Introduction 197
5.2 Policy Issues in Respect to Extension 199
5.2.1 Goals and Objectives 200
5.2.2 Problems in Respect to Training 203
5.2.3 Training and Visit System 204
5.2.4 Subject-Matter Specialists 206
5.2.5 Manpower Ratios 208
5.2.6 Female Extension Agents. 209
5.2.7 Extension: Before 1988 210
5.2.8 Problems of the Role of Rural Development Managers 222
5.2.9 Veterinary Problems 224
5.2.10 Budgetary Constraints 228
5.2.11 Programme Extension and Audit and Evaluation Procedures 230
5.2.11.1 Assessing Needs 230
5.2.11.2 Constant Shifts in Extension Models 231
5.2.11.3 Failure of the Extension Services 232
5.2.11.4 Decentralization Problems and Uniform Policy 233
5.2.11.5 Constant Structural Changes 234
5.2.11.6 Poor Management of Extension 235
5.2.11.7 Information and Data Gathering 236
5.2.11.8 Planning 237
5.2.11.9 Partnership in Mission 237
5.2.11.10 Scientific and Technical Advice 238
5.2.11.11 Expertise within the Extension System 239
5.2.11.12 Public Management and Training for Extension 240
5.2.12 Audit and Evaluation Using the Programmed Approach 240
5.2.13 Policy Implementation in Other Homelands 245
5.3 Responsibilities for Inputs, Supplies and Credit 247
5.3.1 Some Examples from Bophuthatswana 248
5.3.2 Agricultural Extension in the Context of Service Centres 250
5.3.2.1 Community Development 251
5.3.2.2 The Sale of Inputs and Credit 252
5.3.2.3 Loans 253

5.3.2.4	Service Centre Experience in the Transkei	255
5.3.2.5	Service Centre Experiences in Kwa Zulu Natal	257
5.3.2.6	Uneven Development: Molopo and Ditsobotla Districts	259
5.3.2.7	Population	260
5.3.2.8	Employment	261
5.3.2.9	Income	262
5.3.2.10	Socio-Economic Situation	263
5.3.2.11	Illiteracy	265
5.3.2.12	Percentage Illiteracy in Some Southern African States	267
5.3.2.13	The Problems of Illiteracy in Bophuthatswana	268
5.4	Conclusion	272

CHAPTER 6: STATISTICAL PARAMETERS AND ISSUES OF TRAINING AND EDUCATION

6.1	Introduction	274
6.2	Categorisation Of Land Users	274
6.2.1	Rural Dwellers	276
6.2.2	Rural Producers	277
6.2.3	Farmers	278
6.3	Status Of The Agricultural Sector	278
6.3.1	Land Tenure	278
6.3.2	Land Usage	279
6.3.3	Number of Livestock	279
6.3.4	Cultivation of Crops	280
6.3.6	Income	281
6.3.7	Contribution to Gross Domestic Product (GDP)	282
6.4	Strengths Of Agriculture	283
6.4.1	Soils and Human Potential	283
6.4.2	Weaknesses of Agriculture	283
6.5	Farmer Training Needs	284
6.5.1	Training and Education	285
6.5.2	Conceptual Framework of Training	286
6.5.3	Effectiveness of Training	289
6.5.4	Assessing Needs in Programme Planning	292
6.5.5	Ethical Issues	294
6.5.6	Planning for Change	295
6.6	Philosophy of Extension	303

6.7	Principles of Extension	305
6.8	Definitions of Extension	306
6.9	Some Strategies.	309
6.9.1	Animation Rurale	310
6.10	In Search Of An Approach	311
6.10.1	The T&V Principle in a Unified Extension Service	312
6.10.2	Reasons for Unification	312
6.10.3	Agricultural Extension Exclusively	314
6.10.4	Training and Visit Extension Exclusively	315
6.10.5	Problems with the Application of Extension in Developing Countries	315
6.10.6	Extension Activities within a Systems Approach	316
6.10.7	Agricultural Extension in Israel	316
6.10.8	Supply of Agricultural Inputs and Credit	318
6.10.9	The Principle: Supply of Input and Credit	318
6.10.10	Problems with the Application of the Supply of Inputs and Credit Principle	319
6.10.11	Comparative Analysis: Inputs and Credit	320
6.10.12	Responsibilities for Inputs Supply and Credit	320
6.10.13	Responsibilities for Inputs Supplies and Credit	321
6.11	Delivery Systems For Rural And Integrated Development	322
6.12	Conclusion	324

CHAPTER 7: ANIMAL HEALTH SERVICES: CUSTOMER NEEDS AND PERCEPTIONS, 1992

7.1	Introduction	325
7.2	An Overview of The Survey/Study	325
7.2.1	Purpose of the Study	326
7.2.2	Time Frame of the Study	327
7.2.3	Report Format of the Study	327
7.2.4	District Summaries of the Study	327
7.2.5	Target Population of the Study	327
7.2.6	Sample Size of the Study and Interview Procedure	328
7.2.7	Fieldwork for the Study	328
7.2.8	Methodology of the Study	329
7.2.9	Data Analysis of the Study	330
7.2.10	Executive Summary - Salient Findings	331

7.3	Conclusions and Recommendations	334
7.3.1	Staff and Infrastructure	334
7.3.2	Access to Services	335
7.3.3	Livestock Ownership	336
7.3.4	Provision of Patent Stock Remedies	336
7.3.5	Skills Development	336
7.3.6	Dipping	337
7.3.7	Vaccination	338
7.3.8	Advice on the Treatment of Illness and Diseases	338
7.3.9	Assistance with Births and Operations	338
7.4	Conclusion	339
7.5	Situational Analysis of Agriculture	340
7.5.1	A Regional Goal for Agriculture	343
7.5.2	Commercial Agriculture	343
7.5.3	Commercial Cropping	344
7.5.4	Commercial Livestock Production	345
7.5.5	Non-Commercial Agriculture	347
7.5.6	Subsistence Livestock	348
7.6	Future Operational Focus of Agriculture	349
7.6.1	Future Approach to Agricultural Development	350
7.6.1.1	Optimal Physical Production	350
7.6.1.2	People-Centred Development	351
7.7	Integrated Rural Development	353
7.7.1	Farm Systems Research	357
7.7.2	The Grameen Bank System	359
7.7.3	Approaches within Commonwealth Countries	361
7.8	Commonwealth Experiences	362
7.8.1	Magnitude and Dimensions of the Problem	363
7.8.2	The Role of Extension	364
7.8.3	Comparison of Extension Systems	365
7.8.4	Reflections on Strategy	368
7.8.5	Approaches to Rural Development	368
7.8.6	Organisation, Administration and Farmer Participation	372
7.8.6.1	Kinds of Organisations	373
7.8.6.2	Some Weaknesses of government Organisations	374
7.8.6.3	Non-formal and Formal Organisations	375
7.8.6.4	Role of Membership Organisations	376

7.8.6.5 Role of Trade Unions 378
7.8.6.6 Surmounting Obstacles 379
7.9 Conclusion 380

CHAPTER 8: SUMMARY AND RECOMMENDATIONS
8.1 Introduction 382
8.2 Summary 382
8.3 Realisation of Objectives 386
8.3.1 Testing the Hypothesis 389
8.3.2 Research Findings 389
8.4 Recommendations 392
8.4.1 Recommendations for Improving Veterinary Services Policy 392
8.4.2 Recommendations for Further Research 394

Bibliography 398

Appendix A: Animal Health Services Customer Needs and Perceptions Questionnaire. 441

Appendix B: National Overview – Customer Needs and Perceptions. 448

LIST OF TABLES

Table 3.1	Bophuthatswana's Dependence on South Africa in Terms of the Appropriated 1993/94 Budget.	94
Table 4.1	Actual Corresponding Expenditure to Development Expenditure.	154
Table 4.2	Over-Expenditure of Certain Districts in Relationship to Operating Expenditure Versus Original Approved Budget.	155
Table 4.3	Trend of Development Expenditure as a Reflection of the Consequences of Under-Funding.	156
Table 4.4	Number Of Migrant Workers and Commuters from Bophuthatswana in South Africa.	160
Table 4.5	Qualifications of Upper Echelons of Agricultural Management, Agricor, Bophuthatswana, 1993.	164
Table 4.6	Qualifications of Middle Management, Agricor, Bophuthatswana, 1993/94.	165
Table 4.7	Qualifications of Agricultural Extension, Production and Community Development Field Workers, Agricor, Bophuthatswana, 1993/94.	165
Table 4.8	Salary Ranges for Different Categories of Agricor Staff, By Grade for the 1993/1994 Financial Year (Excluding Benefits).	167
Table 5.1	Ultimate Goal: Improved Welfare for the Citizens of a Country.	
Table 5.2	Socio-Economic Development Differentials for the Molopo And Ditsobotla Districts 1991.	260
Table 5.3	Employment Status Percentage.	262
Table 5.4	Distribution of Household Income Percentage.	263
Table 5.5	Commercial Crop Production 1990 – 1991.	264
Table 5.6	Illiteracy Rate in Some of South Africa's Homelands (1983).	265
Table 5.7	Illiteracy Rates in Some Southern African Countries.	267
Table 6.1	Land Tenure.	278
Table 6.2	Land Usage.	279
Table 6.3	Number of Livestock, 1980 and 1990.	279
Table 6.4	Cultivation of Crops, 1989 and 1990.	280
Table6.5	Physical Development and Other Activities.	280
Table 6.6	Income Estimates Accruing Directly for Farmers from Both Commercial and Subsistence Agricultural Activities (1989).	282
Table 6.7	Agriculture's Contribution to GDP (1980 Prices).	282
Table 7.1	Commercial Cropping Potential.	344
Table 7.2	Potential Output Level and Profitability Indicator by Calculation for Regional Targets	344
Table 7.3	Calculation of Theoretical Commercial Livestock Potential in Monetary Value Terms.	346
Table 7.4	Regional Goal Calculation for Livestock Production.	346
Table 7.5	Minimum Potential Value for Non-Commercial Agriculture.	347
Table 7.6	Annual Livestock Benefit Value by Calculation for the Subsistence Sector.	348
Table 7.7	Potential Production Capacity Benefits by Sector.	349
Table 7.8	A Comparison of Extension Systems.	365

LIST OF FIGURES

Figure 6.1 Needs Assessment in the Training and Evaluation Cycle. 292

CHAPTER 1

INTRODUCTION: PROBLEM STATEMENT AND RESEARCH OUTLINE

Keywords: agrarian, veterinary services, legitimacy, democracy, ideology, propaganda, ethnicity, capitalism, proletariat, bourgeoisie, oligarchy, elite, patronage, homeland, sovereign, colonial, apartheid.

1.1 INTRODUCTION

The purpose of this study is to assess and evaluate some of the parameters of uneven development, the fiscal, administrative, discontinuity and legitimacy crisis within the erstwhile Bophuthatswana over time. In doing so an emphasis will be placed on the agrarian and legitimacy questions including the impact of some political factors since the former state's so-called independence, in order to capture the sharply uneven development in production at veterinary services and the massive rural poverty amongst peasants. The problems, which this study attempts to investigate, are located within a socio-historical context. What is apparent in this context is that the nominal state of Bophuthatswana lacked the legitimacy, credibility and support of the overwhelming majority of people in governance. This affected the capacity to bring about effective public management and administration of government and meaningful agricultural development in veterinary services.

1.2 ORIENTATION AND PROBLEM STATEMENT

Discussions of legitimacy tend to be complicated. The term is used in many different ways, to refer to very different situations. Thus a standard definition can prove elusive. One can question the legitimacy of a political entity, its institutions, its leaders, its policies, laws or procedures. Johnson (2005:1) states that "the principle that indicates the acceptance of the decisions of government leaders

and officials by (most of) the public on the grounds that these leaders' acquisition and exercise of power has been in accordance with the society's generally accepted procedures, political or moral values. Legitimacy may be conferred upon power holders in a variety of ways in different societies, usually involving solemn formal rituals of a religious or quasi-religious nature – royal birth and coronation in monarchies, popular election and 'swearing in' in democracies and so on". 'Legitimate' rulers typically require less use of physical coercion to enforce their decisions than rulers lacking in legitimacy, because most of the people are apt to feel a moral obligation to obey the former but not the latter. Consequently, people who gain or hold power by "illegitimate means tend to work very hard to discover or create ways of endowing themselves with legitimacy after the fact, often by inventing a new ideology or religion attempting to indoctrinate the people with its legitimacy formulas through various forms of propaganda, thus creating moral incentives for the citizenry to obey the illegitimate government and position themselves internationally to secure legitimacy" (Johnson, 2005:1). The principles captured and elucidated by Johnson above were never applied by the Bophuthatswana government nor were they applied by the South African government, when it granted independence to Bophuthatswana in 1977. Both governments invented a new ideology of separate development, attempted to consolidate ethnicity as a means of power and utilized various forms of propaganda and created moral incentives for the population of Bophuthatswana to obey the illegitimate government and positioned themselves internationally to secure legitimacy.

The study therefore, facilitates an understanding of several crucial aspects of the former Bophuthatswana state:

- it was a creation of apartheid ingenuity and ideology and, therefore, lacked legitimacy in the global arena of nations, credibility in the African and Southern African context and, above all, the support of the majority of the people;

- in order to sustain and preserve its independence, it followed a policy of irredentism in collusion with the South African Government and changed its ideological basis to the misguided concept of ethnicity as a resilience and means of maintaining power;
- the use of this ideology to maintain and legitimate class rule;
- the instrumental use of state power and the negation of the rule of law and the tenets of democracy;
- the resulting appearance of the state as a crucial object of class struggle;
- consequently, the approach of revolution;
- the formation of class consciousness on the basis of Batswana ethnicity as a decisive subjective element in the historical development of society in Bophuthatswana; and Eurocentric, local and international agricultural policy makers following their own agenda, who formed powerful cliques that had been legitimized by government.

Mills (1986:20) points out: "We live in a society that is democratic mainly in its legal forms and its formal expectations." Though the former state of Bophuthatswana was created formally as a state, there was a growing disillusionment and apathy, which reflected the partial de-politicisation of the peasantry or proletariat of Bophuthatswana. It is necessary to point out that the content of this study emanates from many years of work and analysis, and that the events of the popular uprising in Bophuthatswana during March 1994 encapsulated the basic thrust of the study. Nonetheless, the content captures a very important part of South African history and contributes to the historical approach alluded to.

Towards the realisation of reaching the aims of the title of this study, and in outlining some of the problems that warranted the investigation, this study is framed within the following analytical parameters in order to meet the requirements of the research questions posed and the objectives of the study in general as enunciated as follows: -

- It failed to understand the basic requirements of veterinary services in agricultural parameters needed for sustained development on a democratic basis; and the realization that agricultural development and farmer training were integral to the development of any society;
- There was an absence of systematic data and coordinated documentation on the nature, subtle nuances and needs of agriculture in general;
- Agricultural policies in general and veterinary services particularly were pursued that defied the very nature of intellectual debate given credence by government and, above all, a lack of understanding agricultural development programmes and the need to examine the nature of some of these concerns as it affected agriculture including the modernization of agriculture which led to massive rural impoverishment and
- Land became increasingly concentrated in the commercial sector at the expense of the rural masses.

The problems of agricultural economic management and administration and especially of veterinary services were compounded by the uncertainties arising from the breakdown that occurred almost since independence (Karodia, 1990:6). Their full implications have not yet unfolded, but it may be useful to distinguish four main areas of discontinuity. as follows: -

- Many characteristics of the old economic system remained, including a large concentration of the ownership of modern means of production in the public sector. Extensive state intervention in the operations of product and factor markets, affected the management of veterinary services and development in general.
- In terms of observations in Bophuthatswana, it was obvious that government should have abandoned or changed its agricultural policy drastically, vested almost entirely in the hands of a Eurocentric minority and Black bourgeoisie within the agricultural parastatals and departments, and chartered a course of action to follow international norms. The state needed to implement a workable structure and formulate a veterinary

services policy by means of consensus with the farmers and in terms of a participatory democracy, in accordance with the perceived or felt needs.

- The post-1977 Bophuthatswana economy and the management of agriculture in particular, despite changes in some important variables, was in other respects, moulded by the past. The capital stock in the productive sectors and some of the infrastructure were the result of past investments (in both good and bad projects). More important, perhaps, were the institutions, the administration and organisation of veterinary services, the vested interests and the habits of thought and work which are a collective inheritance that determines many of the features of the economy today and colours its prospects.
- The management and administration as concerns agriculture and veterinary services in the medium-term and within the limits of the new-found democracy would have had to take account of these continuities that it had inherited from the former political order.

1.3 SIGNIFICANCE OF STUDY

There is no doubt that a study of this nature could contribute significantly to agricultural debate in terms of development, extension and training in the new North West Province of South Africa, considering that nearly 70 percent of the population of the former Bophuthatswana now comprises the new province of the Republic. Of even greater significance is the fact that there is a new wave of legitimacy in the ANC-led government of the Province as it commands the support of nearly 83 percent of the provincial population (SABC, Election Results, 1994).

1.4 RESEARCH QUESTIONS

Flowing from the problem statement outlined above, the following research questions and objectives can be postulated:

- What is meant by the concept legitimacy?
- What fiscal, administrative and discontinuity crisis affected the management of veterinary services in the state of Bophuthatswana?
- How was agricultural development in Bophuthatswana affected by the use of ethnicity and state repression as means of maintaining power?
- What were the state of affairs of uneven development and the problems in respect to the management of veterinary services?
- What were the functional problems and policy issues in respect to agriculture, extension and veterinary services?
- What recommendations can be made on agricultural development to add value in promotion of animal health services, customer needs and perceptions?

1.5 RESEARCH OBJECTIVES

The proposed study will focus on the following objectives: -

- To provide a theoretical exposition of the nature of government relations with particular reference to the legitimacy, fiscal and administrative crises of the Bophuthatswana state as an independent entity; and therefore, the negative aspects upon the management of veterinary services, as it relates to development, training and non-formal education.
- To assess the extent to which legitimacy crises in the fiscal and administrative management impacted negatively on the management of veterinary services in erstwhile Bophuthatswana.
- To evaluate the impact of ethnicity and repression on the management of agriculture and veterinary services in the former homeland.
- To identify and comment on the factors that contributed to the process of uneven development in the management of agriculture in the former homeland of Bophuthatswana.

- To examine the functional problems and policy issues that hampered the management of agricultural extension and veterinary services in Bophuthatswana.
- To make recommendations for change in some agricultural programmes and to draw implications for the policy and planning of extension programmes in this region.

1.6 RESEARCH HYPOTHESIS

The central theoretical statement of the study is as follows: Efficient and effective management of veterinary services in the erstwhile state of Bophuthatswana was flawed due to legitimacy crises in state power; lessons from poor utilization in functional areas of agricultural extension and training can be learned for agricultural improvement in the new North West province.

1.7 RESEARCH METHOD

The methodology that was employed in examining the subject matter, which forms the basis of the thesis, included the following

1.7.1. Literature Study

- The use of electronic sources on issues of legitimacy and state power, in the form of databases were consulted. These included the catalogue of dissertations, theses of the University, internet services (both internet and intranet), books and the index of South African periodicals on legitimacy issues and on agricultural and veterinary services management;
- An examination of reports, agricultural policy statements and bulletins issued by agricultural organisations within Bophuthatswana and South Africa;

- A review of related issues, both local and international by the use of articles and statements made in the popular media in respect to the realities of political, economic, social and agricultural debate, as it affected Bophuthatswana by 1993, the period of negotiation politics in South Africa;
- The practical replication of a study commissioned by the researcher, in terms of the main findings of the study "Animal Health Services – Customer Needs and Perceptions" that was undertaken in support of this study, by an independent researcher within the Agricultural Corporation of Bophuthatswana. The findings were consistent with most of the assertions made by the researcher, particularly regarding the needs for training;
- The use of electronic sources in the form of databases were consulted, such as internet services (both internet and intranet) including the Index of South African Periodicals and any other applicable sources of literature that were available in this format.

1.7.2. Empirical Study

The Bophuthatswana state no longer exists. In this regard various officials in the former Bophuthatswana state were interviewed over time and prior to the collapse of the regime. This did not in anyway hamper the study as it lent itself to the concept of a case study and in keeping with the historical approach. Data collection for the study involved the following empirical methods: -

- Qualitative open-ended interview schedules were utilized;
- Discussion by the process of interview, with personnel within specific organizations in the agricultural sector and other departments within the administrative services of Bophuthatswana, such as the Department of Agriculture, the Bophuthatswana parastatals in the form of the Agricultural Development Corporation, Agricultural Services Board, the Agricultural Bank, the Agricultural Marketing Board and some of the smaller

institutions within agriculture; the Advisory Services of the Presidency and the Bophuthatswana Intelligence Services were conducted;

- The category and ranks of the personnel that were interviewed within these specific organisations included, the Secretary for Agriculture, the Director of Veterinary Services, State Veterinarians, Animal Health Officers, the Director of Extension, Extension Officers and Extension Coordinators, District Managers, the Head of Cobperative Services, general agricultural professional staff and staff of the administrative services. In addition the General Managers or Chief Executives of the Agricultural Development Corporation and the Agricultural Service Board, the Agricultural Bank, the Manager Human Resources and general professional and administrative staff of the parastatals, the Chief of the Bophuthatswana Intelligence services and the Chief Advisor to the President;
- The number of personnel in various categories within the above organizations that were interviewed was sixty and made up the cross-section of the agricultural sector of Bophuthatswana. The objectives of these discussions and interviews in the main was an attempt to determine the state of agriculture in Bophuthatswana, with particular reference to the delivery of agricultural services, in respect to Extension, Veterinary and Cooperative services, the implementation of agricultural policy and planning, human resources complexities and a host of inter-related issues that contributed to the processes of uneven development. The interviews and discussions thus lent themselves to proving some of the assertions that were made in this study and, together with the body composite of the study allowed for making sound recommendations. It further allowed for determining the financial mechanisms that were used in funding agriculture, under-funding of some important delivery services within agriculture and finally, facilitated an understanding to the agrarian crisis within Bophuthatswana as it pertained to the title of this study;

- Quantitative structured questions were constructed with the aid of the study leaders and tested with a pilot group;
- Field-work was conducted at selected sites within the erstwhile Bophuthatswana and;
- Collection of statistical data made available through government institutions at the time.

1.8 CHAPTER OUTLINE

Chapter 1: Introduction: Problem Statement and Research Outline.

Chapter 2: Theoretical Overview of legitimacy as a Concept.

Chapter 3: Geographical Location, and the Fiscal and Administrative Crisis of the Bophuthatswana State.

Chapter 4: Factors Contributing to the Process of Uneven Development in Agriculture within Bophuthatswana.

Chapter 5: Policy Issues in Respect to Agriculture.

Chapter 6: Statistical Parameters and Issues of Training and Education.

Chapter 7: Animal Health Services: Customer Needs and Perceptions, 1992.

Chapter 8: Summary and Recommendations.

CHAPTER 2

THEORETICAL OVERVIEW OF LEGITIMACY AS A CONCEPT

2.1 INTRODUCTION

Public policy is one of the instruments by which governments purposely govern and develop societies. Aristotle's famous dictum and Michael's iron law of oligarchy indicate two aspects of the close inter-relationship between politics and administration. The first postulates simply that because administrators are human they will behave politically even when they are behaving professionally; the second is that the administrative process is by its particular nature especially connected with the political process (Cloete, 1977:23-29). (Aristotle's dictum and Michael's iron law of oligarchy refers to two syllogisms. Syllogism according to the Oxford Dictionary of English, (2004:1787) is a form of reasoning in which a conclusion is drawn from two given or assumed propositions (premises). Oligarchy according to the same source (2004:1225) means that a small group of people having control of a country or organization. In other words the process of logical inference was based on a form of argument called the syllogism – a proposition is argued or logically inferred to be true from the fact that two other propositions are true; whilst in an oligarchy, government is a dictatorship without the consent of the governed. It must be noted that syllogisms are generally ambiguous because of the ambiguity of the word politics. Dictum therefore, is a formal pronouncement from an authoritative force).

Even if there is agreement on a definition of politics, one is still faced with the problem of an understanding of the terms micro – and macro. Micro-politics in the context of this thesis will be the politics within the administrative system itself; while macro-politics will be the politics of the national political system in which the administrative system operates. In other words micro and macro-politics merely

indicate extreme positions on a lineal continuum from the politics of the small group of those of the nation state. To argue that public administration both contains an important political element within itself and also operates within a political context does not necessarily imply that there is an inescapable connection between the disciplines of Political Science and Public Administration. On the other hand when one attempts by theoretical analysis to distinguish between political norms and the norms of public administration, we find that they are inextricably interwoven.

The focus in this chapter and with particular reference to the study is the existence of public policy in the two disciplines, politics and public administration or within the ambit of public management and governance. This study attempts to capture the role and limits of the erstwhile Bophuthatswana state in implementing a set of reforms directed at the contradictions of public policy formulation, politics, public administration and management, which contributed overtly to the processes of uneven development. This was achieved, implemented and perpetuated on the basis of an internal hegemony perpetrated upon the rural masses, political patronage, and the role of the land grabbing elite in supporting the regime on the basis of the resilience of power. The intimate relationship of public administration and its politics is clearly demonstrated by Edelman in his The Symbolic Uses of Politics (1964:86) where he shows "how administrative agencies in the United States, originally established to control industries or other enterprises in the private sector, eventually establish a symbiosis with these enterprises so that the industry becomes essential for the advancement of the administrator while the administrator becomes in effect the "representative" of the enterprise in the governmental process. In the course of such developments the interest of the consumer or public is quite lost sight of." Edelman thus describes an essentially political process of how a political policy may be administered in such a way that, it very nearly produces results opposite

to those intended by the politicians. The political scientist fails to understand that administration can thus distort policy.

2.2 POLITICS AND PUBLIC ADMINISTRATION

The relationship between politics and public administration presents problems that have been of perennial importance and interest ever since the distinction between the two forms of activity came to be clearly perceived. As with so many problems in political science there is no reason to believe that an ideal solution exists or that a single set of rules would be equally suitable to the circumstances of different states. It has been challenged as inapplicable to the needs of some contemporary new states where single-party rule has been established as the guiding principle. The difficulty is of course where the single party is not the direct or indirect result of previous foreign rule and of a nationalist struggle against it, but is instead the product of a ruling ideology – such as Bophuthatswana, as part of the apartheid system and ideology; the problem then takes on a rather different form. In such systems, which may be called totalitarian or near-totalitarian, the state will directly control not merely those activities which are elsewhere the proper province of government but all the other principal ones as well, economic and cultural activities in particular. What exists are two interlocking hierarchies, the political which is that of the party itself and, the administrative – managerial.

The nature of public administration however, as practiced in any country is largely shaped by the political, social, economic, cultural as well as the physical and technological environment in which it operates. Basically though, public administration always operates within a political context. Public administration by fulfilling its primary function of implementing government policy must respect the political colour of that policy. The close association of public administration with government policies offers a fertile field for casting suspicion by merely putting a

question mark behind the political neutrality of public administrators who must, in accordance with a basic rule of the democratic system of government, always remain politically neutral. However, the factual state of affairs that politics and public administration are like the two sides of a coin has been accepted by academics. In this regard Beloff (1966:355-365) states that civil servants' are in normal circumstances appointed for a life-time career and according to non-political criteria by a body independent of the government and separate from the rest of the administrative machine. It is obvious therefore, that their tenure is thus unaffected by changes in party control of the government. A further consequence is that civil servants must refrain from political activity to a degree which is determined by their nearness to policy decisions. Beloff, further states that the civil servants first duty is to the state. It is also correct that such loyalty should in normal times be to the government of the day. But not all times are normal, for instance a government that may claim to represent the general will, may make demands upon civil servants that infringe the moral law – what precisely were the limits of duty of German civil servants in the Nazi period? There are no easy answers. Van Zyl (1972:61-63) points out that "although public administration generally functions in a particular national environmental setting it thus operates within a political context".

The increasing technical character and complexity of modern government activities have involved top public administrators in politics by the very nature of their primary function for example, policy execution. Under these circumstances the researcher posits that it must at all times be remembered that both politics and administration are largely service activities and that the tendency for them to outweigh the productive apparatus of society is always present and always to be resisted. In this regard Beloff (1967:355-365) states that "the civil servant is after all a servant, not only of the state, but also of each individual citizen and that too is something he forgets at his peril". In other words, the "political" role that the public administrator must play as part and parcel of his proper functioning is

performed under the control of political leaders. Should that control be circumvented the action of the administrators would have to stand the test of public scrutiny. This is not only understandable but also an acceptable development because of the increasingly technical character and complexity of modern government activities which, have involved top public administrators in politics by the very nature of their primary function, namely policy execution – to be directly involved in matters of governance. Policy-making is the primary function of the political arm of government, but without the advice on factual and value implications from the administrative side, any government will find it difficult to arrive at decisions on many aspects of government operations. In translating government policy into practice, the function of the administrative arm, the administrative and the political decisions will again be as closely interrelated that the one inescapably affects the other.

In the final analysis, and in terms of the literature reviewed on the subject matter, Cloete, (1977:23;29) in a comprehensive analysis advances intuitive hypothesis that "the disciplines of political science and public administration are essentially complementary, that this is true whether the approach to them is normative, descriptive or behavioural; politics contains an administrative element that is often as important as that commonly seen as "political; that conversely public administration has its internal micro-political behaviour and operates in a macro-political context, which in turn influences this behaviour; and, finally, that in South Africa and generally the world over, much fruitful research in each discipline could be undertaken in fields common to both." Having briefly delineated some aspects of the nuances and distinction of politics and public administration in terms of public policy formulation and implementation, it thus sets the pace in respect to a comprehensive analysis of several aspects in relationship to human rights, criteria for statehood, irredentism, ethnicity, power and a host of other interrelated issues. These issues pertain to a theoretical overview of legitimacy of the erstwhile Bophuthatswana state, in the context of

politics, political activity and its influence upon public administration and management.

2.3 LEGITIMACY AND HUMAN RIGHTS

The promotion of human rights has become a concern of international law only since World War II. Before 1945 the manner in which "a state treated its own citizens was generally not regarded as a factor to be considered in deciding whether to admit a state to the community of nations" (Kelsen, 1941: 605 -611). Neither the League of Nations or any state raised objections to South Africa's racial policies when it became an independent member of the community of states. Despite this, states in recent times have attached to the respect of human rights and self-determination as a precondition for the recognition of statehood. The idea that an entity that denied human rights and self-determination would not qualify as a state was initially mooted in the context of the requirement of effective government. This was later translated into a new criterion for statehood. In this regard Fawcett (1965:102; 1971:34) writing on the non-recognition of Rhodesia after its unilateral declaration of independence declared: "But to the traditional criteria for the recognition of a regime as a new state must now be added the requirement that it shall not be based upon a systematic denial in its territory of certain civil and political rights, including in particular the right of every citizen to participate in the government of his country, directly or through representatives elected by regular, equal and secret suffrage". Dugard (1980:98-100) in turn argues "the principle was affirmed in the case of Rhodesia by the virtually unanimous condemnation of the unilateral declaration of independence by the world community, and by the universal withholding of recognition of the new regime which was a consequence".

It must be borne in mind that the issue under consideration deals with the recognition of states as subjects of international law and not with the recognition

of the governments in control of states. Although a government may have de facto or de jure recognition, no such distinction is possible in the case of a state.

An entity is either recognized as a state or it is not. Recognition may be unilateral or collective. In the former case an individual state, already accepted as a state, recognizes that an entity claiming to be a state meets the factual requirement of statehood and is therefore to be regarded as a state, with all the privileges and responsibilities of statehood. Recognition is a precondition for the establishment of diplomatic relations; but it is not essential that the recognizing state enter into diplomatic relations with the new state. Collective recognition occurs when a group of states, such as the European Community or the United Nations, recognize the existence of a claimant state directly, by an act of recognition, or directly, by the admission of the state to the organization in question. Collective recognition on the other hand is still relatively uncertain and controversial. Dugard (2000:84) states, "it appears that entities such as Rhodesia, the TBVC states and the Turkish Republic of Northern Cyprus have not been faulted for their failure to comply with the requirement of statehood but denounced for violation of certain peremptory norms of international law which result in their 'illegality', 'invalidity', and 'nullity'". The researcher therefore posits and concludes that the legitimacy of the Bophuthatwana state was only recognized by its colonial master, apartheid South Africa and was an illegal entity not recognized by the international community of nations; that it was involved in flagrant violation of human rights; that it held regular elections but in respect of the criteria enunciated for statehood (recognition) it was unable to enter into relations with other states.

However, it must be emphasized and acknowledged that, in respect to Bophuthatswana, it existed as a quasi form of state for nearly two decades and functioned relatively well under certain circumstances and in particular, its

relationship to the administrative processes, in the performance of its government obligations.

The most common source of legitimacy in the contemporary world is the perception that a government is operating under democratic principles and is subject to the will of the people. Governments often claim a popular mandate to exercise power. The mandate of Bophuthatswana's independence in 1977 was not derived nor obtained from the entire Batswana people but it was obtained by political agreement with the apartheid South African government. Bophuthatswana was a tyrannical, oppressive and authoritarian regime that attempted to showcase itself as a liberal democratic state, claiming democratic legitimacy on the grounds that, it conducted regular, free and fair elections. Tyranny is the type of government that has/had authority centered in a single all – powerful ruler. The ruler held the title of tyrant and today the word tyranny means a cruel and despotic government. Macridis in the World Book Encyclopedia (1983:275-277) states that "throughout history, people have developed many forms of public government to make and enforce rules of conduct. If a government ruled for the benefit of those in authority, not for the good of all, it was called corrupt and by implication was a tyranny, and a corrupt democracy was a tyranny of the majority".

A tyrant ruled to satisfy his appetite for power or wealth. Similarly, an oligarchy rules/ruled to increase the power or wealth of a few. A tyranny of the majority meant government by crowds. Many tyrannies developed during times when governments were overthrown and angry mobs swept aside, personal freedom and private rights. The tyrants of modern times are called dictators. (Among them were Adolf Hitler, Benito Mussolini, Joseph Stalin, Idi Amin, Mengisto Haille Mariam, Mobuto Seso-Seko, Saddam Hussain, Lucas Mangope, Charles Sebe and a host of others). Authoritarianism on the other hand is any government in which relatively few people run the country, and the rest of the population takes

little part in decision making. The World Book Encyclopedia (1993:913) states that "authoritarian states may prohibit, severely restrict or manipulate elections to suit their own purposes. They may limit the powers of legislatures that represent the people, such as a parliament or a congress and restrict individual freedom. Authoritarianism includes such types of government as absolute monarchy, dictatorship and totalitarianism". Bophuthatswana characterized and therefore exemplified facets of tyranny, dictatorship, oligarchy, authoritarianism and totalitarianism, in respect to the form of government and type of state, it was in charge of and power was vested in a single individual Lucas Mangope, who attempted to change society according to a set of doctrines by the use of unjust power.

The history of the failed 'Bantustan states' of Transkei, Bophuthatswana, Venda and Ciskei demonstrates the factors that are considered in the admission of states to the international community (Dugard, 1980:98-100). Independence was conferred on these entities by the South African Parliament in the expectation that they would be recognized by other states, which would have given legitimacy to the policy of apartheid. "Instead the United Nations called on states not to recognize them with the result that they were not recognized by any state apart from South Africa. This failure in statehood provides an excellent illustration of the requirements of statehood and the process of recognition" (Dugard, 2000:72). In order to implement a set of reformist policies, the Bophuthatswana state needed to secure support from the different social classes and fractions that composed its constituency. The bourgeoisie itself was composed of fractions that had conflicting interests.

Until recent times only states were subjects to international law. "Today other entities, such as inter-governmental organizations, are also accepted as international persons with rights and duties under international law" (Vorster 1978:23, Dugard, 2000:71). It must however be pointed out that individuals

within governments and states are also liable for prosecution according to international law, especially for atrocities committed by themselves against individuals that, they govern over. Such violations refer specifically in the field of non-adherence to universal principals of human rights. (There are many examples of such individuals that have been charged and successfully prosecuted by their countries or at the International Court of Justice at the Hague, in the Netherlands – Charles Taylor of Liberia, Slobadan Millosovic of Serbia, Augustino Pinochet of Chile and a host of others). "It is thus most obvious that the state however, remains the principle actor in the international arena, and the raison d'être of the international legal system" (Jennings and Watts, 1993:16). It will therefore be vitally important, prudent and necessary in this chapter to consider how entities claiming to be states are accepted into the community of nations as full subjects of international law.

International law is a product of European Christian Civilization and was for many centuries a European law of nations. When a new state appeared in Europe it was received into the community by the old members of the European society of nations. After the decolonization of the Americas, non-European, Christian states were admitted to the 'club'. With the admission of Turkey to the community of nations in 1856 international law ceased to be a law between Christian states only. Thereafter non-European, non-Christian states such as Japan, China, Siam (Present day Thailand), and Persia (Present day Iran) were accepted as states. Although the existing states retained the right to admit new members by unilateral acts of recognition on their part, there is no doubt that the League of Nations and the United Nations have both facilitated and accelerated the process of international acceptance (Dugard, 2000:71). In the case of the TBVC states as recognized by its colonial master, South Africa, the United Nations did not facilitate nor attempt to accelerate the process of international acceptance, but on the contrary the United Nations as stated earlier called on states not to recognize them.

2.4 THE CRITERIA FOR STATEHOOD

The traditional criteria for statehood are described in the Montevideo Convention of 1933 which provides as follows: "The state as a person of international law should possess the following qualifications: a permanent population, a defined territory, government and capacity to enter into relations with other states". Dugard (2000:72-82) states that "more recently, since human rights and self-determination have become more important in international law it has been suggested that for a new entity to succeed in a claim for statehood it should meet the standards and expectations of the international community on these subjects. This development Dugard suggests "was given support by guidelines on the recognition of new states in Eastern Europe and in the Soviet Union issued by the European community in 1991, and extended to Yugoslavia, which sought to make recognition of states dependent on compliance with international norms relating to self-determination, respect for human rights and the protection of minorities."

2.4.1 Permanent Population

The microstate presents problems in the United Nations as it seems unfair that India, with a population, of 1,169 billion (17,95%) of world population, should have the same voting rights as the Seychelles, with a population of 87,000 (0,001%) of the world population. On the other hand, what ought to be done in respect of China which has a substantial human population of 1,319 billion (19,77%) of the world population of 6,6 billion? (Wikipedia.Comm.2007 and U.N. estimates, accessed 15 July). The following question arises: should not population size play any part in the recognition of states? In addressing these questions, is it not perhaps that the structure of the Security Council of the United Nations be changed? Perhaps the criteria for statehood in respect of population needs to be reassessed and reevaluated by the community of nations within the

United Nation's, on the basis that we are dealing with the phenomenon of political power in terms of population. On the other side of the continuum the question arises should not the concept of the state that conforms to certain criteria and requirements be respected as a unit of power within the community of nations? This vexing issue needs elaboration within the UN and must receive further attention. Attempts to remedy this inequality in the United Nations, however, have been abandoned and microstates are today accepted as full members of the international community.

2.4.2 Defined Territory

It is not a necessary prerequisite of statehood for a state to have clearly defined and undisputed borders. Israel's borders, for example, have been the subject of dispute for over half a century. However, the state should have a stable community within an area over which its government has control. Furthermore, it is not necessary for a state to occupy a single territory. Prior to the creation of Bangladesh in 1971, Pakistan was divided into East and West Pakistan, separated by India; and Canada separates Alaska from the rest of the United States. By the same token Bophuthatswana was separated in many spheres of land mass (Thaba Nchu, areas near Pretoria such as Mabopane, Winterveld and so on) with South Africa having ceded large territories in between the land mass of South Africa itself. It was therefore difficult to argue that Bophuthatswana lacked statehood on the grounds that it comprised a number of separate territories.

In order to underscore the sensitive issue of Israel as a state and the possible recognition of Palestine as a nation state by the international community of nations, reference is made to Steven Friedman's analogy and article – Business Day (August 17, 2005:14) in which he states "the failure of South Africa's homelands should serve as a cautionary tale for Israel". Placed in perspective

there is no doubt that Israel is a recognized state by the United Nations and the world community of nations. It fulfils the requirements of statehood. However, its track record against Palestinians in respect to human rights is found wanting. Given Israel's formal acceptance as a state rightfully or wrongfully and the serious political consequences that have arisen in the context of Israel and Palestine, it has to be borne in mind that both Israel and Palestine are here to stay for the moment. Perhaps the world is eagerly awaiting the chance to recognize independent Palestine.

In respect to the question of legitimacy and the quest for political stability to the Israeli question as enunciated above, it is important to draw some parallels with the South African policy of Homelands and Bantustans. Allister Sparks, well known South African political commentator and analyst in his contemplation of Virginia Tilleys, "One State Solution" points out that "Israel's two-state solution is dead and that the powerful Zionist dream of creating a 'Jewish state' is not a viable one" (Sparks, 2005, September 21:14). Sparks further indicates that "like South Africa's Bantustan policy, it was a nice idea in theory, two separate rival groups living in one country so that each can have its own national homeland sounds like a moral solution – provided the separation is fair and the homelands are viable. In South Africa neither condition was attainable, so the policy remained one of naked oppression and ultimately had to be abandoned." He adds that "the reality of a one state solution will have to be faced, with Gaza, Israel itself and the West Bank integrated into a single secular state." In this regard he points out that Tilley argues that "it would involve a major revision of the Zionist dream of establishing a 'Jewish state' – a concept with powerful emotional and spiritual content, for the facts on the ground make the decision inescapable. The alternatives, as John Vorster (former and late Prime Minister of South Africa) might have put it, are "too ghastly to contemplate".

Sparks concludes by stating that "in discussing these and related questions and equating them to the South African experience in abandoning apartheid non-racial democracy. Has that meant South Africa is no longer a homeland, for the Afrikaners, or whites generally?" It is an important debate, courageously initiated to this complex and vexing issue in respect to legitimacy, credibility and recognition. A solution has to be found for global peace and stability.

2.4.3 Government

In order to meet this requirement (government and its formation), a state must have a government that is in effective control of its territory, and that is independent of any other authority (Shaw, 1997:143). The fact that a government receives substantial financial aid from another state would not in itself appear to affect its formal independence. This fact, together, with other indications of dependence, however, may provide evidence of a lack of independence. "This was one of the reasons given by the United Kingdom for its refusal to recognize Bophuthatswana" (Hansard, 1988:760-61).

2.4.4 Capacity

The capacity of a state to enter into relations with other states is a consequence of independence. If an entity is subject to the authority of another state in the handling of its foreign affairs, it fails to meet this requirement and cannot be described as an independent state. South Africa's own history according to Dugard (2000:74) "suggests and illustrates the complexity of this criterion". According to Dugard, (2000:74-75) "the South African Republic (during the Anglo-Boer wars and the early period of colonization of South Africa, when parts of the then South Africa were declared independent republics) was in an anomalous position. In terms of the London Convention of 1888, it agreed not to conclude treaties with any state other than the Orange Free State without the

permission of Britain. Despite this restriction, it maintained diplomatic relations with other states. The restraint on its treaty making however led to Britian denying the Transvaal's independence, but scholars have argued that it was either a semi-sovereign or fully sovereign state". South Africa's position in 1910, on the other hand, was straightforward. "It lacked the capacity to enter into treaties without the assistance of the United Kingdom, to establish diplomatic relations with other states and to make war or peace" (Schaffer, 1978:21-23). The literature is rich in respect of this issue, which falls outside the purview of this study.

It is difficult to pinpoint the exact moment at which South Africa became an independent state and the correct view, it seems, is that South Africa acquired full international status at the moment that it acquired the capacity to enter into relations with other states and this capacity was recognized by Britain. "1926 therefore appears to be the year in which South Africa became a fully sovereign independent state under international law" (Motala, 1977:30).

2.4.5 Position: TBVC States

The position of the TBVC states under this criterion for statehood presented difficulties. Although they enjoyed full constitutional independence under the respective status acts which conferred independence on them and the formal capacity to enter into treaty and diplomatic relations, they were unable to conduct international relations with states other than South Africa on account of their non-recognition by the international community. "In State versus Banda (1989), in which the statehood of Bophuthatswana was challenged before a municipal court of that territory in a case of treason, Friedman J. held that this requirement of statehood did not apply where the state had an infrastructure to implement relations with other states should it be given the opportunity to do so but was precluded from so doing due to political considerations." He further stated that

"an entity possessing all the other essentials of being a state cannot be regarded as not having the capacity to enter into relations with other states if it is denied the opportunity to demonstrate this capacity in practice" (Dugard, 1980:98-100). This view, which ignores the role played by recognition in the creation of states, is out of touch with reality for, as Hedley Hull (1977:8) and Erasmus (1998:212-220) have stated and written, "a community that claims to be sovereign but cannot assert this right in practice, is not a state properly so called". Formal independence the researcher posits does not produce the capacity to enter into relations with other states. In addition the claimant entity must be recognized by at least some states in order to make this theoretical capacity a reality to give it functional independence. Although recognition may not create a state, it seems it should be taken into account in deciding whether the fourth requirement of statehood is met.

In underscoring the above issue the researcher further posits that the Turkish Republic of Northern Cyprus (TRNC) occupies the same position today as did the TBVC states: It is recognized by no state other than its creator, Turkey. Dugard (2000:77) "cites Calgar versus Ballingham (Inspector of taxes), in which the British Special Commissioners of Inland Revenue were concerned with the exemption from liability for income tax for officials of a foreign state, the commissioners adopted the following reasoning and held that the TRNC failed to qualify as a state: In view of the non-recognition of the Turkish Republic of Northern Cyprus by the whole of the international community other than Turkey we conclude that it does not have functional independence as it cannot enter into relations with other states. It does not therefore satisfy the fourth requirement of statehood".

From the above expose in respect to international law and the prescripts of statehood and citing international experience the researcher acknowledges that Bophuthatswana although meeting the criteria of a permanent population, a

defined territory and possessing a government could not meet the fourth requirement of statehood and thus did not have the capacity to enter into relations with other states. This fundamental prescript could not be met and therefore it lacked credibility, recognition and legitimacy as an independent sovereign state. It is obvious therefore that, from its inception as a state in 1977, Bophuthatswana entered into a legitimacy, fiscal, administrative and discontinuity crisis.

2.4.6 Bophuthatswana: Politics and its Emergence

This section of the study entails capturing and providing the salient features of the emergence of the erstwhile Bophuthatswana as an independent entity. In other words, it will attempt to encapsulate the politics of the 1970s into two phases. The first period up to 1977-78, was a period of building the homeland and consolidating its government. This period in no uncertain terms was a time of intense competition for leadership, on the one hand and internal resistance to its existence, on the other. It also exemplified the emergence of Lucas Mangope as the "undisputed" leader of the Bophuthatswana homeland. The second period, after 1977-78, reveals a more repressive side, characterized by state oppression and making Bophuthatswana an ethnic Batswana enclave with the misguided notion of Batswana nationalism. It is against this background that the foregoing narrative becomes important, in understanding the emergence of Bophuthatswana as a state, government and country. The discussion also assumes significance, in the context of the study on the basis that, it structures some of the salient features of ethnicity, Batswana nationalism, oppression, suppression of the masses, the concept of irredentism, uneven development, the myths of independence, and the fiscal, administrative and discontinuity crisis of the Bophuthatswana state. On the other hand, it enriches the chapter, in respect to a better understanding of some of the issues enumerated above, which will be discussed in greater detail as the discussion in this chapter will attempt to do.

The first event of critical importance was self-governance, which was conferred in 1972 through the Constitution Proclamation and following this the Bophuthatswana Legilative Assembly was created. The Bantustan was divided into 12 magisterial districts. It must be noted that Bophuthatswana, comprised mainly land belonging to the former reserves of the Republic of South Africa, which for a long period, in fact several decades had experienced the ravages of underdevelopment. Given this sate of affairs, Manson and Mbenga (2006:782-802) point out that "from 1974, however, the growth of the labour movement in South Africa and township revolt, exemplified by the 1976 South Western Township (Soweto – in Johanessburg, South Africa) uprising, began to impact on the nascent homeland of Bophuthatswana". They further indicate that Bophuthatswana was created for the "Tswana people" on the assumption that they were culturally and politically homogenous. This was a fallacious argument because this did not translate into a sense of ethnic community or nationhood. More importantly, the economic, social and demographic developments in South Africa from the nineteenth century meant that ethnic categories did not correspond with geographic realities on the basis that many non-Batswana and other race groups lived in the homeland, and that many Batswana had to be removed from historic sites of occupation to create the "new state". The ethnic basis of Bophuthatswana therefore, rested on a fundamental contradiction. Keenan (1986) states that "the first president of the Bantustan, Lucas Mangope, espoused from the mid-1970s the principle of non-racialism and flirted with "liberal democracy" as a means of distancing his political entity from South Africa and buying legitimacy. In the end though, as resources became more limited, privileges were accorded to those who could show 'Tswana identity'; 'foreigners' (non-Tswanas) were treated as second-class citizens".

Another consequence of consolidation was that people had been moved to arid, remote and poorly serviced areas and land, which was only suited to grazing livestock and had limited arable capacity, compounded by Africans having little land or the capital to engage in commercial farming. Industrial activity was

centred only in selected growth points and the only economic activity that held prospects for significant employment was in the platinum and chrome mines near Rustenburg, the mineral rights for which were held nominally by the Bafokeng. Wolpe (1984) states that "in the 1970s there were few job opportunities in the homelands bureaucracy, as white officials occupied most ranking positions in the administration and most people feared that their rights as South African citizens would be taken away if they were forced to become Bophuthatswana citizens".

The Tswana Territorial Authority (TTA) which was formed in 1961 was broadened in 1968 to include Tswana – speaking people, in an attempt to legitimize the process that later led to 'independence', in 1977. Two elections were held and according to Manson and Mbenga (2006:786) "these were ludicrously suspect mandates on which to base the foundation of a state on the basis that the Tswana were not asked, in the first instance whether they desired 'independence'. Second, that the elections were conducted under a cloud of confusion, fear and a lack of transparency. Third, Tswana voters were not enumerated and the percentages of votes cast could never be properly determined. Mangope was elected the first chief councillor of the 1968 TTA on a suspect, if not downright unpopular 'mandate'. The 1972 elections saw the emergence of differences between Mangope and the Kgatla Chief Tidimane Pilane. Pilane stood for African unity as opposed to Tswana unity. In other words Pilane's Seoposengwe Party, later the National Seoposengwe Party (NSP) espoused a form of 'federalism'. Lawrence and Manson (1994:451-477) indicate that in Mangope's view "Bophuthatswana was to be for Tswana citizens and he feared the concept of federation as it might weaken the status of the Tswana in relation to other and more numerous ethnic groups". The 1972 election was contested mainly in the rural constituencies. Manson and Mbenga (2006:787) indicate that "of 45 percent of rural voters that went to the polls, only 15 percent did so in the townships around Pretoria and Johannesburg. Only 16 seats were contested. The BNP won 12 and the NSP won 4 – or 268,000 votes

to 102,000. The remaining 48 seats were nominated, which rendered the entire process a farce".

Soon after the elections, internal disputes and personal power struggles afflicted the BNP and the schism led Mangope to form a new party, the Bophuthatswana Democratic Party (BDP). In May 1977 elections were held again and the BDP won 90 of the 96 seats in the Legislative Assembly, a result which Mangope saw as a mandate for taking independence. The appearance of legitimacy conferred through the elections, the South African government proceeded to lead Bophuthatswana to independence in 1977, which stripped nearly two million people of South African citizenship. Objections were strongly enunciated by the African National Congress in exile and the scene had been set for future political turmoil in South Africa's homeland creation. Manson and Mbenga (2006:788) draw attention to the fact that Mangope "repeatedly tried to force the government to incorporate more land, demanded compensation of R240 million for the past contribution of the Tswana people to South Africa's economy and vehemently stated that "he was no stooge for the South African government and never will be".

The concept of divide and rule which was perfected by imperial and colonial forces in the past now became an option for Mangope to implement vigorously within the homeland. In this regard discrimination against non-Tswana people became rife within the territory. Manson and Mbenga (2006:791-793) draw attention to a host of incidents with regards the concept of divide and rule.

These incidents and the wrath of Mangope and his government as Manson and Mbenga (2006:793) state highlight several issues: "first, the depth of discontent with the Bantustan policy and resistance to it among mainly rural people; second the brutality of the Bophuthatswana regime in attempting to crush opposition; third, the extent to which the Bantustan policy divided ethnic groups that had for

decades lived cheek by jowl; and fourth, the extent to which it divided the Tswana – speakers themselves". Its intention was to 'divide and rule'.

Anti-apartheid political activity intensified after the expulsion of student activists from Universities in South Africa. Students who were expelled made their way to Mafikeng and the Mafikeng Student Organization (MAFSO) was formed under the auspices of the South African Students Organization (SASO) a wing of Steve Biko's Black Consciousness Movement. Protests took place in Mabopane, Ga-Rankuwa, Itsoseng and Montshiwa, within a week of the Soweto uprising and several schools were burnt in the Bophuthatswana region. The protests led to arson and the Bophuthatswana Legislative Assembly was burned down. Several educational institutions such as the Hebron Training College were closed for fear of further protests or violence. In 1977 Mangope's car, in which he and four cabinet members were traveling, was stoned by angry youths in Ikageng near Potchefstroom. The Human Rights Congress in 1978 was outlawed in Bophuthatswana. Mangope banned 'foreign' organizations and in 1979 declared a state of emergency. These developments indicate the scale of repression, the nature of Mangope's ethnic bias, and the intended consequences of the apartheid system.

The Road to Democracy Education Trust Text (2006:794:797) shows clearly that the National Seoposengwe Party challenged the BDP in two tactical forms: first, they challenged the theoretical basis of the homelands; and, second, they focused on individual instances of the abuse of political power or anomalies in the system. The NSP used the Legislative Assembly to question the legitimacy of Bophuthatswana. It took up the issue of forced removals. From the mid 1970s Umkhonto we Sizwe (MK – military wing of the ANC) cadres began to infiltrate South Africa from Botswana, some through Bophuthatswana territory. This had a twofold impact. First, it raised awareness among Bophuthatswana 'citizens' that the ANC was in their midst. Second, it intensified the state's anxiety about armed incursions and the threat 'terrorism' posed to

Bophuthatswana's independence. This elevated repression to greater heights and levels in the late 1970s. The ANC had infiltrated the borders of Bophuthatswana and several missions into Bophuthatswana were successful. On the other hand the security forces of South Africa managed to recruit individuals in Botswana to inform on ANC activities. It has also been recorded by Manson and Mbenga (2006:800) that "MK guerrillas received assistance from the Bophuthatswana Defence Force".

From this narrative, it is obvious that much intrigue, violence, suppression and overt authoritarianism characterized the Bophuthatswana state. There was also considerable disgruntlement in Bophuthatswana with the Mangope regime. This often translated into identification and sympathy with the liberation movement among the people and in this regard Manson and Mbenga (2006:801) state "repression thus sparked resistance and retaliation". The narrative also sets the pace in this chapter to further analyze a host of repressive characteristics that, signified the emergence of Bophuthatswana as an independent entity under President Lucas Mangope.

2.5 IRREDENTISM AND ETHNICITY

The resilience of ethnicity as both politics, ideology and reality is one of few apparent apartheid continuities since independence. Ethnic connections still challenge other relationships, formenting arguments of internal secession or external irredentism, despite the Batswana masses' determination to be part of the greater South Africa. Ethnic fissures remain powerful, however, particularly in a period of economic crisis, when resources are scarcer than ever, unemployment beyond control, morale at its lowest ebb and competition in terms of survival at its highest. Thus the intellectual as well as the political context of ethnicity in former Bophuthatswana may have been distinct from that in other parts of the 'developing world' and Africa as a whole. In particular, notwithstanding similar attempts elsewhere, the synthesis of ethnic and class

factors had gone furthest in Bophuthatswana, somewhat ironically so, given its dubious independent and least-developed regional status. (The word irredentism emanates from the noun irredentist and is derived from the Italian, French and Spanish word *irredenta*, meaning unredeemed. In the context of the study, irredentism is defined by the Collins and Oxford Dictionary's (1981:450; 1984:390) as "a person who advocates a policy of recovering territory formerly a part of his country - the acquisition of unredeemed land").

Whilst officially denying and decrying ethnicity the ruling classes in Bophuthatswana tended to use it in practice to maintain personal networks, the very contradictions of power. Client networks served not only to keep the leaders in power and in touch, but also to mediate class differences, at least within particular groups. Both class and ethnicity were salient because the crisis of production and distribution had rendered all connections intense. This period of continuing contraction, competition for resources and so forth, generated its own response - regulation and repression. In the post-independence period until the late 1980s, there was a widespread assumption that ethnicity was an outmoded form of relationship to be superseded by more rational and modern state structures, the very myth of modernisation. The economic difficulties after 1990 induced a new scepticism with the government. They realised that ethnicity as a trump card in terms of jobs and opportunities for the Batswana was no longer viable. The available resources drastically declined.

The containment of class and ethnic antagonisms had become a major preoccupation of the ruling classes of Bophuthatswana after 1990. This set off largely internal survival issues in the form of the South African Tswana (SATSWA) initiative by President Lucas Mangope, together with initiatives with the right and far-right protagonists, and with an alliance in the form of the Concerned South African Grouping (COSAG) and the Freedom Alliance. This tended to divert attention away from external possibilities such as irredentism,

which was previously relentlessly pursued in collaboration with the South African Government. Yet, when reinforced by intra-national self-reliance, irredentism remained a threat to the so-called established Batswana nation state. In short, the historical context of ethnicity and class in Bophuthatswana was fundamental to the government's salience, survival and influence.

The many (mini) nationalist states in the form of the TBVC and self-governing territories were a response not so much to regime pressure, but to economic imperatives; the retreat from urban decline to rural survival in ethnic homelands, as observed in the agricultural imperatives on restructuring within the Agricultural Department and its parastatals in former Bophuthatswana, to replace other ethnic groupings with local indigenous peoples, at all levels of the agricultural work environment (must not be confused with White South Africa's enforced 'retribalisation' in the Bantustans). In the earlier period of Bophuthatswana as an entity, ethnicity was a political demand with economic potential; in the latter period and in terms of survival of the Bophuthatswana regime, it became an ethnic response with political implications. As context changed, so ethnicity was redefined by the upper classes, from political aggrandizement to economic sustainability.

Once ethnicity becomes entangled with the politics of production and distribution, into primary political and economic determinants, it moves from the concept of misguided nationalism into the argument and justification of nations. This was the case with the Bophuthatswana government. Schatzberg (1981: 462) points out: "Africanist social scientists have long known that ethnic groups are not immutable and that social class identity, composition and boundaries may also vary according to the political, social, economic and spatial contexts of the moment. Fluidity in class relations, ambiguity in class boundaries, and inconsistency in class membership must be taken as fundamental starting points, if we are to understand the role that class plays in Africa". Ethnicity and class are

not social problems *per se*, when considered in struggle. Ethnicity is only characterised as a 'problem' by the bourgeoisie when it ceases to be functional, in terms of providing support and instead becomes dysfunctional in that, it undermines the political order. The political economy was characterised by high levels of inequality and, therefore, did not wish to draw the attention of the poor to their condition, as opposed to those that had accrued privilege due to political patronage.

The degree of inequality in Bophuthatswana increased after the so-called independence. The majority of people had to endure stagnant or declining living standards and uneven economic development, which produced uneven social transformations, with differential ethnic and class forces. The minority within Bophuthatswana on the other hand experienced dramatic economic growth, in the form of the ruling party, the bourgeoisie, local business enterprises be they Tswana, White, Black, expatriate, Coloured or Indian. These sided with the oppressive regime in terms of maintaining the *status quo* and their own privileged status, together with expatriate professionals, White and Black, who were also charged with the responsibility of maintaining the *status quo* and, above all, giving credence to the political entity then defined as Bophuthatswana.

The dialectic of class and ethnicity as both latent and manifest social forces as defined by the erstwhile Bophuthatswana government, will have most certainly disappeared in the immediate future. Coercive containment of the tensions as experienced in Bophuthatswana, in terms of economic decline and social decay, could be readily mobilised or organised except in covert ways. In addition to the impact of parallel or informal relations on class formations, they must also transform gender relations. African communities (former Bophuthatswana included) that have departed from their urban/modern areas, are in decline and tend to regroup in rural/traditional places, and have also come to rely on female agricultural production and exchange. Women in Bophuthatswana were also

excluded from modernisation, and from official policies and decisions. Thus the tenuous connections between gender on the one hand and class and ethnicity on the other, became even more problematic, with profound implications not only from an analytical perspective but the very survival of the former regime, in those turbulent, yet dynamic and interesting times in South Africa.

It is acknowledged that inequalities between different ethnic groups in a number of African countries must be seriously addressed. However, one should be mindful of the all-embracing fact that the Bophuthatswana government needed to understand that the demands and aspirations of its local populations in the fragmented 'homeland' lacked legitimacy and, therefore, it needed to acknowledge and take into account these aspects within a national framework of the new South Africa. It should have further acknowledged that it was only by addressing injustices and inequalities within borders that African states and African nations could grow stronger. In this case, a strong, united, undivided and unfragmented South Africa, taking into account the economic realities of transition and not based on race and ethnic divisions, but addressing regional differences was of primary importance in order to address the manifest differences of uneven development and of the hegemony it created and perpetrated upon the people of this region, including the privileges and patronage for the ruling classes. From the above it follows logically that the concept of the rural masses and land in former Bophuthatswana, in relationship to the ruling classes be engaged and explored briefly. This will broaden the discussion and place into perspective the entrenchment of power by the government and its subordination of the rural masses.

2.5.1 Subordination of the Rural Masses

Despite the fact that rural ownership and tenure relationships were unfavourable to the majority when President Mangope came to power, and that the only

rebellion against his government in February 1988 was led from within the cabinet (the opposition PPP led by Malebane 'Rocky' Metsing and the defence force), there was no peasant rebellion during his rule, and the rural masses were unable to force the government to improve the situation. This was due to the lack of resistance by the rural poor in terms of the effectiveness of the repressive regime, which kept the poor quiet, and either eliminated or discouraged capable young leaders who might have organised a defence of the rights of the rural population. Agricultural and political subservience and ethnicity also served as a safety valve, reducing the tensions among the rural poor which might otherwise have led to more radical reforms that would have been against the interests of the land-owning party members. A further explanation of the weak resistance was to be found in the lack of unity among the rural poor. Opposed interests had thwarted their adequate organisation and the appearance of large and successful rural social movements. As a starting point to these aspects, a very brief historical perspective to this vexing question and problem is provided. An array of writers have studied the when and why of peasant rebellion at an international level, and particularly in 'developing' countries. Writers such as Manley, 1975:11-220; Samir al Khalil, 1990:3-150; de Janvry, Sadoulet and Wilcox, 1986:69-79; Lehman, 1978:339-45 and many others have dealt explicitly and extensively with this aspect and argue "that peasants base technical, social and moral arrangements on the 'safety-first principle. The reason for this lies embedded in the fragility of agricultural production within oppressive and mostly developing countries in the main (the former homeland's dynamic) and the consequent need to avoid failure, to minimise the subjective probability of maximum loss. The revolutionary potential of peasants should, therefore, not be over-estimated. Rather than resort to violence and armed struggle, most peasants prefer peaceful means to improve their situation and most of them have learnt that the most realistic way to achieve their goals lies in an incremental strategy, that is, by means of a series of modest improvements." The ruling landlords in Bophuthatswana seemed to be well aware of this bias, since many

examples can be given of resistance being met with minimal measures which only slightly improved the socio-economic situation of the population. This was the reality of peasants in Bophuthatswana.

In relationship to the above, the researcher is of the opinion that when the socio-economic and political climate becomes less bearable, as was the case within Bophuthatswana, the likelihood of loss seems minimal. As capable leaders come to the fore to organise peasant mobilisation, violence and armed struggle may become an attractive alternative strategy and option, to bring about more or less radical change. The ruling regime of Bophuthatswana seemed quite aware of the danger posed by discontent and organised peasants, "since rural history provides many examples of systematic and ruthless repression of peasant movements and of attempts to eliminate their leaders" (Huizer, 1972: 1973).

In pre-colonial times the region under discussion was inhabited by human communities engaged in hunting, gathering and a sophisticated and rudimentary form of shifting cultivation. No political ties between various communities, in the classical sense, are evident and no signs of state building can be traced within the polity of these human communities. Differences in power and privilege within the human communities were very small and, as a consequence, there was hardly any socio-economic stratification. "Specialised political roles had hardly developed, the most common function of the tribe's headman being to provide minimal leadership for the group. His actual power mainly depended on his personal qualities as a leader, rather than on his access to resources, which were considered as the property of the whole community. There was sufficient land and other vital resources, and consequently the concept of private ownership of land, animals, plants and fruits was unknown" (Pienaar, 1990:1-35, Alcock, 1973:2-16). It must be noted however, that human communities of the time including the Batswana coexisted peacefully in the main but, "at times there

was violence and evidence of subjugation and coercion by stronger tribes or communities against those that were considered weaker" (Wylie, 2006:44-49).

British colonialism (in the case of South Africa) brought with it a new brand of daily life and the descendants of colonials rapidly increased. As in other parts of the colonial empire, they became politically, economically and culturally dominant, able to control the region's land and labour. This brought about growing exploitation of the indigenous labour force. At the end of the colonial period, a small minority of Afrikaners ushered in and perfected the British policy of segregation. Thus, the indigenous people were forced to abandon much of their traditional way of life and were forced to settle in peripheral areas and to work on the mines as migrants. The Christian missionaries also played a significant role in aiding the colonial and apartheid rulers and succeeded in concentrating the indigenous peoples in various tightly-regulated communities.

After Bophuthatswana opted for independence under President Mangope in 1977 and the state became the owner of most of the territory, the government established state ranches/projects and rented the remainder of the land at nominal fees to people from the upper class who were willing to farm it. Through a rigidly enforced system of trade licences and its own massive participation, the Bophuthatswana government prevented the growth of both the subsistence farmer and commercial class under the guise of political patronage for the landlords, both Whites and Blacks. The majority of Batswana did not enjoy physical benefits and material well-being to identify with Mangope's policy and regime. The economic power of the state of Bophuthatswana was strengthened by several measures over its last decade, including the further appropriation of land from the apartheid rulers in South Africa and the architects of the Bantustan policy - the National Party under President F.W. de Klerk, in the form of large tracts of land negotiated between the Mangope regime and the South African Development Trust (irredentism).

It is unlikely that every Batswana supported the paternalistic and undemocratic regime of Mangope. However, this meant that daily life remained unchanged for most Batswana, who lacked leaders capable of defending their interests successfully and, therefore, the majority of the population supported the efforts of the liberation movements as spearheaded by the African National Congress. It was precisely for this reason that the Mangope regime closed ranks and ushered in repressive legislation, curbed the role of the labour unions, and refused to declare a referendum on the question of incorporation or for that matter allow free political activity. The regime in Bophuthatswana was apt to describe the territory as a kind of paradise. This paradise was for the ruling sector of society and expatriates who benefited over the years. The life of the rustic Batswana population was simple to the extreme. The people did not have access to land, did not eat a nourishing diet, did not enjoy adequate housing, nor did they have basic commodities like electricity and water, had only minimal education, and did not feel the satisfaction of close communal life.

In short, the paternalistic, not to say authoritarian, tradition which stretched from the period of colonial and church domination to apartheid and the Bophuthatswana regime under Mangope, was a way of life for the majority in this region. After independence, the homogeneity of the rural population increased, mainly as a result of misguided nationalism and the government's will to entrench the concept of ethnicity. The creation of a strong Batswana nation state without allowing the development of a class of private landowners and local leaders to defend local interests, appeared to be more important to the Mangope government, than did individual interests of the majority rural population. Indeed this chapter of Batswana history became the order of the day under the Mangope regime.

Afrikaners, the Batswana landlords and foreigners together with influential politicians took possession of the land without serious resistance from the local

population who, in the main, remained illiterate and badly informed about the decisions taken by the government. Most of the Batswana were too poor to acquire property rights. The majority of the population was subordinated to a rural bourgeoisie. The politicians concentrated on safeguarding their own interests and those of foreigners and 'big' business as large land-holders. After 1977 the situation did not improve and the Christian Democratic Party dominated the country's political life. Most development efforts in the first decade of independence focused on stimulating investments in large government holdings and the enterprises of members of the ruling party, without much attention to the interests of the large group of politically-marginalised Batswana farmers, who not only became landless, but had to make do with small holdings.

Most of the land remained in the hands of foreign investors, or with political leaders and their direct supporters. Political life was dominated by various forms of violence, electoral manipulation, opportunities for both expatriates and the local landlords, and other symptoms of political rivalry. Nevertheless, faced with repression and, rather than revolt, most peasants preferred to clear their small plots of land and to supplement their income from farming through seasonal off-farm employment, by migrating to areas within the region and the Republic of South Africa (RSA). The basis of power in Bophuthatswana thus changed from personal qualities in pre-colonial times, to economic power based on the control of Bophuthatswana's most important resources - land and political power. Under the regime of President Mangope, political power was increasingly consolidated by military force and, living conditions of the rural masses deteriorated. Various instruments were used to keep them mute, and to prevent them from gaining power. The regime skilfully imposed censorship and, also skilfully, transformed the area into an instrument for safeguarding so-called political stability. The party transformed itself into a Christian Democratic Party, reminisceht of the National Party in South Africa under apartheid, which used 'populist' symbols of nationalism and increasingly controlled many aspects of daily life. Government

employees in many ways were obliged to become members of the highly centralised and authoritarian party, which was totally subservient to Mangope.

The party had an effective national organisation through a network of branches, which extended to village level in rural and neighbourhood level in urban areas. Police and the army acted under the orders of officials; courts in the main were unable or unwilling to swim against the political tide. As a consequence, party affiliation in rural areas was seen as an insurance against constant harassment by agents of the state. Helped by the long-standing tradition of 'paternalism' in Bophuthatswana, members of the ruling party and the government managed to increase their power over the rural poor. The 'revolutionary potential' of rural leaders that would successfully revolt against the oppressive political regime was further reduced by the fact that many skilled people criticising the regime were expelled, as a consequence of the instability brought about by the negotiation process and the unfavourable political climate under this administration.

In the late 1980s and early 1990s, the economic crisis increased the urgency of social demands. Social movements, the church and the university took an active role in challenging the state. In addition, democracies in neighbouring countries placed tremendous pressure upon the government. Yet repression did not diminish. After the attempted coup in 1988, outspoken critics of the regime, who attempted to penetrate the regime and stand on the side of human rights, were banished or branded as communists. Many were arrested and threatened.

Agricultural fragmentation of the Department of Agriculture, the concept of agricultural parastatals and the unwillingness of allowing progressive Non-Governmental Organisations (NGOs) to operate within Bophuthatswana, were also used as an instrument for reducing the resistance of the rural poor and avoiding political unrest. Many rural people who historically occupied and settled the land, lacked official property titles and had a status of occupant. Most

farmers used traditional methods of production and because of the lack of means for intensifying land use, yields per hectare were low. It is, therefore, not surprising that the share of the agricultural sector in the national economy was considerably lower than it could have been, and the position was declining. The view of the Mangope administration, as indicated by agricultural statutes, was to increase production in areas favourable to the regime in order to try and improve the situation of the mass of the impoverished and landless families living in over-populated agricultural core areas, and to reduce social tensions. This opportunity was intended to convey a sense that something was being done to improve the situation. This was easily translated as mere political posturing and political rhetoric - a dismal failure to live up to its promises.

Bophuthatswana rapidly became the domain of private owners, agri-business firms, speculators and land-grabbing party members. Because of their so-called contribution to agricultural production and the growth of the national economy, foreigners enjoyed the active and passive support of the Bophuthatswana government. In short, while the policy of land distribution was presented as a measure to improve the situation of the rural poor and stimulate development, it turned out to be primarily an instrument for reducing social tensions by consolidating the existing rural property relationships. In addition to these external factors, which restricted the possibilities for change and development, another explanation for the weak resistance of the rural masses to the Mangope regime is to be found in their lack of common interests.

The rural masses were not a homogenous group, and several subgroups with their own specific interests were distinguishable. The lack of social homogeneity and the decreasing spirit of unity at the national, regional and district levels was a bottleneck for the emergence of large and successful peasant movements in Bophuthatswana, such that more radical changes in the position of the rural masses did not materialise. Although the traditional value system was

increasingly threatened by the process of oppression and repression, the rural masses were also unable to offer meaningful resistance, in part because they belonged to various ethnic groups and were not geographically integrated. Moreover, some groups received considerably more support from the state and its benefactors than others.

From colonial times to the time of the Mangope regime, a small group of the population dominated Bophuthatswana's political and economic scene. One of the major negative characteristics of the Bophuthatswana society, for which its landlords, both opportunistic Black and White, may be held responsible, was the skewed distribution of landed property. The rural masses were unsuccessful in improving their situation. Representatives of the rural poor were unable to obtain access to the political arena, sufficient to force the government by legal means towards radical reform. Unrest was violently put down by the military, and leaders defending the interests of the people were imprisoned or exiled. The economic and social situation in Bophuthatswana required vigorous action from the progressive forces, in order to undermine its lack of legitimacy in the eyes of the majority of the people. Large-scale reforms were needed but, prior to 1988 and the attempted coup, the limited rejuvenation of the Bophuthatswana élite and their attitude toward social problems seemed to be a major obstacle to reform.

Apartheid's Bantustans reflected extreme forms of territorial fragmentation and (neo) colonially – derived dependency (Jones, 1999:597). Under the guise of 'independence', marginalized groups sought power and influence through vigorous efforts to promote a new national identity in Bophuthatswana. Bophuthatswana's shifting strategies and regional discourses, however, had to be seen in conjunction with the effects of the implementation of the modern façade of a 'nation state' and its incursion into rural and urban society. Subsequent efforts towards nation building by this pseudo-state were based upon the evolutionary imagery of Bophuthatswana as a 'less developed'

peripheral territory requiring modernization and maturation. This had severe consequences for any state – led efforts to mobilize cultural identity, 'invent tradition' and implement 'national' development in Bophuthatswana.

Jones (1999:598) further states that "former President Lucas Mangope, found guilty of 103 counts of fraud and the highly artificial and corrupt nature of the bantunstan 'pseudo' – states created under apartheid placed the President in an invidious position and under tremendous pressure". "Following the collapse of his regime in 1994, such evidence would appear only to confirm 'Mangope's image as a 'dog of the boers' "(Lawrence and Manson, 1994:447). It is therefore suggested that the Bantustan's nation building must be located within the context of both apartheid's discriminatory and discerning logic. Jones (1999:580) indicates that Southall (1977:1-23) in the 1970s, "identified the beneficiaries of Bantustan independence as an emerging bourgeoisie consisting of teachers, farmers, bureaucrats and businessmen who by virtue of their financial dependence upon the state, were more likely to use this influence to promote support for, and to suppress resistance to, separate development". Lawrence and Manson (1994:447-461) added to the debates by stating that "the character of Bantustan leaders themselves and their discourses of ethnicity and nationalism added an important dimension to homeland survival and increased oppression". A critical re-interpretation of Bophuthatswana's experience as the caricature of a sovereign nation embodying the spirit and practices of nation – building can identify some surprising reasons for its own particularly acute disjuncture, that was the emerging conflict and chasm between its territorially – populated 'nation' and its administrative 'state'. Berman and Lonsdale (1992:466) distinguish between what they regard as "political competition associated with an external realm of 'political tribalism' and the interior local moral ethnicity internal to civil society. The interplay between the two, according to these authors, had profound implications for state legitimacy, which was crucially mediated by patronage."

Lucas Mangope, President of Bophuthatswana stated "our people (the Batswana) became fragmented and scattered willy nilly across the sub-continent. Our culture, our language, the very fabric of our being as a people, began to be dissipated and lost in bastardized tapestry exacerbated by the evils of apartheid" (Strydom, 1977:36). The above quotation reflects the Bophuthatswana regime's efforts to reverse the cultural position of the region. It was an attempt by the regime to manipulate history and to promote ethnic renewal and Batswana nationalism. In 1972 the manifesto of his party revealed Mangope as an ethnic nationalist who consistently emphasized the rights of the Batswana within Bophuthatswana despite the presence of hundreds of thousands of non-Batswana. Butler et al (1997:48) and Jones (1999:587) "suggested that with 64 percent of all Batswana situated outside the homeland Bophuthatswana could not qualify to be called the urheimat or original gathering of at least a substantial portion of the people". Mangope, however, took this argument of the apparent immutability of ethnic divisions to overseas audiences and to 'white' South Africa in attempts to legitimize his regime in the eyes of the international community. "On one of many occasions he claimed that a political system based upon the concept of one man one vote was inappropriate for South Africa; it would lead to ethnic conflict - another Angola" (Breytenback, 1977:13).

Throughout the 1970s, the economic and employment opportunities in Bophuthatswana were expanding. Jones (1999:588) indicates that "within the Bophuthatswana administration, 'employment increased from 872 in 1968 to 2,917 in 1974 and 7,304 by 1977". Together with other party members, Mangope promoted these 'opportunities' as an escape from racism and apartheid's restrictions. This 'progressive' discourse was focused upon an emerging socio-economic group consisting of teachers, businessmen and farmers'. Batswana farmers now demanded equality within separate development. Mangope himself farmed and this Batswana farming group offered a potential political basis for the Bophuthatswana regime, in contrast to the vast

mass of landless Africans who were forcibly removed from white areas and resettled in the homeland.

Within Mafikeng, a white town adjacent to Montshiwa township where the Boputhatswana Legislative Assembly (BLA) was located, "Batswana businessmen demanded that blacks should serve blacks in shops through breaking the white monopoly on jobs. Other Batswana criticized the arrogance of whites, particularly for still referring to the Batswana as 'boys', walking uninvited into council meetings and inspecting black business" (Moatshe, 1973). "The major South African parastatal promoting economic development in the homelands, the Bantu Investment Company, was accused by Batswana of being a racist company" (Mafikeng Mail, 1973 July 27). Black advancement was therefore perceived to be most effectively promoted through separate development. The promise of economic opportunities, infrastructure and facilities was another major strand of Mangope's strategy to legitimize Bophuthatswana. The regimes emphasis on 'national identity' and the political basis of the regime rested upon a combination of traditional structures and as Moerdjik (1981) has suggested the "development spirit" of the middle class within the Bantustans. The 1972 elections confirmed a rural bias, whilst the urban areas rejected separate development" (Jones, 1999:588).

The National Party's refusal to move from the territorial allocations of the 1936 Land Act amplified divisions within Bophuthatswana politics. By 1977, final negotiations were taking place over the Bophuthatswana Independence Bill. In 1976, the fury that precipitated the burning down of the BLA was an indication of the opposition of many within the Bantustan to the removal of their South African citizenship. Through lack of consultation with the so-called regional 'ethnic' citizens, symbols of the Bophuthatswana regime were targeted by demonstrators. "Against this backdrop of instability the leaders of the opposition Seoposengwe National Party (SNP), Chief Maseloane, came out very strongly

against 'independence' and demanded equality with white South Africans" (The World, March 11,1977). Whilst this national and particularly urban based opposition, was forcefully expressed, there was nonetheless a sense in which even 'limited independence' was interpreted by the ruling elite, and various groups within Bophuthatswana as a significant stepping stone along the road to 'maturity' and 'independence' of Batswana people, in this region.

Amidst global condemnation, 'independence' was bestowed upon Bophuthatswana at midnight on 6 December 1977. South Africa was the only country in the world to officially to recognize Bophuthatswana. Prior to and following 'independence' South African officials compared the Bantustans to 'other' independent African countries. However, for some sections of both black and white South Africans it was clear that these events, although a 'sham', nonetheless were having a real impact and meaning. The 'nation building' agenda had been set and despite the severe legacy of economic and institutional features of dependency upon South Africa, the Bophuthatswana regimes response was to invoke the power of development through the Bophuthatswana Development Council.

Traditional settlement, such as villages were considered generally by government as an obstacle to progress because they made the 'superimposing of modern infrastructure' on large tracts of fragmented land almost impossible in Bophuthatswana. "The Institute for Regional Planning at Potchefstroom University for Christian Higher Education had also made suggestions for a National Plan for Bophuthatswana" (Jones, 1999:596). The focus was upon assisting the transition to modernity. "Development as a means towards urbanizing and industrializing the population of Bophuthatswana because traditional settlements had little to 'offer people who live in a modern economy'. Industry was suggested as the cornerstone of government policy and this tenet was encapsulated in the White Paper for Development" (White Paper, 1981:24-

25). The modernizing impulse came crashing into traditional settlements because the traditional villages spreading as they did over large areas of rural land certainly did not promote optimal land use. On the contrary they increasingly present examples of overgrazing.

These sentiments would have major importance for Bophuthatswana agricultural policy shaped as it was, around national goals of self-sufficiency and increased production. "In order to unleash the modernizing dynamic, the regime introduced multi-million Rand agricultural schemes and facilitated large agro-business" (Roodt, 1985: 6-9), whilst, the rhetoric was of 'national self – sufficiency' and the production of cash crops for export; the huge cost of these modernizing projects outweighed the dubious benefits to local small scale farmers. For example, "the expensive Dinokana irrigation project, set-up in conjunction with Israeli 'expertise' had the devastating impact of diverting local farmers' water supply, drastically changing land use and disregarding indigenous farming practices" (Drummond, 1990: 335-343).

The rhetoric of modernization cannot be divorced from the regime's strenuous efforts to gain international recognition and legitimacy for Bophuthatswana. In seeking to modernize institutions, newly independent countries often adopted alien models from countries or systems that had 'oppressed and despised' them. Jones (1999: 597) states that "rather alarmingly, despite its negative features and assumptions regarding the benefits of transformation and with an emphasis upon the catalysts of growth, such as Mmabatho itself, a former economic advisor to President Mangope, Karl Magyar (1984), suggested that the white paper represented a standard 'development administration model' similar to many African plans." Given the enormity of South African economic and institutional influence, the most critical omission was the failure to recognize the high level of dependency which supposedly warranted, a 'unique approach'. Instead national

development and autonomy were promoted. In short or in other words Bophuthatswana followed the pursuit of an inappropriate external model.

According to Jones (1999: 598) "this approach was based upon the unlikely combination of Mangope's top black advisors who were not educated in development theory and a range of white South Africans and Rhodesians, mainly free market industrialists seconded from South African industry". Another axis of contradiction was growing between those developmentalists promoting Bophuthatswana's 'independence' and others who increasingly criticized this strategy. Mangope's own ambitions and drive for 'independence and sovereignty' were then superimposed upon this framework.

Leading from the above scenarios and in order to further expand the discussion in terms of legitimacy, power, and repression under the Bophuthatswana government, the researcher is of the opinion that not all power is legitimate; political authority, unlike raw power, is power delegated through a process of legitimation. In this regard, Lucas Mangope already exercised genuine authority. The partnership between social organization through the United Christian Democratic Party bureaucracy and political leadership, focused on a manufactured personal charisma, which presumed a legitimacy to the conditions surrounding the exercise of political power. In other words, the leader syndrome in Bophuthatswana's United Christian Democratic Party (UCDP) conditions entailed the rise of a shared conception of legitimate authority within the polity. This was a new conception for so-called modern Bophuthatswana uniquely associated with the UCDP experience. It is therefore obvious that if power had not undergone such legitimation, authority could not have been absolutely vested in a leader. In single party regimes as was observed in Bophuthatswana, this was a recipe for conflict, factionalism, and a modicum of real politics. A powerful leader who does not focus into his person all political authority, and wanted to do so, would necessarily conflict with his party and remain 'fallible' in the eyes of his

public – the outcome of the necessarily public nature of such a conflict. If the leader emerged triumphant (as did Mangope), absolutism and infallibility would become once again attributes of a leadership vested with authority.

Lucas Mangope's authority can be thought of as having been acquired across three stages of transference. First, authority was merely posited to exist in the party by an act of will. The party was the originator and author of that which it wanted others to carry out. Second, compliance with this act of authorship was acquired gradually by means of the numerical and qualitative growth of the UCDP and the front organizations it created. The power of large numbers of people was becoming an attribute of the party. Third, as a consequence of this metamorphosis, the authorship of political ideas became jeopardized; the 'author' was in danger of being lost in the bodily morass. Hence in Bophuthatswana and under Lucas Mangope, the leader syndrome had become the substitute for all politics. However, the party had conceded its political authority to the leader, replaced civil society and thus remained the power base of the new authority.

Logically the second stage of transference was the crucial moment. What motivated people to enter the party? While many complex reasons probably exist, the researcher believes that fear was the socially dominant motivation in UCDP Bophuthatswana. Fear lies at one extreme of a continuum, the other end of which is autonomous consent based on active belief. Normally, the latter is viewed as a binding motivation on individuals that gives rise to a truly legitimate authority. Fraudulent elections as were observed in Bophuthatswana for example, de-legitimized power, as was demonstrated by the dramatic fall of Marcos, the former president of the Philippines. If it can be shown that deep-rooted fear also legitimates power, albeit of a very unusual kind, then surely it would follow that a genuine authority had become vested in Lucas Mangope. Herein resided the most fundamental specificity of the UCDP regime in Bophuthatswana. Whereas in Bophuthatswana notions of justice, obligation, and

morality were meaningless in the 'new state' where the unfettered will of the ruler (Mangope) was justice, and a system of moral obligations towards him was incumbent on citizens being in the nature of the contract made to ward off insecurity. Reason therefore, dictated that an underlying consensus existed in the polity of the homeland, and nothing was in principle inviolable to the ruler's will.

The transition from one condition to the other in UCDP Bophuthatswana was achieved by an unprecedented assault on the willingness to act in public as was observed in Mmabatho, Braklagte, Winterveld, the University of Bophuthatswana and many other areas/institutions, by an inculcation of an all-embracing atmosphere of fear. In this regard Samir al –Khalil (1989:61-62) clearly shows that "a polity whose self-definition is that 'everything is political' comprises one of the most apolitical populations". This profound metamorphosis of attitude was carried through in Bophuthatswana in a few years. The result was a vulnerable populace unable to 'think' or accumulate experience in dealing with itself, and consequently more prey than ever to believing the most fantastic lies. Storytelling can only be suppressed through broad and graduated informer networks whose main function was not to identify malefactors, but to embroil the largest number of people in the terror of the regime. Success was achieved by Lucas Mangope by the degree to which society was prepared to police itself. Who is an informer? In UCDP Bophuthatswana, the answer was anybody. "Party members straddled every facet of life including the public sector and were a mass under discipline, expected to inform on all acquaintances, including other party members" (Estherhuisen J., Chief of Intelligence, Personal Discussion 1988).

Leaders and men such as Mobutu Seso Seko, Idi Amin, and Lucas Mangope, Kaizer Mantanzima, Charles Sebe and a host of others on the African continent were feared, not loved; above all they commanded enormous respect in a

population to whom strength of character was invariably associated with the ability to both sustain and inflict pain. The madness inherent in the elevation of raw violence to such a status in the affairs of human beings appears as such only from the outside; from within respect, no matter how grudgingly bestowed, eventually gives way to awe. Promoted by the organizational omnipotence of the party and the preeminence of fear in peoples daily lives, such awe accentuated individual feelings in the homeland of utter helplessness and worthlessness. The size of the gap between awe and helplessness was the measure of Lucas Mangope's infallibility in the eyes of his followers; a perception that followed from their loss of identity that was brought on by the dissolution of all normal norms that were not those of the UCDP. The public's ability to judge what was right or wrong about its affairs, what was real as opposed to mere illusion, had broken down completely within Bophuthatswana.

After the February 10, 1988 coup attempt by the military and the opposition, explanations of the massive purge centred on political differences at the top levels of leadership. Undoubtedly the purge marked a climatic moment in the personal emergence of Lucas Mangope as the 'Leader'. Many academics, and personnel, public servants, traditional leaders, school teachers, church leaders and a host of others including businessmen and opposition politicians were hounded, imprisoned and banished from the homeland. The 1988 purges were designed to transfer already existing bands of complicity away from the party and firmly into the person of Lucas Mangope. This had become a powerful imperative of the homeland system itself, once all political opposition had been eliminated and truly absolute power had emerged. The terror had turned against its perpetrators. (The researcher had himself experienced this phenomenon and had to flee to Saudi Arabia for a protracted period of time from February 11, 1988 – a day after the coup, because of imminent arrest and questioning by the police and in addition harassment and intimidation). These and other measures created a new audience held in thrall to UCDP ideological productions whose

chief characteristic was that it had never existed before. Terror campaigns to weed out that 'old generation' of intellectuals associated with another worlds inbuilt elitism (by no means advocates of it) were thus combined from the outset with laying down the groundwork for a society made up of the mass consumers of ideological artefacts.

Samir-al Khalil (1989:100) shows that "conspiratorial thinking has broad roots in the extreme fatalism and hostility to individualism" that may have been a characteristic of Batswana culture under the UCDP. Batswana nationalism under Lucas Mangope enriched this legacy by setting up a yawning chasm between its ultimate goals and its existed realities. This chasm grew with time and created an even more conducive atmosphere for 'thinking' conspiracies. By the end of the 1980s the UCDP had become veritable masters of the craft. This was observed by the researcher in respect of the number of people, throughout the homeland being threatened and imprisoned. Among these were two former Ministers in Mangope's Cabinet, Chief B. Motsatsi and Reverend L. Holele; various businessmen including the popular, late Abdul Dada, local physician Dr. Anwarmia Hoosenmia (the peoples doctor who in post 1994, became the Deputy Mayor of Mafikeng) for renting premises to the African National Congress, banker Sydney Malapa and King Lebone Molotlegi of the Bafokeng to mention but a few. The real experience of politics in the erstwhile Bophuthatswana over its seventeen years of independence had so degraded the language of public discourse that the whole population, including those that were in opposition, lacked the barest rudiments of a conceptual apparatus with which to have comprehended their reality. The assault on tradition and the rhetoric of the UCDP and Lucas Mangope was the hallmark of power that greatly accentuated the general degradation of Batswana through politics and culture. Remnants to a lesser or larger degree in respect to such propaganda is still a feature in different parts of the North West Province of the Republic of South Africa. This was the reality within Bophuthatswana.

The government and state therefore epitomized race, ethnicity, patronage, suppressed workers' rights, enforced the outdated dogma of political correctness; embraced neo-Stalinist tactics and rhetoric; promoted symbols of ethnic Batswana nationalism; undermined parliament, threatened and manipulated the judiciary; monopolized power and public service posts; controlled the media and thus brought about a crisis of democratic legitimacy, through its pursuit of the rule of fear consolidated by means of intimidation, oppression and total suppression.

Finally, it must be understood and recognized that the separation in theory between party and state did not belittle the strategic influence of state power in the achievement of UCDP goals. A key effect of all edicts that originated from the Leader (Lucas Mangope) was the destabilization of state authority, with the consequence that all hierarchy within institutions based on procedure, law or merit was destroyed. The natural tendency for the state of Bophuthatswana was to become a power base for individuals or cliques. The Leader, through the party was in control. Why did so many people come around to accepting the traditions and principles of Mangope's political party? How did they become the source of UCDP legitimacy in Bophuthatswana? These are historical questions which this study in a small way attempts to answer but, it is obvious that any inquiry into what the principles are must be left to further inquiry by other researchers. However, indispensable, the UCDP state was simply a means for arriving at the new society in 1994 (April), and a supposedly revamped South African individual as regards values, concepts and conduct.

2.5.2 Further Acts and Forms of State Repression

"We have had to struggle and to sacrifice to develop infrastructure and all the physical attributes of a state and nation that wishes to jump the gap from an African rural eighteen century economy and way of life to join the respected nations of the world in the twenty first century all this in the brief period of 23

years from the start of our independence to the turn of the century" (Lucas Mangope, 1982). The above quotation illustrates the parameters within which nation building would take place and which had become internalized within the Bophuthatswana leadership. The distinction of government expenditure indicated that social policy was secondary to the physical transformation of Bophuthatswana itself. "The Department of Public Works, together with the Department of Economic Affairs, received approximately three quarters of total allocation for 'development spending' in the first half of the 1980s" (Jones, 1999: 598). This expenditure was centred upon the rapidly growing urban areas and the capital itself, Mmabatho. Policy making revolved around a small clique at the pinnacle of the Bophuthatswana state and in a top down manner, with Mangope at the helm of affairs.

Jones further points out that "in these efforts to promote Bophuthatswana's claims for legitimacy and recognition on a world stage, projects were conceived as huge public relations exercises. During the 1980s therefore, projects were designed to reflect 'style' and 'prestige'. Without an integrated development plan linking structures with the Executive Council, the Presidential elite dominated decision making and the Bophuthatswana state resembled a commercial conglomerate. "The prestige model was epitomized by projects such as a R21 million game park reserve, a R17 million soccer stadium in Mmabatho, and a R25 million international airport. There were many more, including an opera house, international school and string of hotels including Sun City, and most scandalous of all, was the ill-fated R177 million power plant" (Jones, 1999:600; Roodt, 1985:6-9). These projects were commissioned by the government to modernize Bophuthatswana as rapidly as possible in an attempt to indicate that actual development was taking place, when in reality many of these projects after completion stood as "white elephants" and were seldom used for the purposes that they were built for; for example the international airport was used for a single daily flight to Johannesburg only, whilst the soccer stadium built in the capital, Mmabatho to accommodate a crowd of 80,000 spectators was never fully

utilized and never filled to capacity. The opera house which fell directly under the control of the Bophuthatswana Arts Council, was primarily built for British expatriates and housed the philharmonic orchestra which was subsidized fully by the government and, the musicians were recruited from England in the main and paid by the Department of Arts and Culture, including benefits such as free housing. The International School was modelled in style, character and architecture as though it was situated in England and teachers, in the majority, including the principal and administrative staff were recruited from Great Britain. The school was not under the direct jurisdiction of the Department of Education and followed the British education model and attracted students from the continent of Africa and other international destinations. All of this was an indictment to true development, coupled with wasteful expenditure. It added a boom of some job opportunities for the local population in respect of unskilled labour required for these projects.

The free-market capitalist 'trickle-down' approach to economic development encouraged white industrialists, with their commensurate 'knowledge' and 'expertise' to dominate industry. 'Despite, or because of, the huge tax relief packages given to entrepreneurs, between 1977 and 1985 real household income rose by only 4 percent. However, the exploitative wages and conditions of workers in Bophuthatswana industries and the regime's rampant free-market, trickle-down policy were being contested by trade unions in the more industrialized areas of the territory, particularly within the mining sector" (Jones 1999: 600). Overall Bophuthatswana's economic policy was criticized for failing to recognize the structural relationship with South Africa. The adherence to 'national autonomy' was regarded by critics as not generating any autonomous benefits and as reflecting a continuing dependence upon labour flows. Mangope's independence discourse was also contradicted with the creation of the Development Bank of Southern Africa, in the early 1980s, reflecting the South African 'developmentalist' gravitation towards emphasizing 'regional inter-dependence' rather that the fallacy of Bantustan sovereignty.

The problems were exacerbated by Mangope's faith in a handful of key advisors of dubious ability. Ironically, for such an avowedly Batswana state, expatriates held some of the most important positions within the Bophuthatswana state. "Mangope's influential Israeli advisor Shaptai Kalmonovitz was responsible for 'development' schemes and construction projects in return for foreign international links for Bophuthatswana. His misuse of state funds and office, dubious tendering procedures and Mangope's apparent infatuation with him, alienated numerous Batswana and civil servants. Interestingly, the Kalmonovitz affair, as it became known, was cited by the opposition party and a rebel faction within the Bophuthatswana Defence force (BDF) as a major underlying cause of the 1988 coup" (The Star, 1988, 11 February).

Shaptai Kalmonovitz was a Russian Jew and an émigré to Israel. He came to Bophuthatswana in 1980 with a group of Moroccon Jews to build two stadiums and caught the attention of President Lucas Mangope. He posed as Israel's ambassador to Bophuthatswana and drove around with a black Mercedes Benz with an Israeli flag. He was connected with the Russian 'mafia' and fled to Israel in 1988 (after the attempted coup) where he was imprisoned for fraud and corruption (Interview, 2007 July. Cutler, and Gordon, former Mayor of Mafikeng). "Within the BDF there was also deep resentment of the gross inequalities characterizing race relations in the homeland army. The rebel soldiers were also mobilized to act against what they considered as the corrupt actions of the regime and particularly the rigging of the 1987 elections. The opposition Peoples Progressive Party (PPP) also considered Mangope's continuing enactment of 'nationhood' as misguided and a betrayal of his earlier emphasis upon a federal option, which they themselves endorsed" (Jones, 1999: 600).

There was also a sense that the opposition was motivated by the resentment of being excluded from state power and the accompanying benefits. Jones (1999) points out "that the restricted access to the levers of the Bophuthatswana state created heightened competition from Batswana who sought loans or business

licenses. The minority accessing the network of patronage emanating from Mmabatho could benefit from the modernizing projects and policies. Those within the state structures were frustrated with Mangope's authoritarianism, white expatriate influence and the traditionalist outlook of many ministers. The Batswana ethnic group was assigned origins, which sought to legitimize Bophuthatswana as the modern repository for ancient Batswana rights denied through colonialism. The local media now became part of the state machinery and the enhancement of cultural sites and archaeological findings was given credence, in order to give the 'Nation' historical depth and legitimacy".

The emphasis upon Batswana exclusivity introduced further contradictions and posed considerable problems for the non-Batswana who numbered around 30 percent of the population. These communities were squatters within Bophuthatswana. Jones (1999:601) exemplifies the fact 'that although the façade of liberalism and non-racialism was presented to the international community, for example the voluntary incorporation of the white town of Mafikeng into Bophuthatswana and the creation of Sun City, work permits, citizenship and pensions were denied to non-Batswana within the homeland". Far removed from the glitz and glamour of Mmabatho were vast informal settlements such as Botshabelo, Winterveld and Hammanskraal, which comprised entire communities 'dumped' from 'white' South Africa, and where fierce battles were waged against incorporation into Bophuthatswana and discrimination. The Bophuthatswana army was deployed on numerous occasions to quell opposition. The government now began to interfere with chiefly successions and directed its wrath at non-Batswana 'traditional' communities.

From 'independence', traditional leaders were thrust into political positions and according to Jones (1999:602) "epitomized these contradictory functions of traditional structures. The granting of authority and power to these structures were not from their own communities but from higher authority. Chiefs were

granted the power of arrest, ability to levy taxes and even to pass sentences for various crimes. There seemed to be a lack of concern for the welfare of the community, with the corrupt use of power for personal enrichment. The subordination of chiefs and their authoritarianism created a dependency of villagers in respect to patronage for services and resources; it also demoralized any efforts to mobilize alternative grassroots structures (some chiefs had resisted the regime)".

Corruption and nepotism in Bophuthatswana began at the very upper echelons of power. In this regard and to exemplify the point Serry (Saturday Star, 11 December, 1993:9) indicates that "Mangope in land scam, audit reveals and goes on to state that President Lucas Mangope had been occupying state-owned farms in the homeland without paying rent, owing his own government and therefore, indirectly, the South African taxpayer tens of thousands of rands in unpaid arrears. The cushy deal was unearthed earlier by chartered accountants Ernst and Young who carried out an audit of the Bophuthatswana Land Allocation Fund on behalf of the Auditor General. The Ernst and Young report which was submitted to the Auditor General on April 5 (1993) painted an appalling picture of maladministration, 'sweetheart deals' and wastage of government money. The report said there was no lease on file for a farm in the Marico area occupied by Mangope. It noted that farms rented out by the Bophuthatswana government in the Marico area had improvements on them valued at R2,6 million, and for which those leasing the land should have been charged an additional 10 per cent in rent. This was never done'. Serry (1993), further points out that the auditor's cited Mangope as one of a number of farmers who had 'long-outstanding rentals'. In Mangope's case the amount owed as at March 31, 1992 was R59, 690. In reaction Bophuthatswana's Director of Land Administration Dr. Theo Scheepers said "Mangope had applied to lease the land 'in his capacity as farmer' in 1985 and that the auditor's information was outdated. He claimed also that under drought relief arrangements, farmers

including the President had their leases extended, with the proviso that the outstanding rent would be added to the price of the farm when it was purchased. Scheepers added that Mangope had since applied to buy the farm and had put down a deposit of about R100 000 and that the title deeds would not be handed to Mangope until the full purchase price and outstanding rent were paid". "Ernst and Young told the Auditor General that they had come across the Land Allocation Fund only by chance when auditing another fund. After they had notified the Auditor-General, he authorized the firm to do an audit" (Serry, 1993:9).

Its conclusion after, assessing what it described as 'an unacceptable situation' in the Land Allocation Fund, was that the 'strongest possible' action should be taken to rectify matters. Among practices identified by the report: no proper books and records were kept; no financial statements were prepared; rent was not paid; no inventory was kept of state land, so there was no way of knowing whether all rents owed to the Mmabatho Government were, actually paid (Serry, 1993:9). (The issue of the Land Allocation Fund and the Lands' Directorate will be alluded to briefly in Chapter 3 and will underscore the above revelations). This case clearly shows that corruption, nepotism and political patronage had become a way of life under Lucas Mangope's regime and government.

2.5.3 The Authoritative Force

The corrupt politics of ethnicity and economics together with issues in respect of social and cultural aspects of the Bophuthatswana regime, assumes significance in the context of the study. An attempt will be made to very briefly outline some of these dynamics. In doing so a linkage will be made in respect to the economic dimension, as it pertains to the conflict with the Bafokeng tribe. The idea that political authority should reside in that agency that best embodies the "national will" ties in with the notion in reform law, that authority is always unitary, never

fractured, mediated or conditioned. In this regard Samir – al Khalil (1990:138) states that "because authority in the state is one, this means the negation of the idea of 'multiplicity of powers, legislative, executive and judicial." The size of the agency acting on behalf of the 'national will' does not matter. By definition this agency has already established that the people have objectives corresponding to its own. On the other hand the Legal Reform Law text (1977:28) indicates that "Power is not exercised for its own sake but for achieving objectives, the method of practicing the power which is defined by the constitution, is itself influenced by the economic, social, cultural and political reality of the country over which power is exercised. Owing to the importance that these foundations enjoy, they have to be stressed and declared in the constitutional document. Yet, the social, economic and political principles included, may not be in part data but an objective or aim to be realized." Therefore, in this meaning, the "constitution" shall also be a guide of action for the political leadership and a programme for a future policy the political leadership intends to realize through exercising the power.

Tyrannies and dictatorships resort to violence when their authority is placed in jeopardy. But for Mangope and his UCDP, violence was no longer merely the ultimate sanitation used periodically against a genuine opposition. The UCDP invented their enemies; violence, not a threat of it was institutionalized, reproducing and intensifying that all pervasive climate of suspicion, fear, and complicity so characteristic of their polity. Violence generates the fear that creates the complicity that constitutes the power, which was first passed to the party (UCDP) and then to Lucas Mangope in the form of his authority. Fear, which under other conditions can tear authority asunder, (for instance, soldiers and police refusing to fight as was seen in Bophuthatswana prior to its collapse or as was observed in the dramatic collapse of central power in the homeland in some situations), drove authority in Bophuthatswana to collapse inwards, into the bottomless black hole of absolutist leadership.

On a smaller scale, the experience of Bophuthatswana's UCDP, established yet again the radical separation of the question of legitimacy from that of autonomous consent. The UCDP turned fear into the precondition for their legitimacy. By presupposing, for instance, that torture is immoral, later generations of Batswana will certainly try to untie and unravel repression and oppression of the UCDP and Mangope's legitimacy. The world of political facts is less kind than that of human rights. It has to be understood however, that the legitimizing measures undertaken by the UCDP in Bophuthatswana were prerequisites for the regime of terror that followed. At this juncture politics as such came to an end.

The explosion in the size of the repressive apparatus in Bophuthatswana and the ascendancy of a police state over the army also followed the end of politics, which can be dated roughly around 1980. The peculiar feature of the Bophuthatswana regime, is that it developed unmistakable signs of a real social base (as measured by party growth, public support for Lucas Mangope, more armed men and stratification) after all politics had ended and in an atmosphere of rampant violence no longer directed at real enemies, but at everyone. To understand the phenomenon of Lucas Mangope in relation to "his" citizens, one must look beyond personal motivations into the broader societal preconditions and genuine authority that made it possible for a man like this to act out his dreams.

In respect to the degradation of thought in Bophuthatswana, how do barrages of myths coming from every direction; newspapers, the media, workplace, public meetings, street, and family, affect people, especially those once illiterate? What does the administration of lies do to people's judgment, especially when they are afraid? No one knows. A society like Bophuthatswana had choked off all the avenues by which anything other than mediocrity could flourish. Culture is defined not as "the spiritual outgrowth of an elite, but the scientific outlook

understands that the material production of needs is the basis and origin of all spiritual culture, which in other words means that it is the product of the activity of the masses" (Samir-al Khalil, 1990:99). It is therefore, obvious that, the real experience of politics and culture in a country like Bophuthatswana, degraded the language of public discourse that the whole population, including those in opposition, lacked the barest rudiments of a conceptual apparatus with which to comprehend their reality.

The post 1977 assault on tradition and rhetoric of Batswana nationalism and the UCDP, although very important, remained hemmed in by a "them versus "us" framework. There was no human message, just the same old suffocating parochialism. To challenge the language and categories of the UCDP on a terrain so well trodden by them was bound to be futile. By itself, ideology as mythmaking is powerless to fashion reality in its own image, married to this kind of organization, however, it acquires that capability by squeezing out of the social organism, remaining vestiges of an irreverent and non-ideological mode of thought. Even when its control over people is far from completed, the magic that has been injected between experience and reality on the one hand and concepts and discourse on the other remain operative. This was the hallmark of the UCDP that was in power that greatly accentuates the general degradation of Batswana thought in politics and culture in erstwhile Bophuthatswana.

2.5.4 Bafokeng Conflict

In continuing the discussion in respect of the authoritative force and repression in Bophuthatswana, an attempt will be very briefly made to place in context the political consequences of Bafokeng incorporation into the apartheid 'homeland' of Bophuthatswana under Mangope. These injustices of the Mangope era endured by the Bafokeng are detailed extensively by Manson and Mbenga in their research paper of March, 2003 'The Richest Tribe in Africa': 'Platinum Mining

and the Bafokeng in South Africa's North West Province, 1965-1999' (2003:25-43). This is undertaken on the basis that, the Bafokeng conflict is a very valid case to argue and put forward, in the context of the study.

The Bafokeng are a Setswana speaking community settled near present day Rustenburg from the end of the seventeenth century. They began to acquire land which was purchased in trust. The Bafokeng tried to secede in 1980 rather than enduring the vicissitudes of oppression and repression under the guise of ethnicity and so-called legitimacy of the Bophuthatswana regime. Such an act by the Bafokeng was considered to be treason and they bore the wrath of Mangope and his government. Conflict began with the Bophuthatswana regime in respect to mining rights that lent itself to protracted litigation (see Manson and Mbenga).

Inevitably when the matter came before the Bophuthatswana Supreme Court, Judge Smith ruled that the Bafokeng could not terminate the contract and went on to dismiss the action on the ground that the Bafokeng did not own the land, but that the trustee, Mangope, in fact did so. What followed after the judgment is important in the context of repression, in that even the royalty of the Bafokeng were not immuned to the violation of their dignity which was impinged upon by the Bophuthatswana regime. Owing to the fact that the six opposition seats in parliament derived from the Bafokeng area, by implication Mangope interpreted this as an opportunity to directly link the Bafokeng and its king to the attempted coup. The Bafokeng monarch was interrogated by the police in connection with his alliance with the opposition political party. Such interrogation was held at the Rooigrond prison near Mafikeng, despite of the king's poor health. Subsequently the king was released and he went into exile in neighbouring Botswana. This served to worsen relations between Bophuthatswana and Botswana, already strained by border disputes and wrangles over water rights.

Overt intimidation, repression and oppression continued against the Bafokeng by the Mangope regime. The king's wife, together with fifty one other women were arrested and imprisoned. The struggle for leadership of the Bafokeng became a major tussle between the Bophuthatswana government and the Bafokeng tribe. With the departure into exile of the king, his position became vacant and, it offered his opponents an opportunity to interfere in Bafokeng affairs. During this period further intrigue and oppression to the extreme was perpetrated upon the Royal House of the Bafokeng. The entire process of appointing an acting chief (king) and councillors was manipulated by the Bophuthatswana government. The king's brother was appointed to the acting position despite the Bafokeng tribes insistence that the kings uncle be appointed. The tribal authority of seven individuals was also packed with Mangope loyalists.

In March 1989 Bafokeng lawyers brought an urgent application to have Mangope's appointment of the king's brother set aside. The court rejected the application and found that the Traditional Authorities Act empowered Mangope to appoint and that this was done with the due observance of the law and customs of the Bafokeng. The Bafokeng appealed the judgment and the result was a stunning legal victory for the Bafokeng.

The significance, entire episode and saga in respect to the Bophuthatswana governments conflict with the Bafokeng, does not only exemplify oppression, repression and manipulation but, underscores the totalitarian state's desire to have suppressed any opposition within the homeland. The more important facet of the conflict was to subjugate the Bafokeng tribe economically and control the platinum reserves and revenue that accrued to the Bafokeng, in respect to the royalties that multinational corporations had to pay to the tribe by virtue of agreements reached between them. In fact, the regime wanted entire control of the rich platinum reserves, for obvious reasons.

2.5.5 The Donkey Massacre

The Bophuthatswana government extended its cruelty and tyranny upon animals also and against the tide of environmental and socio-economic issues and considerations. The state promoted a discourse that the animals were destructive. In 1983 the Great Donkey Massacre occurred as a result of Bophuthatswana government's policy with particular reference to the districts of Kuruman and Tlhaping Tlharo. Other areas were also targeted and Jacobs (2001:485) states that "the 'independent' Batswana 'Homeland' of Bophuthatswana destroyed perhaps 20,000 of the animals".

Since 1990, historians, natural scientists and social scientists have effectively refuted well-entrenched positions about environmental change in Africa. McCann (1997: 138-159) points out "that drawing on indigenous knowledge, documentary sources, and non-climate ecology, they have disproved assertions that desertification, deforestation, soil erosion, vegetation change, or wildlife eradication are occurring as inexorable linear processes of decline or even occurring at all". This nullifies the contention of the Bophuthatswana governments explanation by its Minister of Agriculture in the National Assembly "stating the received wisdom on the destructiveness of donkeys, claimed that since 1978 the state had attempted to reduce numbers, and referred to the seriousness of the drought" (Jacobs: 2001:499). The word on the street, recalled W. J. Seramane, a Bophuthatswana dissident, was that "President Mangope had nearly collided with donkeys on the highway, and this turned him against the entire species" (Jacobs: 2001:499). Increasing repression by the central government (Pretoria) must have given the Bophuthatswana regime confidence to act brutally. Perhaps the savageness of the massacre was politically motivated, intended to terrorize people, destroy and stifle opposition. Whatever was the immediate cause, the difference between donkey control in 1983 and

earlier years was not due to change in the donkey population or their environmental impact; it was due to changes in the state and economy.

The researcher being a veterinarian and having worked in these areas categorically indicates through observation that donkeys and ruminants do compete for food, but their relationship is not a zero-sum equation. Donkeys consume large quantities of low-quality forage that cattle and goats avoid. Hence, in environments where low quality forage is predominant, the sustainable donkey biomass may outweigh that of cattle and goats. In Kuruman, donkeys even had advantages over their equine cousins, horses which suffered disease and were expensive. Although cattle prefer grass, bushes sustain them when grass withers during the very frequent droughts. "Raising small stock and donkeys could not remedy poverty, but it could mitigate it because donkeys had many uses 'such as transportation, a requirement for peoples' subsistence; the use of donkeys as draft animals and the benefit of donkeys that were slaughtered for meat; donkey dung mixed with sand was used in construction; a final dividend was that their milk was considered medicinal for sick children" (Jacobs: 2001:492). It is therefore obvious that the arguments put forward by the Bophuthatswana government was not based on any empirical evidence in respect of degradation of land and that donkeys were in direct competition for grass with cattle, in fact the power of the state to implement programmes, conservation included was generally against the will of the people and was contingent on the populations lack of political rights.

These homelands were not independent of the administrative capital, Pretoria. Thus Bophuthatswana had the trappings of a modern state, a well-endowed bureaucracy, and a weak parliament was superimposed on colonial institutions. Indirect rule and communal tenure had long since exposed people to intervention by the state. However, at this point, state intervention was unfettered through the ideology of self-determination in an ethnically based state. The state was

undemocratic and the governing elite competed directly with the governed for resources. Therefore, donkey control under Bophuthatswana became extremely virulent. According to Jacobs (2001:500) "members of the Bophuthatswana Police Force and Defence Force arrived in trucks or in 'Hippos' and people who had gathered their animals for counting, saw the immediate shooting of most donkeys. The shooting was extremely traumatic and that people were threatened by police for offering resistance. The shootings provoked revulsion and that the animals were shot anywhere on the body and as often as it took to kill them".

This sad episode of repression and massacre was in many ways due to class divisions motivated by the killing of animals, but in contrast to Parisian cats, Bophuthatswana donkeys were more than symbols of social position. Testimony about donkeys and their environmental impact reveal that the alternative to the received wisdom is also a social production, subject to political forces, in this case populism. "Consequently, the subject of donkeys became thoroughly politicized and today in the Kuruman area, a strong pro-donkey populism extols their moral significance and democracy itself. The memorialized donkeys aided those who had power, and did so on terms set by the powerful. Donkeys have inspired monuments while only a song of revolution commemorates their history in the erstwhile Bophuthatswana" (Jacobs, 2002:506).

There is virtually no mention or there is a scarcity of published material or sources of the donkey massacre. It must be noted that "most of the slaughtered donkeys were in underpopulated and remote areas that received little media or scholarly attention" (Cooper, 1984:376-77). On the other hand colonial constructions of tribal government and communal tenure according to Cooper (1994:517) "made the donkey massacre possible, because these institutions were reinvented without community accountability. This case reveals that even in South Africa an observation made in other parts of the continent holds true, a binary representation of colonizer/ colonized, oppressor/resister, and white/black

is not appropriate." At the same time, this case provides a further argument for broadening the scope of the field beyond 'nature'. By the same token Leah and Mearns (1996:1-33) point out that "Bophuthatswana donkeys were more than symbols of social position, in that this history illustrates a major recent development in Africanist environmental studies." In its discussion of the official assessment of donkeys, it exposes processes in the creation of knowledge and demonstrates the importance of questioning the "received wisdom" about farming practices, degradation, the proper state of the environment, and its best uses. In this regard environmental historians have made the point that non-human forces are actors in human history.

Disease, bushes, and poverty hampered cattle keeping and promoted the herding of goats and especially of donkeys. These animals were more cheaply purchased than cattle and Brock (1982: 62-66) indicates that "donkeys in frequent droughts around Kuruman were the hardiest of all four – footed creatures. Hence, in environments where low-quality forage is predominant, the sustainable donkey biomass may outweigh that of cattle and goats." Jacobs, (2006:4) states that "the London Missionary Society personnel brought donkeys to Tlhaping and Tlharo territory by 1858 to serve as pack animals for a postal service." Donkeys are not indigenous to South Africa and arrived through European expansion, for it is fundamentally a history of colonial rule. The balance of donkey ownership shifted from whites to blacks owing to mechanization by tractors and transport coupled with the desire on the part of whites to raise cattle for obvious economic reasons and thus less need for trek animals. "Even in the context of South Africa, people in the Kalahari were particularly poor and raising small stock and donkeys could not remedy poverty, but it could mitigate it." (Simkins, 1981:267-268).

Jacobs (2006:9) clearly indicates that "two recent South African studies differ on whether rural black people who use donkeys also perceive that they can be

destructive." It found no negative assessments of donkeys among rural people. Vital to this discussion is the all encompassing observation made by Rich (1996:1912-51) that "the South African "homelands" remind us, that an actor's position in colonial structures often carries stronger explanatory power than his or her race. The most drastic action against donkeys, the 1983 Bophuthatswana donkey massacre, occurred after the anti-donkey position transcended race. Ironically, apartheid promoted this development by giving powers of government to the indigenous elite." On the other hand Jacobs (2006:9) further points out that "unfortunately, it is now probably impossible to determine to what extent people in the 1950s believed that donkeys were capable of environmental degradation. Colonial control over the documentary record and the politicization of memory after the donkey killing in 1983 have obscured voices from that period."

It is therefore, obvious from the above discussion that the trappings of a modern state, viz. a well endowed bureaucracy, and a weak parliament were superimposed on colonial institutions. The state was undemocratic, ethnically based and coupled with the ideology of self-determination. The governing elite competed directly with the governed for resources. Therefore, donkey control under Bophuthatswana became extremely virulent. Although it transcended race, the anti-donkey tendency remained embodied in class and Jacobs (2006:10) points out that "compared with the colonial elite elsewhere in Africa, officials who acted against donkeys have relatively great power and material benefits." The researcher is of the viewpoint that an assessment of their current environmental impact and economic costs and benefits would be possible through experimental investigation by researchers who understand that both the received wisdom and the alternative populism are historical productions.

2.6 CONCLUSION

In concluding this complex, yet fundamental chapter, as it relates to the study, the researcher finds it necessary to make certain remarks. Although violence is always instrumental, requiring armies, police, weapons and networks of informers, it has to be justified and legitimated by the ends it pursues. In this, Lucas Mangope's violence in its origins is no different from the policies of other rulers. There must be people out there willing and prepared to implement the policies on behalf of those who are telling them what to do. No normal human being can kill or maim another without some way of rationalizing the act. This is precisely what happened in Bophuthatswana under Lucas Mangope.

On the other hand, the separation between organization and the generation of ideology taking place in the emergence of the leader corresponds to a growing loss of identity on the part of the public. The original distinction of the public service in reality and definitionally between any public and those who rule over it was being erased in Bophuthatswana. Pervasive fear and insecurity resulted in a collapse of self-confidence. To the extent that Bophuthatswana society was successfully organized along UCDP lines (and only to the extent), this fundamental boundary between ruler and ruled was torn down, and the Batswana public lost its most important safeguard against the vagaries of authority. The masses need for a leader correspondingly intensified as it took the form of a longing for that which they had allowed to be taken away from them.

It has to be noted and acknowledged that authority is not exercised for itself or in itself by man for the sake of man. Thus the exercise of authority must be carried out with the peoples' consent and only then can it be legitimacy of authority. This will determine the kind or nature of the political system. In other words the way of exercising authority in the society. Finally, it is the concerted view and opinion

of the researcher that the apartheid government of South Africa's largely hands – off policy in relationship to the TBVC states – the South African government would have been better off not to have become involved in the first place in granting dubious independence or at least to have seen the TBVC states through in the proper colonial way. The structural problems that confronted and plagued the South African apartheid experiment in Bophuthatswana – as enunciated in the proposal of this study (Chapter 1) and the issues raised hereunder and throughout this chapter, clearly underscores the futility of the apartheid experiment, as follows: -

- The smallness of the governing class. (I do not suppose there is in the whole of history another example of a state with a representative government of a modern type, in which the only people who counted were a few hundred at the most or less).
- The "complete" absence of any true patriotism.
- The laxity of even religious morality (much less civil or national values) amongst the educated Batswana and all of the other population groups, at that time, in Bophuthatswana. The moral "incompleteness" that arose placed a premium on mental dishonesty.
- The underlying cause of the Bophuthatswana crisis was the abject failure of Batswana political culture within Bophuthatswana even to formulate, much less solve in practice, questions of legitimacy, freedom and the nature of citizenship.

In conclusion, this theoretical overview concentrated to a very large extent on the legitimacy discourse as it affected Bophuthatswana and, concentrated on the issues of irredentism, ethnicity and state repression as a means to power within Bophuthatswana. The chapter could not encompass all issues that pertain to this subject matter, given the vastness and complex issues that required some scholarly understanding, analysis and articulation. This chapter sets the pace,

tone and trajectory for other salient issues in the discourse as it pertains to this study.

CHAPTER 3

GEOGRAPHICAL LOCATION, AND THE FISCAL AND ADMINISTRATIVE CRISIS OF THE FORMER BOPHUTHATSWANA STATE

3.1 INTRODUCTION

In view of the relatively recent resurgence of interest in economic agricultural development, it is not surprising that theory regarding the growth process in early stages of development is in a rudimentary state. Because of a lack in the recognition of the key role of agriculture, knowledge concerning the agricultural sector is even less well developed than that concerning other sectors of the economy. One has, at best, only the bare skeleton of a theory of agricultural development and little systematically-developed empirical knowledge of the workings of the agricultural sector in low income countries, including former Bophuthatswana. This lack has made it difficult to plan for agricultural development and explains much of the general dissatisfaction concerning agricultural development programmes within the former homeland.

A further difficulty is the scope and quality of administrative services in this area and most low income countries. In the past, the availability of formal education has been limited largely to urban areas and members of the small, middle and upper classes. "In those rare cases in which a village 'boy' has obtained a higher education, he has usually had to move to an urban area at an early age. Hence, most educated people in low income countries have very little intuitive feel for rural conditions and problems" (Davis, 1945:6). Under such circumstances, it becomes particularly important that the creation and systemization of knowledge of agriculture be given high priority. This places a special importance on an empirical study of the existing situation in agriculture and continued and careful empirical study of the effect of various development policies. Despite the inherent difficulties, some attention must be given to define

the purposes and goals of development. First, such an exercise will serve to delineate the various problems that have confronted not only agriculture but the entire social, political, economic and cultural facets of life in Bophuthatswana since the pre- and so-called post-independence periods. In doing so, the primary concern is the post-independence period, but the discussion will also build on the legacy of the pre-independence period. Thus, the general discussion in this chapter will concentrate on various conceptual problems as viewed over time, with particular reference to the fiscal and administrative crisis of the former Bophuthatswana state.

Poverty, telecommunications, nutrition, health issues, population growth, manpower and employment, illiteracy, education, family-planning, research, rural welfare, technological change, variability in agriculture, organisation, policy implications, administration, physical infrastructure, farmer participation, transport, extension problems and so on, will in some ways be analysed and discussed. In attempting this, it is further acknowledged that this recital of likely macroeconomic effects leaves out some important factors, and that the aggregative model does not pretend to capture all the richness and complexities of erstwhile Bophuthatswana's agriculture and economy. Therefore, one cannot model the effects of all policy alternatives, nor does the discussion address questions of institutional or administrative reforms, except for introducing very briefly a specific viewpoint and opinion on the options that were open to Bophuthatswana in as much as they affected its future, in terms of the constitutional proposals that were emerging in South Africa in the dynamic period of transition.

3.2 GEOGRAPHY, LOCATION AND DEMOGRAPHIC CHARACTERISTICS

The Republic of Bophuthatswana attained independence on 6 December 1977 from the Republic of South Africa. After nearly seventeen years of independence it failed to gain international recognition and was only recognised

by its colonial master, the Republic of South Africa (as of 1 January 1994, this recognition had been terminated by an Act of the South African Parliament).

Originally, Batswana inhabited the central plateau of the South African region. They shared common borders of 2790 kilometres with South Africa, with the exception of the Lehurutshe and Molopo regions which had a common border of over 260 kilometres with Botswana, roughly bounded by the Orange River in the south and the Limpopo River in the north. On the north-east, the boundary was also the Limpopo River, and in the south-east it was formed by the Vaal and Hartz rivers. The land mass was just over 44 000 square kilometres comprising twelve regions. The individual regions varied in size from 140 kilometres (Thaba Nchu) to 16 000 square kilometres (Kudumane and Ganyesa), the latter about as large as Switzerland (Breutz, 1987:21-28). The western boundary was at longitude 21 degrees east, stretching as far south as latitude 32 degrees south and from there along latitude 20 degrees north. This area more or less coincided with the region which included the Western Transvaal, the Northern Cape and the western area of the Orange Free State. It fell generally within the two distinct regions defined longitudinally and latitudinally as follows: the regions between 22 degrees 15'E and 28 degrees 30'E and 25 degrees 15'E and 28 degrees 30'E and 25 degrees S' and 29 degrees 20'S.

These regions were part of the original Batswana territory before the British Government annexed them into South Africa in the years preceding and following the Boer War. The other part of the territory of the Batswana was constituted by the British Government into the Bechuanaland Protectorate, which was given independence by Great Britain in 1966 as the Republic of Botswana. Arising out of the various long-standing tribal authorities in the Batswana tribal areas of the Northern Cape, Western Transvaal and the Thaba Nchu area of the Orange Free State, the South African Government instituted a process of constitutional development with the establishment of the Tswana Legislative Council in May 1971. Self-governing status was conferred in June 1972 with the

establishment of the Legislative Assembly, and full sovereign independence was taken in 1977.

The population of Bophuthatswana, according to the 1985 census, was 3, 2 million. Of the 1, 8 million living in the country, 1,4 million were Batswana and about 405 000 people belonged to at least eight other Black ethnic groups. In addition, a small mobile White population, a sprinkling of Malays, Coloureds and Indians of South African descent, and other expatriates of all nationalities from all over the world, resided mainly in Mafikeng (a historic town in the Northern Cape) and the capital Mmabatho. Mostly South African Whites and a number of Taiwanese expatriates resided at Thaba Nchu, a former town of the Orange Free State. These towns were incorporated on 19 September 1980 and 1 October 1983 respectively. The remaining 1, 2 million Batswana were migrant workers in the Republic of South Africa.

Physically, the region was flat to gently undulating, ranging in altitude between 1000 and 2000 meters above sea level. The climate was generally that of a dry steppe with warm to hot summers and cool, though sun-drenched, winters. Average mid-summer temperatures were 22, 5 degrees Celsius and 12, 5 degrees Celsius. In mid-July, temperatures went down to as much as 0 degrees Celsius to -7 degrees Celsius and in some regions frost was common. Rainfall occured in summer from November to early April, and ranged between 300mm in the dry west and 700mm in the east, which was sufficient for dry land agriculture. This area was primarily suited to livestock ranching and was well-endowed with various species of domestic and game animals.

After the approval of a new constitution during November 1977 by the then existent Legislative Assembly, a President was elected as Head of State by an electoral college of the newly constituted National Assembly. The National Assembly consisted of members elected by the voting public. The executive power was vested in the President, with ministers appointed by him from the

executive council. The judicial power of the Republic was vested in the Supreme Court of the country which consisted of a Chief Justice and such number of other judges as could be determined by the President from time to time. Public services were provided on three different levels of government. In the first or central level, government activity was administered by departments, one of which, the Department of Local Government and Housing, was established to conduct the necessary administrative practices on the local (urban) level. On the second or regional level, twelve regional authorities were responsible for the coordination of the services rendered by the Tribal authorities. The 72 Tribal authorities accepted specific responsibilities on the third or local level" (Strydom, 1987:12-20; Breutz, 1987:21-28; Scapera, 1984:9-15).

3.3 HISTORICAL REVIEW OF BOPHUTHATSWANA'S AGRICULTURE

3.3.1 Pre-Colonial: Up To 1884

Prior to 1840, the Southern Batswana usually settled in large communities, housing 5000 to 10000 people. These large communities were involved in subsistence on cattle and cultivation. Agricultural work was divided according to gender. Men looked after the cattle attached to the household whilst females cultivated, ploughed, planted, weeded and reaped. Land was allocated by headmen to the elders of an extended family who, in turn, subdivided this amongst themselves and their sons. Women focused their attention on growing drought-resistant crops such as sorghum, maize, cowpeas, melons, pumpkin, sweetreed and beans. They also shifted their yield sites according to rainfall, using hill slopes and valleys in good rains and silty land near river beds during times of drought. The tools that were used were very simple. Work was hard and yields low. Cattle were used primarily for milk, with slaughtering for feasts. Two factors changed this situation. Firstly, there was the introduction of the single-share plough after 1840 and secondly, the opening of the Kimberley diamond mines. The single-share plough brought men into agricultural

production as it required the use of cattle. Wealthier families amongst the Batswana were able to grow irrigated wheat and sell a surplus to White traders.

3.3.2 Colonial Period: 1884 to 1936

With the opening of the mines and expansion of the urban population, a marked increase in the demand for food, fuel and labour was experienced. The region was stripped of trees and more land was given to the cultivation of crops for sale. Poorer families were forced to find work on the mines. With the annexation of British Bechuanaland in 1884, a hut tax was introduced, which increased the need for cash income, and thereby the necessity of employment in the mines. In addition, White settlers began to charge rent to the Batswana using their land for grazing. By the 1890s, locations and reserves had been established for the Southern Batswana. These boundaries were entrenched by the 1913 Natives Land Act, which limited the area of land which could be used by the Black population.

From 1920, further changes in the agricultural process took place with the introduction of the double-share plough, tractors and other farm implements. The double-share plough could stand upright and did not require women to steer it. This meant that women were no longer involved in the ploughing and planning of the land. More importantly, however, agriculture in the region during this period was shaped primarily by the forces affecting agriculture in South Africa as a whole. Growing populations, overgrazing, the improper burning of pasture, recurrent droughts, raging epidemics of rinderpest and other diseases, wide swings in prices and the vicissitudes of war and economic depression, afflicted South African farmers of all colours. However, after 1913 many measures were introduced by the government to protect farmers.

These measures had little positive benefit to farmers in the locations and reserves, which made up Bophuthatswana. The tariffs which protected the

home market for agricultural products and export subsidies which opened the way for larger overseas sales of maize, sugar, wine, wool and dairy products, did not reach the Black farmer. Likewise, the extension of the railways and roads tended to neglect areas designated as African, and the Land Bank and Cooperatives established from 1912 and 1922 respectively did not provide credit for the Black farmer.

3.3.3 Pre-Independence: 1936 to 1977

Active development intervention in the areas of South Africa, set aside for the occupation of Blacks can be traced back to the establishment of a Native Agricultural and Lands Branch within the Department of Native Affairs in 1929. Having an extremely limited budget and an equally narrow range of responsibilities, this branch focused its activities on soil conservation and the stabilisation of grazing. The Native Trust and Land Act of 1936 extended this responsibility and besides expanding the area of land set aside by the now infamous Native Land Act of 1913. The 1936 Act also established a body known as the South African Native Trust to administer those areas set aside for Black occupation, in terms of the 1913 Act, as well as those additional areas designated for Black occupation by the 1936 Act. This same period witnessed the final collapse of peasant agriculture in these homelands, with rapidly falling total production and productivity levels from the mid-1940s. Migrant labour became entrenched as the major economic activity with the potential for agricultural activities being totally eroded, and permanent out-migration to urban areas took place.

Despite an apparent shift after 1945 from a purely conservationist approach towards a greater focus on agricultural viability, little real action took place until after the Tomlinson Commission in 1955. This Commission stated that the aim was to 'help the Bantu to develop an efficient and self-supporting' peasant farmer class "in their own areas" and that development problems were seen as

the correction of the perceived bad farming practices of Black farmers.

A wide range of strategies were recommended to accomplish this, including the Commission's endorsement of the proclamation of "betterment" villages; the emphasis on the creation of 'economic farming units', and the recommendation that the government establish a Development Corporation for the reserves which would promote agriculture and provide guidance and capital to aspirant farmers. The latter recommendation led to the establishment of the Bantu Investment Corporations Act of 1965, which allowed for the establishment of individual corporations for the different homelands which then existed. Generally, the starting point of the development corporations with respect to agriculture was two-fold. Firstly, there was the fostering of an "African farming class" based upon the transfer of 'modern' techniques and resources, access to privately owned land, and the commercial marketing of crops and, secondly, the rationalisation of and usage of non-commercial rural dwellers. The Commission emphasized that 'sub-maintenance farming' could not be permitted and the number of farmers should be limited.

However, despite the effort put into planning during this period in the form of 'betterment plans', there was a dramatic decline in the proportion of subsistence requirements that the inhabitants of the homelands were able to produce from agriculture after 1955. Forced relocations due to group area evictions, retrenchment of farm labourers and the tightening of influx control restricted permanent out-migration, and led to a dramatic increase in land pressure during the 1960s and 1970s. Apart from the trauma experienced by the people who were uprooted, one of the results of these actions was the severe increase in the pressure placed on the environment by the settlement of large numbers of people on fairly restricted land space. This land pressure contributed towards the failure of 'betterment planning' as recommended by the Tomlinson Commission. The shortage of land at even that early stage forced the implementors of the "betterment scheme" to repeatedly subdivide the 'family units' in an attempt to

accommodate more people who needed to participate in the scheme. The set income targets from agriculture were therefore never attained.

With respect to agricultural development during this period and prior to 1977, when Bophuthatswana was a self-governing state, the Department of Agriculture had as its duties the provision of extension services, veterinary services and rural water supply, amongst its other more commonly-known responsibilities. This early department was decentralised into three regions, namely southern, central and eastern. However, the effectiveness of this structure was seriously impaired by the fact that very little autonomy was granted to these regional offices. The result was that there was a longer chain of command and, because of this, decisions to facilitate action in the field were greatly delayed, and often never taken. During the period of self-government, most development work was focused on achieving agricultural production goals. Projects such as the Taung Agricultural Scheme, Mooifontein and Shiela Dryland Cropping Schemes were started. The major development objective of these types of schemes was to move the Batswana farmers into the realm of commercial farming and commercial agriculture. There was also a Sisal Production Scheme in Madikwe and several livestock breeding schemes. Many of the dryland cropping schemes were at that time run under contract by management agents such as Noordwes Co-op situated in Lichtenburg and the Tswana Agricultural Company (TLM), a joint venture between the Council for Economic Development (CED) and the Bophuthatswana National Development Corporation (BNDC).

3.3.4 Independence: 1977 to 1994

At independence Bophuthatswana inherited a whole host of projects, situations and problems. Although aware of this, they were not of its creation. The self-governing state had little say under apartheid. Extension remained the function of the Department of Agriculture. In addition, the Agricultural Development Corporation of Bophuthatswana (Agricor) was established with the

set goal at its formation in 1978, of bringing Bophuthatswana to a point of self-sufficiency in food production. Agricor inherited several projects which were already in operation and was geared towards achieving high agricultural production levels. The emphasis of activities was on project development and high potential sites were identified and planned according to technical priorities. Thus the organisation's main objective was the promotion of such projection through commercial projects in order to reach self sufficiency in maize. It was this period that annihilated and destroyed subsistence farming and what little of peasant farming that remained. It was this period that also made no attempt to empower the rural constituency. All of this was promoted by government policies.

Marketing of the output of farmers was promoted by the establishment of the Bophuthatswana Agricultural Marketing Board (BAMB) which was established in terms of the Bophuthatswana Agricultural Marketing Act, (Act 21 of 1977) and came into being in 1978. Its main function was to regulate and deal with any matter relating to the production, manufacture, processing and sale of any agricultural product. Marketing arrangements in the empowerment of the rural poor was highly inadequate and did not cater for the empowerment of the poor. It was also inadequate on the basis that it was very heavily influenced by Boards in South Africa, and was therefore unable to make any significant contribution to marketing in general. The credit needs according to the Bophuthatswana Government, in order to provide credit to farmers, was also attended to with the establishment of the Agricultural Bank in terms of the Bophuthatswana Agricultural Credit Act, (Act 14 of 1981). Its main function was to provide finance to economically viable agricultural activities in order to facilitate the development and growth of agriculture in Bophuthatswana. This did not happen in the context of peasant and subsistence farming and will be dealt with in greater detail in other parts of the dissertation.

3.3.5 Institutional Support

The agricultural scenario in Bophuthatswana consisted of a range of institutional bodies, and functions which continually changed. It was steeped in confusion, nepotism and a complete lack in direction. This was portrayed by the scrapping of the Bophuthatswana Agricultural Corporation (Agricor) which began its brief of restructuring agriculture in 1988 and, with a proposal of amalgamating the different agricultural initiatives, also ushered in even greater confusion and apathy. Restructuring continued with no tangible solutions.

3.3.5.1 The Department of Agriculture

The function and brief of the Department of Agriculture was as follows: It formulated agricultural and rural development policy (including policies for natural agricultural and rural disasters) and advised the Minister accordingly; prepared agricultural and related legislation; designed national agricultural and rural planning (on macro level) with emphasis on medium and long term strategies; provided agricultural statistics and information; planned and co-ordinated research; dealt with bilateral and multilateral matters related to agricultural and rural matters; regulatory functions (co-ops, animal, health and plant protection); departmental financial planning and overall agricultural budget co-ordination. The department remained responsible for accountability in terms of state financial requirements. In the absence of a structure and policy, many of these functions were not performed by the Department of Agriculture.

3.3.5.2 Bophuthatswana Agricultural Development Corporation

From an institutional point of view, Agricor's tasks expanded enormously at the end of 1987 when the corporation was charged to perform the field duties of the Department of Agriculture which included regional, operational, agricultural and rural planning; agricultural disaster action programmes (management thereof);

development of agricultural potential (infrastructure, commercial farmers, small-hold farmers, communal (tribal) farming, South African Development Trust land, foodplots); development of rural human potential (extension, training, youth farmer programmes (Department of Population Development to propagate - Agricor to implement), appropriate non-agricultural training and extension); development of non-agricultural income-creating potential (rural industries); institutional development and management (service centres, co-operatives, agro-industries).

The strategy adopted in taking on this task was to decentralise control to district offices and, in turn, to service centres thereby bringing service to people in areas without an adequate infrastructure. There were eleven Agricor district offices covering the whole of Bophuthatswana and some seventy service centres. A further fifty service centres were still to be developed, according to Agricor (1989). This had not materialised. Although further training of extension and community development officers was clearly needed, nothing tangible was being undertaken in this direction.

Village Development Committees and the Tribal Authorities were the key institutions utilised in the development process. Detailed budgets were prepared annually by the districts, these included allocations for administration, specific development programmes, service centres and an accelerated development fund. The district officers were allowed a great deal of autonomy in order to enable them to perform the duties expected in support of the rural people. This decentralisation according to Pienaar (1990:9-10) "was soon to take another step with the decentralisation of project planning to district level."

3.3.5.3 The Agricultural Marketing Board

This organisation was charged with the responsibility of development and administration of agricultural marketing and economic research. The Board's

1988 annual report indicated the following agricultural products, which it regulated - meat, eggs, maize, wheat, grain, sorghum, oilseeds and cotton. Observations and interactions with members of the board over time revealed a rather limited autonomy as regards its interaction of control products with the different boards in the Republic of South Africa. This led to over-regulation against the interests of agricultural marketing of local products and solely in the interest of commercial farmers and, particularly, the landed élite. In spite of the fact that the board had invested heavily in training individuals in various aspects of agriculture, it failed to attract an appropriate level of trainee. Such training had also been undertaken at great monetary cost, when one considers the unnecessary training facilities that had been built and which were grossly under-utilised. South African facilities could have been easily used and the money saved could have been channelled into other urgent development programmes.

3.3.5.4 Agricultural Bank of Bophuthatswana (Agribank)

Agribank enjoyed the support of government in the form of grants, farmer debt consolidation, interest relief and subsidies. The method of financing had changed from financing co-operatives, who then funded their individual members, to the direct funding of individuals. The Agricultural Bank was an over-ambitious banking project that did not make sound economic reasoning, considering the failure of agricultural projects, lending primarily to politicians, the landed élite and commercial farmers, the low recovery from its favoured élite clientele and lending on the basis of political patronage.

3.3.5.5 Bophuthatswana National Parks Board and Agricultural Services

The Parks Board was charged with the responsibility of the management of National Parks and reserves, environmental research and education, wildlife management, and development of areas for outdoor recreation. The Agricultural Services was involved in administration of staff for the Department of

Agriculture, Bophuthatswana College of Agriculture, its own staff and served as the secretariat to the Land Allocation Board.

Agricultural Services was an unknown entity within the department and its terms of reference was completely unknown, in spite of the fact that various attempts were made to determine its brief from the then Secretary of Agriculture, other functionaries, including the agricultural advisor to the President and also the financial administrator of the department.

3.3.5.6 Land Allocation Board

It was mandated to perform the following functions: allocation, control and administration of all rural state land, administration of tribal land rights on an agency basis. The Board had a top-heavy structure. It comprised a battery of legal personnel who could have easily merged with the Ministry of Justice, which had been dealing with land issues over the years. The legal personnel had been unable to comprehensively and adequately deal with a large volume of agricultural acts and regulations that had been inherited from the Republic of South Africa and which, for all intents and purposes, were not applicable in totality to the complex rural agricultural dynamic of the former Bophuthatswana (Internal Document, Department of Agriculture, 1991: 1-20; Pienaar, 1990: 1-15; Schutte, 1992: 1-122; Dixon Soule Associates, 1987: 10-25).

3.3.5.7 Strategy

Important policy and strategy changes in agriculture within former Bophuthatswana is included in order to understand the dynamic and context of its agricultural imperatives. These are synthesized from experience, observation and policy directions of the state over time and are as follows: "The development and dissemination of a corporate mission statement for Agricor; the adoption of the community development approach to rural development and concurrent

acceptance of a community development policy which detailed the underlying principles guiding all Agricor activities; the decentralisation of Agricor's authority, activities and funds to eleven district offices (Agribank had also decentralised); the implementation of a rural development fund which could be utilised by the district with the minimum of procedure to address urgent needs in the rural areas, the planning and construction of service centres throughout Bophuthatswana as part of a rural support programme, the use of formal evaluations as a means of assessing the impact of development efforts, a monitoring and evaluation policy to guide the evaluation of Agricor's projects and programmes and introduction of the first evaluations. Observations revealed that the total agricultural budget was voted to the Department of Agriculture by the process of an assigned vote by parliament; and that the bulk of the funds were then transferred to Agricor by the department. A small proportion was held by the department as a running budget for its own activities. This led to Agricor appointing its own internal auditors and a firm of external auditors, who audited the books and affairs in terms of company policy. This resulted in no checks and balances in the audit process from a government point of view. The company was not subject to audit by the office of the Auditor General which led to a total lack of public accountability; the introduction of a budgeting procedure, which emphasized zero-based budgeting whereby activities were first identified for the next financial year, matched to capacity and then costed; the introduction of this policy for the 1991/1992 financial year led to the development of a detailed budgeting process for all cost centre managers; the introduction of a Programme Approach to development, whereby planning was focused upon broader programmes which linked separate projects, the planning and implementation of such projects was envisaged to be decentralised to the district offices; the adoption of specific areas of focus for development programmes in a given financial year; for example, in 1991/1992 these areas would include large stock, foodplots and irrigation; the identification of rural industries, both. informal and small production businesses in the rural areas, as a sector for support by the agro-industrial planners within Agricor. In short, the privatisation of agro-industrial activities.

The policy statements of Agricor and other organisations were not criticised or evaluated except to outline the main functions, in terms of the institutional support to agriculture. The position had been further exacerbated in that the Bophuthatswana Agricultural Corporation was scrapped, on the basis that it was unable to steer agriculture in a direction intended by government. It was replaced by a new institution in the form of Agriserve, with a new Board charged with the responsibility of restructuring agriculture in Bophuthatswana. The Department of Agriculture had been relegated to the role of an inconsequential secondary player; its policy-making functions had been usurped. This was exacerbated by the fact that the new dispensation under Agricor and then under the new Agriserve Board, was not working as smoothly as anticipated. It was moving towards disaster, was in a state of chaos in terms of agricultural development, much to the detriment of the region and to the detriment of the public good and general welfare of the majority of the population. (Pienaar, 1991:1-7 and 9-10; Department of Agriculture, Internal Document, Strategies, 1991; Agricor Policy Document, 1990; Tomlinson Commission Report, 1955).

3.4 FISCAL CRISIS

Faced with both objective and subjective crises, the reformist capacity of the Bophuthatswana state was also limited by its capacity to generate a public budget solely on the basis of tax revenues. This was illustrated by the fact that it was reliant upon its colonial master, the Republic of South Africa, for large grants, revenue from the customs union, seconded personnel and aid from development institutions of South Africa. Objective crises imply the need to increase social capital expenditure to counteract the fall in the rate of profit and to sustain accumulation. These expenditures included public transfers to firms, tax concessions, subsidised credit, stimulation of aggregate demand, infrastructure construction, and subsidies to research and development.

Similarly, subjective crises require increased social expenditure to maintain the legitimacy of the existing social relations. The objective limit to these reforms in Bophuthatswana was the fiscal crisis of the state on the basis that government expenditure surpassed fiscal revenues. Objectively, the state should depend upon revenues that originate in the sphere of production. In Bophuthatswana this was not the case. Subjectively, therefore, the Bophuthatswana state needed to legitimise its imposition on taxpayers. Legitimacy and fiscal crises of the erstwhile Bophuthatswana state were very closely related and must have assumed greater significance in the dynamic period of transition, in order to create a democratic South Africa, which was rapidly emerging.

3.4.1 Reliance on Fiscal Aid from South Africa

Bophuthatswana always prided itself on the fact that it had no bank overdrafts backed by the South African government, and that it had never reneged on loan repayments. On the surface this sounded impressive and could explain the homeland's steadfast opposition to reincorporation and matching commitment to federalism. But this does not reflect the homeland's almost complete reliance and dependence on South Africa. "An economic feasibility study by government suggested that the homeland could suffer total economic collapse if aid stopped flowing from South Africa" (New Nation, 1993:10).

The New Nation (March 11, 1993:10) pointed out that "at the level of employment alone, the homeland was almost completely reliant on South Africa. The number of migrant workers in 1990, according to the study, was estimated at 100 000 and increasing. In addition, transfrontier commuting between the homelands and South Africa was in excess of 100 000 people per day". The New Nation Report (1993) further stated that unrestricted trade between the homeland and greater South Africa held specific benefits for the Bophuthatswana economy as well. At the same time, forward and backward linkages (reliance, dependency and agreements) with industries in the immediate

adjacent areas in South Africa supported many factories in the homeland. South Africa also provided a major market for Bophuthatswana's products without the restrictions of import tariffs faced by most countries in the developing world. With regard to consumption, South Africa offered unrestricted access to quality goods without the homeland having to concern itself with the need for foreign exchange. As a member of the Common Monetary Area, Bophuthatswana had unlimited access to foreign exchange, one of the major constraint of developing countries of a comparable economic profile. It also enjoyed the benefit associated with managing it.

The homeland further had access to a well-developed money market and banking system, both of which were considered to be 'of extreme importance in the development of any economy'. And by being a member of the Common Monetary Area, Bophuthatswana received millions in compensation for using South African currency. The economic study further estimated that, in the "1993/94 financial year, the homeland received more than R19 million in this respect. A review after the 1994 election in South Africa would impact significantly on all these benefits, but they were not the only benefits that would have masked the lack of any meaningful potential for the generation of wealth. In this regard the New Nation Report (1993) stated that South Africa had also made substantial contributions to stimulating industrial development in the homeland. It is said to have poured in an amount of R26 million during the 1993/94 financial year alone to stimulate industrial development. A R64 million drought relief package was also finalised and, in addition to this, a further R6 million was allocated for 'finance of nutrition programmes'. Budgetary assistance for the 1992/93 fiscal year was in excess of R1 billion. This represented about 25 percent of the homeland's total revenue.

By comparison, Bophuthatswana's most important source of internal revenue, the platinum mines, yielded around R600 million per annum. Customs Union and Common Monetary Area benefits, together with tax compensation and

industrial incentives from South Africa, made up another R1, 3 billion. Together with direct budgetary assistance, this represented more than half of the homeland's revenue (New Nation, 1993). According to the 'New Nation Report (1993), the South African government's total loan commitments to Bophuthatswana stood at around R45, 6 billion. In addition, South Africa was considering soft loans for projects that could cost almost R31 million. These were mainly projects aimed at addressing backlogs in health and education. A discontinuation of such aid might have precipitated an immediate collapse of these essential services. Apart from this, South Africa also allocated a non-refundable amount of R188, 2 million for the development of Winterveld, an underdeveloped black location near Pretoria.

In addition, South Africa was expected to make payments under existing land and grant agreements with Bophuthatswana to the tune of R28, 5 million. This did not include an amount of R1, 3 billion that the government had set aside for small development projects. South Africa's Foreign Affairs Department was also known to have budgeted an amount of almost R23 million to second 165 South African experts to Bophuthatswana's state administration. The withdrawal of these personnel in key areas of the civil service would have led to serious problems. Since November 1979, Bophuthatswana and South Africa entered into no less than 55 agreements which provided for technical and financial assistance from the South African government. These relations and the amounts of financial aid that the homeland received from South Africa, suggested a high degree of dependency on the part of Bophuthatswana. Not only was the homeland dependent on financial aid, but also on technical assistance necessary in the governing of the territory (Department of Economic Affairs, Bophuthatswana, 1994). What is obvious from the study is that Bophuthatswana, as an economic unit, was far from viable. In this regard an illustration of Bophuthatswana's dependency on South Africa is depicted in Table 3.1.

Table 3.1

Bophuthatswana's Dependence on South Africa in Terms of the Appropriated 1993/94 Budget.

Direct Budgetary Assistance Transfer Payments	R	1,029	million
Customs Union Agreement	R	1,087	million
Tax Monetary Area Agreement	R	19	million
Industrial Incentive	P	26	million
Drought Relief	R	64	million
Project Aid from Land Fund	R	76	million
Non-Refundable Amount for Development of Winterveld	R	188	million
Technical Assistance for Small Development Projects	R	1,292	million
Total	**R**	**3,781**	**million**
Appropriated Bophuthatswana Budget for 1992/93	R	5,000	million
Dependency percentage	**R**	**79**	**percent**

(Source: New Nation, 5-11 March, 1993:10; Department of Economic Affairs, Bophuthatswana, 1994)

The above figures are also captured in a statement by political staff of the '*Sunday Times*, February 20 (1994:1) in an article titled 'Alliance begins to waver' which quoted the then South African ambassador to Bophuthatswana as saying "that a new government might not be willing to subsidise Bophuthatswana's R5 billion budget. At present, 26 percent is generated by Bophuthatswana, 29 percent comes in the form of development aid and 45 percent is made up of transfer payments". The Bophuthatswana government was, therefore, dependent upon South Africa for more than 75 percent of its monetary requirements.

3.4.2 Administrative Crisis

Bophuthatswana was not endowed with credibility and cohesive fiscal means, and also lacked adequate administrative capacity to understand the nature of specific forms of crisis and to define and carry through meaningful and corresponding reforms. It lacked the ability to develop a system of economic planning and to coordinate the administrative apparatus needed to ensure the

implementation of plans. This was further exacerbated by planners and policy-makers who were essentially highly paid expatriates with dubious qualifications, who lacked the intellectual and practical base for the analysis, understanding and implementation of meaningful agricultural programmes. "The Bophuthatswana state thus operated within very narrow limits. Effective planning was further constrained by the opposition of factions of the bourgeoisie when their private interests were threatened" (Jones, 1999:499-605). Implementation required a prior major reorganisation. This is particularly true for 'integrated' programmes where the joint participation of several public agencies is required. In the context of Bophuthatswana, agricultural agencies and parastatals were organised and staffed autonomously in order to service their own clientele, and new mechanisms of authority and coordination were continually instituted. This had caused serious problems. This highly conflictive transformation implied an evolution toward the rise of powerful bureaucracies and the weakening of parliamentary institutions. "Thus, it had been 'observed that the management of reform in the crucial phase of negotiation politics and transition in the South African context led to a more than steady rise of state intervention in Bophuthatswana and to the deepening role of the state in crisis management" (Manson and Mbenga, 2003:25-47).

The 1990s will be regarded by future historians, economists, agricultural theorists and educationists as a period in which considerable adjustments were made in all spheres in the South African context. This applies particularly in the area of the consequences of uneven development where past policies of a White oligarchy that entrenched apartheid ideology and created the basis of ethnicity in the many so-called mini-states. It continued to impose serious problems, not only in the political agenda of transition, but also upon the economics of agricultural development and social relations. These adjustments were still being made in almost all spheres that affected the lives of the masses. "When the speed of political, economic and social changes is rapid, greater demands are consequently made on agricultural development, training and on non-formal

education" (Prosser, 1967:13). It is in this context that this study was motivated. In view of the fact the Bophuthatswana had a structured Agricultural Development Corporation, various other agricultural parastatals and a Department of Agriculture, with high monetary inputs - why was it that agricultural development proceeded so slowly? This, of course, is a question that many people have been and are still trying to answer with reference to most developing countries. Many theories have been put forward, and some solutions have been tried. However, none have been successful in eliminating all the problems. The problems have usually been attacked from macro-level national programmes with large amounts of money allocated in an attempt to alleviate problems over the shortest period of time. It has been noted that lack of progress on small farms was attributed to the fact that programmes to help small farmers were always attempted on a country-wide scale, carried out sporadically, and hampered by many constraints. The effect of the programmes was not being felt by the farmers. It is imperative that agricultural problems are also dealt with at the micro-level where communication among professional agriculturalists and the chief agricultural producers can create a oneness of purpose, leading to high agricultural production and true development (FAO, 1981:4).

Young adults who are not academic achievers are less likely to find employment after leaving school. If they are from traditional farm families, their only recourse will be to take up agriculture as a means of livelihood. It is such farmers who are the 'left behinds' in the race for achievement, and who form the base for agricultural and economic development. With the expectations from agriculture and the low profile of farmers in erstwhile Bophuthatswana, was it not appropriate to reinforce the importance of training of farmers and, above all, the importance of agriculture in terms of economic growth and a means of gainful employment? Agriculture should have provided the forum through which intellectuals and producers communicated, and in which traditional and indigenous knowledge mingled with the more highly-developed scientific and institutionalised learning. It would have thus created a most powerful medium for

bringing about change. But change must be relevant, meaningful and beneficial to all parties involved, particularly the farmers who take the highest risks and stand to lose the most.

3.5 THE REGION'S FUTURE

Political changes in the region have vindicated the assertion originally made in this discussion, that Bophuthatswana would again be reincorporated into South Africa. This assertion was further extenuated by the plight of the people from areas like Braklagte (rural village outside Zeerust), and political tension within. The question of how to reintegrate the four nominally independent Black homelands was, therefore, one of the trickiest issues that faced the South African government, as it moved to strip away apartheid. The then Minister of Foreign Affairs of South Africa told parliament during the 1991 session that "the governments of Venda, Ciskei and Transkei had expressed in 'general terms'a desire to shed their dubious independence at some time" (Newsweek, March 1991:32). For all practical purposes, 'grand apartheid', the effort to lure Blacks away from the country's major cities and shunt them into remote and inhospitable corners of the country, was now dead.

According to a study conducted by the Urban Foundation (1988), "between 60 and 80 percent of the homelands' gross income was derived from remittances sent home by Blacks working in the rest of the country, and their average population density was five times that of 'White South Africa". Operation Hunger Executive Director, Ina Perlman, estimated that "only 8 percent of the homelands' 6, 5 million people had sufficient land for subsistence farming. The population was designed as labour pools; they were just dumping grounds for all the unskilled labour, and people did not want this any more" (Newsweek, 1991:33). The future was indeed bleak in former Bophuthatswana in spite of its erroneous independence, despite the platinum deposits and the tourist industry in the form of hotels and casinos. Its agricultural and economic performance

was never intended to serve the people. To discuss different political options and scenarios, as they affected Bophuthatswana would have been an exercise in futility. This would have been decided by political 'players' at the negotiation table and will not have been determined by homeland leaders of the former Trankei, Bophuthatswana,Venda and Ciskei (TBVC) states, in spite of the fact that they may have been at the negotiating table.

The former Finance Minister of South Africa, Barend du Plessis (1991), stated that "there will be so many jobless people in South Africa that the country would become ungovernable, and unless growth rates improved drastically and dramatically, the South African economy was bound to plunge into a downward spiral. He predicted that by the mid 1990s, the government of the day would not have the resources to meet the demands of the population" (Robertson, Sunday Times, April 1991:14). Du Plessis, together with the Governor of the Reserve Bank (Stals, 1991), further added that "no profound knowledge of economics and history was needed to grasp that a high unemployment level, coupled with a rapid rate of population growth and an inability of the formal sector of the economy to absorb more than a fraction of the new entrants to the job market, would eventually spill over to civil upheaval." That had already happened and the situation was worsening post 1990. Under the circumstances it was considered impractical for Bophuthatswana to resist the incorporation option, given its reliance on the South African economy, the high unemployment rates, its fragmentation, economic failure and lack of recognition, together with the worsening South African economic situation. Du Plessis (Sunday Times, April 1991:14) reiterated and pointed out that "South Africa's low rate of employment growth stemmed directly from the disappointingly low economic growth in recent years which, in turn, reflected both domestic structural problems and external factors, including aid to homelands and, above all, the disaster and failure of agriculture."

There was wide consensus on the outlines of the system of government in a new

South Africa, and it had been agreed at the Convention for Democratic South Africa (CODESA) negotiations that the homelands had to be reincorporated into South Africa under a strong regional dispensation. Given this situation, Bophuthatswana had no option in the long- and short-term to prepare itself for this inevitable scenario, but it was arrogantly not prepared to do so. In the newly emerging climate for political change, and with the emergence of a new South Africa, that was conceived as a unitary state, with strong regional and central government power, free of tribal bantustans and fragmentation across a duplicity of South African borders, there was thus no other option, given Bophuthatswana's constraints, but to move inexorably towards reincorporation where it rightfully belonged. But the poverty, overpopulation and chronic political instability caused by its lack of legitimacy and the lack of popular support, was destined to linger on for many years to come and continues today even under a new democratic government.

3.6 RELEVANT ISSUES

3.6.1 Introduction

Many developing countries or regions have increased food production greatly, but a large segment of low income farmers with access to modern technology has been bypassed. The equitable distribution of gains from the green revolution (discussed elsewhere in the study under extension) increases the productivity of large numbers of poor farmers and is one of the most critical issues facing many of the developing countries (Lipton and Longhurst, 1989:12). This will require far reaching political, social, institutional and organisational changes within the agricultural sector. A policy issue which faced the government of former Bophuthatswana was the level of resources to allocate to its more modern agricultural sector. The Agricultural Development Corporation (Agricor/Agriserve), and other agricultural parastatal institutions, had to produce as much food and as rapidly as possible in order to meet the demands of its

rapidly growing urban sector versus how much to allocate to raise the production of large numbers of the rural population above the subsistence levels of farming or production.

Although research has shown that small farms are often more productive as they are more labour intensive, it is widely acknowledged that the basic thrust of agricultural development efforts over the past three decades has led to few benefits to small-holders and the rural poor (Chambers, 1983; Johnstone and Clarke, 1982; de Janvry, 1981). "It has also been generally accepted that the relative position of small-holder peasants has deteriorated especially in recent years as redistributionist policies have been abandoned in favour of increased production" (Bailey, 1986:6; Grindle, 1985:12). Was the disappointing record of agricultural development on behalf of small farmers in former Bophuthatswana inherently the case, or largely the product of poorly designed development programmes? "An initial consideration is that rural and agrarian structures differ greatly across and within the major so-called 'developing' regions" (Hyden, 1986; Lipton and Longhurst, 1985), so that making generalisations is particularly hazardous. This review of issues is thus undertaken with particular reference to the former homeland, Bophuthatswana.

Alleviating hunger is not a simple matter. Colonial legacies, unwise authoritarian policies, the lack of appropriate agricultural technology, unequal or dualistic agrarian structures, population growth, and many other factors render solutions to the agricultural problems of the region difficult. "Nonetheless, there are only a few countries that have the labour absorption capacity to employ agricultural and rural people uprooted through technological and political change, making retention of small farmers an important goal for the near future" (Buttel and Raynolds, 1989:350). These realities must bear heavily on the selection of future research priorities within this region. What strategies are then appropriate? Discussion on the factors limiting agricultural production and retardation and the techniques appropriate to overcome the region's stagnation, must become a

priority of the agricultural agenda of the new democratic government and its policy makers. "Linking scientist and farmer, rethinking extension's role by proposing the use of a system's perspective in the analysis, design and operation of agricultural extension programmes to assure coherence and efficiency of effort, are vital factors in rural development" (Drosdoff, 1984:4).

3.6.2 The African Peasantry as an Anomaly

Having outlined and captured some of the problems of agricultural development and state repression together with the manifest problems of ethnicity as a resilience of power (elaborated upon in Chapter 2), a brief analysis on the concept of the anomaly of the African peasantry is attempted. In this respect, there is no difficulty in identifying the problems of the present emergency facing development in Africa. This crisis is due to extended drought, unfavourable terms of trade, rapid population growth, urban policy bias via the process of modernisation, bloated and sluggish bureaucracies, military dictatorships, authoritarian and repressive regimes, and so forth. These factors have, no doubt, contributed to and exacerbated the current predicament in Africa, including the former Bophuthatswana. But at the bottom of all these is also the truth that African politicians and the African élite, together with their bureaucracies, overlook the determinant of the way agricultural production is organised on small farms employing simple technologies and faced with the vagaries of climate. Therefore, there is a need for more respect for, and better understanding of, how the African peasant looks at the world and the ways in which the limits inherent in the structural set-up within the former Bophuthatswana could have been transcended and transformed.

Bophuthatswana's commercial farmers, aided by government, were engaged in commodity production on the misguided principle of export orientation, in spite of the fact that it could not meet domestic requirements in order to feed its own population. The low productivity of peasant agriculture in the former

Bophuthatswana, as measured in terms of yield per unit of land, was manifested in the discrepancy between rates of output in this area and those achieved elsewhere. The implication here is not that Batswana farmers were incapable of raising their yields, but rather that few serious attempts were made by the former-Bophuthatswana government and its agricultural institutions to develop them. Instead of this, non-agricultural resources of revenue and other forms of peasant agriculture had not been supported. It is for these reasons that the government of former Bophuthatswana and its agricultural parastatals often took an arrogant view of peasant agriculture. Peasants have rarely been the beneficiaries of productivity-enhancing research. However, it would be a mistake to explain limited production gains in agriculture with reference only to the arrogance of the agricultural bureaucracy. A peasant household is not only a production unit, but also a social organisation of some complexity.

The question always arises how far members of the household are willing to accept more work on the land. Chayanov (1966:68) argued that "as a peasant family grows in size, the working members of the household have to spend more time supporting dependent consumers." This was applicable to the Russian peasantry, because much of the domestic work had been rationalised and there was time to engage in increasing 'self-exploitation'. It must be further acknowledged that the situation was different in Bophuthatswana. Domestic work was still a heavy burden to members of the household, particularly women and children. Household division of labour places a limit on how far male members are willing to work on the land. Social mobility and migration to the urban areas is more extensive today than was in Chayanov's Russia. Thus, it is not surprising that a study of household economies in Southern Africa (Low, 1986) showed that "peasant household members tend to translate their lower productivity gains into labour savings on the land rather than more time in the production of more crops. Thus they have chosen to escape the drudgery of farm work in favour of other employment, even if it is not clear that such work offers higher pay."

The point is that there are more doors open to the contemporary African peasant than there ever were for the Russian peasant that Chayanov studied. One such opportunity to improve agricultural performance in Africa is education. In Europe, the spread of primary education kept pace with the diversification of the economies away from dependence on agriculture. Education helped the agricultural surplus population to move into other forms of employment. Before that, the peasant population had been confined to farm employment because education was generally not available for peasant children. In Africa, by contrast, universal primary education has come at a time when agriculture is still characterised by low productivity and employment opportunities in other sectors are limited.

Education may help the individual peasant child, but it is unlikely to help the national economy, and certainly not agriculture, unless they grow at roughly the same pace as education expands. It has to be realised that, in Africa, the peasant does not need the state but, with only limited access to alternative sources of revenue, those in charge of the state need the peasant. Bophuthatswana's government and its élite did not realise this crucial factor. Although leaders like Mangope might have appeared powerful, they were not, because they did not control the very system that they represented. In this regard, Kasfir (1986:353) "sees the efforts by the Tanzanian government to force some 5 million people to move into villages as a manifestation of state power- 10 years after the rulers captured the peasants." Experience from many African countries, Bophuthatswana included, shows that where the bureaucratic bourgeoisie becomes monopolistic and unwilling to open the door to capitalist forces, unless for its own greed and economic empowerment, it fails to play a development role because it cannot contribute to capital formation or to the capturing of the peasantry on its own.

The Zimbabwean experience suggests that where capitalism has been allowed to serve the rural areas, peasants have developed new relations with the state

and with other groups in society. Bratton (1986) shows how small peasant producers in Zimbabwe had effectively organised themselves for production and marketing purposes, in response to the challenges and opportunities provided by the economy of that country. (This is not true in Zimbabwe today, given the political turmoil being experienced but was relevant in the early years of Zimbabwean independence). In this regard, it must be clearly understood by the reader that the situations alluded to in respect of Zimbabwean agriculture throughout the study alludes to its 'golden years' when Mugabe, elected in landside 1979 elections after a seven-year guerrilla war forced an end to white minority rule in Rhodesia. Yet on September 8, 2005 setting out Zimbabwe's aims for the UN's millennium goals before heading to the world leaders' summit, he said "the number who could not afford one balanced meal a day rose from 20 per cent in 1995 to 48 percent in 2003 and that 63 percent could not now satisfy more comprehensive basic needs." Zimbabwe became the "regional breadbasket with 5000 white commercial farmers growing enough (and complimented by predominantly black subsistence farmers) to feed the nation and even to export. In the 1990s, Mugabe's rule became repressive against an increasingly vociferous opposition and corruption grew rampant. He then seized on the hot-button issue of land ownership, seized white farms, tortured farmers and expelled many. He is now assuring the remaining white farmers, fleeing the country that there is "a place for you in the sun." (The Star, September 19, 2005:1).

The researcher has no illusions in respect to the violation of Zimbabwe's constitution by its struggle heroes. This is manifested by greed and the resilience of power reminiscent of the erstwhile Bophuthatswana and exacerbated by South Africa that, has failed the people of Zimbabwe by not taking a stand but preferring so-called quiet diplomacy. It also appears that the African Union (AU) has failed to bring the Mugabe government to order. This most certainly has in many ways put paid to the New Economic Policy for Africas' Development (NEPAD) as was enunciated by President Thabo Mbeki,

ratified by the AU and accepted by world leaders. Internationally, he (Mugabe) has become a pariah and is now set for further isolation as the United States is preparing for sanctions against him and his government. This has been the history of many African countries post independence and the researcher states that such a situation is a salutary warning and reminder to the South African government, which is failing to deliver basic services to its population and where corruption and nepotism is becoming endemic. It also begs the question in respect of Zimbabwe, is it at this stage technically a legitimate state given irrefutable evidence of alleged gross human rights abuses, including the torture of opponents and continued manipulation and rigging of elections coupled with many governments and states, at present, not willing to cooperate nor prepared to enter into agreements with it?

The lack of appreciation in the former government and its agricultural institutions of the relative autonomy of the African peasantry created a situation for the Mangope regime where both state power and state institutions began crumbling. What was experienced is both fundamental and significant. It marked the end of the road that it had been forced to travel by its colonial masters and its apartheid policy-makers. Only capitalism within a framework of a mixed economy and distribution of wealth, by means of certain forms of state intervention and the process of accountability, coupled with the rule of law and the marginalisation of the landed élite and the abandonment of political patronage by any new government based on the principles of legitimacy, can capture the peasants. The other reality is that Bophuthatswana's development was a matter of changing the material and social realities from outside and from without.

3.6.3 The Role of Women in Agricultural Development

In continuing the debate in order to focus upon the manifest problems alluded to, and leading from, what has already been captured in this chapter and the study as a whole, it is the opinion of the researcher that the agricultural policy

regarding the role of women in the 'developing world' in general, must be placed high on the agricultural agenda in order to review and evaluate policies directed at rural women. The policies have brought women into a previously genderless consideration of the links between subsistence and peasant production and the capitalist sector in less developed countries, and have questioned the very nature of the relation of unpaid labour to wage labour both in more advanced countries and the 'developing world'. "Also, development policies will not have their intended effect, or might even produce unintended negative outcomes, if the role and position of women in rural households are not explicitly taken into account" (Agarwal, 1989; Beneira, 1981; Dixan, 1982: 539-66). The instrumentality of policy interventions aimed at rural women is generally clearly spelt out. However, this aspect was saliently absent within service sectors, including agriculture, in Bophuthatswana. Some of the concrete areas in which such interventions might be able to produce beneficial results are population control, health delivery, food production, nutrition and the alleviation of absolute poverty through expanded opportunities for income generation. According to Kabeer (1989:241-262), most policy papers tend to stress the intrinsic congruence between the goals of greater equity for women and increased productivity. Their thinking is based on a set of commonly-held assumptions, some of which have been well documented and others less so. These may be summarised as follows: Women are the de facto food producers and active participants in the agrarian sectors of the 'developing world'; some of the main constraints on women's productivity are related to the labour time involved in their daily household maintenance tasks; a reduction of freeing labour time from household tasks implies its possible diversion to income-generating activities; women's productivity to income is more likely to pay welfare dividends for the community at large, especially for children, than men's incomes; women's productivity and potential for income-generation may be raised with minimal capital outlays.

Following from the above, an important rationale behind increasing women's

direct control over resources in general, and cash in particular, stems from the assumption that women are more likely to use these resources to further the immediate welfare of their families, especially the nutrition and health of their children. The evidence of increasing levels of female poverty and its implications for community welfare has been instrumental in promoting a wide-ranging reassessment of rural women's access to resources; access to land and water, to agricultural inputs, credit and services, to education, training and extension and to institutions and organisations. None of these measures were meaningfully applied on a sustained basis within Bophuthatswana. Kabeer (1989:258) further states that "an increase in women's rights of appropriation over resources and over their own labour, should be declared a priority to be furthered through the following measures: the protection of women's existing sources of livelihood; the elimination of discriminatory legislation in the ownership and control of productive assets; the support of extra-household forms of women's labour; the promotion of equitable access to agricultural inputs, credit, extension services and education; the encouragement of an increased capacity for political empowerment and organisation".

In the Bophuthatswana context, very little had been done to empower women in terms of raising production and income as a general growth and poverty alleviation strategy. This had been brought about by lack of interest on the part of agricultural policy-makers within the government, and a lack of understanding of the pivotal role that women could have played in agricultural development. An alternative approach would have been required in order to link women's issues to poverty for the purposes of attempting to quantify the positive effects that may have resulted from incorporating women's concerns into agricultural and economic development programmes. This should have been a policy imperative and should have been placed on the agricultural agenda.

3.6.4 Factors Affecting Access to Credit

Consistent with the discussion thus far, some of the factors inhibiting small farmers' access to formal credit, including credit-based lending policies, formal tenancy contracts, extended processing procedures and tribal barriers, will be discussed in broad terms. "The existence of capital market imperfections in the rural areas of developing countries has engaged the attention of a number of economists and other social scientists" (Griffin, 1979:4-5; Ladman and Adams, 1978:43-50; Lipton, 1976:543-53; Ruttan, 1986:1-8; Braverman and Guasch, 1986:1253-67; Eswaran and Kotwal, 1986:482-98). An important feature of this market is that access to credit is far easier for some groups than for others. Following technological change and a greater need for credit to small farmers to facilitate their adoption of technology, the question of small farmers' effective access to credit institutions was of crucial significance in Bophuthatswana. It was argued by policy-makers that increased production and credit were essential for the generation of adequate growth of production and for changing the composition and distribution of production in favour of deficit producers.

Increasing evidence suggests that the above efforts seldom benefit poorer farmers, since the primary advantage has accrued to large-scale farmers (Karodia, 1990:13-16; Murray, 1992). It has been stated that this was due to the fact that a small proportion of the total number of farmers in rural Bophuthatswana received loans from institutions and, among those with access to formal credit, a very small group of the landed élite, monopolised a major share of the total volume of credit disbursed. The literature on formal credit contains several important explanations for the fact that formal credit is used to a lesser extent by small and potential small borrowers. "It has been argued that the urban-biased policies pursued in low income countries have led to the lower allocation of formal credit to the rural poor" (Lipton, 1976:543-53). "Credit is invariably rationed in terms of the ability to offer collateral" (Von Pischke et al, 1983:98; Biswanger and Sillers, 1983:5-21). The lack of collateral, as well as the

higher perceived risk of small farmers because of lack of diversified resources, leads to a bias against them in credit allocation.

Similarly, interest rate restrictions imposed by the government of former Bophuthatswana inhibited lenders from charging higher interest rates on borrowing, but induced higher demand for credit from the large borrowers which compelled institutions to ration credit in such a way as to exclude small-scale farmers from the formal credit market. The presence of dishonest borrowers was another feature of the élite and, therefore, the government was forced to write off large loans because they were part of their favoured constituency. Also patronage, arbitrariness and corrupt practices pursued by financial institutions under the control of the Bophuthatswana government, enabled by an interplay of political and social factors, further limited the small-scale farmers' access to credit. This suggested that mere physical access to formal credit by formal institutions as was propounded by the government in terms of easy accessibility to farmers of small and marginal holdings in relation to their needs, was a ploy to appease political functionaries.

Further, the dominance of large-scale farmers and the élite in the decision-making bodies of former Bophuthatswana institutions, especially cooperatives and the Agricultural Bank, appear to have influenced the officials in the disbursal of credit in favour of large-scale farmers and their allies. Besides, their dominant economic and social status also seemed to have increased the probability of wilful default of loans from these institutions. The appeal is that justice must prevail and, therefore, policies have to direct resources to small-scale farmers for equity reasons to reduce the influence of large-scale farmers and the élite in credit institutions. In addition, effective measures ought to be taken to improve the productivity of small farmers through proper supervision and guidance and by ensuring timely provision of adequate amounts of credit and other inputs.

3.6.5 Health Issues

Most countries in Africa have major problems of malnutrition in certain sectors of their population and Bophuthatswana was no exception. That these problems persisted, and in some cases worsened, despite an increased pace of development, was due to many diverse factors which are beyond the scope of this study. The failure to emphasize agricultural production at the rural base and equitable food distribution as central goals to development was a major problem. A wide range of political problems, adverse weather conditions, the vicious cycle of poverty and inequity, made worse by the lack of control that poor people and poor countries have over their own destinies, coupled with expatriate eurocentric agricultural thinking and policy-making, have contributed to this phenomenon. In addition, irrelevant extension education programmes, the total lack of an aggressive agricultural education policy for citizens and a host of other factors contributed to the exacerbation of poor rural development within the erstwhile Bophuthatswana.

The major challenge to health workers, development economists, government and international agencies is how best to reduce morbidity, mortality and permanent sequelae that result from the synergism of malnutrition and infection. The answer does not lie in fancy hospitals, nor in elaborate manufactured foods or expensive infant formulae. Leaders and governments must first decide what "development" really means. Planners and economists have tended to view improved nutrition and health as welfare questions. Too often in the past, development has been viewed mainly in terms of large-scale industrialisation and was measured in terms of productive capacity and material output. Latham (1984:58) "emphasizes that it is clear that the classical patterns of development often contribute very little to the quality of life for the majority of citizens of any country and may, sometimes, aggravate the problems of the poor."

The answer to development may in some way lie in the concept of a multi-

disciplinary approach to rural development; combining educational and training approaches at all levels with health and agricultural development, solely on the basis that development per se is not the sole purview of one government department or solely the right of one profession. Development is inextricably entwined with the concept and approach of multi-disciplinary action in order to create meaningful progress and a good life via the process of accountability for the upliftment of the general welfare and social standing of the majority of people. One needs to ask, therefore, what the purpose of economic development is? For whom is it? If improved health and better nutrition for people are not considered in development plans, is it really development? Similarly, agriculturalists need to consider the main purpose of an improved agriculture. Is it mainly to produce more, better quality food, or more cash crops, so that persons have increased incomes to purchase better diets and other essential goods to improve their quality of life? (Karodia, 1992:9). Bophuthatswana should have geared itself for overall economic development, especially agricultural development. Support should have been given largely to those projects that would have benefited a large segment of the population, reducing inequalities in income distribution, and would have been likely to improve the nutrition, health and quality of life of those deprived. For example, labour-intensive projects are often preferable to capital-intensive ones, and support for small-scale farmers is more important than that of large commercial enterprises with particular reference to the Southern African region. "It would have been sensible to recommend coordinated programmes with the following objectives; control of infectious diseases and improved nutrition; a widely available family-planning service; and above all, sustained agricultural programmes based on the needs of farmers" (Lathan, 1984:59).

These three types of services may themselves be synergistic; each may contribute to the success of the other (Latham, 1984:59). National development must be for the benefit of the majority of people and must be designed to improve their quality of life. The smallholding farmer with limited resources will be

around for as long as it is necessary for the rural sector in developing countries to provide the primary employment base for people. Increasing agricultural production through large-scale mechanised and commercial farms only, while neglecting the productive potential of small-scale farmers, can be disruptive to the larger national economy and polity by creating extensive rural migration of displaced farm people to already overcrowded and burdened urban centres. "Consequently, it is imperative that concern for increasing agricultural production be in balance with attention to the general welfare and quality of life of rural people" (Compton, 1984:79). In this context, extension services in the former Bophuthatswana was faced with the major task in assisting small holders in identifying, adopting and adapting to technology appropriate to location-specific soil, water, climate, labour and economic conditions in order to make the small farm a viable economic unit. "These economic and political concerns, combined with the general dynamics and persistence of the food and population crisis, called for greater scope, intensity and quality of effort by extension programmes, if farmers were to receive relevant and realistic assistance and advice on a first hand and timely basis" (Compton, 1984:79).

It emerges, therefore, that the central theme of this study, agriculture both pre- and post-'independent' Bophuthatswana, paid no attention to and neglected completely the perceived (felt) needs of farmers for agricultural training; various aspects of extension that would have emanated from these perceived needs, "probably communication of innovations and the adoption behaviour of farmers, which have been studied in great detail by others" (Compton, 1984). This study emphasizes these questions and issues concerning the inter-relatedness of such units and dimensions of the overall system as research: extension-farmer linkages, training, social organisation and administration. Matters concerning agricultural research will be dealt with only as necessary to complete the system paradigm.

3.6.6 Farm Animal Production

The population of ruminant species of animals, such as cattle, sheep, goats and antelopes that made some contributions of food and non-food uses to humans in Bophuthatswana was nearly 1, 6 million. In addition, about 8,000 pigs and about 3 million poultry were kept for food production. Species lesser in number, like the horse, donkey, rabbit, guinea fowl, pigeon and duck contributed to the consumption of animal protein. These sources are exclusive of fish. Most domestic species of animals were expanding at the rate of 1 to 2 percent per year (Annual Report, Directorate of Veterinary Services, 1990).

With rising human and animal numbers, a fundamental question was, how did one utilise his/her land resources more effectively for the human population of Bophuthatswana? What proportion should have been used for residential or industrial purposes, agriculture, recreation, forests, conservation, or forever have been left wild? If land use was for agriculture, how much should have been allocated to food crops, non-food crops, crops to feed animals, for livestock production and so on? Choices vary widely because of numerous factors in any area, such as soil fertility, temperature, rainfall, labour and capital which govern agricultural enterprises. In addition, there were external elements, such as distance to markets, both internally and to the external South African markets, prices for products and political decisions that influenced decisions on land use. All factors considered, animal production was the enterprise of "best use" for much of the less-productive land.

Proteins from various meats, including fish and poultry, are important throughout most of the world. Average per capita consumption of all meats in the developing countries was estimated at 10 to 20 kg per year, but actual consumption was, no doubt, higher because the estimates do not usually include fish and meats from animals other than cattle, sheep, goats, pigs and poultry (McDowell, 1980:37). Given the region's potential for livestock farming, it is

probable that the results of this study may emphasize the need to pay greater attention to its animal resources.

Throughout the world, animals perform a number of social, ritual and economic functions. "The relative ranking of these functions varies widely according to ethnic group, country, ecological conditions, as well as other factors" (Barat, 1975:132). Non-food products and resources from animals are especially important in developing countries. "Frequently, technicians from developed countries fail to recognise that farmers are trying to have their animals satisfy several objectives at the same time" (Goe and McDowell, 1980). McDowell (1979:103-120) "classifies goods and services of a non-food nature provided by animals as fibre, skins, traction, waste, storage, conservation, pest control, cultural and inedible products". On purely economic grounds, there are good reasons for supporting increased animal production in the area under consideration. Animals have a pay-off not only in improved nutrition, but cash income received for products enables the purchase of agricultural inputs needed to generate large increases in food grain production. The recognition of the importance of animals for cultural needs, recreation and traction for reducing the drudgery of agriculture has also added to the importance. Animal efficiency will need to rise rapidly just to maintain current per capita levels for animal products. Technology is already to a large extent available. The main challenge will be how to use the technology in the environments of the 'developing countries' (McDowell, 1984). "New knowledge and identified variations in the feeding habits of domestic and game animals permit the designation of a single animal species or combination of species that will make most efficient use of a plant eco-system" (Makhaijavi and Poole, 1975:62). This strategy could have probably led to a much more effective use of the rangelands in the former homeland. The bottom line on the contributions of animals in the future will largely depend on attitudes toward the value of animals to the overall efficiency of agriculture. The more recent trends in appreciating the interdependence of humans and animals in most societies indicate that support for the roles of animals will increase.

3.6.7 Some Issues in Agrarian Reform

Agrarian reform is a controversial issue. Some professionals and politicians believe that reform is a critical component of any overall policy to increase food production and improved rural welfare. Critics challenge this position. Some express philosophical opposition to state intervention against private property; others question the efficiency and cost effectiveness of reforms; others maintain that the basic problem lies not in tenure relations but in cheap food policies and, of course, the lack of political will. Those who support agrarian reform have two basic sets of arguments. One set derives from neo-classical economics. Peasant producers make better use of land, labour and capital than landlords; productive resources should, therefore, be redistributed to peasants. The other set of arguments derives from a pre-occupation with the feudal or anachronistic organisation of estates.

Estate land must be redistributed to eliminate "extra economic coercion", to increase productivity and to improve the standard of living of workers. These two positions are critically reviewed in Lehman" (1978:339-45). "The second position, usually labelled 'structuralist', has been dominant since World War II. Structuralists argue that governments must initiate land reform to increase agricultural production, improve the productivity of labour and decrease rural poverty." This is precisely what government and agricultural institutions, policy and decision-makers should have adhered to and striven to achieve, within the agricultural dynamic of Bophuthatswana. "Major proponents of this school include Barraclough (1973) for Latin America, Warriner (1962) for the Middle East, and Jacobs (1961) for Southeast Asia. Their influence has been felt in national and international programmes supportive of agrarian reform" (Parsons, 1973:106).

Structuralists defend agrarian reform as the critical component in an overall programme to change the organisation of agricultural production so that both

productivity and welfare are enhanced. They emphasize the redistribution of land, the designation of land beneficiaries, the establishment of group farms and an infrastructure to assist the reform sector. Future attempts at agrarian reform must give more thought than has been the case in the past to the production of basic food, the possibilities for complementary production in the reformed and private sectors, and the development of welfare and employment generating programmes benefiting those sectors of the rural population that will not benefit directly from agrarian reform. During the past decade it has become clear that merely to increase food production is an insufficient goal for agriculture and rural development policy in less developed countries. In order that the majority of rural people - small and marginal cultivators, tenants and landless workers - can also participate in the benefits of rural development, policies and programmes must focus directly on increasing their productivity, incomes and employment opportunities. "For any approach to agricultural development that incorporates the majority of the rural people, not merely the minority comprising large scale commercial farmers, one must identify four necessary components. Esman and Uphoff (1982:46) identify these as follows:

- A set of government policies that stimulate higher productivity and greater income-earning opportunities. In addition to fair prices for agricultural commodities, they include tariff and credit measures to discourage premature mechanisation, which displaces agricultural labourers for whom there are no alternative job opportunities.

- Government investments and expenditure on physical and social infrastructure that enhance productivity and rural welfare. These infrastructural facilities include roads, irrigation and drainage works, research and training centres, schools and sanitary water supply.

- Technologies, such as higher yielding varieties and improved cropping and husbandry practices, that are suitable to the specific needs of small farmers in their distinctive micro-environments and that they can afford to

adopt.

- Organisations to guide group action in the pursuit of common goals.

The above criteria eluded, to a large extent, Bophuthatswana in its 17 years of independence. "Policies were stifled given the fact that during this period of its emergence and development, there were five ministers of agriculture, nine secretaries and seven directors of veterinary services. There were also numerous other administrative and structural changes within the Department of Agriculture and Natural Resources which did not enhance the direction and focus of agriculture, nor address the plight and problems of the rural agricultural sector" (Personal discussion, 1993, Secretary for Agriculture).

There is compelling evidence that agricultural development strategies designed to increase the productivity, welfare and employment opportunities of small farmers, tenants and landless workers require far more attention than the subject has received to date. Institutions need to be built and strengthened at the local level to develop more effective local action capacities, aggressive educational and training programmes instituted for local people and citizens at large. Without such institutional development at the grassroots level, no policies, technologies or infrastructures can be effectively implemented. Institutional development at the local level must, therefore, involve both government and local membership associations and must emphasize the links between them. This is the vital organisational dimension of agricultural and rural development.

After a long period of neglect and decay in both the pre- and post-independent periods, there was still no encouraging evidence that the government and its development assistance agencies had begun to invest in and recognise the organisational dimensions of rural development. The performance of the Department of Agriculture and Natural Resources and other government agencies serving rural people, could have been improved by the total integration

of the Department and the Agricultural Development Corporation and other parastatal organisations into one cohesive agricultural institution. This would have led to limiting the growing bureaucracy by defining positions, rather than persons, emphasizing quality, education, skills and leadership and, above all, streamlining the agricultural sector by avoiding duplication of services. It is imperative for this to become agricultural policy in the region in the years that lie ahead.

3.6.8 Participatory Development

There was a need for the decentralisation of decision-making and the power to act to personnel closer to the local level, and encouraging the use of para-professionals that extend the range of government services to large numbers of rural cultivators who would otherwise not be reached. Further incorporated into agricultural policy should have been rigorous training programmes, rewarding personnel for effective service rather than rigid adherence to rules, and limiting expatriate decision-making and thinking which had tended not to include indigenous culture, values and reasoning. At the same time, the capabilities of local membership associations needed to be strengthened so that local people could have done more for themselves and become active partners with government in the process of rural development. Since the ultimate objective of extension has been philosophically accepted as the development of people so that they are capable of helping themselves, extension programmes require the clients' active participation. The participation of the intended beneficiaries is very crucial to extension programmes because their primary objective is to bring about required behavioural changes, which can, and will, occur through their active involvement in the programme.

A participative development programme approach has appeared to be instrumental to the success of many social action programmes. It has been used extensively in the United States of America and India. "In the United States

of America, the participative approach has been taken as the standardised programme development procedure by agencies such as the Cooperative Extension Service" (Pesson, 1966), and "Vocational Agricultural Programmes of the Public Schools" (Barlow, 1974). "These agencies involve their clients in the programme development process. Similarly, rural farmers have been extensively involved in community development programmes of the "Panchayati-Raj" in India" (Singh et al., 1978). "In Malaysia, the government is actively promoting more local participation in the rural development programmes and to develop a spirit of self-reliance within its rural community" (Ariffin et al., 1972:31-39). It stands to reason that the government of Bophuthatswana should have launched an aggressive 'revitalisation operation' reflecting the desire to reverse the direction of the development efforts in line with a more community-based development concept.

This approach should have been part of the agricultural policy framework and a primary move on the part of policy-makers relative to the adoption of a more 'bottom-up' approach in national development. It should have been realised that the traditional "top down" approach was ineffective in bringing about holistic development and popular participation. In recent years, a serious concern and interest has evolved around the concept and relationship of participation in development. Cohen and Uphoff (1980) "reported that the United Nations Economic and Social Council has recommended that government should adopt popular participation as a basic policy measure in national development strategy. The Council further encouraged the widest possible active participation of all individuals and national non-governmental organisations, such as trade unions, youth and women's organisations, in the development process in setting goals, formulating policies and implementing plans." The rationale of this process, concept and relationship did not only elude Bophuthatswana over the 17 years of its so-called independence, but was not even considered by policy-makers in its later structural and policy directions formulated during 1988 and 1989. What does participation really mean? Awa (1986) states that "participation has come

to mean different things to different people. In communication and allied fields, the word is used almost interchangeably. For instance, in learning and discussion groups, facilitators are asked to encourage participation and to find ingenious ways to motivate the reticent to participate."

In the concept of community development, participation refers to an active process, whereby beneficiaries influence the direction and execution of development projects rather than merely receiving a share of the projects (Paul, 1987). This implies that the objectives of participation in development are to give empowerment to the people, to build beneficiary capacities, to increase programme effectiveness, to improve project efficiency and to share the cost of the project. Bamberger (1988) conceived that "community participation is not only an active process but is also an evolutionary process, in activities at the project level which can create the conditions for an increased popular participation in development programmes at the local, regional or national levels."

In the study of individual participatory involuntary action, Smith et al. (1972) "emphasized that the usual approach is to explain the phenomenon in terms of social background factors such as age, education, socio-economic status, and so forth. This approach must be supplemented by at least two kinds of alternative and complementary approaches if a complete understanding of the phenomenon is to be achieved. More attention should be given to the social-psychological and the more strictly psychological factors affecting individual participation". Specifically, this means there should be greater focus on attitudes, personality traits, capacities and related psychological characteristics of the individual as determinants of his or her participation.

Katz and Kahn (1966) introduced the concepts of expressive and instrumental cycles in their discussion of individual commitment and involvement in organisations. The authors stipulate that individuals perform their expected roles

as long as their activities in the system carry some intrinsic and extrinsic rewards. These concepts are somewhat related to the propositions concerning individual motives and needs structure advanced by Maslow (1970) and Herzberg (1971) in the theories of human motivation. In general, both theories stipulate that "the realisation of the individual's satisfaction will enhance his or her future activities or performance". Closely related to these behavioural theories is the inducement-contribution theory advanced nearly five decades ago by March and Simon (1959). This theory states that the individual's contribution to the system is directly related to the inducement the individual gets from the system. The higher the inducement (intrinsic and/or extrinsic reward), the greater will be his or her contribution to the system. Further contribution or involvement in the activity of the system will be enhanced as long as the individual perceives there is an equitable reward to his or her effort.

3.6.9 Synthesis of Culture and Appropriate Technology

Every culture, if it is to continue, must form patterns for the education and training of oncoming generations. It must be able to synthesise culture, indigenous and traditional knowledge with appropriate western technology to suit its conditions and frames of reference. Fasheh (1982:6) states "that the world is heading to a peak of cultural changes and cultural awareness. Training can be used to stress one's own culture, with its special and beautiful characteristics. At the same time it can be used to make one aware of the drawbacks in one's own culture and try to overcome them." In other words, training should be used to point out the strengths and weaknesses of one's own culture. Teaching which is detached from cultural aspects and conducted in a purely abstract, symbolic and meaningless way, is not only useless, but also very harmful to society, to farmer-training itself and to future generations.

Colonisation has implied the underdevelopment of most so-called 'developing' countries. Underdevelopment is not just an economic process. Foreign

domination also caused agricultural underdevelopment. African agriculture was ignored or despised; the farming capacities of certain peoples were negated, reduced and destroyed; agriculture was presented as the White man's creation and ability. Cultural reaffirmation should have formed part of the struggle against the agricultural underdevelopment of Bophuthatswana and the combat against racial and colonial prejudice. In all underdeveloped regions, it is necessary to encourage an understanding that the people have been, and will be, capable of developing agriculture by themselves.

Culture could thus be redefined in terms of its relationship to the dominant social formations and power relations in society. This 'politicised' concept of culture would include the relationship between ideology and the socio-economic system. In a country like South Africa, where the political and economic dominance of one group over all others had been entrenched for so long, the concepts of power and conflict are central to a discussion on culture. Girous (1981:26) describes a 'politicised' notion of culture more fully thus: "Culture, in this sense, would be defined not simply as life's experiences functioning within the context of historically located structures and social formations but as 'lived antagonistic relations' situated within a complex of socio-political institutions and social forms that limit as well as enable human actions". Therefore, culture is more than simply the expression of what grows out of the experiences of people in their daily social and economic roles. The culture of people encompasses their experiences in the struggle for political power and their opposition to economic constraints that prevail.

It follows, therefore, that totality involves the understanding of any fact or situation in its historical, socio-economic, political and cultural context. Knowledge does not exist apart from human consciousness; it is produced by us collectively searching and trying to make sense of our world. Frankenstein (1983:185) states that "the rationality basic to science and technology disappears under the extraordinary effects of technology itself, and its place is

taken by myth-making irrationalism'. People begin thinking and acting according to the prescriptions they receive daily from the communications media rather than in response to their dialectical relationships with the world. Technology becomes a species of new divinity to which people create a cult of worship."

The awe created by both the apparent complexities of technology and the superficially wonderful concrete changes it has made in daily life, must be countered by showing people that they can understand how technology works and in whose interest it is applied. Critical education must challenge and expose the contradictions in society's definition of 'progress' and 'the good life'. Technology which Southern Africa as a region cannot disengage from in the agricultural sector - for agricultural development - must be incorporated selectively and appropriately with the indigenous culture, knowledge and traditions to create meaningful progress and the good life. A problematising reality approach as a starting point is in itself already a confidence-creating activity. Problematising reality, reinforced by cultural, social and individual-collective confidence-stimulating activities, will contribute substantially to emancipatory agricultural education and training, to enable all people in the region to understand, develop and use agriculture as an important tool in the process of grasping agricultural reality, the reality of its nature and of society. It stands to reason, therefore, that farmers' wants, needs and positions must be very highly regarded in any programme that is attempting to modify their behaviour.

This study may, in some way, contribute to the understanding of the agricultural cultural dynamic in terms of indigenous tradition and knowledge and the influence that selective and appropriate technology could make upon that direction and progress of agriculture in the region. One of the purposes of this study is intended to focus on the farmers as receivers of training. The knowledge gained should indicate how willing and adept farmers are to participate in training activities, enabling planners and trainers alike to provide

more meaningful training programmes.

One of the essential functions of theory is to help the mind transcend human limitation. One of the most obvious achievements of modern scientific theory is its revelation of a whole array of causal connections which are quite staggering to the eye of common sense. Amuah (1989:2) noted that "theory serves to place events in a wider causal context than that provided by common sense. But once a particular theoretical idiom has been developed, it tends to direct people's attention towards certain kinds of causal linkage and away from others", as had occurred within the agricultural theoretical policy framework of former Bophuthatswana. Most African traditional cultures have adopted a personal idiom as the basis of their attempt to understand the world, which had not been allowed to surface and contribute to development within the former Bophuthatswana; its emergence was thwarted by Eurocentric policy-makers.

Are these traditional notions of cause merely artefacts of the prevailing theoretical idiom, fantasies with no basis of reality? Or are they responses to features of people's experiences which, in some sense, are 'really there'? Although these notions are ones to which people are not predisposed by the prevailing theoretical idiom, they also register certain important features of the objective simulation. Over much of Africa, one is dealing with small-scale, relatively self-contained communities. These are the rank of social units that have helped Africans achieve equilibrium with agriculture, disease and a host of other retarding and hazardous factors. Amuah (1989:3) further states "that scientific method is undoubtedly the surest and most efficient tool for arriving at beliefs that are successful in this respect; however, it is not the only way of arriving at such beliefs. Given the basic process of theory-making and environmental stability which gives theory plenty of time to adjust to experience, a people's belief system may come to grasp (even in the absence of scientific method) a significant range of common sense which Eurocentric agricultural policy thinking has blatantly undermined, buried and disregarded. It is because

traditional agricultural beliefs demonstrated the truth of this that it seems apt to extend to them the label 'empirical' and not grounded in theory."

The relation between common sense and theory are essentially the same as they are in western society. That is, common sense is the handiest and most economical tool for coping with a wide range of circumstances in everyday life. Nevertheless, there are certain circumstances that can only be coped with in terms of wider causal vision than common sense provides. Thus, in these circumstances there is a jump to theoretical thinking. In this regard, Amuah (1989:4) emphasizes that "it has cast doubt on most of the well-known rural dichotomies used to conceptualise the difference between scientific and traditional agricultural thought: intellectual versus emotional; rational versus mystical; reality-oriented versus fantasy-oriented; casually-oriented versus supernaturally-oriented; empirical versus non-empirical; abstract versus concrete; analytical versus non-analytical. All of these are shown to be more or less inappropriate." Amuah (1989:4) adds that "if one is disturbed by this casting away of established distinctions, it is hoped that it will be accepted when it is realised how far it can pave the way towards making sense of so much that previously appeared senseless."

The aim of this exposition has been to re-open the bridge between traditional African thinking and modern western science. The point is that the difference between non-personal and personalised theories is more than anything else a difference in idiom of the explanatory quest. Grasping this point is an essential preliminary to realising how far the variable dichotomies used in this field are simply obstacles to understanding. Once grasped, a whole series of seemingly bizarre and senseless features of traditional African thinking become immediately comprehensible. Until it is grasped, they remain essentially mysterious. Making the business of personal versus impersonal entities the crux of the difference between African agricultural theory and science not only blocks the understanding of tradition, it also draws a red herring across the path to an

understanding of science. This is precisely what agricultural policy-makers had achieved within former Bophuthatswana.

It is hoped that the findings from this study may shed some light on the reasons why agricultural and rural development programmes have not been peasant-oriented, and may also provide some useful directions for the improvement of peasant participation in extension programmes. This knowledge base will be useful to policy makers and extension agents alike in their endeavours to solicit peasant participation in the planning, execution and evaluation of future development programmes in the region. Hopefully, the findings from this initial investigation will serve as the foundation for further and more in-depth research in this area of scholarship.

Studies and assessment in extension methodology should become an integral part of the extension services of the agricultural sector of any country, recognising the need for improving farmer knowledge and skills. Thus a comprehensive programme based on the process of acceptability and political legitimacy and credibility, as its main component, should complement the other activities of the extension services, in order that democracy, in the interests of the general welfare and the promotion of the public good, becomes the order of the day. Thereby, a conscious effort is required to redress the imbalances of the agrarian crisis within this region.

3.7 CONCLUSION

This chapter very briefly outlined the geographical location of Bophuthatswana and attempted to trace its agricultural history overtime. The institutional agriculture support agencies charged with the formulation of policy and delivery of services was discussed, in order to understand the agricultural dynamics and structure within which agriculture functioned within Bophuthatswana. An overview of the fiscal and administrative crisis of the state was briefly explored

and, some aspects of its future, given the political changes that were rapidly emerging in South Africa was undertaken. Relevant issues such as the African peasantry, the role of women in agricultural development, other salient issues in respect to agriculture, including some issues in agrarian reform together, with the synthesis of culture and appropriate technology were discussed. The overview of agriculture in this chapter, allowed the analysis to situate the study in the context of evaluating the factors contributing to the process of uneven development within the erstwhile Bophuthatswana, which will be undertaken in the chapter that follows.

CHAPTER 4

FACTORS CONTRIBUTING TO THE PROCESS OF UNEVEN DEVELOPMENT IN AGRICULTURE WITHIN BOPHUTHATSWANA

4.1 INTRODUCTION

Policy reforms in general will have to be raised in parts of this discussion. This is based on the premise that the amount of external assistance that would have been needed to sustain Bophuthatswana's economy and state in terms of addressing the manifest problems within government as a whole and for purposes of agricultural development and for reducing poverty, would have been substantially higher and will have been required for a much longer period. In attempting this, it is further acknowledged that the recital of likely macroeconomic effects leaves out some important factors, and that the aggregative model does not pretend to capture all the richness and complexities of Bophuthatswana's agriculture and economy. Therefore, one cannot model the effects of all policy alternatives, nor does the discussion address questions of institutional or administrative reforms, except for introducing very briefly a specific viewpoint and opinion on the options that were open to Bophuthatswana, in as much as they affected its future, in terms of the constitutional proposals that were emerging in South Africa in the dynamic period of transition.

Poverty, telecommunications, nutrition, health issues, population growth, manpower and employment, illiteracy, education, family planning, research, rural welfare, technological change, variability in agriculture, organization, policy implications, administration, physical infrastructure, farmer participation, transport, extension problems will form the thrust of this chapter. Despite the inherent difficulties, some attention must be given to the purposes and goals of agriculture. Leading from this, the question why farmers do so badly will be posed. The chapter will attempt to also capture the implications of under-funding

research and extension, manpower problems and the primacy of industrialization and an analysis of some development indicators; causes for the breakdown of extension and other related issues.

4.2 PROBLEMS IN RESPECT TO AGRICULTURAL POLICY

Since independence in 1977, and the constant change in agricultural hierarchies and the ever-present influence of agricultural parastatals and the unilateral decisions of the former State President Lucas Mangope, there had not been an approved and acceptable agricultural policy within Bophuthatswana. This had led to a serious problem in respect of analysis, guidance, development, intellectual understanding; staffing at the upper echelons of a disjoined structure. This had been pursued on the basis of political patronage and nepotism, party and tribal affiliations, thus making the evaluation of agriculture and agricultural development in terms of acceptable and accountable processes very difficult and, had not been possible up to the latter part of 1993. In justifying the above, numerous internal policy documents were reviewed. None of these policy documents were approved as official policy of the Department of Agriculture. It is self-explanatory that there was no interim agricultural policy and that over its seventeen years of independence the Department of Agriculture had been functional and operational, (albeit) without a policy. In order to underscore the assertions made, firstly it must be recognised that policy is a salient and vital instrument, used in analysing objectives and goals.

Without a defined policy, agriculture, extension and development evaluation, became all the more difficult and meaningless, and negated the very fabric of the rule of law and the process of public accountability. These assertions must also be clearly understood from the perspective of the generic principles of public administration. Planning is an instrument of policy, therefore, no planning can take place without a defined and acceptable policy. It is also used as an instrument of audit. Without implementation of a policy for *

audit/measuring/evaluating agriculture, development and extension, there cannot be any sustained and meaningful implementation of the generic processes, which revolve around the cardinal principles of policy, planning, staffing procedures, financing and control/accountability and eventual budgeting. In reality, the agricultural budget is a reflection of government policy expressed in monetary terms, but without a defined policy and in terms of a practical theoretical framework, the agricultural responsibilities cannot be evaluated in respect of objectives. In short, the entire agricultural scenario in Bophuthatswana, as observed over time across the entire agricultural spectrum, defied the generic principles of public management, administration and the crucial aspect of accountability.

In order to prove the assertions made it is necessary to draw upon the Annual Report (1991) of the Department of Agriculture, which was supposedly a true reflection of the agricultural audit as put forward to parliament by the accounting officer (Secretary of Agriculture and approved by the Minister). In doing so, and as a starting point, the mission statement of the Department will be scrutinised. It reads as follows: "It is the responsibility of the Department of Agriculture and Natural Resources to serve the people of Bophuthatswana who continuously use agricultural and related resources to improve their quality of life by formulating, monitoring, and co-ordinating macro agricultural objectives, policies and strategies" (Annual Report, Department of Agriculture, 1991:2).

The goals and objectives were not elaborated upon in a policy document as approved by government; with no mention of how this will be achieved and reflected upon. No meaningful policy document was available, nor could an interim policy document be furnished by various functionaries within the Department. The Department of Agriculture did not formulate and co-ordinate macro-agricultural objectives, policies and strategies in respect of agriculture (this will be elaborated upon later). The mission statement captured only macro-agricultural perspectives in the development of agriculture and made no

reference to micro-perspectives, as it related to subsistence farming and the peasantry and its emphasis was, therefore, on the development of commercial farming only. In respect to financial planning, the Department received its funding from vote 13. It was the responsibility of the Department to seek funds from the national budget, then split those funds received from the Department of Finance amongst the six parastatal bodies namely the Agricultural Bank of Bophuthatswana (Agribank), the Agricultural Development Corporation of Bophuthatswana (Agricor), the Bophuthatswana Agricultural Marketing Board (BAMB), the National Parks Board of Bophuthatswana (Parks), the L.M. Mangope Agricultural College and the P.H. Moeketsi Agricultural High School. The remaining sum was used by the Department which included the Land Administration Branch. The parastatal bodies controlled the expenditure of the funds allocated to them (Annual Report, Department of Agriculture, 1991:2). Although the Department stated that it "monitors the funds and expenditure of the parastatals" (Annual Report, 1991:2), in actual fact it only received reports on money spent by parastatals.

The Director of Finance (1991) acknowledged that "the Department did not have the accounting capability and was impotent in the absence of a National Agricultural Policy within the dispensation of former Bophuthatswana; that audit was not its brief nor was it a brief of the Auditor General's Office or the responsibility of Treasury, which was the supreme financial authority of the government of the day. It was further stated by the Director of Finance that a system was introduced in 1991 and 1992 that the audit be conducted by the Auditor General's Office." Although requested, these audit reports could not be made available. Repeated claims that this was an anomaly, on the basis that the Department was charged with the responsibility of monitoring agricultural parastatal funds, revealed that there were no such reports. Telephonic and personal enquiries to the Auditor General's office brought no positive response, only the following inadequate reply:

- That these agricultural parastatal institutions in actual fact used public funds without the necessary checks and balances and without the necessary process of government audit and public accountability. This was a major problem in the quest for agricultural development, on the basis that powerful cliques were formed, each fighting for power and the maintenance of the status quo, but above all given credence and clout by the then State President and politicians.

- A further anomaly was highlighted in the Annual Report (1991:2) which stated "although some members of the staff of the Department were transferred to Agricor three years ago, an approved establishment accommodating its new responsibility as proposed was only submitted to the Public Service Commission during the year under review" (to date 1994, was not approved by the PSC).

- The reality is that the lag period in the finalisation of the structure was a distortion of the agricultural reality and impinged upon a host of interrelated agricultural factors and parameters. That the new dispensation under Agricor, and then under the new Agriserve Board, was not planned and was covered with hidden agendas, and certainly impinged upon the reflection of successive budgets. That Public Service Commission regulations were overlooked and completely flouted with the knowledge of politicians who dared not speak out, for fear of arousing the wrath of the powerful inner circle of government. This was being done with impunity. That there existed more than dual lines of command and distorted allegiances and accountability. The majority of staff were seconded to the Department via the various parastatals and were, therefore, not true public servants and as such also not subject to the rules and regulations of the public service. This led to poor government leadership. That conditions of service were not uniform, causing serious morale problems and dissatisfaction among Departmental and seconded

parastatal staff, in lieu of different and preferential service conditions. The former Secretary of Agriculture in the form of the Accounting Officer of the Department and all Directors were seconded from the parastatals and were also not public servants, performing functions that they could not legally undertake, and that there had been no formal approval from the office of the Public Service Commission in respect of these arbitrary arrangements. The former Minister of Agriculture and the Secretary occupied positions on a number of these parastatals, which negated the rule of law and transgressed Public Service regulations. The process of allegiance, commitment, sustained service and accountability were therefore negated in the extreme, leading to apathy, retardation of agriculture per se and haphazard implementation of agricultural objectives. It must also be noted that the Annual Report (1991:2), accorded a special status to the Land Administration Section. This was largely because Land Administration had grown in stature politically and, was relentlessly pursuing its own agenda also without checks and balances. It functioned as a parastatal and ignored the administrative jurisdiction of the Department.

The initial brief of this section was to look at legislation and streamline its acceptance and management for proper and efficient government (Internal Discussion Document, Department of Agriculture, 1990). In short, it deviated from its initial brief because it was incapable of fulfilling this task amidst a plethora of South African legislation that required inputs in terms of its applicability in the Bophuthatswana context. It had become a powerful independent institution within the Department of Agriculture and within the agricultural sector. It was continually plagued with internal strife and its functionaries were constantly lobbying politicians to become a department or parastatal in its own right. It did not operate as a unit of the Department and was not accountable to the Secretary. This was further explained by the fact that enquiries made to the agricultural advisor to the President, W. Behr (1991- a

German national) revealed that "its operational budget did not emanate from the Departmental budget, but via an internal branch of Agricor - termed Agricultural Services, which was not accountable to the Department nor to the Public Service Commission". Its executive officers had marginalised the Secretary, while a top official within the Land Administration was a former Minister of the South African Government, who had been jailed in South Africa for embezzling funds.

In terms of macro planning, the Annual Report of the Department of Agriculture (1991:14-15) stated as follows: "In the light of the worsening economic position for commercial cropping in Bophuthatswana and the continuing pressure on the country's livestock carrying capacity, it became evident during the year that the Department of Agriculture and Natural Resources should take a consistent lead in the future direction of agriculture. In view of the difficulties outlined above, a re-directional planning process has commenced during the latter part of the year and will continue into the 1991/1992 year." An initiative spearheaded by the Department and involving its four parastatal bodies saw the preparation of a National Policy document which was expected to receive approval from the Executive Council in the first semester of 1992. This document contained recommended objectives and suggested policies. The Secretary for Agriculture (1991) upon enquiry stated that "further to the realization by the Department of the need for urgency and inertia in macro-planning for the agricultural sector, a small, specialised planning division was created whose main function was to include: macro-agricultural planning and policy, co-ordination, monitoring and evaluation of planning and policies, management of information and statistics". These will now be evaluated. None of the aforementioned, including the acceptance of a national agricultural policy, came to fruition, and all of this had been nothing but rhetoric and playing to the public gallery and to politicians. The above scenario was further exacerbated by the scrapping of Agricor and the fact that the new Agriserve Board was in the process of overhauling the situation again. The implication was that the Department of Agriculture had to take a consistent leading role in the future direction of agriculture only due to the

worsening economic position. It had been realised by certain functionaries that the Department was marginalised and that it was vital to regain lost ground and seize the initiative once again in order to charter a sustained path to agricultural development. The suggestion is also that the Department was not in a position to take the lead, nor address the future, ignoring the failures and realities.

As already stated, planning could not take place in the absence of policy, which was then the position. The Annual Report (1991) acknowledged that there was inertia in macro-planning. No clear indications of the difficulties experienced were addressed. It must be noted that the initiative in drawing up a national policy was spearheaded by the Department in consultation with four parastatals (this will be discussed later). Discussions with the Secretary (1991, 1992) indicated that in actual fact the Department was charged with National Agricultural Policy formulation by the cabinet, and that no other institution should negate this principle. Further, the former Secretary was categoric and expressed the view that "National Policy took precedence over the policies/agendas of the parastatals and that their objectives must fit in with the National Policy, and not vice versa." That the National Policy as formulated and stated above was expected to be approved by the Executive Council in the first semester of 1992. No such approval was granted (1994). The researcher did not expect any form of approval even prior to the collapse of the regime.

A planning section was already in place, but was under-utilised and lacked the vision and leadership (in the past) and, therefore, negated the content of the mission statement in that, the Department was not involved and was never involved under the later dispensation, introduced in 1988, and was not even involved in the dispensation under the Agriserve initiatives, in any form of macro-planning. The planning section was only being expanded, without any direction and understanding of its total role in national agriculture and rural development. Both planning and so-called policy making took place at the levels of the parastatals pursuing their own agenda. The Department of Agriculture was a

passive onlooker and endorsement institution of the policy imperatives of these parastatals.

As concerns Veterinary Services, the Director of Veterinary Services stated as follows: "There continued to be a problem with the control of the field staff of the division of Veterinary Services. As from 1 April 1988, the field staff of the Department had been transferred to Agricor for functional control. Such a method of management causes a lot of unnecessary problems and, in this case, led to the disruption of the disease surveillance system which then led to livestock owners receiving poor disease control and also disruptions in the trade of animals and animal products." (Director of Veterinary Services, Internal Memorandum, 1992). This, in some way, is confirmation of the assertions made in this dissertation and impinges upon international and national disease control mechanisms. It brought about dual control and marginalised the Directorate of Veterinary Services in terms of control of staff, the application of legislation, international veterinary norms and so on, but above all negated the process of accountability. It impinged upon sustained and co-ordinated veterinary and general extension programmes in terms of the development dynamic in respect to animal production and public health. It marginalised the veterinary services in terms of interaction with other state departments and negated the very parameters of development and extension. All of these issues raised via the content of the Department of Agriculture's Annual Report (1991), clearly indicate both the abject paucity of direction and that agriculture in the Bophuthatswana context was torn apart by a maze of intrigue, not conforming to a set of national and international rules. It was a service that was unco-ordinated at all levels and was problem-oriented, in the sense that its structures were subordinated to the implementation of various smaller policies of parastatals, following their own agendas, which were not subservient to a broad National Agricultural Policy, over time. Such a situation did not help the promotion of the general welfare; brought about a 'free for all' without sustained and testable hypotheses, leading to absolute chaos and confusion. Agricultural development is a dynamic process,

but there were no checks and balances, in order to measure or monitor and evaluate agricultural extension programmes and general agricultural development, across the total spectrum of agriculture in Bophuthatswana.

This situation confirms the view that extension and development was not aimed at the economic empowerment of the poor and was also not aimed at achieving social justice. There was a total lack of understanding these concepts, which are mutually exclusive, yet dependent on each other, but interchangeable. There was also no understanding of the felt/perceived needs of Bophuthatswana farmers for agricultural training, and a lesser understanding from an intellectual base of the consequences of uneven development. In addition, there was an arrogance and lack of understanding that extension and agricultural development was a dismal failure in Bophuthatswana in spite of the high monetary inputs and not in keeping with the fundamentals of extension and development indicators utilised and explored in the development dynamics of developing nations. In continuing the assessment, it is necessary to express some viewpoints before attempting to furnish more proof of the dismal performance of agriculture, and particularly extension, within the agricultural sector of former Bophuthatswana (in other parts of the dissertation).

There were those within the upper echelons of agriculture who became powerfully entrenched, in spite of their incapabilities and lack of knowledge, and poor administrative skills. They believed that mutual consultation in agricultural policy-making, with the various parastatals, would somehow magically provide the best solutions to social and agrarian questions and problems. According to Broudy (1961:77), "consultation among thieves (at best or at worst) produces only more efficient thievery (deception). Without the goal of self-perfection of individuals to enhance the general welfare and good life, consultation is futile, without the consultation, the self-performance is gratuitous." Consultation or discussion as such is, therefore, according to the researcher, not a guarantee of democracy or even an indubitable symptom of it. It becomes a guarantee when

it is a means to, or clarification of, the common good in a particular problematic situation. In the problematic agricultural dynamic of the former Bophuthatswana, consultation and discussion only brought about further entrenchment of the leading agricultural role players, politicians, the landed élite, and greater confusion and a lack of agreement, in order to bring about an all embracing and encompassing agricultural policy.

The total symptom, however, was only understood by these minority role players, following development parameters and agendas that only they could interpret within a government that lacked credibility and legitimacy. A government that controlled every aspect of daily life, a government that did not enjoy the support of the majority, a government that defined power in terms of negating the very principles of democracy that it so religiously espoused on the domestic front and attempted to espouse in the international arena. By the same token, hierarchies in different sectors of agriculture in the former Bophuthatswana did not understand the option of group dynamics, and that group dynamics would only make sense when they were able to remove emotional obstacles to the process of clarification; otherwise they could just as easily have brought about agreements among genuine rascals as among misguided saints. This was the reality of the Bophuthatswana agricultural hierarchy.

There is no blueprint for development and extension. However, cognisance had to be taken of the realities confronting agriculture in this region, in a period of dynamic transition and political change. In so doing the Bophuthatswana Government should have acknowledged that the extension services had been a dismal failure and this was one of the main factors that contributed to the process of uneven development, and that a revitalised agenda for agriculture was required in order to address the manifest problems, and in order to redress the imbalances of uneven development. The old order in Bophuthatswana should have realised and acknowledged that its only hope of obtaining peace and security for this region lay not in greater oppression of the masses that

challenged its power structures, but in the pursuance of human rights and of promoting social justice and progress, and better standards of life for all amidst greater freedom. Agriculture must never again be crippled and held to ransom in the South African context, as it was, in the era that is now confronting us, and in that which is now passed.

4.3 THE KEY ROLE OF AGRICULTURE

Having outlined some of the problems in respect of policy issues within the agricultural sector, the key role of agriculture in economic development will be briefly explored in order to come to terms with economic development as an important parameter in development and agricultural discourse. Economic development is a process by which a population increases the efficiency with which it provides desired goods and services, thereby increasing per capita levels of living and general well-being. "Nearly one third of the world's population lives in nations in which annual per capita income averages over 500 USA dollars, whilst the remaining two thirds occupy much of Asia, Africa and Latin America" (Mellor, 1980:3). (The statistics provided by Mellor are pertinent and relevant on the basis that, they assumed significance in respect to Bophuthatswana and Africa, during the period under discussion). Shah (2006:1) states that "half the world – nearly three billion people live on less than two dollars a day and that, according to UNICEF, 30 000 children die each day due to poverty". Koffi Anan former Secretary General of the UN (2006: 6-35) stated that "almost half the world's population lives on less than two dollars a day, yet even this statistic fails to capture the humiliation, powerlessness and brutal hardship that is the daily lot of the world's poor". "Government sources in the former Bophuthatswana indicated that per capita income was in the region of R840 per month for the majority of the population (Personal Communication, Department of Economic Affairs, 1992). The above data was based on individual worker income, which included the salaries of government civil servants, individuals working for private enterprise and did not include the majority of the

population.

When analysing the distribution of households according to income group, Pieterse (1984:6) states "that 53 per cent of all households in former Bophuthatswana earned less than R2,000 per annum; 28 percent earned between R2, 000 and R4,000 per annum and 19 percent earned a little over R4,000 per annum. Given the global economic crisis, the high inflation rates that currently plague Southern Africa coupled with the economic crisis in most Southern African states, it is obvious that the above figures would not have improved over time within the Bophuthatswana homeland." From the foregoing, one would have expected that the task of developing agriculture would have been essentially one of mobilising and increasing the efficiency of the vast quantity of agricultural resources which were already available. Clearly, while development occurs, the population grows and per capita incomes rise. To feed more people a better quality diet, agricultural production must increase. However, a rising level of living pre-supposes not only an increasing per capita demand for food, but also a larger supply of other commodities. In addition, the capacity of the agricultural sector to absorb an increased labour force is very limited in most countries. For these reasons, economic development also requires rapid expansion of the non-agricultural sectors of low income countries. Bophuthatswana did not attempt to accomplish this or move substantially in this direction. Expansion of the non-agricultural sectors required vast quantities of capital. Because agriculture initially commands most of the population, income, and capital, it follows that the additional capital must be raised in large parts from the agricultural sector. Thus, agriculture must produce major increases in agricultural production, but it must also make significant net contributions to the capital needs of other sectors of the economy. The nature of this burden has an important influence on selecting the means of developing agriculture, as does another role of agriculture, the direct provision of welfare. In respect of welfare Bophuthatswana's performance was dismal.

4.4 RISE AND FALL OF THE AFRICAN PEASANTRY

Today and since the advent of democracy in 1994, the former Black homelands and Bantustans present a sorry sight of destitution, demoralisation and neglect. The erstwhile Bophuthatswana was no exception to this scenario. Large parts of vegetation, whole sheets of earth had been washed away from hill-sides and deep dongas scar the valley sides. "The reasons for this unhappy state of affairs are in one sense self-evident - the 13 percent of South Africa reserved for Black settlement was manifestly incapable of supporting its human and animal population. Yet, in popular belief and in many more expert opinions, African societies are often held to be conspirators in their plight" (Alcock, 1973:2-16). Peasant conservatism, inertia, improvidence and sloth are regularly evoked as reasons why Black rural societies have failed to adapt, and as contributory factors to their present desperate state. A considerable amount of literature has been published over the last fifteen years which has gone a long way towards exploding the myth in the continent as a whole, but little of this has found its way into public discourse and consciousness.

Colin Bundy's path-breaking "Rise and Fall of the South African Peasantry", first published in 1981, falls into this category and its appearance in a second addition in 1988, reviewed by Philip Bonner (The Star, 1988:12), bears relevance to this dissertation. Bundy's (1988) work is subsequently discussed on the basis that it represents a milestone in South African history and has caused a radical shift in historical thinking. In the time since its publication, however, (and more particularly since the appearance of his seminal article on the subject in 1972), a number of limitations have been exposed, which Bundy freely acknowledges in the new preface to this edition. Bundy (1988) focuses primarily on the Eastern Cape between 1840 and 1913, and his findings and extrapolations can be extended to most areas of South Africa and the homelands. The first of his two initial theses is that "the period 1860 - 1890 witnessed the growth of an African peasantry. Starting on a relatively modest scale on missions and among

primarily refugee communities from neighbouring independent African societies (notably the Fingo's and Mfengu), production for the market 'exploded' between the 1870s and 1880s, extending geographically into the Transkei and Griqualand East, embracing African tribesmen residing on communal lands." Rather than being inhibited by a traditional conservatism and constrained by inertia and sloth, this rapidly-growing peasantry responded eagerly to market opportunities and the possibilities of capital accumulation. They demonstrated great initiative and a keen receptiveness to new ideas, new crops, new technologies and new social institutions. The plough, harrows, wagons, square houses, Christianity, schooling, the production of wool, wheat, barley, tobacco and an infinite variety of vegetables all spread at an astonishing pace, particularly from the early 1870s."

- **Superiority**

Numerous contemporary accounts commented on the superiority of Black over White agriculturalists in this period. Both in quantity and quality of exhibits at agricultural shows, Black peasant farmers regularly outshone their White neighbours, and many White land owners found it more profitable - and less strenuous - to lease out their farms to Black peasant producers rather than cultivate them themselves. Black society in the Eastern Cape in this period did, nevertheless, not present a uniformly rosy and prosperous picture.

An equally important part of the argument is that *pari passu* with peasantisation for one section of Black society, came land shortages, poverty, and a growing dependence on wage labour for others. Moreover, the production of the population falling on hard times steadily grew, notably as a result of land annexation and booty raiding in the last frontier wars (1877-1881) and the crippling droughts which occurred shortly before. An increasing differentiation within African society could be discerned with a

small group of perhaps 2,000 fully commercial Black farmers, a larger body of peasants producing for the market, and a majority of marginalised labourers who were forced to work for wages on a regular basis. So much for the rise. From the early 1890s, Bundy argues, the African peasantry entered a precipitous decline. The main agents of its downfall were the mining industry's appetite for labour, which quickly outstripped supply, and an employers' offensive' which was mounted against African agricultural self-sufficiency through a battery of laws culminating in the Natives Land Act of 1913.

- **Subsidies, limitation and research**

The commercialisation of White farming was simultaneously forced through by a massive programme of subsidies (tax relief, credit, transport etc.) siphoned off the gold mining industry and distributed per head of the rural population, had been devoted to the relief of farmers in South Africa, more than in any country of the world, wrote Smith (1908). Against this unusual competition, the Black peasantry increasingly failed to hold its own. By 1914, crippled by these disadvantages and battered by rinderpest and other natural diseases, it had succumbed. Similarly, arguments have also been advanced of the pre-1850 period. A more serious criticism of Bundy's analysis is that it does not show why particular groups or homesteads were able to succeed as peasants in this economic and political environment, and why others failed. For Bundy, progress and innovation are all too often the result of the individual household head's personal initiative and energy."

It is precisely this aspect of Bundy's analysis which recommends itself so strongly to Leon Louw's 'South Africa: The Solution' (Bonner, 1988), which singles out the "Mfengu as the Cape's natural entrepreneurs, and an example of what might have been in South Africa, the self-governing states and the TBVC homelands, and presumably what might come." Yet, as a number of other

agricultural histories have commented, success, either as a commercial farmer or as an ordinary peasant, was predicated on prior access to resources, notably, family and other labour, cattle and land; pre-colonial, pre-conquest society was itself differentiated and stratified, and it was those best positioned at that time who were most likely to succeed later. Even then, where the Mfengu fit in this background is unclear, and their role, like so many aspects of South African history, still awaits adequate research. In this context, perhaps the best tribute one can pay to Bundy's 'Rise and Fall' is that it has opened up a huge and neglected area of South African history and decisively changed the scholarly agenda, especially in this dynamic period of transition and particularly for any restructuring of agriculture in the new democratic South Africa (Phillip Bonner, The Star, 1988:12).

Unfortunately, it did not impact upon the policy-makers and government of Bophuthatswana in terms of understanding the history of the past and the positive inputs upon agriculture that an understanding of our own agricultural history could have made, in seeking agricultural models, in order to redress the imbalances created by apartheid and the Bophuthatswana regime. In short, Bophuthatswana lost its opportunity in relationship to the peasantry and in relationship to sustained development, for the orderly economic empowerment of the rural periphery and the advancement of the general welfare and public good. In other words, Bundy's work has chartered a course for the case of African agriculture and, in a way, has exposed the myth of agriculture in the South African dynamic, being viewed as a White preserve. In spite of this, the former Bophuthatswana government did not understand this reality.

4.4.1 Why Our Farmers Do So Badly

The question leading directly from the discussion and analysis undertaken above is posed in terms of the huge gap between Zimbabwean and South African production, under optimum conditions prevailing for both countries. It is also

posed from the aspect of exposing the myth that led to the belief by the apartheid South African regime, and the former Mangope government, that while agricultural entrepreneurship in South African and Batswana agriculture was best. "South Africa's natural cattle herd numbers about 9 million head, and its annual beef output is not enough to meet the needs of the country's population of about 40 million. Thus meat had to be imported" (Annual Report, Meat Board, 1990:15-19). "Bophuthatswana is also a net importer of meat and meat products in spite of a cattle herd of over half a million" (Veenstra, 1987:6). "Zimbabwe's national herd numbers 1,5 million head, which, in spite of periodic temporary shortages, not only supplies the needs of its 8,5 million people, but also produces 10,000 tons of beef a year for export to Europe and earns on average R 75 million a year in foreign exchange" (Nicholas, 1991:9). (*Note: Zimbabwe at independence and beyond, not today because of political turmoil and President Mugabe's policies.)*

Zimbabwean farmers make representation to government calmly and through organised agriculture, and accepted other viewpoints or limitations. They are outstanding farmers, clear-thinking business people, willing to take normal risks. They will not hesitate to discard a doubtful line in favour of one that is more lucrative, they think positively. Unfortunately, this cannot be said for White South African farmers, because so many of them run a 'hit or miss' business, year after year. They are incapable of changing to other lines of limited, but certain, profitability; their management is far below standard. They make threats and organise crisis protests of other population groups and other sectors of the economy and continue to run to the state in order to bail them out (Nicholas, 1991:9). If one had to consider the production of agriculture in former Bophuthatswana, and compare it to both these scenarios, it would be too ghastly to contemplate for both commercial and subsistence agriculture.

There were about 4,000 White farmers in Zimbabwe compared to about 60,000 in South Africa. This relatively small number of Zimbabwean farmers boasted

many diplomas and degrees among them and produced some 80 percent of the country's total marketed agricultural output. (Note: Given Mugabe's policies, white farmers have declined drastically due to the new land policy and expulsion of white farmers). Their exports brought in, on average, more than a billion rands in foreign exchange which was an indication of the high international recognition of their products. With more than 75 percent of the country subject to conditions that make dryland cropping a risky undertaking, (similar to Bophuthatswana) their achievements were outstanding. Similarly, subsistence farmers were highly motivated by a competent extension service and, considering their large numbers, compared very favourably with commercial farmers (Nicholas, 1991:9).

There is no reason why South African farmers and farms in the former homeland regions should have not striven to reach the same heights as their Zimbabwean counterparts (note in the earlier years of Zimbabwean independence) Not only experience, but particularly knowledge, ability, a co-ordinated and workable extension programme in order to make the correct decisions, were needed to overcome the major challenge of steeped-up production. In addition, the legitimisation of the Bophuthatswana regime was urgently required in order to gain the support of all the people and thereby to attain the badly required credibility. In the absence of this legitimacy, agriculture faced tremendous problems, especially in restructuring and the process of democratic access.

4.5 IMPLICATIONS OF UNDER-FUNDING RESEARCH AND EXTENSION

The researcher will, in a later part of the dissertation in the form of a conceptual framework, attempt to establish the distinction between training and education, and will also further attempt to outline the objectives of non-formal education in relationship to development problems. However, the researcher is firstly of the opinion that a fundamental concern is that education and particularly training, in terms of the perceived needs of farmers in respect to 'third world' agricultural development, particularly in the context of Bophuthatswana, should provide the

structural support necessary for the creation of a class of people more conscious of the demands of an advancing industrial society. The researcher postulates this on the basis that the region was integral to South Africa, coupled with the reality that its economic viability as a region in both the short- and long-term will, in the context of the new North West Province and as a consolidated region of the new democratic order, increasingly become more dependent on the mature economy of South Africa as a whole. It follows, therefore, that amidst the numerous agricultural concerns that this study attempts to capture, one of the primary questions is one that relates to optimal expenditure for agricultural research and extension and the implications of under-funding.

It is in this perspective that discussion and analysis will be made in respect to the former Bophuthatswana's ability to have met the challenges of increasing food production and the researcher's view that this depended on the level of investment in agricultural research and extension. Therefore, as outlined earlier, education and farmer-training in terms of felt or perceived needs is a pre-requisite and, moreover, is of vital importance to the very survival and development of a region in which approximately 80 percent of the population is rural-based. Given the above scenario, the success of agriculture will be dependent on the viability, influence, linkage, practical implementation and acceptance of the programmes by farmers on the one hand, and support and monetary inputs by government as a whole, and its commitment to the promotion of the general welfare through the process of agricultural extension and related research on the other hand.

Increases in agricultural productivity are often attributed to production-oriented agricultural research and extension. Because such activities use resources, an important question is whether or not it pays for society to invest in them. Many studies indicate high returns to a wide range of agricultural research and extension investments (for a summary of these results, see Peterson and Hayami; Arndt; Dairymple; and Ruttan). However, we still need to assess the

long-run consequences of alternative levels of agricultural research and extension investment. Investment could be adjusted to achieve desired levels of future agricultural prices relative to other goods and services. Because of the lagged response to agricultural research, it obviously would be impossible to control short-run fluctuations in prices through research and extension investment. However, long-run price trends might be controlled by adjusting such investments. In the ensuing discussion, the researcher will attempt to analyse the investment patterns for agricultural research and extension that could, and will, achieve selected levels of expected growth in agricultural output. Therefore, it is the considered opinion of the researcher that this aspect is one of the central themes of this study. More specifically, the researcher will also attempt to formulate an economic model of the agricultural sector in which technological change is achieved from investment in agricultural research and extension, and identify optimum patterns of investment based on rate of return estimates, and, finally assess the consequences of failure to achieve the optimum investment as it relates to Bophuthatswana.

4.5.1 Conceptual Framework

Economic policies generally are formulated under uncertainty about the eventual levels of important uncontrollable factors. By anticipating these variables, policy-makers can successfully achieve selected economic objectives. "Hence, economic policies may be viewed as the use of available instruments to achieve desired values and time paths of policy targets" (Fox, Sengupta and Thorbecke, 1966). The objective of the policy-maker may be to change the price trend of agricultural commodities relative to other goods and services. The problem is to select the investment level of agricultural research and extension so that the target variable, the desired price point, is attained. In general, farm price is an important variable because higher farm prices are translated into higher food prices. Rising food prices can increase the cost of living. Also, farm prices are a major determinant of farm sectoral income. If the rate of growth in agricultural

productivity is too rapid relative to demand growth, farm prices and farm income may be depressed. Severe adjustment burdens may be imposed on marginal resources in the sector.

4.5.2 The Model

Estimates of market equilibrium through time depends on the specification of supply and demand schedules. Since investments in research and extension are long-run supply phenomena, a simple model using short-run supply and demand elasticities would be inappropriate. The supply and demand relationships must be sufficiently flexible to model the system through time. In developing the model further, the aspect of supply and demand parameters must be taken into consideration. In this regard, the price elasticities used in the analysis must be based on sound econometric studies of agricultural production. Similarly, the aspect of determinants of productivity growth must be given the necessary importance. Therefore, growth in agricultural productivity, defined as an index, can be represented by an increase in output per unit of input. Increases in productivity reflect changes in the quality of inputs, but such changes generally are not captured in the total input measure. These changes can be attributed to an increase in knowledge resulting from education, research and extension.

The relationship between input, quality improvements, research, extension and education may be measured by inserting these variables directly into the production function. "Grallochs (1964) was the first to use education, research and extension as separate variables in production functions. Since then, several others have used this approach". The above use of such parameters, or any other model in relationship to improvements in the production sectors of the erstwhile Bophuthatswana, cannot be identified, in spite of various enquiries by the researcher. Extension's role is distinct from that of research. Therefore, a separate extension variable should be used in the production function. However,

measuring the separate influence of extension on agricultural productivity has been difficult because of the multi-collinearity between these variables in time series data. "Even sophisticated econometric techniques such as ridge regression cannot overcome the problem" (Discussion with Head of Department, Extension, School of Agriculture, University of Bophuthatswana, 1992). Evanson (1967) states that "research and extension expenditure in one year may affect productivity over several years."

In terms of empirical analysis, two main questions (which were never asked within the agricultural sector of Bophuthatswana) must be considered: What is the optimum pattern of agricultural research and expenditure. Secondly, what are the consequences of failing to achieve the optimum pattern of expenditure? In analysing the optimum pattern, selected target values of the farm price variable are related to rates of return of investment. The rate of return declines as research and extension expenditures are used to reduce the annual growth rate in farm prices. In this regard, White and Havlicek (1982:52) show that "increasing annual expenditures for the 1981-1990 period in the United States from $ 1,878,4 million to $ 2,618,0 million would reduce the annual growth rate in real farm prices from 0.4 percent to 0.3 per cent. However, the rate of return on research and extension expenditures would drop from 15,6 per cent to 10,9 per cent." The research and extension expenditure patterns chosen as the base situation by White and Havlicek (1982) is one that would, according to them, result in a 0.4 per cent annual increase in real farm prices. They further state that "this situation was chosen by them for further analysis because it is closest to the actual trend in research and extension expenditures and that the 15,6 per cent rate of return from this pattern of expenditure corresponds to the level that Ruttan (1980:531) argues are in the public interest". White and Havlicek (1982) and Ruttan (1980) state that "the indexes of farm production and prices received by farmers are equilibrium values simultaneously determined with optimal pattern of research and extension expenditure. Farm production would be expected to increase by 14,2 per cent over the period, whilst real farm prices, the target

variable, would increase by approximately 2,7 per cent. The productivity index is the ratio of output per unit of input for aggregate agricultural production."

4.5.3 Effects of Under-Funding

Policy-makers may be tempted to under-fund agricultural research at less than optimum levels in order to cut current government funding. (In the Bophuthatswana agricultural sector, apart from a few small sociological research inputs, no serious agricultural research was undertaken and no meaningful research could be unearthed by the researcher). However, there may be long-run costs associated with such a strategy. Considering that budgets in general within governments allow a variety of approaches to be evaluated, some selected approaches to reducing research and extension expenditure will be analysed. First, research and extension expenditure could be cut in the early years and then made up later, so that advances in productivity could continue, leaving consumers no worse off. Hypothetically, this approach would require more government funding over the period, but leave consumers virtually unaffected. Under a second approach, policy-makers could cut support in the early years and then return expenditure to the base situation in later years. Finally, a new, lower expenditure base could be established.

The latter two approaches would result in a direct government saving, but might substantially increase costs to consumers. An important question is whether or not the reduction in government expenditure ultimately would be offset by higher food costs. White and Havlicek (1982) capture three hypothetical cases or scenarios of under-funding (relative to the base situation). "The first case is when policy-makers decide to reduce research and extension expenditure to 10 percent below the base level for three years, and then spend enough during the later part of the 10-year period to generate the same level of consumer surplus as the base level. The results in this case indicate that it is possible, although costly, to overcome under-funding for a limited number of years. In the first three

years, this strategy would reduce expenditure significantly. However, expenditure would have to be increased substantially above the base in order to leave consumers unaffected. Thus, each Rand the government tries to save initially will ultimately cost the government more.

The second case of under-funding involves a 10 percent reduction in expenditure for the first three years followed by a return to the base level of expenditure for the fourth and remaining years, with no recovery attempt being made. Productivity and production will be less than the base situation, while equilibrium prices will be higher. Although these differences may not appear very great, they must be put into perspective. Even slightly higher prices translate into a substantial reduction in consumer welfare. The estimated reduction in consumer surplus is small in the first few years, but, as the cumulative effect of under-funding is felt, the magnitude of consumer surplus reduction rises substantially.

The final under-funding case involves establishing and maintaining a lower level of funding than in the base situation. In this case, research and extension programmes are 10 percent below the base situation for the entire period. This expenditure pattern has a greater effect on the farm output and prices than a temporary reduction. Although, initially, the savings in government expenditure are higher than the loss in consumer surplus, the reduction in consumer surplus increases rapidly through time, and soon far outweighs the budget savings. This relationship can be expressed and explained by the lagged effect of research and extension expenditure on productivity."

From the above, it is more than obvious that these scenarios will have certain serious implications. "For example, agricultural research and extension expenditure in one year will affect agricultural productivity and, hence, farm and food prices for many years in the future. The contribution of these expenditures to agricultural productivity is relatively small in the first few years, increases to a

maximum in the sixth and seventh years and then declines through the fourteenth year" (White and Havlicek, 1982). It is, therefore, self-explanatory that in choosing the appropriate level of expenditure in each year, policy-makers should take into account multi-period effects. Since expenditure in each year will affect productivity in later years, inadequate funding of agricultural research and extension activities in one period will be very difficult to overcome later. The problem of selecting the optimal level of expenditure is also stochastic. Therefore, the uncertainty surrounding research breakthroughs makes it impossible to control future outcomes exactly. However, it is indeed a starting point in terms of a scientific approach to research and extension, which most decidedly would have a positive and meaningful impact upon agricultural development. It would also allow for some measure of prediction of the outcomes intended by policy-makers and further allow for some sort of qualitative and quantitative analysis of input/output relationships, that was sorely lacking and urgently required in the assessment process of the former Bophuthatswana's declining agriculture.

4.5.4 The Consequences of Under-Funding

Leading directly from the discussion undertaken above, and in relationship to the scenarios outlined in respect of the consequences of under-funding extension from a global viewpoint, the researcher finds it necessary to draw from an internal audit report (Number 92/64) provided by Agricor's Department of Finance, in order to prove what the consequences of under-funding extension was upon rural development and agriculture. The primary objective was to ascertain whether the preparation and control of the Corporation's budget facilitated the achievement of the Corporation's mission in terms of extension. The scope of the exercise was as follows: The effect of the Programme Approach on the preparation of the Corporation's budget; the comparison of the Corporation's development expenditure with the budgeted operation expenditure for the financial years 1991/1992 and 1992/1993; the budgetary control of

operating expenditure by the district offices for the 1991/1992 financial year; and the financial reporting status using budget figures from the district offices.

Since 1991/1992, the development budget was drawn up on the basis of the Programme Approach instead of the Project Approach. According to the Programme Approach, the development budget must reflect and address the needs of the community. Furthermore, the development budget allocated for the 1992/1993 financial years showed an increase in the ratio of the expenditure towards agricultural village development activities (from 34 cents to 80 cents out of every R 1 expended). As shown below, out of every R1 spent on development, 80 cents was spent on the following: agricultural, village and rural industrial programmes. The detailed findings as presented by Senaratne (1992:4) are reflected in Tables 4.1 and 4.2 and 4.3.

Table 4.1

Actual Corresponding Expenditure to Development Expenditure.

ITEM	1992/93 RAND	(BUDGETED) CENTS	1991/92 RAND	ACTUAL RAND
Introductory Programme	114,400	.00	0	0
Agricultural, Village Development and Industry Programme	17,261,644	.08	15,638,831	.34
Consolidation Farms Service Centres	1,500,297	.07	4,206,524	.09
Property Development	1,607,268	.08	17,533,618	.37
Agricultural Business	0	0	6,231,931	13
Farm System Research, Genetic Conservation	331,000	.02	651,693	.01
Breeding Schemes	441,294	.02	2,868,452	.06
TOTAL	21,275,903	0.27	47,131,049	1.00

(Source: Senaratne, Group Financial Manager, Internal Audit, Report Number 92/64, Agricor, 1992:4).

In 1991/1992, the actual corresponding expenditure had been 34 cents to R1 of development expenditure. However, in the same financial year, six out of eleven

districts exceeded their operating expenditure over the original approved budget, as shown in table 4.2 (Senaratne, 1992).

Table 4.2

Over-Expenditure of Certain Districts in Relationship to Operating Expenditure versus Original Approved Budget.

Name Of District	Budget For 1991/1992 R	Actual Total Expenditure R	Variance R
Molopo	5,108,065	5,329,191	(221,126)
Lehurutshe	3,920,310	4,338,475	(418,165)
Ganyesa	3,201,649	3,460,639	(258,990)
Thaba Nchu	4,131,192	4,543,669	(412,477)
Kudumane	3,290,150	4,378,378	(1,088,228)
Moretele	3,454,559	4,202,717	(748,158)

(Source: Senaratne, Group Financial Manager, Internal Audit, Report Number 92/64, Agricor, 1992:4)

According to Senaratne (1992:5), "Section 4.18 of the Budget Policy states that approval of additional funds in excess of overall approved budget rests with the Group Financial Manager in collaboration with the Managing Director. None of these districts had been granted approval for additional funds. This was due to a 'free for all' and due to the loss of control of fund management, leading to the situation that important projects and operations could not be implemented due to the lack of funds. This was further exacerbated by inadequate budgetary controls by cost centre in general. There was, in fact, no written approval for any over-expenditure on budgets and this can be proved by the system of monthly consolidation reports". Senaratne (1992) further points out that "budget allocation for operating expenditure was becoming disproportionate to development. Agricor spent R1, 66 in operating expenditure for the 1991/1992 financial year; the ratio of development expenditure changes, therefore, from R1 to R4, 19. There is no doubt that this trend would have forced the Corporation to re-

evaluate the entire operating expenditure structure." This is captured in Table 4.3:

Table 4.3

Trend of Development Expenditure as a Reflection of the Consequences of Under-funding

	1992/1993 EXPENDITURE (ACTUAL) (R million)	1992/1993 BUDGET (R million)
Operating Expnditure	78	88
Development Expenditure	47	21
TOTAL	**125**	**109**

(Source: Senaratne, Group Financial Manager, Internal Audit, Report Number 92/64, Agricor, 1992:4)

From the tables it can be concluded that under-funding of any extension system will have devastating effects upon agriculture, human and rural development in this region in the future. It would also allow for some measure of prediction of the outcomes intended by policy-makers and further allow for some sort of qualitative and quantitative analysis of input/output relationships, which were sorely lacking and urgently required in the assessment process of Bophuthatswana's declining agriculture.

4.6 MANPOWER PROBLEMS

In addressing the question of manpower, employment and education, two primary sources of research data are used namely - Jacobs, 1990:3-97; RSA and Bophuthatswana Population Census, 1985. In addition, other sources of research data, including the observations of the researcher, are utilised and reflected as such in the narrative. This is precipitated by the all-embracing fact that, in spite of the researcher's attempts to find empirical evidence in almost all spheres of work that affects and impinges upon this study, there seemed to be a

paucity of available data and statistics within organisations and institutions in the former homeland. One of the most important factors affecting production in any country is unquestionably its people. Economic development can only take place if there is a significant supply of well-trained manpower. The supply of labour in a country is dependent on, inter alia, the size and composition of the population, the wage structure, availability of work, working conditions, labour legislation, and the capacity of schools and other training and educational institutions. An accurate estimate of the size of the labour force can only be made if a sophisticated model is developed which takes into account all the above parameters and various other economic, social and political factors. Mainly due to the lack of reliable data, it was not possible to construct such a model for the region formerly known as Bophuthatswana.

According to the 1985 census of the Republics of South Africa and Bophuthatswana, "60 per cent of Bophuthatswana citizens who lived in either of these two countries, resided in Bophuthatswana. However, only 40 per cent of the potentially economically active Bophuthatswana citizens (people in the 15-64 year age group) resided in Bophuthatswana. This low percentage of potentially active people was mainly due to the lack of sufficient employment opportunities in the region and the difference in wages between the internal and external markets. The total de facto population in terms of the 1985 census was 1,74 million and it was estimated that the population would be 2,18 million by 1993" (Jacobs, 1990:3). The estimated number of 460,000 economically active people in 1985 was expected to increase to 629,000 in 1993 at a mean annual growth of 4 percent. This was significantly higher than the growth rate of 3, 2 per cent in the population between the ages of 15 and 64. This was mainly due to the high growth (4, 8 per cent) in the number of females joining the labour force. The increase of 168,500 in the supply of labour during the eight-year period from 1985 to 1993 implied that on average at least 21,000 work opportunities should have been created during each year for this period to absorb the growing labour force alone. If the 40,000 economically active people who indicated that they

were unemployed in 1985 are added, a total of 35,000 jobs needed to be created annually to ensure full employment (Jacobs, 1990:4)

In 1985, 50 percent of the economically active population lived in the Odi-Moretele region, which was close to the Pretoria Witwatersrand, Vereeniging (PWV-RSA) industrial complex, where more jobs were expected to exist. In contrast, less than 9 per cent lived in the underdeveloped rural districts of Ganyesa, Kudumane, Madikwe and Lehurutshe. The region with the highest activity was Bafokeng, where 66 per cent of the population were economically active in 1985 (82 per cent were male and 40 per cent female). Regions with an activity rate of less than 30 percent were Kudumane (24 per cent), Ganyesa (27 per cent) and Madikwe (28 per cent). Molopo and Thaba Nchu were the only districts where the male participation rates increased during the period 1980 to 1985, probably because of some infra-structural development. The proportion of the economically active population with a standard 5 or higher qualification increased from 43 percent in 1980 to 51 per cent in 1985, and was expected to increase even further to 55 per cent in 1993, whilst the proportion with a standard 8 or higher qualification increased from 12 per cent in 1980 to 18 per cent in 1985 with an expected increase to 22 per cent in 1993. This marginal increase in the educational level implies an increase in the percentage of the population regarded as trainable as well as an increase in the demand for tertiary education.

It could also mean that, unless proper work opportunities are created, unemployment could shift from unskilled to skilled manpower. The highest growth rate of 9 per cent was expected in standard 10. In some regions, less than 15 percent of the economically active population had an educational level higher than standard 7. The skill mix of a country is broadly reflected by the occupational structure of the labour force. This, in turn, is mainly determined by the economic and technological development in the country and the demand for specific goods and services, and the occupational composition of the labour

market.

In 1985, 9,000 agricultural and related workers were unemployed, and 50 per cent of males were in the category of production workers or labourers. There was a sharp decline in mine workers from 1980 to 1985, from 20 percent to 12 percent respectively. In the groups 'professional, semi-professional, technical and related' and 'administrative and managerial', 5, 6 per cent and 6, 8 per cent of men respectively indicated in 1985 that they had no work. In the same year, the majority of women in the professional group were either teaching (60 per cent) or nursing (31 percent), whilst 31 percent were domestic workers. Non-citizens in 1985 were more involved in administrative and managerial positions, including professional occupations (30 percent), whilst almost 70 percent of the homeland's citizens were involved in clerical and unskilled work. Total unemployment of the economically active population was between 20 and 25 percent, whilst 40 per cent of the economically active women were unemployed (this was increasing). This meant that at least 31,000 men and 36,000 women were unemployed" (RSA and Bophuthatswana, Census: 1985).

De Clercq (1984) states that "Bophuthatswana depended on the Republic of South Africa to a great extent, especially for employment, as far as its people were concerned. Even though Bophuthatswana had the lowest population density of all homelands, it could hardly sustain the majority on the land available. Because of the semi-arid bushveld vegetation, few people could live off agricultural work in Bophuthatswana. As a result, the majority of the economically active population in the then Bophuthatswana looked for wage employment in industry and commerce and, given the limited work opportunities inside their own region, ended up migrating or commuting to South Africa" (de Clercq, 1984:13; Jacobs, 1990:58). According to a study by the University of South Africa, 70 percent of the Gross National Income was earned by commuters and migrant workers. Jacobs (1990) "reaffirmed that this situation was not drastically changing". The number of registered Black migrant workers

and commuters from Bophuthatswana to South Africa for the period 1982 to 1986 increased, as pictured in Table 4.4.

Table 4.4

Number of Migrant Workers and Commuters from Bophuthatswana in South Africa.

	1982	1983	1984	1985	1986
Migrant workers	236,000	231,000	225,500	275,500	261,300
Commuters	173,000	111,200	115,400	123,800	87,000
TOTAL	**409,000**	**342,200**	**340,900**	**399,300**	**348,300**

(Source: South African Labour Bulletin, 1989).

It is clear that more Bophuthatswana citizens were employed in the RSA in 1985 and, with the economic crisis, this position increased. According to De Clercq (1984), "only 25 percent of Bophuthatswana inhabitants who were employed in 1977 were employed internally. This percentage increased to 26,5 per cent in 1982 and to nearly 30 per cent in 1985. There is no reason to believe that the proportion of people employed externally would have changed substantially in the short- or long-term."

The percentage of pupils in primary schools decreased from 74 percent in 1978 to 64 percent in 1988, while the high school component increased from 6 percent to 13 percent in 1988 and was expected to marginally increase to 16 percent in 1993 (Jacobs, 1990:83). The number of standard 10 pupils taking vocational-oriented subjects had increased over the years. However, the percentage in 1977 reflects that 41 percent of the pupils took mathematics compared with 28 percent in 1988. A very small percentage of pupils took business-oriented subjects such as accountancy, economics, business economics and typing (Report of the Second National Education Committee, 1983-1986). Supply of technological manpower is necessary for economic growth. Technological manpower such as engineers, natural scientists, technicians were drawn from

those who took mathematics and physical science as school subjects. The number of pupils taking mathematics and physical science must increase substantially if the region is to become self-sufficient in the provision of technological manpower. A large number of people in the region are leaving school before they have attained permanent literacy and will join the unemployed. "In 1985, more than 45 per cent of the labour force in the age group 15 to 19 years were purposefully looking for a job and could not find one, while those who did find one joined the unskilled labour force" (Jacobs, 1990:97). "It was forecasted in 1989 by Government experts that the Standard 10 examination would record 12,460 passes out of 18,600 candidates (pass rate of 67 per cent) and that 4,000 would gain matriculation exemption. However, when the results were released, there were only 8,927 passes out of 18,130 candidates. The actual pass rate was 49.2 percent with 2,235 gaining matriculation exemption. It was found that 11 percent of the 1981 school leavers were unemployed in 1985, while 25 per cent of the 1983 school leavers were employed in 1983. Surprisingly, according to this study, the chances for further study and of finding employment were almost the same for science matriculants as for arts matriculants" (Legotlo, 1985:38-39). Legotlo (1985) also found that "of the matriculants who had found employment, 75 per cent of the males and 95 percent of the females were employed by the then Bophuthatswana government, whilst 20 percent of the total number of matriculants found a job in the RSA.

The quality of education is determined to a large extent by the availability of schooling facilities and the provision and qualifications of teachers. There were 1,282 schools, 12,030 classrooms, 16,178 teachers and 553,848 pupils in 1988. The Second National Education Commission of Bophuthatswana (1985:102) further indicated that schooling in the rural areas was generally at a disadvantage compared to provisions in urban areas. Teachers tended to be less well-qualified and buildings less adequate and there was an over-reliance on expatriate teachers from 'developing' countries like India, Sri Lanka, Uganda,

Ghana and many others. These teachers did not have the commitment, did not understand the local dialect, were poorly paid and, above all, could not fit into the community because of their superior education and their lack of understanding local culture and traditions". From the number of vacancies in the approved teachers' posts, it appeared that the quantitative supply of teachers was sufficient in 1988, especially in the primary schools, where only 0, 32 per cent of the approved posts were vacant. In the middle schools, 0, 77 percent of the approved posts were not filled (Jacobs, 1990:107; Annual Report, Department of Education, 1988).

Tertiary education in former Bophuthatswana was mainly provided at the University of Bophuthatswana (Unibo) and its six affiliates, namely, the five Colleges of Education and National College of Nursing as well as the Moutlwatsi Setlogelo Technikon. Student enrolment at Unibo increased from 229 students in 1980 to 2,403 in 1989 to 3,641 in 1994. Although there was a decrease in the enrolment at the Taung campus, where the School of Agriculture had been located before its move to Mmabatho, the enrolment for other degree courses increased remarkably, despite the difficult economic and political climate (Discussion with the Academic Registrar, UNIBO, 1994). A communication to the school by the Director of Veterinary Services (1988) pointed out that the School of Agriculture was not meeting the requirements of veterinary training in terms of knowledge of field requirements and conditions, and in terms of the number of animal health officers being produced. "Since the first graduation ceremony in 1984, 704 Bachelors, 203 Honours, 13 Masters, 1 Doctorate and 2 Honorary Doctorate degrees were conferred until 1989. Residents received tertiary education externally in the RSA also" (Discussion with the Academic Registrar, UNIBO, 1994)

According to the Education Department of the RSA, 3,090 Bophuthatswana residents were enrolled at South African universities in 1987 and this figure was increasing. This may have been due to the fact that the University of

Bophuthatswana (now the University of the North West) was situated in Mmabatho and was not within easy reach of students due to the fragmentation of the country. Another factor may have been that the university was not recognised by many universities in the RSA and that the standards were perceived as being low by students, who felt that their degrees would not be recognised. It must be added that people residing in South Africa sent their children to school and also to the university in Bophuthatswana, because of the continued disturbances of Black schooling and the university system in South Africa, which was not friendly to Blacks and due to constant strikes, police harassment and so on.

Taking into consideration the deficiency of dependable data over a reasonable time-span, it is not possible to make any reliable predictions regarding supply of manpower based on the available education statistics. Related to the imbalance of labour supply and demand was the over-emphasis placed on formal education by government policy. It was therefore important and urgent that government should have addressed the question of education, unemployment and manpower planning on a national and, more importantly, a regional level. A proper evaluation of priorities must rest on decisions about competing options in a constrained system within the region.

4.6.1 Manpower Problems and Shortages of Staff in the Agricultural and Extension Sectors.

Continuing the discussion on manpower supply, the study would be incomplete without providing some essential data in the form of statistics, on a broad range of staff and their suitability to impact or impinge upon general agriculture, the extension environment and rural development, either positively or negatively. This is precipitated on the grounds that it has been and will be attempted throughout this study to bring to bear the inadequacies of manpower provision and other salient issues that required urgent attention in respect to re-defining

the objectives of the extension and rural development thrust and its consequences upon the process of uneven development. In doing so, the data in terms of agricultural manpower provisions are provided in Tables 4.5 to 4.7.

Table 4.5

Qualifications of Upper Echelons of Agricultural Management, Agricor, Bophuthatswana, 1993.

POSITION	QUALIFICATION REQUIRED	ACTUAL QUALIFICATION	GRADE	RELEVANCY TO AGRICULTURE
Chairman	CA SA Dip (Agric)	Nil	2	None
Managing Director	B Com	Dip Ed	1	None
Secretary, Agriculture	B Com (Agric)	B Com (Hons)	3	Part
General Manager, West Region	B Agric	Dip Agric	2	Minimal
General Manager, West Central Region	B Agric	B Com	2	Minimal
Director,Veterinary Services	BVSc	MRCVs	PSCNo grade	Full
Manager, Co-Operatives	B Sc Agric B Com	BA Law	5	Minimal
District Managers, 12 in all	B Agric Management/ Administration Diploma	Ranges from no qualification to MA, Dip Ed	5 (all)	Ranges from Relevant, Minimally relevant to lack of experience
Financial Director	B Com	Standard 10	4	None

(Source: Personal Communication, Agricor Human Resources, 1993).

From the above it becomes clear that most of the incumbents holding these upper managerial positions did not have the requisite qualifications and experience.

Table 4.6

Qualifications of Middle Management, Agricor, Bophuthatswana, 1993/94

POSITION	QUALIFICATION REQUIRED	ACTUAL QUALIFICATION	GRADE	RELEVANCY TO AGRICULTURE
Manager, Rural Development 41 posts	Dip Agric	26 did not have the required qualification	7/8	Overall minimal, Lack of experience
Senior Rural Development Officer 11 posts	Dip Agric	8 did not have the required qualification	9/10	Overall minimal
Principal Rural Development Officer 2 posts	Dip Animal Health	Dip Animal Health	8/9	Old qualification, Minimal impact, relevant experience
Chief Animal Health Officer	Dip Animal Health	Dip Animal Health	8	Old qualification

(Source: Personal Communication, Agricor Human Resources, 1993/94)

The position in respect of middle management was similar to that of the upper echelons of agricultural management. This had a tremendous negative impact on development per se and had contributed to the process of uneven development.

Table 4.7

Qualifications of Agricultural Extension, Production and Community Development Field Workers, Agricor, Bophuthatswana, 1993/94

POSITION	QUALIFICATION REQUIRED	ACTUAL QUALIFICATION	GRADE	RELEVANCY TO AGRICULTURE
Extension Officer 200 posts	Dip Agric Ext	140 did not have the required qualification	Ranges from 9-12	Minimal impact on extension and agriculture
Animal Health Officer 72 posts	Dip Animal Health	All have Dip Animal Health but Majority have Junior Certificate and Old Diploma	Ranges from 10-12	Minimal impact on extension and agriculture
Community Development Officer 65 posts	Dip Agric or Dip C D	36 did not have the required qualification	Ranges from 10-12	Minimal impact on community development, extension and agriculture

(Source: Personal Communication, Agricor Human Resources, 1993/94)

The position in respect of these functionaries was not in keeping with laid-down criteria for appointment. This had serious implications on the process of uneven development. These functionaries lacked a development thrust and did not impact on agriculture per se in any meaningful way. They were further bogged down with senior staff that were not qualified to do the job - above all, there was no accountability and no control of these officers. Statistics in general were very difficult to obtain, and exacerbated by frequent changes to various positions, and constant movement of staff by agricultural specialists. Data was not made available, but discussions with the Manager, Human Resources, Agricor/Agriserve (1993) revealed that a number of incumbents holding these positions did not have the requisite qualifications and experience, and that most of the qualifications were low-keyed and did not justify the grading. It was further established that a number of these posts were held by expatriates who had entrenched themselves in these positions. In continuing the discussion, given the serious short-comings in the provision of agricultural manpower supply, data on the salary ranges afforded to the above categories of staff are subsequently discussed.

In doing so, it is necessary to point out that the salaries afforded to upper echelon and middle level functionaries were unrealistic, for the qualifications and experience they possessed. These salaries excluded additional perks in the form of nominal rent for housing at R12 per month, minimal interest rates of between 4 and 6 percent on loans ranging from R200, 000 to R 500,000 and more, free telephone services for private use, car allowances ranging from R2,000 to R 5,000 per month, free club membership fees, monetary aid for school- and university-going children, a bonus as a 13th cheque equivalent to one month's salary and high subsistence and travel allowances. If one has to extrapolate these figures in addition to the monthly salaries, upper and middle level functionaries earned on average, depending on grade, in the region of R220, 000 to nearly R500, 000 per annum. The conditions of employment circular for the 1993/1994 financial year stated as follows: "To ensure that the

organisation retains its competent staff, by retaining remuneration packages with salary ranges which are competitive with the external labour market and affordable with the budget constraints of the organisation and the government." Competency is a matter of conjecture as pointed out by the researcher. By the same token, competitiveness is only a perception of management. Given the economic climate, many of these functionaries would not have been in a position to compete in the free market, on the basis of their dubious qualifications. These salary packages were by far too high as compared with those of ordinary civil servants within government and at all levels. In defining these conditions of unguided and improper service conditions, there had been a constant struggle in respect of attaining the maximum monetary benefit, whilst neglecting the development of agriculture.

Table 4.8

Salary Ranges for Different Categories of Agricor Staff, By Grade for the 1993/1994 Financial Year (Excluding Benefits).

Grades	Minimum Salary R	Average Salary R	Maximum Salary (R)	Market Mid-Range Salary (R)
1	11,900	14,000	16,100	19,100
2	10,150	11,950	13,750	16,650
3	8,900	10,450	12,000	13,300
4	7,600	8,900	10,250	10,600
5	6,650	7,850	9,000	8,400
6	5,650	6,650	7,650	7,200
7	5,200	6,100	7,000	6,100
8	4,250	5,000	5,750	5,250
9	3,700	4,350	5,000	4,450

10	3,200	3,750	4,300	3,800
11	2,750	3,250	3,700	3,250
12	2,400	2,800	3,250	2,550
13	2,050	2,400	2,750	2,100
14	1,800	2,100	2,400	1,700
15	1,550	1,800	2,100	1,600
16	1,350	1,550	1,800	1,500
17	1,150	1,350	1,550	1,400
18	1,000	1,150	1,350	1,250
19	850	1,000	1,150	1,150

(Source: Personal Communication, Agricor Human Resources, 1993/1994)

The above packages were justified by management on the basis that the market afforded these ranges and salaries in the private sector. No consideration was given to the fact that these were government funds and rightfully belonged to the taxpayer and, above all, that government was the principal employer. The additional perks were afforded to all grades from 1 to 9. Further, empirical evidence on various other agricultural parameters will be discussed in other parts of this chapter.

4.7 THE PRIMACY OF INDUSTRIALISATION

Expanding the discussion in terms of the imperatives for newly-emerging 'developing' countries to industrialise was, and still is, underpinned by a set of factors, and in this regard former Bophuthatswana relentlessly pursued this objective as a primary policy imperative. First, the era of colonialism under the policy of apartheid was one of mass deprivation, and under the so-called dispensation called Bophuthatswana, the lot of the predominantly rural population was not significantly altered. On the contrary, it had steadily

deteriorated in many ways. The fulfilment of the basic needs of the population required a certain level of industrial capability, and this is what Bophuthatswana, very ambitiously, embarked upon. The provision of health, education, housing and sanitation facilities was well nigh impossible in the absence of sustained monetary aid from the Republic of South Africa and, therefore, virtually impossible without the industrial sector.

However, it was not argued that so-called independence was a utopian ideal thrust upon the Batswana by the designs of apartheid. Secondly, small-scale modernisation was deemed part of the pattern of early so-called development necessitated by another unwanted colonial legacy of dependency, misguided nation-building and so-called national defence requirements, which demanded a minimum level of industrialisation. Thirdly, if modern economic growth was to be secured and a high growth of per capita income was to be achieved in the face of high growth rates of population, a process of structural change was necessary within the then Bophuthatswana, which would have rapidly increased the relative share of the high productivity industrial sector. Fourth, even where agricultural development was given high priority, it was recognised that this would call for the injection of modern inputs and infrastructural development which, in turn, required a prior development of basic industrial capacities. Lastly, particularly at a misguided ideological level, the process of industrialisation was viewed by the regime, with much justification, as forming the backbone of projected economic independence in the so-called new era, whereby the myth of traditional economic relationships between the colonial master of the imperial country (South Africa) and the colony would be broken. In the case of Bophuthatswana, import-substituting industrialisation across the broadest front was virtually non-negotiable.

4.7.1 Some Development Indicators

In order to place agriculture into a correct perspective and into context, it is

attempted to briefly trace and historically analyse the evolution of agriculture and agricultural problems pre- and post-independence, with particular reference to the salient extension problems that confronted the country. The discussion will focus on the development indicators already alluded to, but not necessarily discuss them in the given order outlined. Also, it will not be possible to comprehensively deal with all the indicators of development.

Is there such a thing as an African farmer? Clichés and generalisations have obscured many of the realities of African agriculture in South Africa, including the former self-governing and the TBVC states, which were integral to the Republic of South Africa. "First-hand experience has taught agricultural technicians that 'positive' farming, that is, economic and efficient production, cannot provide a full living for the family" (Tomlinson Commission, 1955). The Commission went on to admit that "on the land available there was no place, at that time, where an African could make a full-time living from the land. So, while the African has been condemned for his ability to make agricultural progress, he has, in fact, never had the opportunity to farm at all. South Africa has always had two different standards for her 'White' and her 'Black' lands. White agricultural departments were functioning well before the Union in 1910, but an agricultural service in the Native Affairs Department did not start until 1929" and, further according to the Tomlinson Commission (1955), "agricultural service in the African areas did not really get down to work until 1946."

Every operation to develop a natural resource has both short-term and long-term results, and an attempt must be made to anticipate these results so that choices that have to be made may be based on the fullest possible knowledge of the problem. In reaching decisions, short-term results are likely to be given more weight than long-term results, but care should be taken to ensure that the latter should not lead to irreversible deterioration of the resources that are being developed. There was a fundamental difference in the approach of the White and Black agricultural departments to farm planning per se. If land-use

consultants were to be employed to plan the reserves, they would have had first undertaken surveys to evaluate the natural resources available, and then suggested farming methods to suit the limits of the environment. Parts of Bophuthatswana might have been set aside for ranching only, without any cultivation, while other areas might have been suited to mixed farming and a small proportion to crop cultivation. Instead, the official policy of the Department of Bantu Agriculture was to develop the agricultural potential of the Bantu homelands, thus assuring the Bantu farmer a living from agriculture, assisting the homelands to become self-supporting as far as good requirements are concerned, and safeguarding the natural resources (Bantu Administration and Development Department, Annual Report, 1960-1962). Generally, the planning of the reserves was done on the basis of an economic unit, which imposed a theoretical pattern on the land irrespective of whether this fitted the natural conditions.

Ross (1966), former Director of the Division of Soil Conservation, pointed out that "there are many things - milk, beef, mutton, wool, maize, wheat, potatoes, other farm commodities - whose production of those things, were distributed more or less haphazardly throughout the country, with little regard for the natural controls." But the fact that these things can be produced, for a time at least, in regions not naturally suited to their production, does not mean that it does not matter where they are produced. Far from it. They can be produced commercially in areas not naturally suited to their production, only at the cost of serious long-term consequences. This haphazard farming distribution of farm commodities was the norm over seventeen years within Bophuthatswana, exacerbated by a Eurocentric agrarian policy and a complete disregard for African capabilities. This is further exemplified by the fact that policy-makers past and present, pre- and post-independence within Bophuthatswana, in respect of planning in White farming areas, took heed of the long term; while in Black areas the need to provide land for a surplus of people and the policy of self-support came before the safeguarding of the natural resources. The psychological effect

of the failure of any scheme, whatever the reasons for that failure, helped to build up the African's suspicion of, and reluctance to change. This factor is often under-estimated. Historically, the fact that betterment schemes have not brought about visible as well as economic benefits to the African people, had created further distrust of talks of improvements. In the Bophuthatswana agricultural dynamic, it was imperative that the Batswana's previous experience should always have been fully investigated before a scheme was launched, for only with this knowledge could policy-makers and implementors have understood their reactions. It is useless to introduce better stock if they were left to struggle for existence under poor conditions. Yet time and again improved stock was introduced to an area under discussion without sensitivity. One can cite the Transkeian example of tribesmen who were promised free government quality bulls to upgrade their standards, but presumably due to departmental 'red tape', 18 months passed before the promised bulls arrived. By then, few cows were any longer in milk, and many families had to go without both milk and calves.

In some parts of Zululand, one still hears the tale of how cleverly government reduced African cattle. After an epidemic outbreak of anthrax among cattle, the government sent in veterinary teams to inoculate. The veterinarians did not explain that there was no immediate immunity to anthrax and that cattle deaths would continue for some time after the inoculations. Cattle were inoculated, yet cattle died. "Africans, who have tried to copy so-called progressive European methods, have not had the necessary knowledge or assistance to succeed. For example, Africans have bought Merino sheep from White farmers, only to find that in the reserves there is high mortality. 'Black men' cannot keep European sheep, 'they will tell you' "(Alcock, 1973). Having been kept ignorant and almost illiterate, the rural African got his news by hearing and, possibly, many a tale was improved in the telling. However, experience had taught him that even with his co-operation, schemes for improvements went wrong. Lacking the education to understand the reasons, he looks for the motives of the authorities to explain the failure.

Before any progress can be made in agriculture and agricultural extension in the region under discussion, the reasons for its failure under the former Department of Agriculture and the agricultural parastatals should be explored, identified and analysed more comprehensively. There are additional factors which will also need to be considered, arising from the changes of vehicle to which agriculture (and agricultural extension) resorted, from the Department to the Agricultural Development Corporation (Agricor) since 1988 and later under the Agricultural Service Board (Agriserve) in 1992/1993.

4.7.2 Causes for the Breakdown of Extension and Development

There is little doubt that officials under the new dispensation will be saddled with the delicate task of reconstructing agricultural imperatives within the area formerly defined as Bophuthatswana, on the basis that agriculture is in disarray and that the process of uneven and underdevelopment will have to be addressed in serious terms. However, the mistakes of the past, whilst dealing with people, should be borne in mind in the present and prevailing circumstances, in order to prevent a retrogression to an earlier authoritarian system. In order to do this, one needs to look back more comprehensively at the phases of transition from the pre-independent administration to the Department of Agriculture, within the independent government service of former Bophuthatswana. "Since that time, agricultural extension has steadily deteriorated" (Jordan, 1986, Internal Document and in Depth Discussions, 1986, Extension Directorate).

Under the control of officials from the old Department of Bantu Administration and Development, work programmes were drawn up, calendars prepared for the year ahead, all the necessary reports and returns were submitted every month, and records were kept of all farmers and their activities in each extensionists' ward. All this fell by the wayside. Jordan (1986) states that "it is not logical to equate the standard of extension with having White officials in all districts to impose strict discipline on the extension staff." This is, however, a simplistic

view, and could result in the danger of addressing a symptom, whilst overlooking the cause of the problem. There is little doubt in the Bophuthatswana context that stricter discipline on the extension staff would have resulted in an apparent improvement in the standard of extension. It may have been expected, however, that the standard of extension seen to be achieved would have been higher than that actually reached in practice. The danger was that the extensionist focused his/her attention on satisfying the supervisor, rather than on helping the farmer.

A closer look at the reasons for the breakdown of extension since independence is imperative and a critical analysis becomes necessary. This, in turn, should be viewed against the 'ideal' of an agricultural extensionist, in order to facilitate the identification of short-comings in the system. To outline a sketch of what should be expected from an extensionist, we need to establish where his/her loyalties lie. An extensionist's allegiance should be to the farmer, the person whom he/she is there to help. Experiences in places where extension has achieved high level of success have shown that officers who produce elaborate and impressive programmes and reports and who go out of their way to please their supervisors, are not necessarily good extensionists. "Difficult officers' on the other hand, those who do not readily submit to discipline imposed from their supervisors, are not necessarily poor extensionists" (Jordan, 1986).

Agricultural extension was far from being a routine activity, as was the case in Bophuthatswana over the years, on the basis that extensionists were imparting what they did not know due to inadequate training, an even lesser understanding of the process of extension, poor control and supervision, exacerbated and complicated by an absence of a comprehensive extension policy, misguided by a weak and inadequate agricultural structure, and coupled with the chronic shortages of staff, both professional and technical (Karodia, 1990:8). Nor is extension so much a science, where one deals with known, quantifiable phenomena. It is an art, where the officer is concerned with the unpredictable factors of the human mind. It is not sufficient to establish the reasons for the

farmer's low yields, or the poor performance of his livestock. One has to enable the farmer to identify his own problems and then to show him how to solve them. The whole process could result in a sense of achievement by the farmer, a feeling of self-satisfaction that will encourage him to further development. Jordan (1986) states that "this was not achieved for the majority of small-scale and so-called commercial farmers in Bophuthatswana."

One of the main factors that contributed to this state of affairs, according to Jordan (1986), was that "in most cases, the supervisors themselves had little or no training in extension, they often did not know what they were extending; this was coupled with a lack of motivation. Only a relative degree of autonomy was granted to extensionists and, due to extreme rigidity, they were unable to apply ingenuity in order to reach goals." Supervisors were solely concerned with having an orderly, smooth office, with a well-disciplined team of officials who carried out instructions and handed in reports in time, happy to maintain the status quo. Jordan (1986) further states that "with independence these supervisors were rapidly replaced with officers who had all along been told what to do. They, in turn, tried to emulate their predecessors, but due to a lack of training, often found themselves unprepared for the task."

Young officers, fresh from college and university environments, came with new ideas that were in many ways strange to them. They found that they did not have the knowledge that their subordinates had in extension, and that this could not be admitted for fear of their appearing inferior and incompetent. This resulted in many of the supervisory staff withdrawing themselves from extension entirely, and declaring themselves 'administrators'. A situation arose where extension came to be regarded as a menial task practised by junior officers, after which one could be promoted to an administrative position in a minimum period of time, without comprehensive and meaningful experience in extension.

The system of control within the department up to 1988 was most unsatisfactory. In 1986, an improved establishment was proposed, but was not approved by government and the Public Service Commission. Serious short-comings in the structure of the department was an important factor in the breakdown of agricultural extension and agricultural development in general. The department comprised four separate and virtually autonomous bodies: the three regions and head office. At head office, the division of extension comprised of the 'Director', although this post was not sanctioned by the Public Service Commission, and a single seconded RSA agricultural officer, acting solely in an advisory capacity. Field officers were not reporting to the division. The most senior officers concerned with extension in the regions were agricultural officers in charge of extension in the districts. Too many people were trying to deal with too many things; the field staff found themselves reporting to a number of supervisors, though, ironically, no one took the responsibility for any specific task. This led to confusion, low morale and 'buck-passing' with considerable energy being expended in getting nowhere. According to Jordan (1986), "these experiences should emphasize the need for a carefully planned structure where each officer is responsible to one supervisor, and one, clearly defined, task. The number of subordinates reporting to each supervisor should depend upon the complexity of the subordinate's duties, but where extensionists are concerned, should be restricted to a maximum of four. At the apex of the structure, there should be a single person from whom policy directives and instructions must be passed down." Basically, the regions had three functions with the more important function being administration, for which the senior agricultural officer was responsible in the district, and zone officers and regional managers being responsible at regional level. The second function was development, responsible for the erection of fences, building of dipping tanks, crush pens and other work. The third function was extension, which was dealt with by junior officers. All those from senior agricultural officers upwards were so involved with running the department; they had no time to concern themselves with extension, general agriculture and agricultural development. "The priorities of the

department tended to drift away from rendering a service to the farmer, to administering an excessive, top-heavy establishment. This resulted almost in a state of anarchy, decay, destruction and total chaos of agriculture and extension" (Jordan, 1986).

4.8 FINANCIAL PRIORITIES

The budget for agriculture was insufficient for what the department wanted to achieve. "Yet, when one assesses the objectives that were achieved for the amount of money spent, the cost was exorbitant. It would appear that expensive items were catered for, development works were financed and all employees were paid. Extension requirements were regarded as unimportant and, in the case of transport, the funds had run out. Agriculture and extension had become the frayed edge of a large and expensive garment" (Jordan, 1986).

The main purpose of the department was to serve the farmer. The individual in the department in contact with the farmer, the one that physically served the farmer, was the ward extensionist. The logical way to determine the financial priorities of the department would have been to start with individuals, in order to provide and identify their needs; from there to the supervisor, and so on up the structure. In this, the prime objective of the department, to render a service to the farmer, would have been assured. The subsidiary functions, again in order of priority, should have been budgeted for and financed next. The department lost sight of its purpose within the parameters of government services. Officials were concerned with justifying their positions and, in order to achieve this, created more posts. This resulted in a monumental proliferation of personnel, which continued under the later agricultural dispensation, while the actual purpose of the department and agriculture as a development entity simply receded further and further into the background. The fact that the agricultural extensionist failed to fulfill his duties, resulted in the malfunctioning of the whole department. This situation brought about a new dispensation which was

implemented arbitrarily and authoritatively by President Mangope and his unschooled, but politically influential, policy-makers and advisors, in a prescriptive and unilateral manner.

4.9 PERSONNEL

Despite there having been a large number of extensionists in the field, their potential for making contact with farmers was limited. Most were placed in wards with eight or more villages, and though the lack of transport was a serious drawback, the distances involved and the number of farmers would still have made it impossible for any one of them to give adequate attention to each farmer (Jordan, 1986). Extension assistants should have been selected from the various communities, and given the necessary training to work under the direction of the ward extensionists. Unfortunately, this was not the case then and also not under the later dispensation. One of the most difficult tasks facing an extension officer was getting to know his ward, who the true leaders in the countryside were, who the progressive farmers were, to whom others came to for advice, and where to start with the execution of extension. Extension assistants who have grown up in a community should know the answers to all these questions, and be in a far better position to work effectively with the people.

Needs with regard to training and other agricultural parameters were not comprehensively determined, nor were they documented; nor were the personnel requirements, quality of personnel or fluency in languages of supervisors assessed, negating the planning process which is a tool of policy-making. Instead, Eurocentric thinking, coupled with a large force of expatriates, prescribed solutions which failed to train local people, they clung on to their positions, building fiefdoms, defining people rather than what the post required and called for. An evaluation of agriculture per se was required urgently and planning according to training needs of farmers, based on their perceptions, was vital if agriculture and extension was to exert itself and make a mark in this

region and take its rightful place in the development dynamic and process.

4.9.1 Supervision

From the picture that had emerged, it should be clear that one of the main reasons for the failure of extensionists to perform their duties was a lack of controlled supervision. Any new structure must be designed in such a way as to alleviate the confusion arising from different people giving instructions to the same subordinates. A comprehensive training programme should be undertaken and planned in order to train the trainers in accordance with the perceived or felt needs of the farming community. Effective extension cannot be carried out without programme planning, particularly in a developing country where planned behavioural change is vital and necessary, together with an understanding of local culture and traditions and the implementation of appropriate technology on a selective basis, in order to bring about progress and development of farmers.

Programme planning cannot be implemented without effective supervision. It stands to reason that the supervisor will have to be fully conversant with programme planning and extension techniques before he will be in a position to assist his subordinates in these functions. In the former Bophuthatswana, very few officers in supervisory positions had the necessary knowledge to be able to supervise extension staff. The purpose of supervision is not, therefore, to see that the extensionist is producing a certain quantity of work only, but that it be rather directed at citing complicated tasks, identifying, most importantly, training needs in both farmer and subordinate, and providing necessary encouragement to develop individualist characteristics in the extension worker.

Once a structure has been drawn up, agreed upon and approved by the authorities, a comprehensive training programme should be planned and implemented in terms of the requirements of the perceived or felt needs of

farmers for agricultural training. Because there is such a great deal of planning required before any dispensation can be implemented, the executive officer should be appointed and the leaders of his team identified. These should include lower level executive officers of extension, community development, training and support services. Agricultural extension is a service rendered to the public and, as with other services in health and education, for example, does not generate income in a development dynamic and process. "Farmers and the community as a whole pay for the service through the payment of taxes. The existing crop production and animal production sections within the Agricultural Development Corporation were concerned with being cost-effective, so problems could arise if they were employed in extension" (Jordan, 1986).

4.9.2 Planning and Structure

Bophuthatswana, having been spread over a number of climatic zones, had different agricultural requirements. Varying population densities resulted in different marketing possibilities from place to place. Some areas had extensive stock-ranching requirements, whilst others had intensive market-gardening and food-garden potentials and options. The different needs should have been assessed, and an extension service based on these findings should have been planned. Executive officers, policy-makers, advisors, academics, selected commercial and subsistence farmers, including interested parties and agricultural pressure groups, drawn from various communities, could have formed a planning committee for any new dispensation, which should have not been prescriptive, but based on the perceived or felt needs of farmers, who should have been comprehensively surveyed to draw up an acceptable extension policy for the region.

4.9.3 Extension Workers' Needs

Once the structure had been planned and was available, and personnel placed

to satisfy the priority needs, the requirements of the extension staff should have been identified and a programme drawn up to satisfy policy requirements and staff needs. If staff needs and requirements are not fulfilled as was the case in Bophuthatswana, then it will most certainly retard the progress of extension. Each extension worker should be positioned centrally in his area, he should be provided with a house and a separate, equipped office nearby, and he himself allowed to develop a high self-esteem. The extension worker must be accorded respect, dignity and status within the community he serves, and must be seen as a leader. The extension worker in the former Bophuthatswana was denied these vital facets in the empowerment process.

Experience in other developing countries such as Zimbabwe and Malawi in the Southern African development scenario has shown that an extensionist should be appointed and placed in a community. His acceptance by the community is an important factor in the degree of credibility, he will be able to achieve. His being stationed in a community will also make it easier for farmers to visit him in his office, whereas before they had to leave their area and go to a district office. The problematic situation in the Department of Agriculture evolved almost imperceptibly over a period of time. These were by no means all the problems which beset extension in erstwhile Bophuthatswana and, therefore, the executive officer appointed to head the extension services needed to involve various other heads of sections and divisions within the department, the Agricultural Development Corporation, other government departments and agricultural parastatals which had vested interests in development. In this way, a multi-disciplinary approach to extension could have evolved by means of the full participation of all role-players and those interested in the promotion of the general welfare and public good of the farming community, the public and regional interests. They needed to identify problems and co-ordinate them all in the overall master plan, which had to be developed in the spirit of true democracy. It is obvious, therefore, that the developmental problem is essentially a question of the quality and proportion of resources to be devoted to

development on the one hand, and to economic management and public administration on the other. Any viable development strategy for the area will have to address this question in terms of several fundamental issues. These issues are subsequently briefly addressed.

4.10 Population Growth

Population growth had been ignored by policy-makers for far too long. Government policy approached it only tentatively and with too little means and monetary inputs. Although the demographic trends of the past had been slightly more encouraging, the former homeland continued to face a major unemployment problem. However, the cost of providing the basic needs of the population - food, clothing, shelter, education and health could have risen to unimaginable levels. Immigration and reliance on foreign expertise is not a satisfactory solution because it introduces imbalances in the skill structure of manpower supplies. Equally unsatisfactory is using government employment to absorb potentially redundant workers, because it involves economic costs.

4.10.1 Role of Agriculture

An important issue for the future in the erstwhile Bophuthatswana, as a consolidated region will be the role of agriculture. Since independence in the 1970s, Bophuthatswana's policies did not only strangle agriculture, but also squeezed out resources of agriculture in order to develop other sectors. This strategy was perhaps inevitable when agriculture was, probably, the only sector capable of yielding a significant surplus. But the effect was to weaken and distort incentives for production, and make it difficult for small farmers to adopt much-needed technological advances. The erstwhile Bophuthatswana as a region needed to encourage a greater degree of accumulation within agriculture, particularly by medium-technical change. Within agriculture in the region, there was a need for a qualitative transformation. In the 17 years of its existence,

costly schemes and projects had been increasingly directed towards 'horizontal expansion'. The far-reaching transformation of agriculture could have involved taking into consideration the perceived or felt needs of farmers, education, training, new crop patterns, drainage, new methods of irrigation, improved cultivation techniques, and the linking of new kinds of agricultural production with industry and exports. Policy-makers also faced deficiencies in the structural transformation brought about by limited industrialisation - that is, the accumulation of physical capital for the production of material goods, and education - that is, the formation of human capital.

Limited industrialisation brought about some decentralisation benefits, tax incentives, cheap labour without the intervention and control of labour unions, which led to the exploitation of the worker, and all of this was supported and happened behind 'protected walls'. The process was further exacerbated by wrong investment decisions on the part of government and its agricultural parastatal institutions, which loaded the small emerging manufacturing sector with inefficient industries. Education suffered from the sacrifice of quality in favour of quantity because government policies in Bophuthatswana established a nexus between education and guaranteed employment, resulting in the loss of some of the benefits expected from investment in human resources. According to Cepionca (1991), "fiscal policy in Bophuthatswana had been little used as an instrument, despite the extensive share of the public sector economy. Monetary policy had also been largely passive - the banking sector had expanded credit to finance the overall budget deficit. Economic growth and development are significantly related to investment. Productivity growth, a main source of income increases, also depends in part on investment."

Much had to be done in this region to improve the methods of project appraisal, project selection and the implementation of investment programmes. "Uneconomic projects, once begun, are difficult to close down, especially when employment and prestige are at stake, for example, in Bophuthatswana,

Bopcrafts and Agrichicks" (Mafikeng Mail, 1991). In addition, the City Press (1991) pointed out that "growing dissatisfaction with corruption, maladministration, waste and nepotism has worsened the lot of peasants". On the other hand, Pim Goldby Management Consultation (1991) stated that "more was spent on propping up the former homeland's three agricultural parastatals - the Agricultural Corporation (Agricor), the Marketing Board (BAMB) and the Agricultural Bank - than was spent on agricultural production in total. The report went on to state that Agricor, which was managed by highly-paid expatriates, had wasted millions of rands - by definition, mainly South African tax payers' money. Agricor's R70 million project to produce 150,000 broiler chickens annually for the South African market was a disaster having to be 'rescued' temporarily by a R30 million cash injection in 1991/1992. The company 'Agrichicks' was barely able to meet its interest payments on long-term loans and, within months, started recording hundreds of thousands of rands in losses."

An internal report, signed by the Chairman of the Agricultural Board and advisor to the then President of Bophuthatswana (Behr, 1993) stated that "due to gross mis-management, Agrichicks had been privatised, with a deal not to retrench lower paid staff. Its control had passed to a private company for R4, 5 million, payable over 10 years with a controlling interest of 50 percent, whilst government would continue to hold the other 50 percent of the company in order to share in the profits over this period." This was the type of economics engaged in by the Bophuthatswana government, a government that negated the very basis of sound economic reasoning. Agricultural co-operatives aimed at improving the lot of peasant farmers have likewise not succeeded. One of the few successful agricultural projects, a self-help scheme 'Thusano Foundation', supporting 10,000 of the poorest people and outstripping the Department of Agriculture and the agricultural parastatals, especially Agricor, in every facet of rural development including extension, was closed down apparently because it was perceived to be a threat to government and Agricor (City Press, 1991). The economy generally lived with these misguided and ambitious programmes and

continued to subsidise the inefficiencies.

4.10.2 Policy Issues

There were major issues of economic policy-making and co-ordination. Because of the long and extensive involvement of the government in the economy, the issues are not limited to improving or modifying any specific measures. A complete overhaul of the entire system of policy intervention for agriculture was needed urgently. The dilemma was that such an overhaul may have been ineffective if attempted piecemeal, as was observed in terms of the new restructuring initiatives that came into being in 1988 and later put on hold. During that period of transition, personnel from the Department of Agriculture were haphazardly transferred to the Development Corporation (Agricor), without any consideration in respect to the upheaval that such a move would have upon agriculture. This resulted, at first, in tremendous suspicion and bickering, dissatisfaction and unpleasantness.

The 1988 dispensation was not structured well and was not planned in terms of a scientific approach, neither was it planned over a period of time. It was totally prescriptive and formulated by a small group of unschooled Eurocentric policy makers, who had been in Bophuthatswana even before independence, who occupied strategic positions with tremendous power and influence upon the political environment and succeeded in capturing the mind sets of local political leaders. Local agriculturalists and other schooled staff with local, African, third world and international experience were completely ignored in respect of the agricultural discourse within Bophuthatswana. This was because the inefficiencies of these policy-makers and bureaucrats would have been exposed. After nearly five years of the implementation of this new dispensation, with large sums of money used on outside professional consultants, the Department of Agriculture did not have a structure nor a policy and dissatisfaction prevailed, so much so that Agricor was scrapped by Presidential decree in 1992/1993, and a

new structural initiative was instituted. The architect of the new 1988 dispensation (Beuster, D. Secretary for Agriculture), left the department before the implementation phase; and so the department once again had a new secretary, saddled with mammoth problems.

Personal discussion and working interviews with the new Accounting Officer (1992) revealed that "the new dispensation under Agricor did not run as smoothly as anticipated, and that communication and policy-making as a function had completely broken down; a 'free for all' atmosphere was the order of the day. According to the Secretary, restructuring of agriculture had only brought about a waste of valuable time, proliferation of the agricultural sector in terms of unwanted manpower and a tremendous strain on the agricultural fiscus. Another major short-coming was that Agricor attempted a swift and too radical agricultural transition, without understanding that the mechanism and process of liberalisation of any system requires consensus and agreement at various levels of governmental bureaucracy and not only at the political level. Further, it failed to realise that the transition required an extensive range of adjustments that should have been put into place, gradually accompanied by measures guaranteeing the self-actualisation of transfer personnel, evaluation of infrastructure problems, monetary inputs and so on. The system entrenched incompetency and rewarded people on the basis of power-play and political patronage, which resulted in weak and incompetent management." Disregard for proper controls and linkages between the different role players became commonplace, in an unrealistic programme of agricultural restructuring which was not consistent with reform. Further, a coherent implementation programme was not adhered to, nor were limitations imposed by the cumbersome workings of the bureaucracy, leading to an 'open door' policy, a laissez faire system without accountability to any system of checks and balances.

4.10.3 Statistical Problems

Another difficulty in short-term economic management and administration was the lack of timely data. In spite of high powered computerisation and a Directorate of Statistics, the Department of Agriculture did not have a well-developed statistical system that generated numbers. In the main, data was not conceptually useful and often not available. The budget was extremely intricate and contained much double counting. This confused the statistical picture and was, therefore, of limited use in analysing financial policy and assessing its impact (Karodia, 1990:6). Major weaknesses concerned data for policies that would result in long-term structural changes. Income distribution data were particularly fragmentary, hence the distributive effect of various policies could not be ascertained. Moreover, data relating to land distribution were obsolete and even pre-dated the 1977 land reform. "There also appeared to be insufficient interaction between ministries, particularly the Department of Agriculture and parastatals, when policies were being discussed. This was also evident in the annual plans which were seriously deficient in a discussion on policies" (Karodia: 1990:7).

4.10.4 Project Implementation Problems

A major issue was that the government had consistently spread its resources too thinly over a large number of projects and had focused on a narrow set of priorities. The authorities within Agricor generally preferred to initiate a great many projects and subsequently spent too little time to achieve a satisfactory rate of completion. The problem was also compounded by the fact that these ongoing projects acquired a prior claim on resources in subsequent investment allocations. The lengthening of the completion period not only deprived the economy of the benefits from these projects, but also proliferated the opportunities for cost increases, which was a feature of the then government. "The setting of priorities and co-ordination of the economy was often impeded

when enterprises obtain an informal commitment from external sources for part of the project funding and then put pressure on the Finance Ministry to come up with the rest. This accentuates the pressure towards over-extension of the fiscus to handle these demands" (Minister of Finance, 1989).

4.10.5 Underdevelopment

Open unemployment was relatively low, but a major element in former Bophuthatswana was disguised unemployment and under-employment of the local population in the medium term. This was most prevalent in the public sector, in the over-staffing of enterprises and in the growing bureaucracy, and was caused in large measure by the government's policy of assuring employment of graduates of universities and institutions of higher learning (Mandab, 1990). This was also complicated by the lack of control in the employment of expatriates, outside the professional core, coupled with the employment of their spouses and family members in jobs that could have been held by locals. Another area of disguised employment was the service sector in urban areas.

The problem would obviously grow with the growth rate of the population, the continuing migration to the towns, the increased participation of women in the labour force, and the demobilisation of the defence force after a permanent political settlement had been reached in South Africa. An important goal in the employment strategy should have been to link employment goals with other development objectives. Thomas (1971), for example, "drawing from his experiences in Pakistan, states that unemployed and under-employed labour could be mobilised in off-harvest seasons for other schemes, repairing bridges and fences, and maintaining roads. Such rural work programmes have been extremely productive and successful in creating employment in several countries."

What could the authorities do to contain the expansion into the urban areas of the former Bophuthatswana, or at least slow down the concentration into the six biggest centres - Mmabatho-Mafikeng, Thaba Nchu, Phokeng, Garankuwa, Mabopane and Babelegi? In order to enter the new century, a coherent strategy for rural development would be needed to promote more rapid growth in agriculture, the improvement of the rural infrastructure, development of non-farm productive activities and greater employment opportunities, and the provision of greater access to social and cultural affairs. Such implementation strategy would have helped to slow down migration to the urban areas.

Regional development, particularly in agriculture and industry, should have emphasized areas away from Mmabatho-Mafikeng and other urban centres. This could have been done by consciously locating major sector projects in less-developed areas, by urgently building up infrastructure in the more backward areas, and by inducing the private sector to forego the 'soft' option of investing in or near the major towns and, instead, to invest in other areas. In addition, the government in power should have considered moving some of its ministries and general authorities away from the capital. "The experience of many developing countries has been that private trade and industry tend to cluster near the seat of government, because propinquity facilitates their requests for and acquisition of licences, lobbying for protection and other activities that depend on official action" (Thomas, 1971). In urging a strategy for controlling and directing future urban growth, the researcher is not arguing that all activities in the future be channelled into the underdeveloped areas. But continued rapid growth, particularly in the most populous towns, is likely to exacerbate the problems of poverty and inequality. In articulating an urban strategy, the authorities have several options, from developing large villages to building new cities, to expanding small and large towns.

4.10.6 Growth Parameters

Bophuthatswana needed an annual growth rate in total agricultural production of around 8 per cent in real terms for at least ten years to feed a population growing at more than 3, 2 per cent to narrow the food supply deficit and contribute resources for the development of other sectors (Campion, 1990). Campion (1990) further stated that "after this initial period, growth of the expanded base at an annual rate of 2 per cent might then feed the population, provided that the population growth be brought down to 2 per cent and that the surplus might then provide funds for other sectors." However, there were flaws in his argument. "What were Bophuthatswana's chances of achieving these figures? Because the supply of arable land is inelastic, growth in total production would have had to come very largely from increases in output per hectare. Therefore, it would seem that to import agricultural products would have been more feasible as opposed to Campion's solution and assertion (Karodia, 1990:10).

Some cross-country analyses of economic growth in agriculture found that the maximum sustained by both developing and developed countries since the 1940s had been 2 per cent per hectare, and that the critical differences in performance had been in the output per worker which, in the less developed countries, was growing at 1, 5 per cent a year and in the developed world at 4, 5 percent" (Ruttan, 1973). This 2 per cent increase in yield should be taken as the maximum that can be expected for long-run sustained growth. Whether this could have been attained and maintained, and what its effect will be, will depend on the growth in output per worker and on whether the increased production is consumed or invested. All of this was most unlikely given the circumstances in former Bophuthatswana.

4.10.7 Infrastructure

The efficient provision of infrastructure services was inhibited by a number of

factors. First, the price of virtually all products and services had been set at an uneconomic level, with little or no flexibility to change the response to changing conditions of cost or demand. Second, all essential infrastructure enterprises possessed a shortage of trained personnel, at the field level in particular. Some possessed excessive personnel at head office level, one more instance of the public sector acting as the guarantor of full employment. Third, most facilities suffered from a local burden of inadequate investment. Frequently, it was insufficient to maintain the original level and quality of service, especially if it was needed to keep up with the requirements of an expanding economy and a growing population. Fourth, there was an absence of comprehensive planning and evolution of alternatives, especially in sectors such as energy and transport, where the same service could have been provided by agreement with South Africa at cheaper and more cost-effective prices. Fifth, in common with public enterprise, the infrastructure agencies were given little incentive to improve their performance. While almost all sections of the infrastructure required attention, the main sectors in need appeared to be energy, transport and communications. There was no formal national energy policy in the sense of an explicit statement of national objectives and specific plans of attaining them. Because energy issues were numerous and complex in the Bophuthatswana context, it was important to formulate a clearly defined national energy strategy. The energy tariff structure of Bophuthatswana needed revision. For allocative efficiency, the marginal cost of producing energy that was bought from South Africa, should have eliminated the necessity of the region having its own electricity corporation, which was wasteful duplication.

If one examines the justification of the Bophuthatswana Electricity Corporation, it becomes abundantly clear that its justification was made possible by expatriates in terms of their own economic empowerment and the creation of jobs for themselves - all positions at management level were held by former Rhodesians. The Electricity Corporation, therefore, acted as the middleman, thus increasing the unit cost to the consumer. The marginal costs should have provided the

basis for electricity tariffs. Fuel was made available to the Electricity Authority, and to industry at prices well above the import price. The transport sector suffered from the investment squeeze. "Under-investment and poor maintenance seriously constrained the use of roads that were in a state of disrepair. The Town Clerk, Mmabatho City Council, "admitted that roads and the drainage system were in a very poor condition. He stated that upgrading and improvement to the drainage system in the Mmabatho-Mafikeng area alone would require a minimum initial amount of R72 million" (Personal Communication, 1991). Roads, railways and air traffic improvements could perhaps have been maintained if a certain amount of recurring expenditure for maintenance had been ensured by being included in the development budget. The telecommunication sector also suffered from under-investment and a lack of overall planning and training. The climate was ripe not only for investment, but also for a number of other reforms, especially automation and tariffs, which were constantly raised since 1977. Moreover, the sector seemed to be over-staffed with clerks and bureaucrats, but under-staffed at the professional and technical level in spite of mandatory requirements of the government.

No discussion of improvements needed in the infrastructure, or indeed of investment generally, would be complete without underlining the vital role of the construction sector. The building boom was limited to capital intensive government buildings as a result of Bophuthatswana's ambitious plans to stress modernisation rather than the development of essential services, which had been neglected rather than reinforced. However, the construction sector faced an amalgam of shortages of local skills, technology and finance and was dominated by a few large companies which were supported by government in terms of awarding contracts, much to the detriment of smaller companies. In addition, much political patronage was the order of the day. "Training programmes for the construction sector needed to be enlarged rapidly to offset the reliance on skilled expatriates (labour) recruited at very high costs to the economy" (Personal Communication, Hartnick, Stocks and Stocks, Mmabatho,

1991).

4.10.8 Co-operatives

Continuing the discussion on the parameters of uneven development and the problems confronting the former Bophuthatswana in respect of development indicators, it becomes vitally important to review the role of co-operatives in the agricultural sector. "An agricultural co-operative is an autonomous legal person operating in the private sector, established by farmers, controlled by farmers, with the objectives of promoting the economic interests of farmers. The function of a co-operative is to supply its members with farming requisites, to market the agricultural products of its members and to render sundry services to its members" (Bophuthatswana Co-operatives Act, 1977). "The first co-operative in Bophuthatswana, the Shiela Landbou Kooperasie Beperk, was formed on 16 November 1972 and registered on 5 January 1973 in terms of the RSA proclamation, Bantu Homeland Co-operative R117 of 1971" (Internal Report, 1991). The co-operative development officer pointed out that "many formal and informal leaders advocated the forming of primary co-operatives in order to provide them with 'soft' loans for their own political and economic gain" (Personal Communication, Molefe, Development Officer, 1991).

Molefe (1991) further stated that "a logical positive development was the registration of two secondary co-operatives on 29 June 1977. These co-operatives were facing tremendous problems but, nonetheless, their discontinuation would have jeopardised the entire co-operative movement of the region. Due to the fact that the farming community had to battle against government interference, a lack of provision of an extension service, adverse climatic conditions, high inflation rates, escalating production costs, the Agricultural Development Board wrote off in 1991 a debt of R 3,278,806 and this was only the tip of the iceberg" (Molefe, 1991), and further indicated that as of 21 March 1991, there were 107 co-operatives in Bophuthatswana and categorically

stated that "the co-operative movement should be rationalised and that primary co-operatives be reduced to 29 by a process of amalgamation and that inactive co-operatives with no viability be removed from the register. He also acknowledged that the overwhelming majority of co-operatives were not properly managed and controlled, did not keep books of accounts and that this was one of the factors as to why co-operatives were not performing well."

Molefe (1991) further added that "because of a failure of training in the development process, farmers in general were not at fault, but the system ought to be blamed for not controlling the functionaries who were being paid for a job that was not being performed. Any legal proceedings would, therefore, be an exercise in futility and a failure, leading to a collapse of co-operatives, criticism, antagonism and probable unrest." Officials of Agricor did write up the books of co-operatives, although it was not their legal function, on the basis that it had its own rules and priorities which conflicted with many sectors within agriculture. Molefe (1991) cites further problems as follows: "Co-operatives were being registered haphazardly and without consideration to factors fundamental to the success of a co-operative, especially its economic justification and prospects for successful operation. In many instances, co-operatives were registered with the sole, but rather dubious, intention of obtaining loans from the Agricultural Development Board. In terms of the Co-operatives Act, every co-operative, irrespective, is legally compelled to present to the members within four months after the financial year, an audited balance sheet for final accounts. Many co-operatives did not comply with this most important legal requirement. Strict legal, financial, administrative, accounting and business control were an imperative, but totally lacking. In many cases management committees of primary co-operatives lacked business acumen and administrative ability in respect of basic financial inputs and considerations. Geographical location of co-operatives, undeveloped infrastructure, poor lines of communication, poor roads and the long distances to banks also exacerbated the situation."

Political interference was a major problem. There is no doubt that the co-operative movement had already steered to a point of disaster in Bophuthatswana. Molefe (1991) states in this regard that "the obvious urgent step to improve the situation was expertise, capital and training, because material retardation of all spheres of economic development were deeply rooted, causing widespread socio-economic problems and political tension." The strategic nature of co-operatives in production, marketing and agricultural credit objectives in a developing dynamic should not be overlooked. The alternative can never be the total disappearance of co-operatives from the scene of agricultural development, because this would most certainly cause a vacuum creating tremendous socio-economic upheaval.

The overall plan for the Department of Agriculture ought to have been an aggregation of the plans of industrial agencies and units, which often depends on the strength of a given unit rather than on national priorities for the sector. Unfortunately, both the Secretary of Agriculture and the Minister of Agriculture were reduced to figure-heads and, in reality, were 'rubber stamps' for parastatal organisations which assumed total control of agriculture in the region. All of this was sanctioned by the then State President and given clout by the Cabinet Committee on Agriculture. These institutional sub-divisions seriously constrained the agricultural sector in four other ways:

- They made it difficult to develop projects, either in general or in a given area, because the availability and utilisation of resources were usually considered within an administrative rather than regional, national or economic context. "In the few capital intensive state farms, capital was subsidised by the government and qualified competent labour very scarce. In the co-operatives, capital was extremely limited and though unskilled labour was plentiful, there seemed to be few productive activities to employ it" (Mokgosi, 1987). Separate administrative jurisdictions of the various agricultural parastatals rendered it extremely difficult to develop regions/districts along

the best lines. Small sub-units, even with merit in their particular case, were unable to compete with the larger units for resources. Sub-units also competed at the wholesale and retail market levels. For example, subsidised public sector production competed with co-operative and private sector production of poultry, livestock, fruits and vegetables. "This was also done with impunity by the agricultural parastatals in order to justify their failures in the production process" (Mokgosi, 1987).

4.11 CONCLUSION

This historical overview alluded to, captured some of the factors that contributed to the process of uneven development, within Bophuthatswana and, therefore, sets the pace to project upon and analyse functional problems and policy issues in respect to agriculture in the next chapter. In concluding this chapter, in which an attempt was made to project upon and understand the dynamics of uneven development and underdevelopment in Bophuthatswana, in respect to the factors that contributed to low levels of living and low productivity generally within, the economy and within the agricultural sector in particular, are "self-reinforcing social and economic phenomena in 'developing' countries. The chapter looked at the courses of the breakdown of extension, statistical problems, the issue of population growth, financial priorities, the role of agriculture, some development indicators and the primacy of industrialization. Finally, the role of co-operatives was discussed.

CHAPTER 5

POLICY ISSUES IN RESPECT TO AGRICULTURE

5.1 INTRODUCTION

The performance of the economy in the former Bophuthatswana was uneven in the seventeen years after independence in 1977. In the mid-seventies there was an upswing in the economy due to the status of independence, and the South African government affording maximum inputs in order to justify its apartheid creation in the hope of international recognition.

In the 1980s, sustained growth continued until the abortive coup attempt in 1988, due to the intervention of its colonial master, South Africa, and thereafter the economy began showing a down-swing due to the inevitable uncertainties of major changes, and also because of the worldwide down-turn in the business cycle, after the initial boom period. There was even greater uncertainty with the rapid changes taking place in South Africa and pressures on the Bophuthatswana government to reincorporate. In the post-1988 independence period, due to the coup attempt being engineered by Batswana alone, and the perceived disloyalties of Black people in general by the Mangope regime, the agricultural sector was vested solely in the hands of loyal Whites and expatriates. The agricultural sector was given a free hand by presidential decree, in order to weed out so-called disloyal individuals who were perceived as a threat to the regime and who caused serious problems in general. This was the single most important factor retarding the growth of this sector. The agricultural sector was also plagued by a prolonged drought period in the 1980s.

This chapter examines policy issues that related to agriculture in the former state of Bophuthatswana. Policy goals and objectives in respect to agricultural extension are also analysed. In so doing the chapter attempts to look at the

general problems that confronted agriculture within the homeland, as it related to extension and the veterinary services. Budgetary constraints are highlighted together with the audit and evaluation procedures utilized by the state that impeded agricultural development in relationship to socio-economic development with particular reference to the Molopo and Ditsobotla districts. Policy issues as concerns implementation in other homelands are reviewed briefly, in order to situate the problems that confronted agriculture within the framework of agriculture as a whole. Finally, the chapter attempts to analyse the issue of underdevelopment and uneven development within Bophuthatswana and, which impacted negatively upon the policy goals and objectives, as it related to agriculture and extension, within this homeland.

The economic development of the homeland in those years may be divided into two periods. The 1977 -1987 decade witnessed fairly rapid and sustained growth in the wake of its newly-found independence, as well as a major structural transformation of the economy. Industry and services increased in terms of both total output and employment, and within industry, the composition of output shifted in favour of intermediate goods and consumer durables. At the same time, the transition was made from a free, private enterprise system to an economy characterised by state-planning, public ownership of modern means of production, and wide-ranging administrative control and policy interferences. In the decade after 1987, a period characterised by political disturbances, the economy could no longer sustain the pace of high economic performance, largely because resources were being diverted to defence and aid flows from South Africa began to diminish. The rate of economic growth declined steadily, with a marked fall in the role of investment and domestic saving.

Bophuthatswana suffered from a multitude of problems, a heavy defence burden, the inefficiency of the public sector, maladministration, a lack of foreign trade and investment programmes, the cumulative effects of population explosion and uneven per capita income growth. This was primarily due to the

differential rates of growth in the three major sectors - agriculture, industry and services - a familiar pattern of structural changes emerged in which the share of agriculture in terms of GDP declined rapidly. In the mid-1980s, industry increased its share of real GDP at the expense of agriculture and services. Normally, when secondary (industrial) activities decline in relation to tertiary (service) activities, it is a sign of development. In Bophuthatswana, however, it was a sign of economic problems arising from the population explosion, indiscriminate expansion of the public sector and the general bureaucracy and the unsatisfactory performance of agriculture and industry, as characterised particularly from the post-1988 period under the Agricultural Development Corporation (Agricor).

According to the extension co-ordinator (Agricor), reliable data was not available and, more often than not, data was not available at all. It was further pointed out that, in view of the investigations instituted against Agricor by the President of Bophuthatswana and the Department of Agriculture in the latter part of 1992, there was a general reluctance on the part of senior officials within Agricor to make data available. In addition to this, various other factors contributed to the general disarray and the generally low prestige and esteem of the status of senior, middle management and field officers in rural communities, which resulted in the breakdown of services, resulting in inefficiency and ineffectiveness of the extension service and agriculture in general (Interview, Extension Co-ordinator, Agricor, Coetzee, 1992).

5.2 POLICY ISSUES IN RESPECT TO EXTENSION

According to Coetzee (March, 1992), Extension, being the art of educating people not only to increase agricultural production, but also the quality of rural people's lives, must be seen in its true perspective when evaluating the effectiveness and efficiency of the service. In Bophuthatswana, the policy of enabling people through agriculture was adopted. Coetzee (1992) also pointed

out that this implied that the extension officer helps people to help themselves and does not do things for his clients. Another reality, according to Coetzee, that had to be considered was that extension officers worked with groups, because it was not possible for them to give enough attention to each individual's needs due to insufficient numbers of extension workers.

5.2.1. Goals and Objectives

In criticising the extension policy as captured above, it is necessary to analyse the policy statement of Agricor, as provided by Coetzee (1992), and the actual policy document formulated by Snyman and Maree (1988). Like many extension programmes, the Agricor extension policy, goals and objectives, was a long drawn-out document that covered theoretical application without capturing the practical orientation; was highly philosophical in theme and elaborated in almost 25 pages what the extension policy should have been. It was vague: for example, "enabling people through agriculture and helping people to help themselves" (Snyman and Maree, 1988). Such statements are not very helpful. The above criticism is based on the analysis of extension programmes world-wide and that changes in knowledge, attitude and behaviour, sought by the extension agent must be specified exactly, if one is to deduce which educational experience must be included to achieve these goals. The Agricor extension policy document did not differentiate between different levels of goals in order to specify programme goals concretely. This meant that extension agents in Bophuthatswana were needed to develop their own hierarchy of goals. An example of the hierarchy of goals as provided by Van Den Ban and Hawkins (1988:211), underscores the point being made and is tabled hereunder in Figure 5.1.

Figure 5.1

Ultimate Goal: Improved Welfare for the Citizens of a Country.

HIERARCHY OF GOALS				
INTERMEDIATE GOAL 1	INTERMEDIATE GOAL 2	INTERMEOIATE GOAL 3	INTERMEDIATE GOAL 4	INTERMEDIATE GOAL 5
Higher Income a) farm b) non-farm	Higher productivity on farms	Higher milk yields per cow and many others	a) Breeding for increased genetic potential b) Improved animal nutrition c) Improved health care d) Improved housing e) Improved milking techniques	a) Farmers who know the optimal way to feed their cows c) Improved feed production on the farm d) Availability of supplementary feed

(Source: Van den Ban and Williams, 1988:211)

An extension agent who analyses various goals in this way can see whether or not lower level goals really contribute to achievement of those at a higher level, and, perhaps, if there are intermediate goals that will do this better. Naturally, the extension agent cannot decide what a farmer's ultimate goal must be. However, he can contribute to the farmer's choice of intermediate goals, because by means of his professional experience and expertise, he can often see which of the intermediate goals is the best for achieving the ultimate goal. For each intermediate goal, the extension agent can choose an extension method/s which is/are most suitable for achieving this goal. In respect of the above, the Agricor extension policy was prescriptive and did not allow for the flexibility of approach. It attempted to do all of the thinking for the extension agent and, strictly speaking, did not allow for the perceived or felt needs of the intended beneficiary, the farmer. The policy did not, in any way, meaningfully differentiate between long- and short-term goals, or between goals on a national and local level. It is obvious that the latter two levels must be in tune with each other. This aspect was not defined. A further deficiency was that the goals did

not indicate what the farmers were expected to know, to believe and/or to do as a result of the extension programme. Another shortcoming of the policy document was that it spelled out specific goals for the activities to be undertaken by an extension agent. For example, placements of an article in a newspaper, newsletters, and advertising are not goals, but only means.

Given the absence of a sustained extension programme in former Bophuthatswana over time, Agricor, having been given the opportunity and the financial resources, lost the opportunity of agricultural development in that it should have left the extension component with the Department of Agriculture and concentrated on its brief of agro-industries and commercial farming viability, in order to produce more food to feed the growing population. Agricor completely neglected the small-scale farmer in its agricultural thrust that offered the best hope for self-sufficiency via a pragmatic extension programme. The extension policy document stated that "the thrust must be, inter alia, extension and training to equip them (farmers) for the challenges of more commercial-oriented agricultural production" (Snyman and Maree, 1988:1). A marked shortcoming of the extension document was that Agricor as an organisation attempted to solve simultaneously all problems in the agricultural sector.

This was an ambitious programme and an utopian ideal that was embarked upon, which led to even greater confusion and above all, a lack of focus on the fundamental question of increased food production via a sustained and rational extension programme. Such attempts have little chance for success. It would have been more effective to concentrate attention on one or two problems, thus identifying the major issues for the programme to focus on. Problems should be selected because they are important, because there is a chance of solving them, and because the target group is interested. The shortest path for the extension organisation to follow from the existing to the desired situation is not always a straight line. This is precisely what the Agricor extension document neglected to capture.

5.2.2 Problems in Respect to Training

Further criticism of the Agricor policy document is that it was too general and that it did not take into consideration that the desired situation may be reached faster if extension was firstly motivated in respect of problems that the farmers regarded as important. The policy document did not address the fundamental question of evaluating the goals and objectives of the extension programme. Only vague statements were made regarding this vital parameter, and that the system of audit, using the programme approach, had only been introduced as late as the latter part of 1992, and was in the infancy stage of understanding and implementation. The following questions should have been raised when formulating the extension policy. Only after gaining rational answers via research into these problems, should the policy have been formulated and subsequently accepted and approved. These questions are as follows:

Are the goals clearly in tune with the farmer's problems? Are the goals spelled out clearly? Have outside experts been consulted and have they read and understood what extension agents will try to achieve? Are the goals important, both in the eyes of the target group, the extension agents and their supervisors? Do these goals contribute optimally to the realisation of a larger change programme of which the extension programme is a part? Do the goals specify clearly what the farmers will know, want, can and/or do, or do they indicate only what the extension agents will do? Given the skills and the means available, can the target group achieve their goals? Are the goals specified in such a way that clear conclusions can be drawn for choosing the extension message and methods? Are the goals specified so that one can evaluate whether or not they have been achieved? (Van den Ban and Hawkins, 1988: 212-213).

In short, it is clear that the document was not tested at all, in terms of acceptance on a national basis, by the farming community. It did not capture what had to be done, and only in some instances stated how this would be

achieved. Overall it lacked the credibility, acceptance and legitimacy, even on the part of the many role players in agricultural development and the lack of inputs from the intended audience. The Head of Extension (Coetzee, 1992) revealed that "none of the above markers were taken into consideration when formulating the extension policy; that the goals were not in tune with farmers' problems, neither were they spelt out clearly; that external experts were not consulted, and the methodology was not spelt out in terms of long- and short-term objectives; in addition that the policy was formulated on a unilateral basis and did not take into consideration the viewpoints of both extension agents and the broader community it had to serve". The document was not succinct, it was too wide, and was written in a language that was largely incoherent. According to Coetzee (1992), "provision of a single line of command was made in the policy document, but was not adhered to and this was exacerbated by frequent structural changes. Also, that the policy document had not been reviewed in terms of the new agricultural thrust."

5.2.3 Training and Visit System

The policy document stated that to reach the overall as well as specified objectives, an integrated Training and Visit/Programmed Extension System (T&V) should be used, due to the diversity of agricultural products, climate, skills and knowledge of farmers/extension ratios. The importance of this integrated system between the outlined methods or models is acknowledged, in as much as the T&V system of extension has been introduced in many less industrialised countries, to increase extension effectiveness as an example of a comprehensive scheme for structuring the training, delivery and administrative system for an extension service. However, in the Bophuthatswana context, if the administrators and extension policy makers within Agricor had wanted to introduce the T&V system, they would have first introduced the system in a number of randomly selected pilot areas and would have compared results obtained in these areas with changes obtained in randomly selected control

areas.

This research design would have allowed them to separate the effects of the T&V system from other factors which influence agricultural development. Obviously, this was not done and enquiries from various quarters revealed no information in this regard. Naturally, therefore, without such a control group it was impossible to say whether changes observed were the result of the T&V system or any other factors, such as change in product prices or a radio programme, for example. Another aspect, in terms of the T&V system, is that the policy document had given no consideration to the modification of the system to suit the problems of Bophuthatswana in terms of an extension delivery system. The policy document should have, therefore, delineated specifically whether the extension service had a broader educational task or whether the emphasis should have been on production technology alone. Among the various other factors that the policy document did not take into account when introducing the T&V system in the Bophuthatswana context, was that contact farmers were supposed to be representatives of farmers in their villages, but often they had large farms, were better educated and had or held more leadership positions in the village. They may have hesitated to assist farmers who later may have competed with them for land or in the market place. This does not in any way negate the importance of contact farmers. In Zimbabwe for instance, "contact farmers had been replaced by group farmers" (Van den Ban and Hawkins, 1988:284). "This was also the case in Bophuthatswana as of 1992" (Coetzee, 1992).

Another factor that was not taken into consideration is that the cost of the system may be very high for some countries. Bophuthatswana fulfilled the criteria for this category, on the basis of its limited financial capabilities and, above all else, because it would have been difficult to reach all farmers, due to their farms being scattered, fragmented and in remote locations. The T&V experience has shown that an effective agricultural extension service is crucially important for

agricultural development. However, it can only be effective when combined with effective research into farmers' problems, input supply, availability of credit and marketing. These constraints were not taken into account when formulating the extension policy, in relationship to an integrated T&V/Programmed Approach. No data on the research findings and implementation component of the T&V system could be found in spite of exhaustive enquiries.

In analysing the policy document, it was seen that varieties of terminology were used in respect of development, but a clear distinction was not made in the relationship to extension officers/agents, animal health officers and community development officers (village development officers) or that the latter two categories will have afforded a subject-matter specialist role. In the case of animal health officers it was understood that they would fall under the control of the Directorate of Veterinary Services and not Agricor. Data will be provided later in terms of the problems faced by this level of staff. A further anomaly was that the policy did not make a clear distinction in respect of specialists and generalists in the extension programme.

5.2.4 Subject-Matter Specialists

It must be acknowledged that a single extension agent cannot provide all the services that a farmer requires, on the basis that farmers have been and are confronted with a range of different problems. The assistance may be provided by one service or various specialist services. It has been pointed out that in the former Bophuthatswana there was an absence of a single service and, therefore, implementation of specialist extension inputs were haphazard and lacked uniformity. Cognisance, that a single extension agent cannot be expected to master all the knowledge and expertise required in a service of this nature, which deals with a wide variety of problems, was not thoroughly investigated and implemented by Agricor. By the same token, a single extension agent with an agricultural diploma, as was the case in Bophuthatswana, and the fact that many

of the extension officers employed did not have any form of extension training, cannot be expected to know as much as the combined knowledge of research workers, which was also sorely lacking. It must be possible for a generalist extension agent to operate in an organised structure, in which he can draw on knowledge from these research workers, as required. The most practical solution is to have specialists in the extension service who are aware of research findings, in their speciality, as well as farmers' problems. The catch is that many problems require rational inputs from several specialists.

In responding to this question, Coetzee and a number of specialists in rural development stated that "these fundamentals were not fulfilled (as shown above) because of several reasons, a primary consideration being that research was almost non-existent, farmers' problems were not known and that co-operation became extremely difficult because of a lack of direction and frequent shifts in structure. The few specialists that were educated, trained and had experience within the organisation, considered their own subject of specialisation to be more important than other subjects" (Coetzee, Agricor, 1992). It must be realised that there are two types of subject-matter specialists (SMS's): SMS's who are responsible for a certain branch of agriculture, for example horticulture or poultry; and SMS's for a certain discipline, for example plant protection or farm machinery. In relationship to the above, Van den Ban and Hawkins (1988:268-269) state that the task of a specialist within an extension service is to keep generalists aware of developments in their special field by lectures, publications and so on, as well as with systematic in-service training. To support generalists when solving difficult problems and that this can take the form of on-the-job training for the generalists, or as a service to the generalists in the case of rare and difficult problems by solving these problems for them. To keep the research workers aware of the farm problems associated with their discipline for which no satisfactory solution is yet available. To integrate different research workers' knowledge; the scientific literature and farmers' experience into practical recommendations. To make extension programme planners aware of farmers'

problems that can be solved by one's specialisation. As part of the extension programme, to co-operate in educating farmers via the mass media, demonstrations, talks, preparation of extension aids, and that the branch SMS should also analyse trends which are relevant for the development of one's branch, for example regarding markets.

From the above, Van den Ban and Hawkins (1988:269) identify the importance of the task of the generalist when co-operating with specialists. These tasks are as follows: To integrate different specialists' knowledge into practical recommendations. To make use of the correct specialist(s) when solving a practical problem. To take care that the specialist does not exaggerate. To make specialists aware of practical problems that requires a solution.

5.2.5 Manpower Ratios

Van den Ban and Hawkins (1988) make reference to the fact that extension and development was not the sole responsibility of one organisation (Agricor), given the fact that agriculture, generally, has a number of role players who are charged with the responsibility of committing their professional briefs towards development and the extension process. The structure and relationship between Agricor, the Department and other parastatals needed, therefore, to be redefined, if agriculture was to be served adequately from a perspective of sustained growth and development, on the basis that the general welfare had to be served and, at the same time, to fundamentally increase food production. In this regard Van den Ban and Hawkins (1988) state that an alternative to having specialists within an extension organisation is to have specialised extension organisations for different branches of agriculture. There might be an organisation for extension work, for crops or even several organisations for programmes within their professional forte; for animal husbandry, livestock production, for social forestry, irrigation, or for the development of a catchment or irrigation area.

In addition, and in respect to banks and co-operatives, Van den Ban and Hawkins (1988:269) further state that of about 18 per cent of the extension agents in industrialised countries, only about 6 percent are specialists. The percentage is lower in less industrialised countries, mainly because there are few well-trained specialists available, although this shortage may also contribute to poor standards of training for Village Extension Workers (VEW's). According to Coetzee (Agricor, 1992)," the extension service under Agricor had no SMS's among the 200 or so extension workers." This negates the very essence of training, on the grounds that generalist extension agents were poorly trained and, therefore, could not be expected to extend what they did not know. Another constraint identified was that SMS's are not easily available. Coetzee (1988) states that Agricor's figures did not even meet the 6 percent figure as quoted by Van den Ban and Hawkins (1988:269) for industrialised countries. Although Agricor had a range of process specialists based at head office with some stationed within the regional headquarters, their expertise and influence did not impact adequately upon the lower level extension agents and therefore had a minimal impact upon the extension process as a whole. At head office, there were eight positions for specialists, namely - crops, small stock, large stock, village development, regulatory services, foodplots, dairy and pasture. Of these, two posts were vacant. According to Coetzee and de Smidt (1992), "these were not classical extension subject-matter specialists and, therefore, did not impact positively upon the extension system".

5.2.6 Female Extension Agents

Considerable attention has been given in recent years to the fact that "a large proportion of agricultural work in many small countries is done by women, whereas in most countries, only a small proportion of the agricultural extension agents are women" (Van den Ban and Hawkins, 1988:271). This imbalance can make it difficult to reach such an important target group. In Bophuthatswana, there were only 21 female extension agents out of some 200 (10 or 5%).

According to Coetzee (1992), the shortage of female extension agents was a serious problem, if one considers their importance in relation to the migrant labour system and, even more important, from the perspective and in terms of minimum projections, that extension agents were required with immediate effect within Bophuthatswana in order to afford a semblance of a sustained and meaningful extension service.

5.2.7 Extension: Before 1988

In analysing the extension service before April 1988, the Head of Extension (Coetzee, 1992) identified a number of constraints and, in doing so, was in agreement with the view that extension was in a complete disarray and that the delivery was very poor, due to a number of reasons and factors. It is acknowledged, together with Coetzee (1992), that efforts were being made to redress the imbalances and shortcomings, albeit very slowly and in an uncoordinated manner. These imbalances and shortcomings were as follows:

No housing was available, transport was totally inadequate, salaries were not competitive and very low. Training was outdated and formal extension training was virtually non-existent. Very poor discipline was exercised. Supervisors had no training in extension. Very low quality in-service training was offered to extension officers. There was a complete reliance on South African officials. Extension personnel were more involved with non-agricultural extension tasks, than with extension itself. Extension officers were placed in charge of supervision of state land, which made extension weaker, and corrupted them. No liaison between research and extension took place, a top-down approach was followed and all decisions were centrally based. The structure was top-heavy and extension was dealt with only by junior officers. Adequate funds were not provided for extension. No support was forthcoming in terms of the introduction of new technology, support material, newsletters or even simple hand-outs to extension personnel. Exposure to events like symposia and

conferences was very low and ineffective, and these were usually attended by senior staff only. Promotion criteria were inappropriate and, in spite of a good merit system, staff had no authority to take any decision at all.

Regarding the above constraints, Coetzee (1992) stated that all of these factors contributed to the failure of the extension service in Bophuthatswana and that there was a real need to change the strategy to improve the situation. However, one cannot agree with all the points raised by Coetzee (1992): Transport was not inadequate at all. The use of government transport was available provided that it was used for official duties. The problem that existed was that there was no control of these vehicles and that officers used the vehicles for other functions and on a private basis. All of this was exacerbated by an ill-defined extension policy. Salaries were competitive and progression was allowed for in terms of the regulations of the public service. At the time of the transfer of personnel to the Agricor structure, most senior personnel in the department had on average 10 to 15 years' service. Extension officers, animal health officers, community development officers and meat inspectors, who all performed various professional development and extension tasks, were not afforded market based salaries and, had they remained in the public service, would have been financially better off.

An internal report on salary comparisons within Agricor (Karodia and Haines, September, 1992) shows that the "average salary of extension and animal health officers, ranged between R1,800 and R2,000 per month as compared to the public service at that time, offering a starting salary of R2,300 per month. In the case of meat inspectors, the starting salary within government structures of the RSA and Bophuthatswana was, on average, R2, 400 per month, as compared to Agricor's starting salary of R1,700 per month". Such discrepancies were rampant at lower levels of staff functionaries and was a serious problem. The assertions made by Coetzee (1992), were not in keeping with the stated policy of Agricor (1988), that "salaries will be market related and in keeping with the key

performance areas" (Policy on Salaries, Agricor, 1988). Poor control and supervision was a problem and, in many ways, the position worsened under the later agricultural dispensation. This was also due to the fact that there were constant changes in positions of high-ranking officials, which was exacerbated by the absence of a clearly defined agricultural policy. A top-down approach was consistent in terms of the relatively small department, and in terms of the structure of a traditional government department. The Agricor structure was also centrally based and its structures were consistent with the structures of the past. An attempt to decentralise was only undertaken in July 1992. It must also be pointed out that the system of regional and district offices was also in place under the old departmental structure. Therefore, it stands to reason that there was no tangible improvement under Agricor and, on the contrary, the structure had become top-heavy at all levels. Prior to the establishment of Agricor, the traditional Department of Agriculture was provided with adequate funds by government, but there was no administrative will to utilise the funds because of a mind-set (on the part of senior officers) that was developed under the apartheid philosophy - save, save and save, and you are assured of a promotion.

Support was available in terms of newsletters, pamphlets and video tapes, but the effort was not perceived to be important and lacked the support it required. The effort was totally unco-ordinated and lost its intended impact. The benefit package as provided by Agricor was definitely better for the upper echelons of management, in the form of housing, car allowances and other benefits, based on the fact that it was structured on corporate lines and in the mould of a private company, yet utilised the tax payer's money made available by government. It stands to reason that this was an anomaly and with a different system of accountability, as opposed to a traditional government department. "Lower levels of staff, who were by far the majority and were relocated from the Department to Agricor, were not accorded these mammoth benefits when compared with government offerings. In as much as housing and allowances

were provided by Agricor, only 33 of 72 animal health officers were accorded this facility and they were mostly senior personnel as defined by Agricor" (Chief Animal Health Officer, Moriti, Department of Agriculture, 1992).

In contrast to this, Coetzee (1992) pointed out that at least 90 percent of extension and community development officers were provided with some sort of housing or housing allowance, but this was a mere pittance. It is also not true that the extension officers were, in the main, seconded RSA officers in charge of extension. The only RSA officer who was involved in extension within the department was the Acting Director, by means of an internal arrangement, on the basis that the post was not sanctioned by the Public Service Commission. "All other extension officers, numbering some 90, were appointed by the Public Service Commission and were all citizens of Bophuthatswana (Batswana)" (Annual Report, Department of Agriculture, 1985).

According to Coetzee (1992), the strengths of extension after 1992 improved drastically. This is according to his perceptions and the fact that mobilisation of the service started in earnest in 1989. An analysis to obtain a clearer understanding of the status of extension during this defined period shows that in as much as housing was catered for, the hygiene factors referred to by Coetzee were not fully catered for, given the much broader scope of budgetary allocation made to it as compared to the old department. Transport was again provided to upper levels of staff and there remained a tremendous shortage of transport for extension staff in many districts, as evidenced in the case of animal health officers shuttling extension officers to their daily work programmes and thus negating the extension briefs of the animal health officers.

In addition, kilometre usage was reduced drastically in various districts owing to a lack of financial inputs in an inflationary and recessionary economic climate (District Veterinary Officers, Moretele, Madikwe and Ganyesa; August, 1992). However, there should be no illusions in respect of the improvement of a set of

hygiene factors at all levels of agriculture under the Agricor dispensation. In terms of the self-actualization of personnel, the position improved marginally, but when considered in terms of monetary inputs, the position in respect of efficiency, development and productivity, no tangible improvement was noticeable when compared with the old order. This improvement of certain hygiene factors referred to and the supply of certain infrastructure, does not necessarily mean that drastic shifts and improvement of agriculture had really taken place over the last several years. There had been moves in terms of the implementation of various new models in the approach to agricultural development, that had been introduced amidst confusion, the appeasement of politicians, and constant changes in the shortest period of time, in order to make it appear that there were minimum problems and that agriculture was vested in the most capable hands and, therefore, should remain in the hands of the major role player, in the form of Agricor. This was reflected in the speeches of the Managing Director, who fervently believed that "Agricor was the leader in agricultural development, not only in Southern Africa, but the whole of Africa" (Pienaar, 1991-1992).

By the same token, it must be understood that it has been attempted not only to criticise Agricor, but also to understand intellectually, and otherwise, the problems of agriculture that this region faced and, in doing so, naturally the only open route was to look at the institution charged with the responsibility of agriculture. Further, that every attempt was made to understand Agricor's brief and to see if Agricor was fulfilling its objectives. In this regard, it is the firm opinion of the researcher that, in spite of some marginal and insignificant improvements in some spheres of agriculture, in the main the objectives were not attained and fulfilled. In this regard, Coetzee (1992) states that only about 15 per cent of Agricor's budget was utilised for classical agricultural-based improvement and development, including extension, and that the rest was used for ill-defined development, that went beyond the basic tenets of food production. This was further exacerbated by individual administrators within the corporation

and its board of directors, who were not agriculturalists; who tended to be prescriptive, did not understand the concepts of agricultural development and overruled, very often and without consultation, the decisions of professional experts at various levels of an ill-defined structure.

Coetzee further stated that "if only this could have been overcome, agriculture could have been saved and steered in a correct direction, based solely on sound agricultural principles and the richness of the lessons and mistakes of the so-called developing world". Further findings of the interview with the Extension Co-ordinator (Coetzee, September, 1992), are reflected hereunder:

The majority of staff did not have sufficient technical subject-matter, economic, communication and extension knowledge. To upgrade this knowledge, a 12-month extension course had to be instituted in conjunction with the University of Pretoria's Department of Agrarian Extension and it was envisaged that this training and upgrading course would have had to continue for a minimum of another four years. Field extension staff were relatively young and totally inexperienced and their training at the University of Bophuthatswana did not meet the requirements of practical training. It was for this reason that the upgrading course had to be instituted with expertise from the University of Pretoria. Generally, extension officers had very low formal education which was further exacerbated by 'old' extension officers absorbed by Agricor from the Department of Agriculture, under the later dispensation. Of the 170 extensionists, about 130 were absorbed from the Department of Agriculture. Of these, some 75 per cent were inadequately trained and had developed a bias towards crop production. On the other hand, Agricor employed only another 40 extension officers over the last five years which was not in keeping with its objectives of rural development. The training of these officers was also inadequate.

Of vital and fundamental importance was the acknowledgement that Agricor

remained responsible for the implementation of national agricultural policies and strategies, aimed at rural development and including extension and, if need be, could call upon the various professional divisions within the Department of Agriculture, which in reality had been marginalised, to support its efforts in the so-called integrated fashion towards development, on the basis that development was its sole responsibility. However, it is obvious that rural and agricultural development could not be the sole purview and domain of Agricor alone, because agriculture has many role players, which Agricor did not take serious cognizance of, and that these role players within the Department of Agriculture needed to be given total autonomy in terms of their professional briefs. That given the untenable situation in relation to co-operation and co-ordination as concerns these many role players, the system of decentralisation on the part of Agricor, a process that was understood by only a few of the senior Agricor staff; it was undertaken on a unilateral basis by the upper echelons of the Agricor management and board, without consultation with the professional divisions of the Department and also without the inputs of essential divisions within Agricor, one being extension services. This decentralisation process was, therefore, a very decentralised process in as much as it affected Agricor only, but, in reality, was a very centralised system in relationship to other significant role players within agriculture.

In terms of the above situation it was revealed that there was some acknowledgement, on the part of the Agricor management and board that, owing to major disagreement and dissatisfaction at various levels with regard to this unilateral implementation of decentralisation without consensus, and the problems being experienced in relation to structures within Agricor and the collapse of extension at field level, that a new relationship with Department structures, especially the professional divisions, be mooted for implementation at the beginning of January 1993 (this will be discussed later). There was no direct contact with research stations which resulted in an inadequate flow of practical information and methods for field extension workers to pass to farmers and,

similarly, there was little feedback of farmers' problems for subject-matter specialists and researchers. Co-ordination and co-operation between organisations involved in agricultural development at district and field level was completely disjointed and unsatisfactory. The majority of field staff were unaware of the concept of the objectives of the extension programme plan. This resulted in poor evaluation and feedback because District Managers in the eleven districts were not accountable to the headquarters and those in charge of extension could do nothing to improve the situation, given the state of affairs. Impact could, therefore, not be adequately monitored and only in the homeland's final year some mechanism of audit and evaluation according to objectives was being implemented. This would have taken a long time to accomplish. Field visits were carried out on an ad hoc basis, concentrating mainly on the more progressive commercial farmers and households.

Extension officers were not selected on the basis of aptitude and the amount of time spent on training was totally inadequate. It was customary to grant bursaries for either full- or part-time studies to individuals who did not meet the academic requirements, who did not possess the requisite subjects, who did not understand the motivation of extension and its philosophy as a discipline, but who had political influence. Many of those appointed as extension officers seldom pursued extension or agricultural-based courses at university or technikon level. Very little self-actualization was allowed for in terms of junior staff and field extension officers attending external seminars and conferences, in order to engage the science and improve both the intellectual mind set and skills, in order to interact. Those selected were vetted by top management, and only Batswana were selected in order to appease politicians on the misguided notion of Batswana nationalism. The vital parameter missing in the training inputs was the lack of consultation with the Public Service Commission by the Department, and particularly Agricor, in relation to planning a dynamic professional and technical manpower training programme to cater for the specialist and professional and technical needs of the so-called reorganised extension service

under the so-called 'new' agricultural dispensation. More than 90 per cent of the 170 extension officers (up to 1991) had virtually no formal training in agricultural extension and most of them were involved in non-agricultural extension duties.

The situation was further compounded by the fact that in spite of various structural changes which accommodated people responsible for establishing and guiding extension in Bophuthatswana, these changes allowed for a staff function only. To change this culture was well nigh impossible. The only solution was to completely overhaul the existing set-up. In 1989, an evaluation of extension officers' knowledge and skills reflected that more than 90 percent of them failed to achieve even 30 percent. Needs analysis with regards to extension was also conducted on a decentralised basis with the same results. Supportive material was non-existent and, most importantly, extension officers themselves did not realise that their knowledge and skills were not up to standard. This culture was very difficult to eliminate in the short-term and was a complete demotivator to agricultural development. Centralised training courses which were the order of the day, did not have the necessary impact due to the following reasons: the environment differed so drastically that centralised training would have had a limited effect only; extension officers were constantly away from their stations for long periods of time; training in the different disciplines would have divided their attention in such a way that no one discipline would have benefited; and in economic terms, a very large sum of money would have been needed.

Older members of a community are not readily open for adoption of new technology especially when this new technology is promoted by a young extension officer. In order to address these knowledge deficiencies, Agricor offered a number of remedies: Over the last 24 months, more than 300 workshops and the promotion of booklets were held and distributed to extension officers in the field. These workshops were short, powerful, on-day practical sessions, presented on a decentralised basis. All these workshops were planned in order to coincide with the agricultural practice applicable to that time

of year. Demonstration plots and trials to strengthen the impact of these workshops were also conducted. Some 80 demonstration plots and trials were conducted in 1990. Due to extension officers having little or no training, a course was developed in conjunction with the University of Pretoria's Department of Agrarian Extension, as follows: the course consisted of five models and fifteen practical assignments over 12 months of part-time study and was adopted as a model. The course was unique in the sense that the extension officers were guided through their extension programmes within their wards or actual communities. Twenty seven officers completed the course in 1991. Thirty seven attended in 1992. At a rate of training 40 officers per year, it was envisaged that this training would continue for at least four more years in order to cover all extension personnel. However, it would have had to continue beyond this time in order to accommodate new recruits. One of the spin-offs of the course was that managers of extension personnel realised that their own lack of formal training in programme extension left them with a disadvantage over their subordinates, which prompted them to request short courses for themselves. An eight-day course in programme extension under the auspices of the University of Pretoria was held for managers and extension officers in 1991. Evaluation of the course revealed no tangible improvement and performances in general stayed dismal.

Due to the misunderstanding with regard to the science of extension, a four-day orientation course was organised and presented to all senior staff of Agricor in 1992. This not only revealed the grave inadequacies of senior personnel, but brought forward the concept of greater empathy on the part of senior staff in charge of the lower echelons, and a realisation that the complexity of agricultural extension was too serious to contemplate and required a total reassessment. An in-house extension conference comprising 160 delegates was held in 1992 and 10 of the 11 papers were presented by extension officers. No new data emerged and the papers ranged from the average to absolute mediocrity. One of the direct results of the conference was that about 50 extension officers

became members of the South African Society of Agricultural Extension. This did not happen out of a felt need to belong to this society, but only because membership fees were paid by Agricor (Interview, Head of Extension, Agricor, March, 1992; September, 1992; and November, 1993; Personal Communication, 1993).

Pursuant to the above, it was necessary to interview the manager of the Programme Co-ordination Department, Agricor, on the basis that the Head of Extension fell directly under his jurisdiction in order to evaluate the support input provided by this section and, moreover, to elicit responses in view of this study. The interview findings are tabled hereunder:

- This section came into being on the basis that it previously resorted under the human resources section, and was perceived as not delivering the required inputs primarily because of the acceptance of the Programme Approach of extension within Agricor, in the first quarter of 1991. The brief of this section was to provide support at all levels of the extension service upon requests from the various districts. This support took the form of providing for the requests on an in-house basis, which made up 30 percent of the total inputs, but the more important inputs in the form of posters, hand-outs, population livestock data, soil and feed plot manuals, video tapes and so on, made up about 70 percent of the inputs.

- On an average, about 60 video tapes were made in a year, ranging from 2 to 30 minutes and were made available upon request for extension programmes. Video tapes on local programmes were also made. It was further pointed out that the production of this material had considerably tapered down since the end of 1992, because of the uncertainty of agriculture which had been affected by the changes in structure within Agricor. A supposedly pro-active role was played by this section in that it anticipated the needs of extension workers and provided the required

inputs, of how to grow vegetables in drought conditions and underscored the system of working with people. It provided an input to an agricultural forum on Mmabatho Television and on Radio Services. However, this was a narrow approach at the time on the basis that such programmes could not reach the rural population and subsistence farmers in the majority, because rural areas were not electrified and there were, therefore, no television sets.

- In posing the question of academic qualifications of senior personnel of this section, it was established that there was a hesitancy in supplying such data, and experience (not qualifications) was defined and defended as being of primary importance. It was established that a large number of senior incumbents in this section held formal qualifications which were not in keeping with what was required in the agricultural setting. It was also established that some of the senior personnel had lower formal qualifications than their subordinates, and that these senior personnel were mostly South African Whites, White former Rhodesians and a handful of local and expatriate Whites. This section had no line control whatsoever, in spite of the fact that it was responsible for extension planning, policy and approaches that were to be used. District Managers could be cautioned, reprimanded and warned only if they violated Agricor policy, but were not held accountable to the rural development support division. It was categorically stated that given the then structure within Agricor, the District Managers were not accountable to anyone, and that they did not need to implement the rational decisions of professionals.

- It was the responsibility of this section to develop policy at all levels of rural development, including extension, but within the parameters of Agricor's brief. These policies were sent to the DEC (Divisional Executive Committee) of Agricor, which comprised the Managing Director and the Board of Directors, which approved changes or rejected proposals with a

minimum of discussions with important role players who, in the final analysis, were charged with the responsibility of implementing these decisions. It was further established that there were at least 78 different or smaller policies covering an array of disciplines not backed by a centrally-based, co-ordinated and cohesive policy that embodied all these mini policies. Examination of these numerous policies revealed that the policies referred to were, in actual fact, strategies to accomplish various objectives and goals.

- Functional resources in terms of monetary inputs were diminishing largely due to wastage and coupled with the recessionary climate which impinged upon employment capabilities of the division to meet the requirements of rural development. Scarce manpower resources had to be disbursed over large areas, and this aspect was not catered for adequately. In support of the above, it was established that if salaries were not taken into consideration, including pension, car allowances and housing, the inclusive budget of this section was less than half a per cent of the total agricultural and development budget of Agricor. This did not allow for an aggressive extension and development programme (Interview, Manager Support Services, Agricor, 1992 and 1993; Personal Communication, 1993).

5.2.8 Problems of the Role of Rural Development Managers

In terms of the great confusion experienced and also as a result of the dissatisfaction by many within the organisation involved in extension and rural development, it was stated as follows by both the Manager Support Services and the Head of Extension (September, 1992). "RDM's had to make known to extension officers the need for agricultural development. They had to make known the National Agriculture policy to extension officers. They had to oversee the programme implementation of extension officers (EO's); village development

officers (VDO's); and animal health officers (AHO's); They had to solve both technical and administrative problems of the range of officers identified above. They had to assist in budgeting and the needs for reconnaissance survey. They had to attend workshops and filter messages to all of the above categories of staff. They had to conduct merit appraisals of all these officers. They had to cover all other related activities." In relationship to the above, it was established that there were three RDM's per district, a total of 36 in the service, and the constraints of these officers were identified by de Smidt and Coetzee (Agricor, September, 1992), as follows:

The RDM's, were a very weak link in the entire process of extension and rural development. This was the culmination of many of them being 'poached' and promoted from other sections of Agricor and the Department of Agriculture and, generally, had a low esteem because they were given no respect and status by many lower levels of staff, who saw them as being not qualified to hold these positions. Senior officers had to request support from those in lower ranks, and this caused great conflict and animosity and retarded progress and growth. Their benefits and salary packages, however, fitted into the upper categories of management which further exacerbated the conflict. They became a law unto themselves for the system allowed them to report directly to the District Manager who, in turn, was accountable only to himself. This made possible the entrenchment of RDM's, into more favoured and privileged positions. They did not hold the requisite academic qualifications and could not perform at this level in terms of management principles. They became too entrenched in terms of power and overregulated professionals because of their own inadequacies, and not on the basis of knowledge. Attitudes of RDM's; needed to be changed. These RDM's; were selected in order to show politicians that Batswana were in management positions. This was reflected in a letter to the editor of the National Weekly, the Mafikeng Mail, by the Managing Director, Agricor (July, 1992), in response to criticism labelled against the employment policies of parastatals in general.

5.2.9 Veterinary Problems

In spite of this weak link in the process, which affected the agricultural sector as a whole, the misguided policy of Batswana ethnicity and Batswana Nationalism was pursued rigorously. In supporting the criticism advanced and tabled above, more empirical data will be provided from interviews conducted with District Veterinary Officers and the Director of Veterinary Services (August - September, 1992). This is as follows: It is unacceptable that a new structure in Agricor can be brought to a stage of implementation without involving the professional head of the Directorate of Veterinary Services, sitting in the same building. The main danger of the structure lies in the fact that Agricor officials do not understand the complex nature of veterinary services. They also do not generally understand and realise what political, economic and human health complications could arise from the breakdown of a strict preventative veterinary programme. Veterinarians are loosely used as just another kind of manager and Animal Health Officers are often used as drivers for other, lesser officers; general shortage of transport is a major problem. Too many meetings that bear no relevance to veterinary extension are held and RDM's overregulated almost all professional briefs. District control of the veterinary services must now become a priority of the Directorate. (Olivier, J.M., District Veterinary Officer, Madikwe, Personal Communication, September, 1992).

The District Veterinary Officer, Ganyesa (September, 1992) stated as follows: Animal Health Officers cannot be controlled because they are given duties/tasks completely unrelated to extension and their technical training, and this upsets the veterinary programme and delays progress. There is an absolute shortage of staff. It is difficult to get hold of Animal Health Officers when required, especially during disease outbreaks. The main problem is that they are abused in terms of the work ethic by the RDM's. My functional problems are not being addressed at all by the District Managers. The crisis must be addressed with immediate effect. (Mokgantla, E., District Veterinary Officer, Ganyesa, Personal

Communication, September, 1992).

The problems of the District Veterinary Officer, Thaba Nchu, are reflected as follows: Currently the AHO's fall under an RDM. This causes a serious time delay in information flow. Outbreaks of disease cannot be dealt with quickly and efficiently and will lead to serious consequences. The AHO's are appraised by the RDM's who are not good judges of work quality as they do not have any extension and animal health training and they lack experience. AHO's are often sent to training courses that have no relevance to their work. The veterinarian, or Senior AHO, is never consulted before the officers are sent on a course. The District Veterinary Officer reports to the District Manager. All correspondence must be vetted by the District Manager. There is again a time delay before the message is forwarded to the DVO. Courses, leave, discipline are all managed by the District Manager. There is again a time delay before the message is forwarded to the DVO. The Directorate of Veterinary Services is never consulted concerning these parameters. A DVO can, therefore, be absent from his post for protracted periods without the Directorate being aware. Even if it is aware, it is totally impotent. Overall, Animal Health in Bophuthatswana is made to appear to be the responsibility of Agricor, coupled with veterinary extension and livestock production, yet there is not a single veterinarian in an executive position within the Agricor structure. The DVO has no recourse to someone in the Agricor structure when it comes to veterinary and animal health matters, and the Directorate of Veterinary Services is totally ignored by the Agricor hierarchy. What is of great concern in Bophuthatswana is that, by law, it is required that the Director of Veterinary Services is a veterinarian and that he be directly in charge of, and responsible for, the State District Veterinary Officer and his staff. This fundamental concept was totally negated. All the AHO's must report directly to the DVO's office and not via an RDM. The DVO must report directly, and be responsible to the Director of Veterinary Services. (Stohr, W., District Veterinary Officer, Thaba Nchu, Personal Communication, September, 1992).

With regard to the problems experienced as outlined above, the District Veterinary Officer, Odi District, is quoted as follows: It is difficult to have any say when things are not going right. AHO's are completely under the control of RDM's and lag behind in routine programme work; and it was found that some Animal Health Officers had to work only on three days in the field and two days in the office. It is also not easy to hold regular clinics because RDM's instruct AHO's to be at other places, e.g. selling cattle feed. The resolutions taken at past meetings are not effected, in that I am a storeman, a receptionist, a veterinarian, a manager, and sometimes a cleaner. No veterinary assistant is provided for. Odi, small as it might seem, is not easily covered by a single veterinarian. Distance covered in a month (on average) is 5,000 kilometres, running around 'fire-fighting', which is not effective. The job grades of AHO's are all on the low side, for example, the Senior Animal Health Officers in my district are graded at 12 and 11. There is no uniformity in terms of grades and benefits. This has caused very low morale and threats of resignation, which hampers progress. There is no uniformity between veterinary services and extension between districts. Clear guidelines are required to avoid problems, as were recently experienced and of which the Directorate is well aware (Modisane, District Veterinary Officer, Odi, Personal Communication, September, 1992).

The District Veterinary Officer, Moretele, projected on specific problems as follows: Lack of control over AHO's, especially in monitoring quality and quantity of actual work done. No senior AHO's are available in the district and RDM's are in charge of the veterinary health programmes. This is an untenable position (Botha, A., District Veterinary Officer, Moretele, Personal Communication, September, 1992).

The District Veterinary Officer, Mankwe, tabled his problems as follows: AHO's are now under RDM's. It has become difficult to know the whereabouts of AHO's, since they can be asked to attend meetings by RDM's or even attend meetings without prior consultation, thus leaving their work programme well behind

schedule. Too many meetings, resulting in constant complaints by farmers, that they cannot find the DVO or his staff. AHO's are still receiving low salaries and few are on the bench mark grades. Agricor insists on performance-related salary rises. Even for those who perform, the constant argument is that there is no money. This results in low morale and this culture of management is directly inconsistent at all levels of staff, including extension officers and community development staff (Makhuni, M., District Veterinary Officer, Mankwe, Personal Communication, September, 1992). The District Veterinary Officers of the other five districts - Molopo, Ditsobotla, Lehurutshe, Taung and Kudumane - elucidated and testified to similar problems as experienced by the District Veterinary Officers quoted above (Directorate of Veterinary Services, September, 1992).

In support of the above findings and representations, the Director of Veterinary Services convened a meeting with the Secretary of Agriculture and the Public Service Commission in the middle of September 1992 and, in a written memorandum, pointed out as follows: The new dispensation under which Agricor became the operational arm of the Department, was introduced on 1 April 1988. The Directorate of Veterinary Services was specifically excluded from this arrangement on the directive of the Cabinet and His Excellency, the State President, in his announcement to the Departmental staff in 1987. However, Agricor took over practically all the professional and technical staff of the Directorate of Veterinary Services, except a few. Among those excluded were the Director, two State Veterinarians employed by the State and those seconded by the RSA (2), and some technical staff employed by government. The Directorate's protest against this arrangement went unheeded prior to and up to today. There is ample evidence to illustrate that worsening conflict has arisen between the Directorate of Veterinary Services and Agricor, arising out of the dichotomy of responsibility for administration of the National Veterinary Services. It would not be relevant for the purpose of this review to recount the incidents that have brought the conflict to a crisis point, which is virtually leading to the

demise of the Directorate of Veterinary Services. It is recommended that the existing conflict between the Directorate and Agricor (a state organ and a parastatal organ) be resolved by the relevant authorities as a matter of urgency. The author of this review does not wish to suggest a solution at this stage since he is the most affected party. To date the symptoms of the disease, and not the cause, have been treated; this has not been the professional way, so to speak (Raditapole, N.N., Director of Veterinary Services, 16 September 1992).

5.2.10 Budgetary Constraints

In continuing the debate and discussion in respect of empirical evidence, it is again necessary to reiterate that the criticisms of the weaknesses of the development process in the erstwhile Bophuthatswana were undertaken primarily to determine its effectiveness, strengths and weaknesses.

This was undertaken on the basis of pursuing a debate in order to understand the process of development, and whether agriculture and extension was impacting meaningfully upon the lives of the intended beneficiaries. Another factor was to determine whether a reassessment of the development priorities of Agricor was at all necessary or required, in the short- and long-term. This assertion was made on the assumption that "about 70 per cent of the agricultural budget was utilised as recurrent expenditure" (Managing Director, Agricor, Personal Discussion, 1992). Given this scenario, it is obvious that urgent macro-planning was required, solely on the basis that the development thrust as identified by Agricor, was all-encompassing in 1988 when finance was easily available, might not be achievable and attainable under the current budgetary constraints. The fact that inputs were measured in terms of outputs which, in the main, are not easily quantifiable, the only route left was to train staff to become more productive and efficient; to limit the expanding bureaucracy; and to drastically curtail the employment of expatriates. Above all, to seriously consider the shrinking of various capacities as identified previously in the development

process, and focus on a much narrower development agenda, which had the chance of obtaining a more equitable proportion of the budget. This will have impacted more positively on the development process and this would, for all intents and purposes, play a more important role in the improvement of the general welfare; which must be directed towards the following three goals and objectives. This also assumes significance to the new North West, post April 27, 1994 and, to the new Department of Agriculture and Environmental Affairs, on the basis that, given the rather low budgetary allocation of R311 million for 1995/1996 and exacerbated by the inherited problems from the former regime, it would have to seriously restructure, organise and take heed of some of the options being tabled hereunder. These are; literacy and numeracy of the rural farming community; increased food production; and sustained agricultural extension - determined on the basis of the perceived/felt needs of farmers.

All else in the development process within Bophuthatswana in terms of the process of uneven development was of secondary importance - the monetary cuts and the fiscal crisis due to possible reincorporation into South Africa. The inflationary economic cycle and the realities of global recession impacted very seriously on the capacities of investment in terms of the development momentum of Southern African countries and the more important determinant of Bophuthatswana's reliance on the more mature economy of South Africa. This aspect of international isolation was neither practically, intellectually nor pragmatically given consideration by the former state. All of this had to impact negatively and otherwise on Bophuthatswana, irrespective of the political model and constitutional dispensation chosen for a future non-racial democracy in the new South Africa.

5.2.11 Programme Extension and Audit and Evaluation Procedures

5.2.11.1 Assessing Needs

The extension service having been taken over by Agricor in 1988 was an attempt to rectify and revitalise the service to customers. The immediate decision was to decentralise to districts and to operate on that basis. At the start it was decided to use the Training and Visit System of extension, but, unfortunately, this was applied by people who did not understand that the T&V is largely a method of extending the effectiveness of the extension agent by allowing him to reach more people by managing unqualified 'Village Extension Workers'. The assumption was made that the technical knowledge of the extension officer was lacking, and a massive campaign was launched to write booklets and conduct workshops. "This was the concept of training which was carried out without assessing needs beforehand. Much of the effort was wasted due to field staff not being motivated to learn the course content and was not geared to immediate requirements and was often pitched at the level of a White commercial farmer" (Promnitz, 1992; Interview and Personal Communication, 1992).

5.2.11.2 Constant Shifts in Extension Models

Another grave anomaly was that the time allocated to T&V was minimal, before the whole system was changed and a new idea/extension model was thrown into the system, - the Programmed Approach to Extension. The choice of terminology was unfortunate because it led the way to further confusion. The original idea was that a programme is actually a recipe for achieving a certain objective. Much of the above was based on the Zimbabwean Extension Officer's Handbook which is a masterpiece of simplicity and is, at the same time, a highly technical document. Promnitz (1992) states in this regard that, "by comparison, our efforts are clumsy and that we never go back to refine and redefine them".

5.2.11.3 Failure of the Extension Services

To underscore the above, it is necessary to provide empirical evidence of the failure of the extension service. The shift in extension implementation by Agricor was instituted in the first quarter of 1991, with an emphasis on livestock production, and the empowerment of the so-called commercial farmer, and the process of decentralised management into three broad regions (Agricor, Policy Document, 1991). Observations reveal that this decentralisation process took place theoretically only. At the time Agricor took over the extension service there were some serious problems in respect to poor salaries, limited transport, poor housing, lack of development finance, lack of career opportunities and so on. This was the reality within the constraints of the system. Changes brought about by Agricor caused serious and widespread dissatisfaction, especially amongst older staff. More empirical evidence will be provided (Promnitz, 1992) in order to elucidate the lack of effectiveness of the extension service. According to Promnitz (1992), all of Agricor's efforts to rectify grievances had little effect on the lot of the field worker. In this regard, Promnitz observed the following: Transport had improved for the higher ranks, yet the average EO still battled. It was not possible to provide transport to everyone, but there must be a way of spreading the existing resources in order to maximise the benefits to all staff. Efforts to rectify poor salaries have led to two major problems: A telescoping of salaries at the lower grades. Let us say that we had an EO who joined in 1988 at R 600 per month. In 1989, the bottom grade of the salary scale was raised to R720 per month and the incumbent was happy until he found that a new person who joined in 1989 was earning the same salary as he did. Both of them become exceedingly unhappy when the next salary increase took their salary to R960 per month and that it was found that the person who joined in 1990 got the same as them and so on ad infinitum. The system did not allow for qualifications and experience. The only thing that a salary increase motivates one for was to look forward to the next increase. People within Agricor had high expectations for salaries, but have not made a mental connection between salary and

performance.

At the same time, nothing tangible was done to make living in the 'bush' really attractive with regard to housing amenities. The general perception of staff was that 'perks' were for the privileged few and the poor field worker got nothing. Proof of this is that at least 30 to 40 senior staff resided in towns in the RSA and were far removed from the realities of daily living and existence in the rural areas. If one included the figures in terms of the new dispensation of regions, then the figure would be staggering. This did not lead to cost effectiveness and the majority were White staff. In 1989, a grievance committee took these complaints to top management, but there was little apparent change other than the formation of a staff association. This again caused discontent when in many districts the chief negotiators of grievances within the staff association were promoted to RDM posts. The general feeling was that management had successfully emasculated the staff association, repressed the process of democracy, and that the staff association was nothing but a body co-opted to serve the interests of management and government.

5.2.11.4 Decentralization Problems and Uniform Policy

A further draw-back to the whole decentralisation process was the complete lack of experienced extension people to carry out the mission of 'Enabling People Through Agriculture'. This applied to management throughout the spectrum. In addition, the duties of field staff were varied, ranging from land administration, veterinary services, community development to crop protection and a host of other functions. This left very little opportunity to focus, even if one was a specialist. Promnitz (1992) further states that "reference to this aspect was made in relationship to Rhodesia/Zimbabwe, where there was complete specialisation amongst services offered to farmers. There was also a very strict mechanism for liaison and combined planning, which obviated duplication. At the start of the dispensation in 1988 there were apparently unlimited funds

available. District managers were given funds to be spent on high-profile 'window dressing'. Much of this was spent on ornate offices and buildings at service centres, on the mistaken assumption that extension is bricks, mortar and wire. Much was also spent on providing services to farmers, which crossed paths with other departments and parastatals such as Water Affairs, Agriculture, Health and a host of other departments and many of these problems were still festering. There was also an apparent reluctance on the part of management to test one method thoroughly before adopting the next. Promnitz (1992) further indicates that he believed that the only salvation would have been, once again, to specialise functions and let the extension service concentrate entirely on agricultural extension. There were other bodies such as the Department of Works who were geared for construction and had the manpower which could concentrate on community development and so on. In addition, there should have been a clearer definition of functions between parastatals. At that stage there were numerous bodies devoting effort to small business imperatives; that much more could have been achieved if there was a concerted effort with a uniform policy.

5.2.11.5 Constant Structural Changes

Promnitz (1992) went on to state that the system had the T&V and Programmed Approach including structural changes in as many years as inception, with small doses of Farm Systems Research and Extension, mixed with the Programmed Approach. That the extension services had centralization, followed by decentralisation, all in four years, and that a tremendous amount of time was spent on getting a 'Community Development Approach' going. Many of the staff were totally confused by all of this and had hardly taken time to find out what a new approach was all about, because it may have gone before they had a need to know. In further elaborating on the problems of extension, Promnitz (1992), in response to several questions raised by the District Manager, Molopo, requesting help in developing a system of simple tools to 'assist' line management to

develop more effectiveness in monitoring front-line staff performance and, in pursuance of some of the aspects raised by the researcher, acknowledged that the symptoms as defined above, were evident to a greater or lesser degree in all districts within the Central Region and throughout the country. The objectives were stated as follows by the District Manager, Molopo: "To address vigorously the endemic problem of ad hoc actions and translate daily business into planned, incremental progression towards objectives. To enable hard-pressed line managers (RDM's) to be closely in touch with the work of their subordinates in order to improve control and to achieve and maintain higher standards" (Tindall, 1992).

5.2.11.6 Poor Management of Extension

According to the District Manager, Molopo (1992), the basic and fundamental problem was that front-line staff were not seen to render an effective service to clients and that there were four major shortcomings: Management ability and experience of RDM's, particularly with regard to planning and control, did not meet the demands of the situation in the field. Lack of consistent understanding of a development philosophy and approach, which was broken down as follows: concept of development as a partnership; programmed approach (particularly introductory programme); service centre strategy; extension policy and the role of specialists; inadequate skills of RDO's, especially with regard to the process of extension and the planning of integrated programmes. There was little integration between RDOs' training and performance management. (Tindall, J., District Manager, Molopo District, Personal Communication to Promnitz, 1992).

Promnitz (1992) further elaborated that the tools already existed and the only requirement is to put them to use. I attach a risk analysis of agricultural extension undertaken by the Internal Audit Department as an example, indicating the tools and the risks of non-performance as clearly and briefly as possible, but the whole problem does not stop there. All the necessary technical answers that

one could hope for have been refined in terms of the budgeting process to a razors edge. A Programmed Approach, including an Introductory Programme, Programmed Extension, and Farm Extension, yet the system has never quite managed to weld all of these together into a unified system and each ingredient is treated as being independent of the others. The mere existence of the tools does not mean that they will be effective or be put to use and, therefore, there is a responsibility on the part of the maker of the tools to ensure that they are properly understood and fully used. This is not the position currently. The proposal in order to overcome these shortcomings is a pooling of ideas between central region specialists and is put forward as a basis for discussion. There are certain key elements in the process: an accurate, up-to-date data base; a proper works programme stating exactly what is to be achieved; planned visit schedules covering key visits within the work area; a system of recording advice given; a system of recording visits to all key visit points. Continuing, Promnitz (1992) further elaborated as follows:

5.2.11.7 Information and Data Gathering

The present system of mapping and recording on Computer Aided Design (CAD) is only a first step taken because of the centralized facilities. It is also only part of the total data base needed for effective long-term planning, much of the demographic and social data, which is equally important can only be stored in other formats. Certain types of information have already been gathered and stored by specialists because these require specialized knowledge, but it is important that the information is made available to line staff in an understandable and usable form. It is of paramount importance that line management accepts ownership of the whole data gathering and storage process as this is something that cannot be driven from the outside. A work programme should flow from the data base and the needs of the customers should be incorporated in the job expectations of each individual. An equally important part of this is that it should also be used to determine individual training needs. An important aspect of the

whole system is that the front-line worker should have a clear visiting schedule and that this should be put down in writing with a genuine commitment to carrying out the schedule. The schedule must be based on needs within the area and must also cover key people within the area. Visits must have a clear purpose which must tie in with the whole works programme for the area. It is also important that advice be clearly stated in writing and that the recipient gets a copy. The obvious reason for this is to cover one's back when advice is disputed or when people complain that they never see the staff in the field. The other purpose was to provide feedback as to whether field staff were actually planning work and carrying it out, or whether the advice given was technically correct or not. This was important in view of the fact that much of the agricultural advice given involved dangerous chemicals, which, if incorrectly used, could cause damage to humans, animals, crops and the ecosystem. The method used to record advice was not important, provided that a copy was kept by the front-line manager. A duplicate manifold book would be suitable. Advice to groups would have to be given by means of copies to each member of the group or through the minutes where these were properly kept and circulated. Farmer visit cards are available for recording visits to individuals or groups. These may not be exactly what is required but they can always be modified to suit needs. The important thing is that they should be kept up-to-date and readily accessible, firstly for monitoring purposes but, even more important, to provide continuity of service to the customer in the event of staff transfer, resignations or death. This is clearly not the case at present.

5.2.11.8 Planning

The next, and most important, step was to take the required decisions to make this system work, provided that there is agreement that it should be implemented. In this regard specialists can make a significant contribution by following exactly the same steps in planning and recording their visits. These records could be provided to line management as feed-back and the resultant

shortcomings or good performance could be used in determining possible training needs and also as a factor in assessing performance especially where the line manager is not trained in the same discipline as the field worker. It would assist the specialists if individual front line staff could be identified in each RDM area, who are responsible for a particular discipline such as agronomy or livestock, where there is a major need for that discipline within the work area. This 'specialized' front line worker would be a key visit target for the specialist concerned and would also be given advanced training in the specific discipline where this is needed.

5.2.11.9 Partnership in Mission

In summing up, Promnitz (October, 1992) stated that, if this system was generally accepted and implemented it would go a long way towards creating 'Partnership in Mission' between field staff and support services and would also solve many of the endemic problems. In respect of the many manuals prepared by specialists within Agricor, Promnitz (March, 1992) when asked to comment on the suitability of these manuals, for example, Small Stock Programme Manual (1992), stated as follows: Congratulations - a tremendous amount of work and in fact, every aspect of almost everything, from the introductory programme straight through to technical advice has been dealt with. What the other programme co-ordinators will have left to do really cannot be imagined. Attempts to give technical advice should be left to the experts, in this case to the veterinarians and agronomists and other specialists. Some of the instructions were very sketchy and liable to lead to confusion. In particular, the content relating for example to castration and other parameters, on the basis that there appears to be salient words missing and secondly, it is very doubtful as to whether healing oil is really intended to stop massive bleeding which takes place when one cuts big arteries that run down the sides of the smallest tail.

5.2.11.10 Scientific and Technical Advice

Stating that rubber rings cause little pain is rather like the old joke about the camel and the two bricks. Every one of our extension officers has already been through some form of animal husbandry training at college and there are also comprehensive technical manuals produced by the various specialists. If there is a need for manuals, then this is something that should be addressed through proper channels. Most of the manuals are deficient in proper and scientific technical advice. Simply, the approval of the experts was not elicited. One only has to define at what level these documents are pitched at and write for that level. Experience of field staff indicates that no more than one per cent from District Managers downwards would bother, or have the time, to read and digest such lengthy documents. Another major drawback is the fact that the manuals have not been translated into the local Setswana language.

One must acknowledge the criticism advanced by Promnitz, and there is no doubt that the quality of tools left much to be desired and advanced the notion that very little inputs were requested from specialist divisions and disciplines, in terms of training manuals and other extension and agricultural parameters. It seems obvious that the following criteria may be utilized in formulating guidelines for specialist categories in terms of job expectations. It must be, however, acknowledged that the views expressed hereunder by the researcher, may be subjective views and have been formulated over time, in terms of observation of the extension system and the process of uneven development in Bophuthatswana: The extension service must provide technical inputs to programmes and policy related to a specific discipline. Train front-line staff according to identified needs as determined through work programmes. Monitoring, reporting and advising on ongoing projects. Liaison with external organisations and other sections of Agricor and particularly the Department, coupled with the possibility of engaging progressive agricultural and development NGOs; to build a partnership in mission, identify issues of mutual concern, and

take positive action to resolve these. Provide technical back-up which is appropriate to a development situation, to front-line staff. Identify regional problem areas in specific disciplines, formulate proposals to combat these and conduct awareness campaigns amongst front-line staff.

5.2.11.11 Expertise within the Extension System

The above so-called key performance areas must ideally be applicable to all specialists, with in-built mechanisms to apply and cater for the application of variants if required, and must be controlled under very strict supervision. This will allow for the following: Ensure that all immediate customers are aware of the role of specialists and what expertise the system can offer within a specified discipline. Adhere to the principle of staff/line relationships without deviation. A specialist function must strictly be a staff function unless there are subordinates. If action is required, one has to convince the individual concerned of the necessity, and is not allowed to give directions. Draw up and maintain a list of key elements within the regions/districts related to the specific discipline. Draw up a schedule of visits to key customers over six-monthly periods and assess findings as regularly as possible, and carry out visits as planned. Maintain records of visits to key customers and groups of subsistence farmers identified for targeting. Ensure that all advice to line staff or farmers is given in writing so that both the recipient and the writer have a copy of the reference, as a back up, in the case of misunderstood advice. Regular reporting to RDM's and District Managers on visits to front-line staff in order to provide both positive and negative feedback, which may be used to assist with performance management of front-line staff.

5.2.11.12 Public Management and Training for Extension

One cannot be oblivious of the all-embracing fact that criticism will result in respect of this proposal and of the dissertation as a whole, but it is hoped that this will stimulate intellectual and academic debate in order to engage the science and pave the way to further enhance the discourse in respect to sound and acceptable public management in order to advance the notions of training, professional extension and sound and pragmatic development. Acceptance of the viewpoints advanced by the researcher is not elicited or canvassed on the grounds that the dynamic of development in itself is very complex. What is elicited, however, is an acceptance and understanding that the ongoing debate has to be pursued on the basis of the empirical data provided in order to resolve the current problems inherited from a system that totally negated the concepts of sustained intellectual discussion and debate in respect of the processes of uneven development. If certain characteristics of the above are included into a revised programme of extension, the process of accountability, with the necessary checks and balances will automatically result. It is senseless to have the mechanisms of sound audit procedures in place without first changing the 'psyche' of both extension staff and farmers combined with a strong motivation on the part of managers. Failure to understand the programme and what was to be achieved within Agricor, the Department of Agriculture and government, was primarily because there was a lack of commitment on the part of the agricultural and extension agency, the people within the environment, the intended beneficiaries, and the total lack of administrative/political will and support by government.

5.2.12 Audit and Evaluation Using the Programmed Approach

In continuing the discussion and further attempting to provide empirical data, the study will attempt a review of the audit and evaluation procedures. In doing so, evidence will be provided in the form of documents provided by the Head of

Extension (Coetzee, 1991/1992). The Group Manager, Planning Services (Agricor), dispatched an internal communication to the Head of Extension (December, 1991), which stated as follows: To become result-oriented in the front line, it would be welcomed that your inputs and suggestions on proper performance management of community development and extension staff be made available. As specialists, you have information and access to people who can indicate how to manage and measure the performance of their officers. To enable proper management, such information is urgently required. Can you please discuss this with me, as soon as possible, to finalize our requirements, and to agree on your actions (Jonck, K.T., Group Manager, Agricor, 1991).

The above statements categorically prove the assertions that the organisation as a whole did not understand the role it had to play in extension. The hierarchy was not in touch with what was going on at field level. After four years since the implementation of the extension programme, there were no proper guidelines and a comprehensive evaluation and audit system was absent. The Head of Extension replied by providing a written report to the Group Manager. The salient statements are captured hereunder as follows: It is not appropriate for me to discuss the many systems developed for personnel appraisal and utilised by Agricor. All of these systems have the weakness that the supervisor is not fully acquainted with the ways in which extension officers perform their duties. He can obtain this from the following sources: The reports written by extension officers about their work. For obvious reasons this is not a trustworthy way of appraising them. Extension Officers' performances at staff meetings. Extension officers are likely to present themselves in a favourable light under these circumstances also. Farmers' comments about the Extension Officer: Apart from the fact that the manager usually has contact with a limited range of farmers, especially those active in organisations, the farmers are likely to be selective in what they tell him about 'their' Extension Officer. Observation of the extension officer's activities: This is the most useful and trustworthy way of obtaining information required for personnel appraisal. Therefore, it is important

for an Extension Manager to spend substantial time in the field to see how his officers are working and what difficulties they have. There are problems with this method also. Some activities are easier to observe than others. If an extension officer knows his manager is watching his work in order to appraise him, he will be influenced to behave differently - sometimes favourably and sometimes unfavourably. The way in which a manager interprets his observations will depend on the appraisal standards he uses. Does he pay particular interest to the way his staff dress, or does he take into account the factors essential for the success of their work? Changes of farmers' behaviour - their development. Although this is an important gauge for performance appraisal, it is seldom available when required. Self-appraisal: An Extension Officer may appraise his own work. If this appraisal is compared with information gained by managers using the methods outlined above, a system of career guidance can be developed in which the wishes and potential of the extension officer and the organisation are more closely in tune with each other.

In addition to the points outlined above, Coetzee (1992) pointed out that the assessment of extension officers was made more difficult because of their position between the farmer and the RDM's. They were more likely to press the RDM's for as much help and guidance as possible if they were really committed to solving farmers' problems. This was and might not have been appreciated by the RDM's because of the latter's own knowledge, skills and attitudinal deficiencies. In light of all of this, a set of criteria was in the process of compilation between the writer and the Internal Audit Department, to be finalised in mid-February 1992. These criteria would have been used to evaluate extension officers' performances on a national level. It must, however, be stressed that the line managers were accountable for setting standards for their subordinates within the framework of programmed extension and the extension policy (Coetzee, Head of Extension, Agricor, 1992).

Subsequent to this, a national overview of extension was commissioned by

Agricor (1992) and conducted by the Internal Audit Section in terms of the parameters laid down by the Head of Extension. The findings of the national overview of extension are outlined hereunder:

Extension officers do not know why agricultural development is important. Extension officers do not know how their actions fit into the total picture and what decisions can be taken within the framework. Officers do not know their role. Investigations are not effective or efficient. Resources are not available to complete investigations and programmes. Responsibility for completing an investigation cannot be traced. Not all areas to be covered are considered. Perceived needs are not addressed. No statistical information to calculate standards exists. Standards are not determined. No survey information is available for interpretation. Perceived problems are not identified. Perceived causes are not identified. Not all problem areas are covered. No factual information is available. Real problems and causes are not identified, prioritised and listed. There are no set objectives or goals. No set standards or expected results are laid down to measure performance. No breakdown of actual activities exists. There is no set plan of action that indicates specific responsibilities and tasks. Resources needed to execute the programme are not available. Actions do not correspond to planning. Deviations are not identified early. There is no proof of progress - no monitoring tools. Corrective actions are not taken. There are no set plans/strategies for evaluation. There is no evaluation. Data is not processed and analysed. Deviations are not prioritized. Progress is not measured. No decision on corrective action is taken. No set times are set for attending to individual problems. Individual problems are not attended to. Farmers are not making use of services. Requests are not recorded. There is no follow-up. Actions are not agreed upon. Actions are ineffective. Agricor's response is poor. There is no co-ordinated effort. Communication with customers is poor. There is interference by politicians and top management, and misappropriation of funds and lack of financial accountability. This National Overview of Extension by Audit Evaluation used the following parameters to

determine effectiveness; objectives; critical function; risk of non-performance; critical performance indicator; and specific control objective (National Overview of Extension by Audit/Evaluation, Internal Audit Section, Agricor June, 1992).

The diagnosis was categoric and in total agreement with the view that extension and agricultural development was a complete failure in the Bophuthatswana context. It also shows that the upper echelons of power did not understand the field dynamic of agriculture and extension, and serves as an indictment to the very economic inputs and the moral question of the legitimacy of the regime. It further demonstrates that government was not in touch with the stark realities at grass roots level, that no audit had been undertaken over the past four years, that the process of accountability and the rule of law had been negated and that the population had not been served in terms of the empowerment of the poor, and that economic justice had not been served.

The conclusion is therefore categoric in that, although Agricor opted for the Programmed Approach to extension, it had failed to implement the model on a sustained and meaningful manner and, above all, in terms of the many divergent activities essential to effective agricultural development programming. Burger and Duvel, (1992:32-34), the architects of the adoption of the Programmed Approach in Bophuthatswana, stated that "the fundamental reasons for these shortcomings appear to lie in the fact that existing models are either consciously too subtly all-inclusive or, by default, neglect to point out steps which appear to be important enough to warrant prominent recognition in any programming cycle. In addition, the effect of existing models is to convey the erroneous impression that each of the greater or lesser number of steps involved in the cycle of activities are approximately equal in importance, scope and complexity." This study has more than adequately captured the above scenario as outlined by Burger and Duvel (1992). This reality was not understood by the extension agencies of Bophuthatswana and, particularly, Agricor. Burger and Duvel (1992:32-34), in outlining their proposed model of Programmed Agricultural

Development, state as follows: "The primacy cycle in the model consists of five equal segments representing the five suggested basic phases involved in any problem-solving situation. In effect, the five phases represent a synthesis of the steps in existing models. These phases are: consideration, investigation, preparation, execution and evaluation."

It is obvious that the Programmed model of extension was implemented by Agricor amidst confusion, without understanding the subtle nuances of the model, without due process and accountability. The implementation process was hampered by esoteric arguments without rational efforts to pursue an argument to its logical conclusion and, therefore, without the basis of rational and acceptable debate and rational effort. Agricor attempted an extension programme on a theoretical basis and perspective and without the necessary controls, which was further exacerbated by attempting to achieve and handle too much at one time and with unschooled agricultural policy-makers and participants. This resulted in a breakdown of controlling, and effectively managing/monitoring the 'huge monster' that it had created. This also led to the serious lack of intellectual application, which led to a 'looting mentality'. amidst the political and fiscal crisis of the state and which permeated to all levels of staff and throughout the organisation as a whole.

5.2.13 Policy Implementation in Other Homelands

Following from the above discussion and in terms of the empirical data and evidence provided in this chapter, it becomes necessary to provide some conclusions in order to place the parameters discussed into perspective. In so doing issues in respect of the experiences of the homelands of Transkei and Kwa Zulu Natal, in respect to service centres will be briefly discussed as it relates to policy implementation. This is also necessitated by the viewpoint that the discussion must be enriched from a standpoint of improvement of any system that negates laid-down criteria and contributes to the process of mal-

development and ushers in even greater misery and hardship to the very people it claims to serve. According to Bembridge (1991:28-29), Extension as an education instrument has bright prospects as regards bringing about the much needed changes in attitude among small-scale farmers. For the extension system to carry out these educational functions effectively, Bembridge states that the following must exist: A strong commitment and financial support from government for research and extension. A cadre of well-trained, dedicated staff committed to helping rural farmers attain a higher quality of life. They should be adequately qualified and sufficient in number. Subject-matter specialists must be provided to back- up the extension service. Continual production-oriented research which should present improved practices considered dependable and predictable by the farmers. The improved practices must be economically viable, culturally compatible and technically feasible. Necessary inputs such as fertilizers, pesticides, improved seeds, cultivation implements, livestock remedies and stock feed; credit and marketing facilities together with any other recommendations must be available to the farmers at the right time and at a reasonable cost. Adequate back-up support of the extension service will enable it to provide the necessary extension education programmes to the farmers through village-level extension workers. The extension workers must be mobile and given adequate audit- and visual aid facilities as well as up-to-date reference information to enable them to give their best to the farmers.

Ongoing and effective in-service training and extension information systems are vital to develop extension workers to stem the tide of uneven development. Extension systems in developing countries tend to be bureaucratic. This means, control and direction from the top to the bottom, with the professional extension worker at the operational level carrying out designated activities. Extension systems in developing countries often exist apart from research or teaching institutions; they are firmly entrenched. Professional activities, training, motivation and support funds for extension workers are limited. Extension systems in developing countries have few means for managing middle- and

upper-level staff members. The systems are subject to intensive political control, and staff transfers tend to be the general solution to staff problems. Conversely, rewards for effective field service are unlikely. Extension workers in developing countries are expected to perform a wide range of activities, which include both regulatory (enforcement of government rules) and education functions.

All of the above characteristics were pertinent to the former Bophuthatswana and go beyond what Bembridge (1991) identifies. This chapter has attempted to identify the problems of extension as observed and experienced over time in the context of Bophuthatswana. A fresh approach and a revitalised extension and agricultural approaches were required. However, this required political will and, as a starting point, those who had become entrenched and protected due to political patronage, needed to be weeded out. Without this commitment and a change in the fundamental philosophy and attitude, no improvement to agriculture and extension was possible.

5.3 RESPONSIBILITIES FOR INPUTS, SUPPLIES AND CREDIT

One of the main reasons that allows the Israeli agricultural extension service to carry out "agricultural extension only" is that outside the communities, at national, regional and local levels, there are enough private, co-operative and state organisations which are well-organised and supplied with the necessary inputs for agricultural production. Therefore, Israeli extension agents do not have to carry out input supply tasks in addition to their agro-technical advice and can concentrate on agricultural extension only.

Following the basic relationships between the kibbutzim and moshavim - only those beneficiaries in the decision-making and the evaluation processes 'using' a group of contact farmers in the implementation phase, that are not even representative of the majority of farmers are allowed to participate. In contrast, one characteristic of the Israeli process of decisions in rural development and of

extension activities per se is the high degree of participation of the intended beneficiaries in the process of the making, implementation and evaluation of their own development and extension-related activities. Each kibbutz is a separate economic enterprise and social entity which could not be moulded according to a central plan, as conventional 'blueprint projects' in the former Bophuthatswana often did. Central direction therefore became inefficient and, most importantly, was incompatible with the spirit of voluntary pioneering.

5.3.1 Some Examples from Bophuthatswana

In terms of elaborating further, Bosman, Perkins, Rankin and Schmidt (1991:iii) outline and identify three types of service centres in the Bophuthatswana context:

Type 1: These service centres primarily offer extension, animal health, support to cottage industries and community development advice. Emphasis in these is on providing services to the communities in the surrounding villages, rather than at these service centres. Districts falling into this category were Mankwe/Bafokeng, Molopo and Taung.

Type 2: All the services offered at Type 1 service centres were offered at Type 2 service centres. However, there was a slight shift in emphasis towards the service centre as a community focal point. In particular, demonstrations are held at the service centres themselves and service centre facilities are often made available to community members for various purposes, for example community days, film shows, and so on. Moretele and Odi districts had Type 2 service centres.

Type 3: This group of service centres offers all of the services provided by Type 2 service centres but, in addition, also sell agricultural and sometimes other inputs from their service centres. Districts that fell into this category were Thaba Nchu, Kudumane, Ganyesa,

Lehurutshe and Madikwe.

Bosman et al (1991:iv) conclude from their review of the overall definition of service provision that the diverse range of applications of the service centre concept might be interpreted as success, but that this 'success' is by default and not by design. In itself, the outcome of this diversity will not be harmful, but it does speak of a dangerous approach to the complex issue of rural development in former Bophuthatswana. They believed that any development initiative had to be informed by a considered analysis of the opportunities and threats facing the outreach. Sadly, no such analysis was done for the service centre strategy.

Some interesting problematic issues emerged from their study. The first issue that surfaced as a problem related to the provision of animal health care in the districts. A clear signal was received from staff that this was a serious and major area of threat. In particular it was found that the resources needed were not available to provide adequate staff to service the client population, that animal health officers felt marginalised and that there were statutory constraints which inhibited the services that could legitimately be provided to the client. Considering the significance of livestock to the rural community, this was indeed an area of strategic threat. These shortcomings have been alluded to by means of observation and the fact that the veterinary service lost control of its field staff at grass roots level, was too centralised, not development-oriented, had a wide range of staff with no allegiance, lacked sustained leadership and did not fit into the frame of reference that Agricor had chartered. It also pointed out that the perennial issue of tension between community development officers and extension agents was a major problem. This affected the quality of service provided to the clients. It was also found in an evaluation of the spatial distribution of the service centres across Bophuthatswana in terms of service centre strategy, that not one of the districts used specific guidelines, not even a detailed demographic or community needs analysis when determining the location of their service centres. The usage of the service centres indicated that

there was a significant difference between the three agricultural groups. Only 48 percent of the subsistence farmers had used Agricor's services as compared with 86 percent and 94 percent of the small- and large-scale farming groups. These results were probably representative of the whole of the erstwhile Bophuthatswana and are consistent with the findings of the study as a whole and with particular reference to the findings that will be discussed in chapter seven.

5.3.2 Agricultural Extension in the Context of Service Centres.

Bosman et al (1991:28-30) also point out that agricultural extension was the one service most consistently rendered by all service centres. The nature of the services offered in each district was also relatively similar. In essence, extension officers concentrated on the provision of general advice and technical knowledge. Few of the groups interviewed specifically mentioned the changing of farmer attitudes as a major part of their work. In some cases, extension officers were assisted by rangers who helped with the dissemination of information on improved livestock-keeping practices. In most districts, the authors found that the animal health officers provided general advice on animal health. They also provided medicines to stock owners. In the case of the regulatory programme, these remedies were provided free of charge as part of the vaccination and dipping programme. In some districts, small quantities were kept and sold at service centres even if nothing else was sold. In others, the officers bought recommended remedies on behalf of the stock owners when they went into town. Community members sometimes brought their sick animals to the service centres. The animals were then treated and the owner was charged a nominal fee, if applicable. At least one service centre per district had an animal health clinic, which either had a resident veterinary specialist or one who visited the clinic on specified days. This finding is not wholly true on the basis of the researcher's experience as a veterinarian within the Directorate of Veterinary Services, in that the veterinarian was not a specialist in the true sense, but a general veterinarian bogged down with paper-work, looking after state scheduled

diseases, providing a "fire fighting service". He did not have adequately trained staff and had to rely on the laboratory capabilities of the RSA. There was no back-up in the form of a second veterinarian, so he was unable to cope with the work, unable to train his animal health officers and totally divorced from the implementation of a sustained and guided veterinary extension service. This was coupled with a total lack of policy guidelines and administrative direction from the Directorate of Veterinary Services. (Reference has been made to these problems in previous discussions).

The study also pointed out that this area (veterinary) proved to be fraught with problems. Among the problems identified by staff were the following: A lack of equipment with which to do their work, and restrictive legislation on the nature of the assistance that they could give to stock owners. Bosman et al (1991) further pointed out that "these problems were real, and the problem of the quality of animal health care emerged as a significant issue in the community survey."

5.3.2.1 Community Development.

In this regard, community development staff provided rural people with general advice on various aspects of village life. In general, the community development staff saw their work as that of motivating rural people to help themselves. Various village projects were also facilitated by them. This included adult literacy classes and the formation of self-help groups. All districts did not concentrate on exactly the same issues. Bosman et al (1991) found that there were a number of problems that emerged in the group interviews worthy of note. These are as follows: In some districts the community development staff felt that they were not treated as equals of the extension officers. They felt that they had less status, were paid less and were not considered for promotion. Some districts did not have sufficient community development staff. Thus, this service was only available at some service centres and not throughout the districts.

5.3.2.2 The Sale of Inputs and Credit

According to the study, the service centres classified as Type 3 sold various products during the previous years. These selling activities were not restricted to agricultural-related inputs. The Bophuthatswana Federated Chamber of Commerce (BOFCOC) "launched an official protest against this in July 1990 on the grounds that they felt that Agricor, as a parastatal, was becoming involved in 'general dealership' activities and selling goods 'below cost' and of 'competing unfairly' with general dealers". It was ascertained that Agricor's role in this regard was temporary. Further investigation revealed that this was not the case. The problems experienced were as follows: The staff of most of these service centres were concerned about security, as money was only kept in a money box and not in a safe. Staff members were suspicious about the fact that goods were not sold at cost price. They felt that this was wrong because Agricor was considered to be a non-profit making organisation. Sales activities had to be suspended because of problems of theft and administration. Experiments with sales on credit sometimes had to be stopped as a result of slow debt payment. In all of the districts where no agricultural inputs were sold, all of the service staff felt that they should have also been allowed to engage in these activities, and some of the reasons advanced for this were as follows: Cooperatives only served the interests of commercial farmers and not the small-scale producers. Most retailers did not stock items that small farmers needed for their farming activities. It was very difficult to make recommendations about the inputs that farmers should use if they did not have easy access to these inputs. Some extension officers felt that the availability of inputs at service centres would strengthen their message and accelerate the development of agriculture. Transport to neighbouring towns in the RSA was scarce and expensive. This increased the costs of inputs and invariably put them beyond the reach of small farmers.

5.3.2.3 Loans

The survey showed that not all districts gave loans to small-scale farmers/entrepreneurs. In some cases only grants were given. Where loans were available, greater emphasis was placed on loans to cottage industries than to small-scale producers. Most districts followed the same general procedure for loan applications. Prospective clients applied for loans at their local service centre. The service centre staff then added a recommendation to the request and sent it to the district office for approval. Loans were seldom given in the form of cash. In most cases, the group or individuals who applied received specific goods. The small industry co-ordinators from the district office usually followed up on repayments and any problems experienced by the small industrialists. However, it did happen that the service centre staff were used to follow up repayment problems. The problems encountered were as follows:

- Some felt that the procedure of processing requests at the district office was time consuming. They preferred to handle the whole process themselves. It was highlighted by some that rural development officers should, as far as possible, not be involved in the collection of money for loan repayments. This could have compromised the status of the rural development officers as their role would then have included being 'policemen' as well as motivators and educators. A general marketing problem was raised in some districts. This appeared to affect the viability of the small businesses and the ability of the clients to repay loans.

It is clear that the service centre concept was being applied differently in each district within Bophuthatswana, and any measure of success that it enjoyed was clearly by default, and not by design. Similarly, Bosman et al (1991:24), state that there was a clear and complete absence of any documentary evidence to the contrary, that the development of service centres by Agricor was not based on an intimate knowledge of the client community of Bophuthatswana and was

also not based on any overt plan informed by specific policy; nor was it based on any intimate knowledge in terms of the role of agriculture and the existence of a sizeable agricultural economic base. In this regard, it is stated, that observation points to the serious need for a re-evaluation of the service centre approach. The entire conceptual base for the strategy had to be reassessed to confirm its centrality to rural development. By the same token, it was further stated by the authors that the development of service centres by Agricor was also not predicated on any pre-determined analysis of the regional disjunctures that characterised the Bophuthatswana space economy. It seems that no attempt was made to establish objectively and unambiguously whether there was a justifiable agricultural economic base for the development of a hierarchy, or network, of service centres in Bophuthatswana. Within the agricultural context, it is also unclear how it was hoped that the service centres would impact on patterns of agricultural economic growth. Neither is it clear whether it was that service centres could, in fact, promote the structural socio- economic change on which the development process relied. In terms of guidance and training, the groups interviewed by Bosman et al (1991) reported that they had received no specific training to the operation of service centres. Neither had they been given any documentation relating to the purposes and functioning of service centres. In most cases, the District Manager or Rural Development Manager explained the concept to them. This study also captured the fact that staff had 30 percent of their time taken up by non-productive issues and, therefore, could never be 70 percent effective overall.

Given this data that emerged on the evaluation of service centres in the former Bophuthatswana, it is clear that Agricor had embarked upon a rather vast and too broad development dynamic in its attempt at empire-building, given the constraints in the homeland. Instead, it should have defined its goals of development within the framework of production parameters, in order to build the development momentum it was charged with by legislation and, in so doing, building upon the tried and tested extension programmes that have been used in

other parts of the world. In this regard Bosman et al (1991:58), supported the view that it might be argued that our brief remained too broad and that we were consequently unlikely to be more efficient because our activities occured across too broad a front and that this was further complicated by the fact that Agricor did not have or possess detailed socio-economic information on the nature of the rural community.

In reviewing the concept of service centres and its related problems as was applied by Agricor in Bophuthatswana, it should be pointed out that indeed the concept had been applied in different parts of the African continent, using the theory of service centres, underpinning the concept, but it was not possible to draw upon them on the basis that such theory falls outside the scope of this study. It had been used in a regional and sub-Saharan context by countries such as Kenya, Tanzania, Zimbabwe, Malawi, and, nearer to us, in the former homelands of Kwa Zulu and Transkei. It has been stated by Fox et al (1991:19), that "there are widely differing uses of the notion of rural service centres in the African experience, with points of departure and the need to rectify spatial imbalances". Bosman et al, (1991:210), point out that "there was a lack of a distinct policy and an ambiguous documentary chronology of the history of the service centre concept within Agricor". The concept of service centres, in the context of the Transkei and Kwa Zulu, will be engaged in greater detail. This will be undertaken on the basis that the concept was implemented and tried in these areas with very limited success long before Bophuthatswana embarked on its implementation. It will be shown that not much was learnt by the policy-makers in Bophuthatswana from the concept's failure in these other areas.

5.3.2.4 Service Centre Experience in the Transkei

In this regard, Bosman et al (1991) state that a similar development strategy was formulated for the Transkei. They quote Hawkin's Associates (1980), who identified service centre development within an integrated rural development

context as an appropriate approach to rural development in the Transkei. As such, the service centre was seen as an important base for the development of co-ordinated facilities and the provision of a comprehensive range of services. In this case, the role of the service centres was framed as that of the lower order settlements in the national settlement hierarchy. This strategy was formulated by making a critical assessment of the context within which development had to occur in Southern Africa. Specific acknowledgement was made of the fact that population movement was inevitable, given the drastic shortage of land. In effect, this strategy had as an important point of departure the fact that the rural population in the Transkei was by no means entirely agriculturally inclined.

Another crucial factor that underlined the service centre development policy and strategy in the Transkei, was the need to give consideration to the existing urban hierarchy. The widespread location of existing service centres and the resultant service deficiencies in most areas, in particular, suggested the need for positive action to redress the existing imbalances. Quoting Fox et al (1991), Bosman et al (1991:18), charge that since Transkei's core-periphery pattern (of development) is the result of apartheid-inspired development of three growth points along the main transport axis, rather than through the colonial division of space,it would be incorrect to view Transkei's service centre policy in terms of only Transkei's settlement or service centre hierarchy. Instead, the implication is that the development of a service centre policy in the Transkei requires a consideration of the wider South African space economy and its service centre hierarchy.

Unfortunately, the available literature does not indicate whether the strategy proposed by Hawkin's Associates was viable or appropriate. (The implications of this strategy have been influenced by the political instability in the Transkei and it is, therefore, not possible to draw any final conclusions). At a micro-economic level and in his critique of such central place prescriptions, Fox et al (1991:124-125), reject the idea, according to Bosman et al, that as such they can

be employed successfully in the Transkei and in this regard states that the role of the rural areas of the Transkei in the wider South African space economy (as reserves of cheap labour), militates against successful agricultural and socio-economic development, unless there is a concomitant structural change, which, in effect, re-defines the roles of these areas. More specifically, Fox et al (1991) according to Bosman et al, claim that "until there are structural changes throughout the South African polity, there can be little significant commercial agriculture in Transkei and thus no economic base for a service centre hierarchy". One needs to make similar deductions regarding development strategies that were attempted piece-meal in Bophuthatswana, without taking into account the realities of the legacy of its past history.

5.3.2.5 Service Centre Experiences in Kwa Zulu Natal

Bosman et al (1991:19-20), state that the promotion of service centres was not a definite feature of government policy in Kwa Zulu Natal . However, there were indications that the promotion of service centres was being considered. The Kwa Zulu Department of Works commissioned a pilot study in 1986, which was designed to consider proposals for the development of a service centre at Mbazwana in Maputuland. Prompted by rapidly increasing activity and settlement at Mbazwana, an opportunity was perceived whereby the formalisation of growth and development at Mbazwana could stem the leakage of people and resources from the area. Interestingly, settlement was found to be a function of availability of basic service and facilities relative to the hinterland served by Mbazwana. A proposal was made consequently to promote the development of Mbazwana as a service centre town/settlement, in order to stimulate the development of the relatively service-deficient hinterland served by Mbazwana.

As is the case with some other examples as observed by Bosman et al (1991:19), who cite that the development of a service centre/lower order

settlement takes the form of a settlement and not a building. In this instance, it was argued that the existence of a fairly comprehensive, yet rudimentary, range of goods and service would only be enhanced by the co-ordinated development of the settlement into a more integrated service centre. The consultants appointed for this project subsequently made proposals for a development strategy that dealt with the following issues: the economic potential of the area; spatial planning; growth potentials; a structural land use plan; criteria to guide the physical development of the area; and administration requirements for development.

In essence, Bosman et al (1991:20) stated that the proposals pointed to the need for the service centre to assume the character of a focal point at which a comprehensive range of essential services can be obtained by people living and working in the vicinity. Moreover, they alluded to the need for co-ordinated organisational and institutional development, as pre-requisites for the successful development of the service centre. It is interesting to note that in this regard a form of local bridging administration, democratic in structure and operating under a formal constitution, was suggested. In concluding the discussion on service centres as a concept of development, it is noteworthy to quote Bosman et al (1991:20), who state that "decentralised development initiatives like a service centre strategy requires an excellent managerial team. The adoption of the idea does not guarantee success. Rather, a group of committed and competent managers are needed to invigorate the strategy". Broadly, the service centre concept at Agricor was neither based on any particular theory of development, nor on a model of agricultural social development, in terms of any modification from learned past experiences.

Similarly, it was not something that had been conceived of or conceptualised specifically to form a 'service centre policy'. Indeed, no such policy existed within Agricor to guide and regulate the application of the service centre strategy, which led to the inherent limitations of the strategy embarked upon in terms of

sustained development and meaningful extension. In other words, there had been a lack of adequate empirical evidence in the Bophuthatswana agricultural sector to deploy and engage the service centre strategy as a policy imperative. This was further exacerbated by the fact that demographic characteristics and other factors that would have impinged upon the strategy either positively or negatively, were not determined via empirical data from the various districts before implementation of the strategy.

5.3.2.6 Uneven Development: Molopo and Ditsobotla Districts

In continuing the discussion in respect of the basic premise of the study and, with particular reference to the processes of uneven agricultural development in the context of the erstwhile Bophuthatswana, further empirical evidence needs to be provided to strengthen the arguments advanced thus far. In this regard, some demographic features of the above mentioned two districts together with a comparison of some national figures will be explored and outlined. This is undertaken on the basis that these districts vary considerably from each other in terms of their characteristics, topography, population and so on. Therefore, certain strategies, including extension, training and general development, ought to have been considered by the former regime, solely on the basis and understanding that certain strategies could not have been implemented across the entire region, as was the case. It also has to be pointed out, that it was also not possible to capture these characteristics for all of the former districts, because it generally falls outside the scope of this study. It is, however, felt that such discussion, statistics, figures and data will provide some basis for a greater understanding of the problems raised in this dissertation and will, in some way, contribute to refining future agricultural policy and discourse in this region as a whole.

5.3.2.7 Population

The population of the Molopo and Ditsobotla districts according to the projected data based on the 1985 census is given in Table 5.2. The de facto population was 156,300 and 151,678 respectively. (Updated data was not available.)

Table 5.2
Socio-Economic Development Differentials for the Molopo and Ditsobotla Districts 1991.

ITEM	DITSOBOTLA	MOLOPO
De facto population	151,678	156,301
Population density km²	34	36
Area km²	2,533	2,476
Urban population density	17.2%	22.9%
Rural population density	82.8%	77.1%
Number of households	24,770	28,893
Average household size	4.12	5.41
Average household income	4,739	8,082
Total income (R million)	117	233 5
Unemployment rate	51.0%	54.3%
Estimated literacy rate	28 5%	36 74%
Teacher/pupil ratio	1/36	1/32

(Source: Department of Economic Affairs, 1992)

Out of the population, 77,1 per cent were estimated to reside in the rural areas of the Molopo District. The percentage is a little higher for Ditsobotla where 82, 8 per cent of the population was rurally based. In comparison to the general population density of 27, 5 per km^2 in South Africa, this was much higher in the districts of Ditsobotla and Molopo with 34 and 36 per km² respectively (Cuthbert, 1991, quoting DBSA). The population growth had been estimated at 2, 7 per cent for Ditsobotla and 3, 05 per cent for Molopo, according to the 1970 to 1985 population census. The higher population growth rate of Molopo District was due to the Mmabatho/Mafikeng commercial centres, which attracted the surplus rural population that had been rejected by the narrow agricultural base with prospects

of work (Cuthbert, 1993:16).

5.3.2.8 Employment

The percentage employed stood at 43 per cent of the total population. By the year 1985 the labour participation rate had dropped to 74 per cent with the unemployment population being 56,5 percent and those gainfully employed at 45,3 per cent. The figure for migrants by 1990 was 56 per cent for Ditsobotla and 23, 8 percent for the Molopo District as shown in Table 5.3. From 1985 to 1988, unemployment was between 51-53 per cent of the total population. This had been, partially, the sequel to drought. The share of agriculture to GDP decreased from 8,4 per cent in 1970 to 4,1 per cent in 1988 to approximately 2,8 per cent in 1989 and could further decline" (DBSA, 1989; Karodia; 1992, Cuthbert; 1993).

The projected labour force by the year 2000 will have been 990,000 with a labour participation rate of 54 per cent. Implied in this rate is very high unemployment. It must be noted that the capacity of the formal sector of the economy to absorb new entrants had fallen dangerously and rapidly. High population growth rates and economic stagnation were not the only factors involved. Another disturbing factor, as was reported by the DBSA (1989), was the increasing tendency to utilise more capital-intensive production methods. This is reflected in the trend of employment per R1 million. The number had fallen from 80 to 66 persons over the past twenty years. This trend was especially evident in the agricultural sector, where the required number of workers declined from 249 in 1970 to a meagre 97 in 1989 (a 61% decrease) (DBSA, 1989; Mandab, 1992). It was therefore important to solicit the involvement and participation of the private sector, local governments and communities in the process of identification and financing of prospective employment avenues, especially in the rural areas, in order to avert a desperate future socio-economic scenario of devastating magnitude. It is also vitally

important to look into employment-generating avenues for women who would join the labour market at unprecedented levels. Employment status percentage is shown hereunder in Table 5.3.

Table 5.3

Employment Status Percentage

CATEGORY	DITSOBOTLA %	MOLOPO %
Employed	43	43
Unemployed - not looking for work	51	51
Unemployed - looking for work	6	4
Active migrants	56	28

(Source: Department of Economic Affairs, 1991)

5.3.2.9 Income

The average annual household income in 1989 was R8,082.62 for Molopo and R4,739.81 for the Ditsobotla Districts as indicated in Table 5.4. Income per capita per annum was R1,494 and R774 for Molopo and Ditsobotla Districts respectively during the same period, showing that Ditsobotla was more rural and its citizens poorer. While 91,6 per cent of the income was earned inside the Molopo districts, only 58 percent of the income was earned in Ditsobotla. This shows that more people in Ditsobotla worked outside the district as commuters and, of that, 69 percent worked in Lichtenburg (Cuthbert, 1993), as shown in Table 5.4.

The total income of private households in the Molopo district in 1988 was R233, 5 million whilst that of Ditsobotla was R117,4 million. Salaries and wages accounted for more than 70 percent of the earnings of the inhabitants of Molopo, whilst that of Ditsobotla was reported as 39,2 per cent. Table 5.4 shows that 23 percent of the wage earners in Molopo had monthly incomes of more than

R1,000 as compared to only 7 percent in the Ditsobotla district (note that both these districts showed earnings to be lower than the minimum wage levels). The estimated number of households in the Molopo district in 1988 was 28,893 and that of Ditsobotla 24,770. Among the rural poor, the illiteracy rate exceeded 75 per cent. Over 30 per cent of the children between the ages of 6 and 18 did not attend school. Fifty percent of the households were without adult male members.

Table 5.4
Distribution of Household Income Percentage

MONTHLY INCOME R	DITSOBOTLA	MOLOPO
0 - 25	18	18
26 - 50	3	5
51 - 100	13	9
101 - 200	18	7
201 - 300	9	9
301 - 400	10	7
401 - 500	7	6
501 - 750	11	9
751 - 1,000	5	7
1,000 +	7	23

(Source: Tire, Bophuthatswana Rural Database, First Edition, Development Research, Agricor, August 1991)

5.3.2.10 Socio-Economic Situation

The macro-economic scenario for the whole of the former Bophuthatswana gives an indication of what really was going on within its agricultural sector. The Gross Domestic Product (GDP) of Bophuthatswana in 1989, according to the DBSA, was R 4,420 million at then current prices. The main sectors which contributed to the GDP were mining and quarrying (43,3%), community, social and personal service (16,1%), manufacturing (12,6%), agriculture, hunting, forestry and fishing fell from 7,4% in 1970 to 4,1% in 1989 and was declining further very rapidly. The GDP per capita for the same year was R2, 301. Agriculture accounted for

8,6 per cent of the employment opportunities in the country. The declining contribution of agriculture to the GDP of the homeland was a cause for serious concern.

This status was the result of a number of factors including corruption, nepotism, unqualified management and generally unqualified personnel; environmental, drought, the inability of farmers to adjust to these conditions, as well as an inadequate infrastructure. Other factors included a lack of effective extension services; input price increase, ineffective policies, lack of planning, and the absence of accountability. The overwhelming importance of the mining sector was worrying in the long term. A more balanced growth path was important to reduce the dependency on a single and diminishing factor. The manufacturing sector played a very insignificant role in the economy of Bophuthatswana. There is, no doubt, that there had to be a close relation between industrial development and employment creation. "The shortage of capital, the lack of entrepreneurial skills and other inter-related factors were all contributory factors" (Botha, 1988).

Table 5.5 is a depiction of the commercial crop production for 1990-1991 for all districts within Bophuthatswana and captures the production of various crops for Molopo and Ditsobotla. It is obvious that crop production had underperformed in respect of total tonnage indicated by yield per hectare for the different crops planted throughout the country during this period.

Table 5.5
Commercial Crop Production 1990 - 1991

	MAIZE		SUNFLOWER		GROUNDNUTS		GRAIN SORGHUM		WHEAT	
DISTRICT	ha	tons	ha	tons	ha	tons	ha	tons	ha	tons
Molopo	15,635	17,200	3,728	1,500	2,414	1,200	121	50	-	-
Ditsobotla	35,511	74,510	2,905	1,420	-	-	-	860*	-	250*
Lehurutshe	695	1,000	1,120	900	-	-	1,072	-	50	-
Madikwe	290	175	2,520	1,650	-	-	500	-	-	-
Mankwe	214	-	3,400	1,700	-	-	500	-	-	-
Moretele	1,423	195	1,270	1,020	-	-	-	-	-	-
Odi	390	2,800	2,039	1,150	-	-	-	-	425	-

Kudumane	230	200	¨	¨	500	200	-	-	12	-
Ganyesa	3,000	240	-	-	2,400	1,450	-	-	-	-
Taung	180	800	650	2,080	820	2,625	-	-	1,945	9,530
Thaba 'Nchu	75	-	878	450	-	-	-	-	888	1,065
TOTAL	57,643	97,120	18,510	11,870	6,134	5,475	2,193	910	3,320	10,845

(Source: Annual Report Department of Agriculture and Natural Resources, 1990/91)

¨ Less than 100 ha
* Researcher's Note: Table contains inaccuracy

5.3.2.11 Illiteracy

Having outlined some of the demographic features of certain districts and the problems faced by agriculture, it is necessary to place into context the question of illiteracy in Bophuthatswana and to show that this vexing problem was a major issue in any development process. It is astounding that the protagonists of this so-called country constantly paraded their achievements in the educational arena as the best in Southern Africa, whereas the degree of illiteracy in Bophuthatswana was staggering. This impacted negatively and very significantly on the process of agricultural and general development within the region. In this regard, the speed at which change was taking place in the educational arena was unsatisfactory, while the system for the provision of education remained unchanged. "There can be no justification for providing education in rural areas on a basis different from that of urban areas" (Ardington, 1988: 128). The story with regard to literacy was much the same in most districts of Bophuthatswana and the homelands in general. Estimates are reflected as in Table 5.6:

Table 5.6

Illiteracy Rate in Some of South Africa's Homelands (1983)

Bophuthatswana	70 percent of adults
Venda	53 percent of population
Transkei	80 percent of population
Kwa Zulu	66 percent of adults

(Source: Wilson and Ramphele, 1989:40)

Illiteracy then was a major dimension of poverty all over the homelands,

including South Africa, particularly in the rural areas. Clearly there was a need in Bophuthatswana for massive ongoing literacy campaigns. "The extent of illiteracy and the role at which it was decreasing or increasing is a measure partly of past failures and inadequacies of the educational system" (Karodia, 1990:2).

Literacy campaigns were held by the Bophuthatswana Agricultural Development Corporation (Agricor) in certain regions - not from the viewpoint of a sustained and organised plan in terms of any form of policy-imperative or from the desire to empower the masses and particularly the rural inhabitants in an attempt to redress the imbalances of the apartheid system and ideology. Nor, for that matter, were these campaigns conducted to seriously address the manifest problems of poverty. They were undertaken in a haphazard manner and in an uncoordinated fashion to impress politicians and play to the public gallery, showing that the state was doing everything possible to address this mammoth problem and crisis. These uncoordinated literacy campaigns, which drew upon the expertise of other role players and departments within the government, did not achieve anything tangible. On the contrary, they only retarded progress in this direction. A great difficulty concerning agriculture and particularly farmers is the need for labour. "The services of children were regularly utilised at peak harvest periods. Children were also removed from school to work temporarily as shepherds and to assist with other agricultural duties" (Nasson, 1988:11). The real difficulty facing farm children was that they were growing up in an agricultural world where, due to mechanisation and the changing technology of production, the demand for unskilled labour was steadily shrinking, but at the same time they were not getting the education which would enable them to make a transition to urban jobs.

It is in this economic environment in which school-leavers, half of them not even properly literate, found themselves when they left school. This posed the most fundamental problem. "It was not surprising, therefore, that between 1970 and 1981 the level of unemployment in South Africa nearly doubled. It rose from

11,8 percent to 21,1 percent and the situation in the homelands was probably much higher. The estimates from 1985 to 1993 is that unemployment stood at nearly 45 percent or more" (Simkins, 1982: 1) The relatively high illiteracy and early dropout rates from the Bophuthatswana education system presented a continuing challenge to the oppressive and illegitimate state in its desire to have obtained its objectives.

5.3.2.12 Percentage Illiteracy in Some Southern African States

Expanding on the above, it is relevant to capture, very briefly, the position of illiteracy in some other Southern African countries during this period. Before this is undertaken, it must be pointed out that young women in South Africa were quite clearly not being made aware of career opportunities in agriculture. This phenomenon was more drastic in Bophuthatswana because of the demand for skilled manpower in the technical field, and because of remuneration levels in these spheres, compared with traditional 'women's' occupations. In terms of literacy levels of the female population, South Africa was unique in the Southern African context when compared with neighbouring countries, which show massive differences in literacy levels: This is shown in Table 5.7

TABLE 5.7

Illiteracy Rates in Some Southern African Countries

COUNTRY	MALE %	FEMALE %
South Africa*	58.6	28.0
Mozambique	54.9	78.7
Angola	44.4	41.5
Kenya	20.2	41.5
Zimbabwe	26.3	39.7

(Source: UNESCO, Yearbook, 1990)

* Excludes all former homelands and TBVC states

It was estimated that the female illiteracy rate in South Africa for all races, excluding the former TBVC states and self-governing territories, was 28 percent. If figures from these so-called states were included, then female and male illiteracy in South Africa might very well have been higher or comparable with the illiteracy rates of the other Southern African countries referred to above. One of the legacies of apartheid and its economic system was discrimination against women (particularly women of colour; it also affected White women, but to a lesser degree). Women had been marginalised and relegated to being victims of unemployment and low wage employment. The new democratic South African state, according to the Harare Document (1990), states that "it will strive to promote the rapid integration of women into economic activity, and will promote the removal of gender inequalities in employment". This has to be a policy-imperative. Failure to address this problem will further retard the growth of agriculture and will impact very seriously upon any programme of reconstruction and development.

5.3.2.13 The Problems of Illiteracy in Bophuthatswana

Political and economic factors make it unlikely that grandiose national literacy efforts will work, even in a democratic future. Instead, the need is to strive for a considerable improvement of quality in the services that are offered, such that literacy will be sought after, rather than worthily imposed. According to French (1989:6), "literacy can no longer be seen as in homogenous under-developed countries, as a simple skill to be transmitted to a whole society by means of a single-minded campaign. Instead, a complex of services must be offered, not catering only for contextual and individual needs. Any system must be sensitive about the limitations and exclusions which are inevitably practised when it engages in the promotion of literacy".

The Bophuthatswana Agricultural Development Corporation (Agricor) embarked

upon a grandiose national literacy campaign and, in doing so, treated literacy in the agricultural sector of small-scale farmers in a simplistic approach, in a single-minded campaign which it mounted in 1987. Mohapi (1989:12), a course developer within Agricor, was of the opinion that "if literacy was one of the tools of development, then Agricor as a change agent should have certainly taken literacy as a corporate objective". Since 1987, Agricor had been involved in discussions with literacy organisations to find a suitable literacy programme and strategy. The researcher, in 1991, was unable to find this programme and strategy in spite of exhaustive enquiries. "Since 1987, a total of 66 literacy tutors had been trained" (Mohapi, 1989:12). Those trained were drawn from communities, extension officers and community development officers, who received an average of eight weeks of training. The content of the training modules was also not available. Interviews and discussions with a host of extension officers across all districts revealed that the programme was of a very low level; it was not sustained and no measurement of success was made available. Similarly, managers were unable to provide data for analysis in terms of the number of people that made up the target group. Neither could they provide data on any measure of success or failure of the implemented programme. UNESCO, in particular, has played a significant role in the alleviation of illiteracy in the 'developing world'. Due to the political difficulties in South Africa, it was not possible to make use of this organization.

The solution of illiteracy in Bophuthatswana could have been counteracted only by firm and co-ordinated action by the government and not by volunteer church organisations, because these were an instrument of the oppressive regime (Mirjana, 1989:5). Observations show that Agricor embarked upon a very ambitious programme which fell outside its scope and policy-imperatives, and the vital parameter of sustainable rural development. Its involvement in literacy programmes was undertaken purely to appease politicians and maintain the status quo and was an instrument of the state in the process of oppression. "Statistics indicate that 36 percent to 43 percent of the population in

Bophuthatswana have had no schooling at all, and were definitely illiterate. Of the remainder, over half had four years or less of formal school education" (Mohapi, 1989:15).

This section of the population either lapsed into illiteracy or might well do so at some future date (Mirjana, 1989:5). Therefore, it can be confidently asserted that almost 75 per cent of the population was illiterate, and that the illiteracy situation in rural areas was even more complex, placing tremendous pressure on the rural development of especially small-scale and subsistence farmers. In surveys conducted by Mirjana (1989:5) in the districts of Lehurutshe, Ditsobotla and Molopo to determine literacy problems among both literacy teachers and learners, the following difficulties were encountered: The distance between the adult centres made adequate supervision by inspectors of adult education virtually impossible; the lack of electricity made it difficult to hold classes in the evenings; this led to afternoon classes which, by necessity, limited the number of adult illiterates who could attend; the classes were attended by large numbers of children whose parents could not afford the more expensive schooling offered at those same schools in the morning; there was a marked absence of male learners; the classes visited were conducted with no equipment of any kind, except a chalkboard, it was clear that the learners had no access to any kind of written material.

According to Mirjana (1989:5), the surveys revealed that "57 per cent were between ages 15 and 25 years; 70 per cent had never been to school; over 90 per cent of them wanted to attain literacy in order to fill in official forms; while 84 percent thought that literacy would help them improve their economic situation and 98 percent wanted to continue their education after they attained literacy". This is a reflection of the poor literacy programmes mounted by government and its institutions within the former Bophuthatswana. It is further an indictment of educational and rural development as well as a clear indication that, as long as literacy and numeracy are not attained in appreciable numbers, especially of the

predominantly rural inhabitants, small-scale farming and the emergence of small farmers as a cohesive force in the process of economic growth would be retarded. Their contribution to the process of food production and development will be a utopian ideal and all else will fail. "The similarity between these learners and those taking part in literacy programmes in other developing countries shows that research undertaken in the latter would have helped in formulating literacy decisions in South Africa and its former homelands" (Mohapi, 1989:16).

A similar pattern emerged in respect to literacy teachers - 39 percent had no literacy training of any kind, and 72 percent did not consider themselves to be sufficiently trained to teach literacy. Evaluators of the programme put forward a number of problems. The most serious problems identified were as follows: Inadequate education centres for literacy programmes; discrepancy in the availability of literacy instruction in various areas was a major problem, with little or no inputs, especially in the Moretele district; the lack of free literacy instruction; the programmers reached too few of the illiterate population; the methods of instructions were found to be deficient, in that they failed in the transference of skills learned to real-life situations; the lack of communication between learners and teachers; work was done exclusively by repetition (Mirjana (1989:6).

In this regard, it was suggested by Mirjana (1989) that the Laubach Method (operation upgrade) be replaced by the methods of Paulo Freiere (Latin America) and UNESCO. Mirjana (1989:5), following on her rather disturbing findings, made the following recommendations: A total commitment by the Government of Bophuthatswana to the eradication of illiteracy; sufficient funds to be set aside for this purpose; the formation of a separate government organisation for adult education; a new personnel structure, ensuring co-ordination and effective communication at all levels; a change of venues for literacy classes; the use of literacy teachers as supervisors; the training of lay people as instructors; a completely free basic literacy course to provide for the

needs of the poorest people of the homeland; the use of the media to help with the teaching of literacy and to stimulate public awareness of the problem.

Nearly five years after these recommendations were submitted to government, not a single one was employed nor was any attempt made to address this major problem in terms of significant shifts in government policy. It is obvious from the data presented that literacy programmes and the literacy drive faced serious problems of credibility in the Bophuthatswana development scenario and that, by implication, it failed to meet the desired expectations. It failed in terms of providing for the basic needs of the majority of the people. If this were to continue and if nothing significant were to be done about this appalling situation, nothing could have been achieved to steer agricultural and general development towards a path of sustained growth and progress or, in the final analysis, to the upliftment of the general welfare. People would continue to live in ignorance, which ultimately would lead to apathy, mistrust and chaos in civil society.

5.4 Conclusion

The comprehensive overview in this chapter attempted to look at various issues in relationship to policy reform. In this regard alternative policy approaches to the problem of growth, poverty, and inequality in Third World countries – the need is not for one or two isolated policies but for a "package" of complimentary and supportive policies. Developing countries that aim to reduce poverty and excessive inequalities in their distribution of income need to know how best to achieve their aim. In other words what kinds of economic and other policies might be adopted to reduce poverty and inequality while maintaining or even accelerating economic growth. It is hoped that this study in some way would allow policy makers in this region to formulate agricultural policies that could meaningfully address growth, poverty, inequality and uneven development. The chapter raised salient issues in respect to the policy framework of extension and the problems of training in general. A host of issues in respect of manpower

ratios and their negative effects upon agriculture as a whole and, with particular reference to veterinary services was explored. Budgetary constraints, constant shifts in extension models and the failure of the extension service was highlighted. In addition, the chapter outlined some experiences in other homelands in respect to service centre experiences as it related to inputs, supplies and credit. The process of uneven development in the Molopo and Ditsobotla districts was discussed in some detail. Finally, the important issue of illiteracy and its impact upon development was outlined and comprehensively discussed.

CHAPTER 6

STATISTICAL PARAMETERS AND ISSUES OF TRAINING AND EDUCATION

6.1 INTRODUCTION

Having delimited the problems of agriculture in the previous chapters, this chapter will attempt an evaluation of some agricultural statistics in the context of Bophuthatswana. The discussion focuses on the importance and problems of categories of land users in Bophuthatswana. This will allow for a subsequent analysis of the status of the agricultural sector. Tables will be presented in order to capture the agricultural distribution potential and government expenditure, together with a comparison of agricultural potential and expenditure by the agricultural sector. In addition, the strengths and weaknesses of agriculture will be very briefly highlighted. This will be followed by the importance of farmer-training needs and education in relationship to some strategies and approaches to extension.

After this has been presented, an attempt will be made to discuss, very briefly, a regional goal of agriculture, and the vision of the future in a period of transformation. This will be followed by a discussion of certain features of commercial agriculture and subsistence farming. The future operational focus of agriculture will be reviewed in terms of potential production capacity by sector, the future approach to agricultural development in the regional context, optimal physical production and, finally, the concept of people-centred development will be engaged.

6.2 CATEGORISATION OF LAND USERS

Turning to the population involved in agriculture, the actual size of the rural population was an area of uncertainty in Bophuthatswana. Depending on how

settlements were classified, this population varied considerably. Nonetheless, to give at least some indication the Quality of Life Statistics indicated that "the population in the rural areas of Bophuthatswana was estimated to be some 1,4 million people. This comprised about 80 percent of Bophuthatswana's population. Of this, about 460,000 could have been classified as peri-urban" (Bophuthatswana Agricultural Survey, 1988). "The population of the former homeland was growing at about 2,8 percent per annum. In the light of a trend towards greater urbanisation, it seemed likely that the rural population was growing at a slower rate of around 2,3 percent per annum" (Ministry of Population Development, 1992). Obviously, this population comprised different types of rural families who used land in different ways. The following socio-economic categories of household and of rural land users were suggested for the region. The categories of household and rural land users are listed hereunder as follows, and are subsequently discussed briefly.

- Rural dwellers
- Rural producers
- Farmers

6.2.1 Rural Dwellers

These were households who used land solely for residential purposes. They did not cultivate any land and did not have any stock. Within this group, two types of households were identified, viz. destitute and urbanizing households. Destitute households were likely to be households in dire poverty who might have had elderly members – single-parent households with a female head or households without a breadwinner. In other words, in these households the major barrier to agricultural production was absolute poverty. "This group was estimated to make up about 10 percent of the rural population" (Pienaar, Agricor, 1990:5). The second type of rural dwellers involved those households who were in the process of giving up their rural ties and was moving into the towns. These were

likely to be households where both the husband and wife were migrants in one of the larger cities in South Africa, and households in the denser settlements which were near the major urban areas. With these households the major barrier to agricultural production was a lack of interest in agriculture as an economic activity, due to the lack of incentives and support, via extension and monetary inputs to upgrade their subsistence level and economic agricultural development by government and its numerous agencies. "This group was estimated to make up 20 per cent of the rural population or about 63,000 households" (Pienaar, Agricor, 1990:6).

6.2.2 Rural Producers

The second major group in the rural areas of Bophuthatswana comprised of rural producers. These were households who relied upon the land to provide a minor part of their subsistence needs. They engaged in agricultural and/or pastoral activities which supplemented other economic activities. Again, two types could be identified in this category as sub-emerging and emerging farmers. Sub-emerging farmers were small producers who produced at no more than a subsistence level. They were likely to be households where the breadwinner was a migrant commuter, but in which some form of agricultural activity was maintained. These households were engaged in a variety of activities, that is to say, they were not specialising in any one economic activity other than wage labour. Farming was thus carried out by women and children. In these households the major barrier to agricultural production was the availability of labour and the lack of government support. "This group was estimated to make up 59 per cent of the rural population; some 185,000 households" (Pienaar, Agricor, 1990:8). The second type was those households which were beginning to make a breakthrough into farming. These were likely to be households with small herds of stock, both large or small and/or were cultivating small plots of land; households that were showing some signs of specialising in a form of agricultural activity; households in which the head of the household had not

migrated or no longer migrated, although remittance may have been received from a relative. In these households, the major barrier to agricultural production was the lack of sufficient agricultural resources and technical knowledge, poor extension services and a lack of government support and monetary inputs. "This group was estimated to make up 21 per cent of the rural population, or 25,000 families" (Pienaar, Agricor, 1990:10).

6.2.3 Farmers

Another group of households in the rural areas were classified as true farmers. These households were those which used land as an important means of generating income; where land usage complemented other economic activities and could have been a viable alternative. Once again two types could be identified – self-sufficient and commercial farmers including peri-urban settlements. These were households that were farming efficiently and produced only for their own consumption; they were likely to be smaller households, who were ageing, but had land or livestock. In these households, the major barrier to agricultural production was the lack of access to more specialised resources and labour. In this sense, this group could have been referred to as being in a relatively stable decline. "This group was estimated to make up no more than 1 percent of the rural population of about 3,000 families" (Pienaar, Agricor, 1990:12). The group which played the largest role in agricultural production within Bophuthatswana were the commercial farmers. These were households with larger plots of land and/or larger herds; households where the breadwinner was a full-time farmer involved in the marketing of produce and products. Included in this category were the majority of the landed farming class, who were given farms on principles of political patronage. The major barrier for the majority of these households in terms of agricultural production was the lack of capital, specialised knowledge and markets due to the fact that they entered the commercial sector with their own resources and without support from the state. In the case of the landed farming category, too much capital from the lending

agencies and support from government without the process of accountability, resulted in the sabotage of efforts of all other categories, who were engaged in or attempted to farm. "This group was estimated to make up 2,5 per cent of the rural population or about 7,800 families. A final group worth mentioning was the estimated 28,000 households in peri-urban settlements which were involved in some form of agricultural production, albeit on a very small scale" (Pienaar, Agricor, 1990:15-16).

6.3 STATUS OF THE AGRICULTURAL SECTOR

Next, the status of the Bophuthatswana agricultural sector will be reviewed, in terms of the provision of certain data and statistics vital to this study.

6.3.1 Land Tenure

The form of land tenure was obviously an important factor in agriculture. In Bophuthatswana, land was under the forms of ownership as shown in Table 6.1.

Table 6.1
Land Tenure

TYPE	HECTARE	PERCENTAGE
Tribal	447,286	11.2
Government*	347,690	8.7
Trust (RSA and Bophuthatswana)*	2,497,491	62.8
Private under Tribe	151,932	3.8
Private	120,569	3.0
South African Development Trust*	418,288	10.5

(Source: Directorate of Statistics, Department of Agriculture, 1991)

* These categories were utilised by the regime to strengthen the landlords, members of the Christian Democratic Party and the favoured élite in order to support the process of irredentism in collusion with the then South African government via the South African Development Trust and trust land controlled by the RSA and Bophuthatswana governments. 82 percent of land was controlled by government.

6.3.2 Land Usage

The actual land usage of the arable land is shown in Table 6.2:

Table 6.2
Land Usage

USAGE	HECTARE	PERCENTAGE
Forestry	1,007	0.03
Irrigation	4,225	0.11
Conservation	80,200	2.07
Arable	137,769	3.56
Grazing	3,644,005	94.23
TOTAL	**3,867,206**	**100.00**

(Source: Directorate of Statistics, Department of Agriculture, 1991)

6.3.3 Number of Livestock

The former homeland was primarily suited to livestock ranching and had some 53,000 livestock owners. The number of animals is shown in Table 6.3 for 1980 and 1990.

Table 6.3
Number of Livestock, 1980 and 1990

TYPE	1980	1990
Cattle	568,376	494,830
Sheep	184,798	314,793
Goats	448,241	525,628
Pigs	13,443	8,767
Horses	17,141	12,865
Donkeys	55,463	24,349

(Source: Directorate of Veterinary Services, Department of Agriculture, 1980-90)

However, in Bophuthatswana it was calculated that "overstocking was in the order of 130 per cent and ranged between 77 and 250 percent by district" (Ecological Task Group Report, Department of Agriculture, 1985). With respect to the usage of these animals, "some 15,000 cattle, 28,000 sheep and 7,000 pigs were slaughtered at abattoirs in the region during 1988 and 1989" (Annual

Report, Department of Agriculture, 1989/90).

6.3.4 Cultivation of Crops

Turning to the cultivation of crops, Table 6.4 shows the extent of cultivation for the 1989/1990 season.

Table 6.4
Cultivation of Crops, 1989 and 1990

CROP	HECTARE
Maize	49,396
Wheat	465
Grain Sorghum	1,475
Sunflower	10,840
Ground Nuts	1,105
Cotton	547
Drybeans	1,316
TOTAL	**65,144**

(Source: Annual Report, BADC [Agricor], 1988/89)

6.3.5 Extension and Other Agricultural Services

Development and other activities which came into being in 1988 are shown in Table 6.5.

Table 6.5
Physical Development and Other Activities

PHYSICAL DEVELOPMENT	NUMBER	COST (R 000)
Establishment of district offices	11	4,300
Erection of service centres	59	4,201
Dipping tanks built/repaired	259	322
Land settlement areas surveyed	110	16
Cattle Crushes erected/repaired	295	338
Pounds erected/repaired	1,745	1,501
Fencing maintenance (km)	886,356	11,094
RURAL DEVELOPMENT	**NUMBER**	**COST (R 000)**
Rural industries established	103	834
Food plots established	225	4,580
Literacy training courses	94	952

Community meetings	2,629	70,854
Courses presented	268	2,918
Nurseries established	3	51
Wood lots established	222	5,014
AGRICULTURAL EXTENSION	**NUMBER**	**COST (R 000)**
Farmers' days	75	5,341
Agricultural Production Training Courses	139	2,679
Animal Production Training Courses	156	2,619
Technical Services Training Works	560	14,375
Demonstration plots and trials initiated	80	0
Trials presently conducted	40	0
Supportive information booklets	13	0
Field training and evaluation rallies	2	48
VETERINARY SERVICES	**NUMBER OF UNITS**	**COST (R)**
Anthrax vaccinations	Not undertaken by Agricor, but by the Department of Agriculture, Veterinary Services	57,401
Pulpy kidney vaccinations		65,596
Brucella vaccinations		57,401
Small stock dipped		1,656,593

(Source: Directorate of Veterinary Services, Department of Agriculture, 1980-90; Directorate of Statistics, Department of Agriculture, 1991)

It can be observed from the data tabled above, that besides providing certain basic infrastructure, most of which was in any case in place under the old Department of Agriculture, some newer buildings were erected by the Agricultural Development Corporation (Agricor). It can also be seen that the extension thrust was minimal. The data presented under veterinary services was not a professional function of Agricor. Instead, it resorted under the Directorate of Veterinary Services, Department of Agriculture, and was undertaken by that directorate.

6.3.6 Income

Gross income derived from livestock and from agricultural crops was approximately equal to R74 and R77 million respectively for 1988. These figures seemed unchanged over the previous decade; in 1977 it was estimated to be R3,7 million from livestock and R3,8 million from crops. However, when the

costs of intermediate goods and services were considered and the change in herd size was allowed for yielding net income for 1988, the position changes to R75 million and R62 million respectively (Pienaar, 1990:24). Livestock production was thus the largest earner of income in net terms. The figures reflected above were highly questionable in terms of the figures for commercial and subsistence activities as reflected in Table 6.6.

Table 6.6

Income Estimates Accruing Directly to Farmers from both Commercial and Subsistence Agricultural Activities (1989)

Type	R' million
Subsistence Agriculture	26
Commercial Agriculture	72
TOTAL	**98**

(Source: Directorate of Statistics, Department of Agriculture, 1989/90)

6.3.7 Contribution to Gross Domestic Product (GDP)

Turning to the actual status of agricultural production in Bophuthatswana, the contribution of marketed and non-marketed agricultural output to the homeland's GDP is shown in Table 6.7 at constant 1980 prices.

Table 6.7

Agriculture's Contribution to GDP (1980 Prices)

YEAR	R MILLION	PERCENTAGE
1970	22.7	9.1
1980	18.3	5.8
1988	47.7	3.8

(Source: Pienaar, 1990:20)

Van Rooyen, Fenyes and van Zyl (1987:2) "projected that agriculture's contribution to GDP would decline below the 3 percent mark". The researcher

has alluded to this in some detail in previous discussions.

6.4 STRENGTHS OF AGRICULTURE

6.4.1 Soils and Human Potential

One of the region's biggest strengths, from a technical point of view, has been its soil. The soils were generally deep and sandy. "These characteristics enhance water infiltration, and in combination with the good water-holding of the sub-soil, increases the production potential thereof even under low rainfall conditions" (Pienaar, 1990:25). It is posited here that it was suitable for livestock production and integrated livestock/crop production farming systems. In the RSA it has been proven that the soils are suitable for the establishment of pastures. Any future development should have focused on livestock production; and arable soil not suitable for cash crop production should have been identified in order to establish pastures. Up to 1993, no move in this direction had been made by the main agricultural role players in Bophuthatswana; nor was such a move supported by the government. The region's second and most important strength was the immense human potential that it was endowed with. This potential had not been tapped. On the contrary, it had been left out of agricultural discourse. It was totally marginalised in terms of its potential contribution to agriculture and development.

6.4.2 Weaknesses of Agriculture

The weaknesses of agriculture extend into many seemingly unconnected areas. Support rendered to the farmers was totally inadequate. "The extension officer to farmer ratio was 1:40 in the irrigation areas and about 1:300 in the dryland areas. This compared well with developing countries, and even the RSA, where the ratio between farmer and technical advisor was as low as 1:10. In a district such as Klerksdorp, one could find agronomists, soils scientists and extension

officers employed by co-operatives and the government; technical advisors and representatives employed by fertiliser, seed, chemical, oil, mechanical, livestock, veterinary and various other companies" (Pienaar, 1990: 25). The land tenure system and the inadequate managerial capabilities and experience of both farmers and particularly agricultural staff at all levels hampered and constrained the development of agriculture. Corruption, nepotism, political patronage, the lack of intellectual and analytical capabilities and, particularly, Eurocentric political and agricultural imperatives, that were not in tune with African conditions and African culture, negated the advancement of true development. A lack of training and poor field experience and a host of inter-related factors already discussed, were some of the inherent weaknesses.

6.5 FARMER TRAINING NEEDS

With regard to the very perplexing question of training, the researcher will endeavour and attempt, by means of a conceptual framework, to clarify the distinction between training and education. This is undertaken on the premise that training and education in relationship to agriculture, extension and the entire process of uneven development in Bophuthatswana was of crucial importance to any policy of restructuring that was typically required when new agricultural, extension and development imperatives were undertaken. It was also important from the perspective, that the government of Bophuthatswana did not really invest heavily in training and education in the agricultural sector and this was one of the fundamental reasons for the failure of agriculture in the context of the former homeland. In doing so, we will also endeavour briefly to outline some of the problems relating to development, in relationship to the objectives of non-formal education. This will be undertaken in terms of the approaches to planning for change. In this regard an attempt will be made to focus on the definitions of change, to highlight some of the limitations in Black education and, very briefly, outline the concept of alternative education. However, only a brief examination will be attempted regarding these concerns, mainly because they

have no clear formulation in the available literature.

Issues in respect of training and education assumed significance in this study, because of the problems already discussed and, above all, from the vexing issues and problems that emerged from the discussion on illiteracy. This, therefore, makes the issue of the distinction between training and education vital components to any restructuring programme. For purposes of clarity and better understanding, there is no option but to pursue this aspect in some detail. It is hoped that those charged with the responsibility of training, will understand and take appropriate measures to redress the imbalances of the past in respect to training within this region. It is anticipated that future policy-makers will be in a position to grasp the subtle nuances of training issues and aspects together with the psychological perceptions of learners, within a varied, complex, but yet dynamic agricultural sector that poses a very crucial challenge to development in general and agricultural development in particular, especially in the rural periphery of the new South Africa. An attempt will also be made to capture the effectiveness of training, assessing needs in programming planning and ethical issues concerned with change. It is acknowledged that significant increases in agricultural productivity and production will be needed for South Africa and Southern Africa as a whole, in order to meet future food policy goals, related to an abundant and stable food supply. In this regard Southern Africa's, and in particular South Africa's, ability to meet this challenge, will depend on the level of investment in agricultural research and extension.

6.5.1 Training and Education

While the terms 'training' and 'education' may both describe a teaching- learning process, they are used with different intentions. The following distinction was put forward by McGehee (1977:3): "The term 'training' is applied to a process if the outcome can be specified as a particular kind of performance or behavioural response. If a behaviour cannot be specified, or if the learner is expected to

transfer his new behaviour to a variety or range of new and usually similar, objectives, the process is called education." Lynton and Pareek (1967:4) are in agreement with this view. They explain the term 'training' "as being the kind of education that is in truth not for knowing more, but for behaving differently". Further, the term 'training' is usually used in a job-related learning process, and is discussed by Lynton and Pareek, as well as McGehee in terms of an "organisational activity". Even though this distinction is made, McGehee (1977:3) also points out that "there are educational implications (as education has been defined here) within the training experiences provided by organisations".

It should be recognised that they are important in preparing employees for the changes occurring in industrial operations. The term 'training' therefore, though dealing mainly with changes in behaviour, also allows for the development of knowledge, skills and attitudes by recipients. Training for farmers in Bophuthatswana was viewed in this way. Though the farmers were not staff of Agricor, or the Department of Agriculture, training programmes were mainly aimed at preparing them for specific tasks. Farmers are, traditionally, not bound to any specific jobs, as most of them are involved in so many different types of agricultural enterprises. Farmers are 'free agents' and will choose what suits them best. They, therefore, should also be able to transfer their knowledge, skills, and attitudes from the learned tasks to others. The practices in the former homeland fell far short of the above.

6.5.2 Conceptual Framework of Training

Farmer training in Bophuthatswana was a responsibility of the government. It was undertaken by the agricultural extension service of Agricor, and was based on the principle of educating farmers to help themselves. Whether the term 'training' or 'education' is used, it is this teaching-learning process that is a major concern. In this regard, it has been pointed out that agricultural and extension

training was a complete failure. In addition, it must be noted that the Department of Agriculture's Directorates of Land Administration, Plant Protection Services, Planning, Statistics, Cooperatives and Veterinary Services were not engaged in any form of training of farmers or their staff. This was a major problem in terms of the development thrust and a negative aspect on the process of empowerment of the farming community and the intended beneficiaries.

In support of the above it is relevant to take note of the comments of an urgent memorandum which was delivered to all line-managers within the agricultural sector by the Manager, Human Resources (Agricor), dated 13 December 1993: "Given the fact that agricultural training is a failure in the context of development in Bophuthatswana, and its dismal performance over a protracted period of time, there is no alternative but that the Human Resources Division of Agriserve has to embark upon a training needs analysis exercise with immediate effect, in order to attempt to redress the imbalances of past administrations. In this regard, please be informed that we require your support in discussions that will begin in the very near future."

In analysing and scrutinising the above memorandum, it is important to enhance the socio-political evaluation and discussion within the framework and ambit of the statements made by the Manager, Human Resources (Agricor), in that; the acknowledgement of Agricor's management that agricultural development and training was now considered to be a failure. The realisation that a needs analysis exercise had now become necessary on the basis of redressing the imbalances of past Bophuthatswana administrations, within the parastatals and the department as a whole. That a plea for the support of the general staff within agriculture was necessary and elicited by the management of Agricor. This was undertaken by management in order to begin discussions for the purposes of redefining and restructuring the agricultural agenda for Bophuthatswana.

All of the above must be viewed from the perspective that general dissatisfaction

within the civil service and the parastatals had now surfaced with great intensity. The regime was now being threatened by both internal and external forces in the context of debate and political change taking place in South Africa. It was now becoming more oppressive. A sector of the agricultural bureaucracy, especially from the ranks of middle management, that had historically challenged the regime and had supported the alliance of the liberation struggle, had by now sufficiently penetrated the management structures within agriculture to enforce change. Liberal and sympathetic management, both Black and White, began supporting some of the imperatives of the staff associations and the ideologies of the 'revolution' within the agricultural sector (the researcher was part of those that penetrated management). Agriculture was now rendered ungovernable and had become almost totally paralysed, with confusion and chaos reigning supreme. In the short space of three months, the regime had collapsed and the Transitional Executive Council of South Africa had put into place the Joint Administration to govern the former homeland, running up to the historic democratic elections on 27 April 1994. (The researcher was popularly elected by the staff of agriculture to lead the department and subsequently the Transitional Executive Council ratified the researcher's appointment as Councillor/Minister of the Department of Agriculture and Water Affairs, for a period of four months, until the new democratic North West Provincial Government took office).

Having captured and briefly explored the socio-political discourse in respect of possible change in the direction of agriculture that was envisaged by the former regime in the last moments of its glory, it is important to continue and further explore the distinction between training and education. Both the specific skill orientation and the transferability of learning were important to farmer training in Bophuthatswana. The term 'training' will be used to refer to the teaching-learning process in the context of this study, even though a distinction is made in the usage of 'training' and 'education'. The distinction points out the extreme difference between the two, in which some of each takes place and which is more descriptive of the approach taken in Bophuthatswana's situation.

Training, as it seeks to improve people's knowledge, understanding and skill, should do so in response to some need or requirement, which is an outgrowth of the regular job function or, in the case of farmers, the tasks associated with operating a farm. Training should, therefore, not be an end in itself, but a means through which people can satisfy these needs or requirements. Following in this vein, emphasis should be on assistance to learners, considering their points of view as well as those of trainers, and giving both trainers and learners responsibility for the teaching - learning process. In considering needs, however, one must bear in mind that not all needs are satisfied by training. Only those that relate to increasing knowledge and skills are applicable. The effect of training is a change in behaviour or practice. This can be manipulative or helpful, and trainers must be very conscious of their own ethics and beliefs when given the responsibility for creating change in other people's lives. They must always respect the rights of other human beings. Unfortunately, in the Bophuthatswana agricultural sector, none of these rights were afforded to the masses in general and, more particularly, none were afforded to the large rural agricultural community.

6.5.3 Effectiveness of Training

The importance of training is noted in the kind of contribution that can be made to development in a community, socially as well as economically. Training can increase the ability to perform more effectively through increasing basic understanding and skills. However, there are many problems in the actual practice of training that can prevent the intended outcomes. Lynton and Pareek (1967:5) note that "there are tendencies for training to proceed as if knowledge and action were directly related. Although knowledge precedes skill, it takes experience over a period of time to develop that skill." Trainers may be aware of this and believe in it, yet not practise it. Trying to rush through a syllabus instead of designing a training programme focused on needs-based skill development can make training ineffective. Usually, in such a case, statistics can be compiled

about the number of people who were trained and how much training was carried out, but not on how beneficial the training events were, as measured by the performance of the learner. When training is set in its appropriate educational perspective, it becomes the activity which is intended to improve performances, taking learners through a set of experiences in which they begin to practise new skills in situations close to real life.

Another factor which causes ineffectiveness in training is the assumption that what is taught is what is learned. Also, it is hardly likely that the points of view of the trainers will be the same as the points of view of learners (Lynton and Pareek, 1967:4-5). Training can occur without any assimilation of knowledge on the part of the learner. Trainers and learners can, however, work together, understanding each other's viewpoints, thus creating a climate in which learning is facilitated. The conditions which are most conducive to learning will vary from one learner to another. There are, however, a number of general conditions which have been found to facilitate learning and which should be taken into consideration when training is planned. Rogers (1969:104) "speaks of facilitating learning in the light of how the teacher can become a facilitator," and offers a number of suggestions for teachers that will help to create an atmosphere in which learners can overcome their fear of change and move on to new knowledge, attitudes and behaviour. The teacher must, have trust in the group and the individuals he is teaching; make available the widest range of resources for learning and make them available at the students' request; relate personally to his/her students and be able to share in experiences with them; be able to accept the opinions, views and beliefs of the people with whom he works; accept both the intellectual content and the emotionalised attitudes (Rogers, 1969:110).

In doing so, the teacher shows that the responsibility for training events is assigned to both, the learners and the teachers. This is good, as it creates other facilitative conditions. The learner who takes responsibility for his own learning will develop a feeling of ownership of the training activity. His thoughts, ideas,

views, and even emotions, can be expressed. He is more likely to be interested in whatever he is learning and, therefore, more likely also to have a higher commitment to the training activity (Knowles, 1977:53). In this context, the teacher is only partially responsible for the training activity. He recognises that there is knowledge and feeling in his students. He can be more human, and capable of learning from his students, as well as teaching them. This will allow for better communication and an open, comfortable atmosphere for learning.

Other conditions that facilitate learning are more related to the views and perceptions of the learner. Sanders (1966), in his discussion on teaching in extension, stated that "learning is a personal matter in terms of the learner's own needs and interests as he perceives them." A training activity for adults, whether in extension or in a business organisation, is only one of the many activities competing for their attention. In the ideal situation, the learner must feel a need to learn, and must adopt the goals of training experience and his own. This means that the training activity must be relevant to the interests of the learners and experience gained must be utilised afterwards. Training has thus far been discussed as an activity through which knowledge, attitude and behaviour can be changed with the intention of improving the task performance of the individual. One assumption here is that there is some discrepancy between the present performance (for instance in a job) and that which is expected or desired from the individual. Another is that through training, this discrepancy can be erased. However, as McGehee (1977:5-19) notes, "performance discrepancies occur for many reasons other than a lack of skill and knowledge". This was discussed in terms of employed individuals, but it also applies to the extension situation. Not all the needs of farmers can be satisfied through training. A lack of capital for farm inputs is a physical requirement, not a training need, and this aspect was not a realisation of trainers and management in the extension process in Bophuthatswana and contributed to the retardation of extension inputs.

For example, the need for chemicals, to help control some insect pests, must be

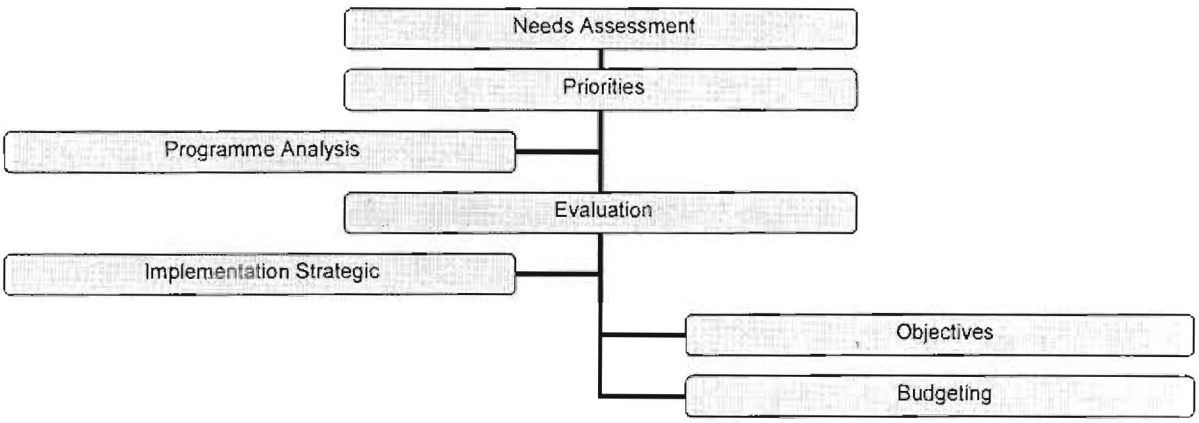
solved by providing the chemical. However, if the farmers do not recognise the need for pesticides or do not know how to apply the chemical, there is a need for training. It is only the need or demand for knowledge, skills or change in attitude that should be addressed by training. Training which addresses any other type of need would be wasted as it could not achieve the desired results.

6.5.4 Assessing Needs in Programme Planning

For any programme to be successful it should be properly planned. All the requirements that made the programme necessary in the first place should be carefully studied, and the value of the programme weighed against the resources available, and the expected outcome and a feasible implementation strategy mapped out. Planning of training programmes should thus involve some assessment of needs, setting of objectives, budgeting, formulation of an implementation strategy and the evaluation process. Figure 6.1 depicts the needs assessment in the training and evaluation cycle.

Figure 6.1

Needs Assessment in the Training and Evaluation Cycle.



(Source: Modified from George Eyster's Model in a Guide to Needs Assessment in Communication, 1976:5)

Needs assessment is the activity which identifies some requirements of individuals for whom training is intended. It functions in two ways in

programming. It provides the basis for determining the priorities, objectives and purposes of the programme. It is also a basis of determining the level and intensity of participation in the programme. In relation to the conditions for learning discussed earlier, "the goals of training should be similar to the goals of learners" (Knowles, 1970:53). Training needs should be determined by trainers as well as learners. McMahon (1970:85) expresses a similar view and states that, "determination of needs requires the meeting of minds between educators and prospective clients. In this way potential learners are involved in the early stages of the planning process and presumably will be more interested in participation at a later date. Thus, training programmes which reflect the learner's feelings and desires will be more acceptable to them and more likely to influence their involvement in the programme."

In recognising the learners' educational needs as they perceive them, one cannot, however, lose sight of the fact that this is only one aspect of the importance of needs as a basis for the design of training programmes. Knowles (1970:53) states that, "an educational need ... is something a person ought to learn for his own good, for the good of an organisation or for the good of society. It is the gap between his present level of competencies and a higher level required for effective performance as defined by himself." Knowles (1977:53) goes on further to explain that "the more concretely an individual can identify his aspirations and assess his present level of competencies in relation to them, the more intensely will he be motivated to learn." This brings up the question of the ability of the learner to recognise his own needs, even though it is asserted that his motivation is dependent upon what he perceives. Knowles (1977:54) also points out the importance of "congruity between needs perceived by the individual and the training agent (organisation)." Perceived needs of learners are, therefore, discussed in this chapter as being more important than needs otherwise identified, because ignorance of them by either the learner or teacher can lead to ineffective programmes.

6.5.5 Ethical Issues

Whenever plans are made to make changes in people's lives, there are always questions arising out of ethical issues. The right to self-determination, individual freedom of choice and expression, and all other human rights must be upheld by trainers (unfortunately this was denied in Bophuthatswana, owing to prescriptive policies, overt Eurocentric thinking and control). Traditional education systems and some practices in training have a tendency to recognise some people as having 'true knowledge' which must be 'deposited' in others. It is also assumed that they must accept it. Some educators express concerns about methods and principles of teaching which perpetuate this top-down flow of information. Freire (1970:36) believes in "experimental learning wherein learning is self-initiated and the whole person in both his feelings and cognitive aspects is involved in the learning event". The teacher's role is to facilitate learning to be a respected learning resource and also to be a learner in his relationship with students. Such a relationship recognises knowledge in both student and teacher, and respect for each other as human beings.

Freire (1973:43) also believes in an educator – educatee relationship which respects the knowledge of both teacher and student and believes that education in the traditional teacher-dominated system is oppressive. It deprives the learner of his self-respect, for it is built upon the belief that the learners know nothing and that the teachers know it all. He believes that true education should create a critical awareness in people of themselves in relation to their world; there should be true dialogue between teachers and learners, thus allowing the learner to express himself in his own way. Freire, (1970:36) also introduces the concept of "praxis in which man acts upon his own decision after reflection upon his own problems."

The underlying principle of these educators, Freire and Rogers, is that education should be facilitative, allowing for the development of self-growth,

self-determination and self-reliance. Freire and Rogers are learner oriented, and believe that what is taught, and how it is taught, should be dictated by the needs and understanding of the learner. This is precisely what the agricultural and extension dynamic was not able to do in the context of training in Bophuthatswana. The underlying theme of this section of the discourse is the belief that all activities involving farmers and the self-perceived or felt needs of individuals are important in the planning of training programmes. This was never a feature of the agricultural sector of Bophuthatswana. The responsibility of creating change in people is a very serious one for all educators and trainers. It should be done cautiously and with great respect for human rights. These rights were never accorded to the people of the former homeland and, especially, to farmers of the rural periphery. When they are working in congruence with each other, trainers and learners are likely to achieve greater success.

6.5.6 Planning for Change

Educationists are almost uniformly concerned with the relationships between training/education and the need for 'change'. Various definitions exist about the nature of this change, and it is not the purpose here to subject these to any analysis. Before proceeding with any plan to effect change, educationists must have a clear vision of the kind of political, economic, and social structures they wish to create. For them an urgent need would lead from the current situation to the desired future structure. Suffice to say that almost everywhere there is a clear relationship between change and the imperatives of socio-political forces. In the history of Bophuthatswana, this relationship was never a political imperative. Moreover, the intellectual capacities of government forces and their bureaucracies did not live up to the aspirations of the masses in terms of becoming a part of the wider circle of the socio-political forces defining a new democracy. They continued to defy the very logic of sustained political debate and continued to follow archaic policies by virtue of power and force in order to maintain their status quo.

At the same time, the imperatives of change are viewed as synonymous with the demand of modernisation. This was the stark reality of Bophuthatswana, where modernisation was an important goal, and the task of the training/educational planner was to provide adequate numbers of so-called trained persons to satisfy the growing needs of the modern sector, and to appease politicians. Additional goals to modernisation may be the effecting of change in terms of the ownership of production, allocating economic surpluses and the distribution of resources to all sections of society. Since these changes would represent a major deviation from the status quo, they were unacceptable by the regime of Bophuthatswana. Evanson (1981:49-50) states in this regard that "any deviation from the status quo is associated with change strategies, which stress the need for confrontation, conflict and radical reform of the existing system." A further constraint which planners are faced with is one which arises from the extreme apathy with which the demands of non-formal education are viewed. Most planners are concerned that society in general is quite unaware of the importance of non-formal education in general, and of its planning in particular. It is in an area of practice more often acknowledged in, and by, its default. What educational theorists within this framework are therefore concerned about is the creation of a social milieu which would provide greater leverage for planners on the basis of change in the attitudes to the problems of non-formal education.

When both the learner and the trainer/educator represent similar socio-economic and ethno-religious backgrounds and the intention is individual change, the result would be the reinforcement and extension of the existing status quo. No conflict or confrontational situation would arise. This is precisely what the government of Bophuthatswana relentlessly pursued over the years. Firstly, in introducing the concept of ethnicity. Secondly, it attempted to subtly force the concept of Christianity upon its people, to the extent that the name of the party was changed to the United Christian Democratic Party. Anyone not showing allegiance to its form and brand of Christianity, and not conforming to the ideological framework of the party, was considered a hostile opponent to the

regime. Given this scenario, it was to be expected that no confrontation would arise. However, the situation is altered when teachers and learners are drawn from different backgrounds and the intent is social change. The potential for conflict is increased and this was what the regime was confronted with, although it was unwilling to acknowledge this to give the impression that all was well and that it had the situation well under control. Planners are influenced by the political structures which control training and education. Those planning political actions that might negate the very tenets of democracy should wilfully stand on the path of justice and expose the regime. This was not possible in Bophuthatswana, based on two factors. Firstly, those who were in charge of government bureaucracies were selected on the basis of political patronage and thus were happy to maintain the status quo and nurse their highly paid jobs; secondly, the status quo was maintained by means of overt and repressive force used by the regime.

Pigozzi (1982:15) states that "planners also need to ask how the inevitable 'ripple' of changes brought into an area or community due to project outcomes will affect participants and the community as a whole. Participation should not be a form of manipulation, but must offer concrete expectations within a given situation." This was never a strong component of the Bophuthatswana regime which always attempted to manipulate the forces crying out for positive change in all spheres of activity and in all walks of daily life. Calitz (1986:8) identifies educational and training challenges to which he draws attention of training and educational planners. Some of the consequences which planners need to give immediate consideration to are: - the expanding learning needs that cut through all segments of the population; the financial pressure that is caused by increased educational and training demands; the relationship between education/training and vocation; cultural and educational inequalities and disparities; the correction of educational quality; and the use of scarce resources.

In continuing the discussion in relationship to education and training and its

effects upon development discourse and, in terms of the nuances and implications upon democratic and contemporary South Africa, as concerns policy formulation and implementation, the researcher will further outline some salient issues from the research undertaken by a host of South African and international researchers. Motala and Chaka(2004:5) state that "the great value of good quality education, especially to societies characterised by poverty, social inequality and unemployment, is the view that there are serious misconceptions in public perceptions and the ideas of policy makers regarding the role of education and development." These authors argue that these misconceptions arise largely from how development is understood and conceptualised, because it continues to be viewed as mainly about the rate of economic growth and the "economic success" of countries. Bophuthatswana fitted into this reality of viewing education, training and development as variables in the extension system relating to the objectives of economic growth, productivity and the enhancement of 'human capital' alone. It has to be understood by policy makers and politicians alike that although education and training has undoubted value in relation to economic development and the potential for employment; Motala and Chaka, point out, in this regard that "for education to have relevance in developing societies, it must aspire to a broader and all – encompassing 'developmental' role." Education and training in the erstwhile Bophuthatswana negated this imperative and did not in any meaningful way address the all – encompassing role of education in its so – called developmental momentum. Arising from the above, the researcher poses the question, what good is theory if its relationship to the effects of knowledge constitution have no relationship to the effects of knowledge in whatever form on the lives of individuals and societies? It is further argued that social policy must concern itself with and about the value of practice and, how it is theorised. This will allow for greater clarity about the purposes of development and about what strategies might be adopted to deal with them. Further, that the concepts of development, education, training and extension will have limited use, as had occurred in Bophuthatswana, unless it is explicated in the context of a particular system and

a specific historical reality.

Education and training in general is regarded universally, as critical to the resolution of the problems of post – apartheid South Africa and as a bulwark against the forces of globalisation and therefore, transformation must be advocated for its ostensible value in the 'development' and 'reconstruction' of society. It is therefore, obvious that the ideas of development and education according to Motala and Chaka (2004: 8) "must be imbued with content if they are to have value in societies that are characterised by the problems of poverty, inequality and the necessity of reversing the effects of poor approaches to social development and education." In other words, policies that simply emphasise the enhancement of technical competencies, narrowly conceived, as was the case in the former Bophuthatswana, diminish the role of educational and training knowledge, more broadly conceptualised and, invariably give rise to particular choices in the way that resources are utilised. Motala and Chaka(2004:9) state that "under apartheid racist conceptions of development resulted in perverse practices whose purpose and effect was to privilege particular communities and social classes(as was the case in Bophuthatswana) and to increase social and other forms of differentiation to engender inequality as a structural characteristic of such societies."

Theodore Schultz (1963), who is one of the leading exponents of the modernisation approach in the field of education, argued influentially that "education was not a form of individual consumption, but a productive investment indispensable to rapid economic growth." However, Dreze and Sen (2002:34) even within the framework of this approach state that writers such as Seers in Youngman (2000:5) "regarded issues relating to poverty, income distribution and employment as important for understanding the role of educational systems." In the Bophuthatswana developmental gravitation and thrust, policy makers lost sight of the productive investment that education could have made to the lives of the people, in the region and, the role that educational systems could have

played in respect to training and extension education, in order to promote the general welfare and the advancement of society. Graff (2003: 1) argues that "in modernisation theory Third World countries are expected to catch up with First World countries culturally, politically and economically." He further states (2003: 13) that in terms of this theory "they need to break out of the 'shackles' of tradition to become modern." In summarising the critique of modernisation, Graff (2003 : 21) refers to "its 'display' of Eurocentric arrogance in assuming that the highest point of human history is represented by European countries and the quite racist versions of social Darwinism," associated with such a view. The study has made reference to these aspects in great detail with reference to Eurocentric policy making and its arrogance coupled with the disregard of African theory and culture and the complete dominance of expatriate Europeans who controlled the entire agricultural discourse within Bophuthatswana.

The critique against modernisation theory has developed well beyond the seminal work of dependency theorists. According to Youngman, "even Marxist political economy, a major contributor to the critique, needs to be refined and extended in a number of ways, including the domain of ideology, the state, environmental affairs and other issues." (Youngman, 2000: 244 - 5). The researcher posits that the lack of understanding the local conditions within Bophuthatswana by Eurocentric policy makers had several consequences firstly upon the people and subsequently upon development and poverty. Some of these consequences were as follows : Poor extension and training programmes; proposing development programmes and strategies which had no meaning for the local population; making decisions based on information gained largely through internal paper flows; the poor training of 'development advisors' and a host of other issues. Unterhalter (2002: 1) indicates that "the benefits from education enhance well – being and freedom of individuals and peoples, improving economic production and influencing social change." Such a situation was never allowed to emerge in Bophuthatswana.

Education and training is vital and important to development, provided it has a target audience and that targeting cannot be simply achieved by the pronouncement of politicians and policy makers as was observed in the agricultural sector of the homeland. Wolf (2002: xiii) in respect to the above states that "'archaic' views about education have almost forgotten that education ever had any purpose other than to promote growth. It is about citizenship and values, the importance of a 'good society' and the intrinsic benefits of learning, without denying the relative benefits of education on the income of individuals." The oppressive and totalitarian state of Bophuthatswana stifled the emergence of these aspects to its own detriment and in so doing subjugated the masses and annihilated their emergence. The state thus negated the issues of development and the advancement of education and training as vital components to any reconstruction programme, in respect to the development of the rural masses but, more importantly the development of Bophuthatswana society as a whole. It further negated with impunity the advancement of particularly rural people in this region and, the role that extension education and training could have played and achieved within the agricultural sector, in terms of alleviating poverty. Govinda (2002: 4-5) states that " because of the relationship between levels of human capital and probabilities of being poor, parents educational legacies to their children translate into poverty legacies that, unless the cycle is interrupted, can persist through several generations." This is exactly what the Bophuthatswana government and its colonial master have left behind as an unwanted and damning legacy in this region, for the North West Provincial Government to deal with.

In South Africa, Baatjes (2003: 178- 204) refers to the "marginalisation and exclusion of a large and growing sector of the South African population who are systematically being excluded from meaningful participation in the social, cultural, political and economic activities of society." For Baatjes, particular traditions in adult education and training "make it possible to counter this marginalisation by enhancing the possibilities for active citizenship in a

'knowledge rich society'." He also regards the 'instrumentalist tradition' as contributing to the "marginalisation of under- educated semi- illiterate and literate adults of the country." This makes education and training vital aspects of reconstruction discourse in South Africa, on the basis that extension education and Adult Basic Education and Training (ABET) has not performed well prior to democracy in 1994 and not much has been achieved in this regard post 1994 and under the democratic dispensation. This is clearly shown by the fact that, former Minister of Education, Professor Kader Asmal, announced his intention in 1999 to eradicate illiteracy by 2005. On the contrary nothing tangible was and has been achieved in this direction and for all intents and purposes ABET has also been a dismal failure under the democratic dispensation. In fact nothing meaningful has been achieved and Asmal's euphoria since his announcement in 1999 has not materialised. Mohlala and Pretorious, in the Mail and Guardian of September, 6 (2007:12) indicate that, in South Africa "there are 9,6 million functionally illiterate people, which is a serious impediment to skills development and economic growth, affecting the lives of 9,7 million people of the country's 47 million population." These writers further state that "about 4, 7 million South African Adults are totally unschooled, while 4, 9 million are those who dropped out of school before grade seven." The situation is precarious and thus makes education and training vital in respect to an urgent intervention strategy. Any plan in respect to addressing this situation and "crisis," must be firmly rooted in a plan that will seek to revamp and revise the content of the Adult Basic Education and Training curriculum and thus deal with major shortcomings in the delivery of education to adults and to recipients in the rural periphery of South Africa.

The researcher therefore, argues that the broader humanising goals of education and particularly training remain incontrovertibly important in all education because of the rapid changes to economic and social systems and the dynamic it imposes on all learning. Even in periods of unprecedented economic growth and great competitiveness, no society can ignore the broader purposes of education and training and its role as the pre –eminent engine for the

achievement of such purposes, and which are not limited to economic outcomes alone. In this regard Motala and Chaka (2004: 9) state that "good quality education is fundamental to the construction of a social and cultural platform for development and can only be ignored at huge historical cost. Ignored, it would lead inevitably to social instability and the stultification of a unifying nationhood, and make the possibility of achieving 'freedom' increasingly impossible in such societies."

All of these are vital considerations, particularly in the context of South Africa, and should be included in the planning strategies of training and education. In addition, the rapid rise in the rate of technological and social development of post-industrial societies and, more recently in South Africa in particular, has added a new dimension to the concept of non-formal education, for example, non-formal education has, therefore, to be organised within the context of the following factors: rising levels of skill in industrial work; job redundancy and obsolescence; youth employment; increasing leisure; and re-training requirements.

6.6 PHILOSOPHY OF EXTENSION

One of the clearest statements of extension service philosophy was written by J. Neil Raudabaugh of the Extension Service of the United States Department of Agriculture. The philosophy is outlined and narrated as follows: The philosophy of the co-operative extension service assumed from the beginning that people must be reached where they are – that is, at their present background of education and level of interest and understanding. It is also assumed that the aims and objectives are not to be fixed and unchangeable. They must be modified on the basis of individual and social needs. It is the function of the extension service to teach people to determine their own needs and the solution of their own problems; to help them to acquire knowledge and to inspire them to action. The basic philosophy to extension education is to teach people 'how' to

think, not 'what' to think. Another basic principle is that the extension worker teaches people to help themselves, not do things for people. The worker can best serve people by helping them to recognize their own potentials in learning, to desire, to grow, to reach out in order to improve their present status. The extension worker who accomplishes this for his people teaches 'people', not 'subject matter'. The success of the extension worker depends upon his sympathy and understanding of people and problems of rural and urban life. It also depends upon his knowledge and of how to apply the principles of extension education and its philosophy to the situations in which he works. His success also depends upon sound technical training and a broad background of education and experience (Warren et al, 1984:13).

People from pioneer days have generously shared what they have with others. This habit of people has been developed further in the leader who shares his information and provides opportunity for others to obtain new practices in agriculture and home-making. This means that the extension worker must also help people to work together in groups. Therefore, extension education is not only teaching people individual practices (how to use the square, the saw and the hammer), but also the interdependence of practices in actually building something - that something is a better, fuller and a more satisfying life. Extension education is the development of comprehensive plans, pertaining, amongst other things, to the home, family and community; and then seeing that the plan is executed. Extension's specific job is furnishing the inspiration, supplying technical help and counselling to see that people as individuals, families, groups and communities work together as units in blueprinting their own problems and charting their own courses, and they launch forth to achieve their objectives (Warren et al, 1984:13).

There is no doubt that the main thrust of the philosophy of education is one of teaching people to learn via their own potentials and in accordance with their needs. Throughout this dissertation, the salient and main features of this philosophy were advanced. The researcher's own analysis of the features are

put forward as follows:

* To sensitise us to the importance of the socio-cultural context in learning and development.

* To provide an insight into the interrelationships between education, culture and development.

* To stimulate awareness of various approaches to development and their underlying theoretical frames and assumptions.

* To provide prior knowledge and develop the individual's pattern of perceptions and the foundations for further learning and development.

* To educate and to facilitate adaptation to changing needs and challenges in society.
* To encourage popular participation as a prerequisite to development which has serious implications for education, teaching and especially the learning process.

Unfortunately, none of these parameters to extension were applied to any significant or appreciable degree of success in Bophuthatswana. What then are the principles of extension?

6.7 PRINCIPLES OF EXTENSION

Following from all of this, Warren et al (1984:13) provide some principles underlying extension activity. He calls them a "composite list of principles" on the basis that they were extracted and categorised from dozens of sources. Warren was writing in the broader context of rural adult education when he wrote that emphasis on an extension process should "be based on conditions that exist (local, regional and national); involve people in actions that promote their

welfare; develop programmes gradually; aim basically at people's interests and needs; use democratic methods; keep programmes flexible; work through understanding of the culture; use local leaders; use existing agencies; use trained specialists; work with all members of the family; make programmes as broad as needs of rural people; evaluate continuously; keep in line with national policies; use the community approach and help people recognise their needs."

It is obvious from the above that these cardinal principles of extension were not applied in the process of extension, training and agricultural and rural development by the agricultural sector of Bophuthatswana. What then are the definitions of extension?

6.8 DEFINITIONS OF EXTENSION

Extension is defined by the Food and Agricultural Organization (FAO) of the United Nations (1984: 680-2) as "an on-going process of getting useful information to the people and then assisting those people to acquire the necessary knowledge, skills and attitude to utilize effectively this information or technology to build a better life for themselves, their families and their communities". Similarly, the United States Department of Agriculture (USDA, 1989) states as follows: "It is the sources of research-based, unbiased information and expertise that links higher education with the people who are not on campus. The extension educators/agents encourage the application of the research-generated knowledge and leadership techniques to individuals, families and communities". In short, by drawing from the content of this study and the definitions cited, extension can be defined as a co-ordinated and co-operative exercise and service, which is aimed to help people improve their lives through an educational process, using scientific knowledge, focused on issues and needs as perceived or felt by them. On the other hand, Biddel and William's (1988) put forward "an intervention model of extension and depict it as an educational issue of evolution, as follows: - concern; involvement; issue;

alternative; consequences; choice; implementation and evaluation."

In analysing their model, Biddel and William's (1988) articulate the eight points cited above as follows with particular reference to extension policy formulators and implementers of the extension process. If extension programmes are to be meaningful to the intended audience, they must accomplish the following: (1) Help audiences understand existing conditions; show how different groups are affected; help people look beyond symptoms; help separate facts and myths and clarify values. (2) Identify decision-makers and others affected; stimulate involvement; encourage communication among decision makers, supporters and opponents. (3) Help clarify goals or interests; help understand goals or interests of others and points of disagreement; help get the issue on the agenda. (4) Identify alternatives, reflecting all sides of the issue and "including doing nothing"; help locate or invent additional alternatives. (5) Help predict and analyse consequences, including impacts on values as well as objective conditions; show how consequences vary for different groups; facilitate comparison of alternatives. (6) Explain where and when decisions will be made and who will make them; explain how decisions are made and influenced; enable audiences to design realistic decisions. (7) Inform people about new policies and how they and others are affected; explain how and why they were enacted; help people understand how to ensure proper implementation. (8) Help monitor and evaluate policies; inform people about formal evaluations and their results; help stakeholders participate in formal evaluations.

None of the issues cited above were considered in Bophuthatswana in respect of extension, development and general agricultural policy. Bophuthatswana did not display one iota of transparency or one tenet of democratically based decision-making, nor was the participation of the intended beneficiaries taken into consideration. Suffice to say that these strategies and issues in the evolution and intervention of extension policies were never used in the extension initiatives of the services in Bophuthatswana, thus retarding the very process of

extension. In continuing the analysis and discussion regarding the definition of agricultural extension, Kotsokoane (1989:26) submits that "very few subjects have been written about as much as agricultural extension. Drawing from the social sciences not only for its foundation philosophy and principles, but also for its methodology and techniques, even more literature will, no doubt, be produced to explore the latest theories and their application to basic problems in future. The wide scope of activities often included under the umbrella term 'agricultural extension' often results in some confusion about the term." However, the researcher finds it necessary to focus more comprehensively on the 1984 definition as captured by the FAO which was elaborated upon above.

In this regard, extension is an on-going process of getting information to people (this is the communication dimension) and then in assisting those people to acquire the necessary knowledge, skills and attitudes to utilise effectively this information and technology (the educational dimension). Generally, the goal of the extension process is to enable people to use these skills, knowledge and information to improve their quality of life. The extension function can be used effectively and equally well by both the private and public sectors, although most general extension organisations are public sector institutions. It can be combined or integrated with other technology transfer functions, as is the case in most agricultural extension organisations, which are expected to concentrate on the educational function. Extension, or non-formal education as it is sometimes called, can be used effectively in non-agricultural programme areas, in rural health, family planning, and community development. Although, in the FAO manual the focus is on agricultural programmes. In other words, extension can be successfully used by different types of organisations to reach different types of institutions, to reach different groups of people with different messages. What then are the strategies and approaches to extension?

6.9 SOME STRATEGIES

Strategies and approaches to extension are vital to the implementation of local, regional and national extension programmes. In keeping with the definitions advanced, the researcher will outline some strategies and approaches to extension, which make up one of the central themes of this study. In advancing these strategies and approaches, attention is drawn to the fact that no attempt is being made to the advancement of a preferred strategy or approach. These aspects are presented broadly and in the hope that the arguments advanced in this study may, in some way, contribute to the formulation of a sustainable extension policy and programmes within this geographic region. It is further hoped that the study will, in the main, have captured the salient problems affecting extension, and that at least some recommendations could be made that will advance agriculture, extension, rural poverty, rural development and economic growth in order to enhance social justice and the general welfare.

There are, nonetheless, differences between systems found in Francophone and Anglophone countries of Africa, reflecting their colonial past. The systems differ in both organisation and implementation. The Anglophone system tends to have a centralised extension service within the Ministry or Department of Agriculture (Blum,1986). Experience and observation have shown in the context of Bophuthatswana that its extension service was based on the Anglophone model, in terms of the legacy of its past. Its extension service dealt in crop farming and not livestock despite the need for an integrated farming system. Likewise, research and training related to experts could be found in separate agencies. This organisational form according to Kotsokoane (1989:26) "had clear-cut lines of command and communication, resulting in a top-down approach and no incentive-oriented staff management. (This has been discussed in great detail in the context of Bophuthatswana). However, in Malawi and Tanzania, a more decentralised approach has been tried, with much more autonomy allowed at lower levels."

In Francophone countries, on the other hand, parastatals have played a more important role than general extension services. These bodies tend to be commodity-based with emphasis on export crops within a particular region. Although Agricor did, for example, concentrate on export of maize from the areas of Taung and Ditsobotla, which fall into the maize quadrangle, it was not by any means following the Francophone system - which primarily remains concerned with natural aspects of planning and co-ordinating agricultural development, administration and staff training. The shift in agricultural policy that occurred so often in Bophuthatswana resulted in so many things being done at the same time and ultimately with no sense of purpose or, for that matter, direction. Thus, extension did not fall into any one of these models and was neither a combination of both. (The Department of Agriculture did not discharge its responsibilities - this has been discussed in detail). In this regard, it has to be stated that the extension system within Bophuthatswana did not follow a hybrid system of extension or any new form of extension within its agricultural sector, but used all forms of development theory and extension systems without a coordinated approach. This was largely due to the fact that there was no approved agricultural policy. As stated previously, this was also exacerbated by unschooled agricultural advisors and complicated by a Eurocentric thrust to extension initiatives.

6.9.1 Animation Rurale

There is an important method of extension known as "animation rurale practised in Francophone countries which involves a participation approach and attempts to integrate various activities" (Kotsokoane, 1989:26). Local people, working voluntarily or for some benefits in kind are the 'animators' (promoters) of rural development. These 'animators' are chosen by the community for their farming and personal skills. "Their fields become demonstration plots, and they usually pass on knowledge informally although they receive training and are sometimes provided with teaching aids" (de Janvry, 1981). This method was never tried in

Bophuthatswana.

The above method could be likened to the multi-purpose village-worker who is expected to be capable of giving agricultural advice as well as improving community hygiene (sanitation), social organisation and literacy in the Anglophone system. However, 'Animation Rurale' is more flexible than the Anglophone method, which is highly institutionalised. 'Animation Rurale' may be seen as a precursor of the Peoples Participation Programme and Small Farmers Development Programme developed by the United Nations FAO, including the Popular Participation Approach to Community Development. "Population education and functional literacy, also promoted by the UN and its many specialised agencies in the 1970s and 1980s, were implemented in various parts of the world" (Kotsokoane, 1989:26). There are several methods of extension being applied world-wide including the 'Training and Visit System', which was first tried in Turkey, then introduced in Asia in the 1970s and now being promoted in Africa. It is known as the T&V system and will be discussed in greater detail as one of the thrusts and focus of an approach to this study. These models all involve the communication dimension of transferring information.

6.10 IN SEARCH OF AN APPROACH

The researcher will endeavour to set out on a search of an approach to extension, having outlined broadly some of the approaches that have been used world-wide. An attempt will be made to focus on the Training and Visit (T&V) system of the extension process in an effort to pursue arguments and strategies for a unified extension service. The discussion will attempt to present the T&V principle of unifying the extension services, so that it may be co-ordinated by one centralised agency. It will be necessary to draw from international literature in order to focus on the central issues of this study, in respect of capturing the importance and relevance of coming to terms with approaches and strategies.

To conclude, a brief discussion of the applicability of the principle to developing countries will be undertaken.

6.10.1 The T&V Principle in a Unified Extension Service

The following is a brief description of the principle as presented by Benor, Harrison and Baxter (1984:22-23): "One of the most essential management principles to be adopted in creating an effective, professional extension service is the establishment of a single line of command from the apex of the government agency responsible for agriculture to the field-level extension worker." They point out that the agency (in many cases the Ministry of Agriculture) must have full administrative control over their staff. Having only one department to serve, extension workers at all levels will be able to concentrate exclusively on extension. They will achieve greater job and professional satisfaction than was previously possible. Benor et al (1984: 22-23) further submit "that all agricultural extension activities should be combined into a unified extension service. Staff engaged in special crop or area development schemes should be merged with the regular extension service staff."

6.10.2 Reasons for Unification

As has been pointed out throughout this study, a number of institutions in the erstwhile Bophuthatswana were engaged in extension activities. In order to reduce duplication that existed, the decision was taken by Presidential decree, to unify all extension activities. Thus, Agricor was charged with the responsibility of undertaking this task. This was done without consulting other role players involved in agriculture and rural development. Before such unification was embarked upon in Israel, a contract was drawn up between all the players and organisations. This contract included the following provisions: "A joint extension will be founded which will centralize all the instruction presently provided by the Ministry of Agriculture and all the other institutions involved in agricultural

extension. The extension service will be the sole body which will be involved in extension. All the extension workers of the Ministry and other departments and organizations involved in extension will be affiliated with the extension service" (State of Israel, Ministry of Agriculture, 1960).

This serious omission in Bophuthatswana resulted in tremendous problems in the implementation of extension programmes and in the entire extension process. Automatically, therefore, the question arises whether it is appropriate under the prevailing conditions in many developing countries to unify their already scarce extension activities. It would be counter-productive, given that in developing countries in general, there is little of the overlapping of extension activities that were existent or present in Israel prior to 1960. In some countries there have been cases where extension staff from other regions, working under non-T&V programmes or projects, have been obliged to work for other projects, leaving the regions where they served without any need of extension service. Many of the developing countries where T&V is applied do not experience the same conditions as were applicable in Israel and other countries of having so many extension activities, that they have 'no need' to unify them due to service overlap.

Unification, as a first step in developing an extension service, may be questionable. The Israeli extension service "only merged after nearly eighty years of formal and informal extension activities that enabled them to gradually build up and involve a certain level of human and material resources, and institutional and organizational capabilities" (Sellener, 1988:70). It can be projected with confidence that having many different private and state agencies initially to organise extension, provides the flexibility needed to respond quickly to changes and to involve an approach in harmony with the conditions, culture and resources of the country. A centralised extension service can be negatively bureaucratic and can impede spontaneous decision making at the grass-roots level by the extension staff, in accordance with relevant and immediate needs of

farmers or the extension service. In order for a unified extension service to work efficiently, a fundamental pre-requisite is a high level of administrative capacity. This capability is often not present in developing countries, and Bophuthatswana was by no means an exception.

6.10.3 Agricultural Extension Exclusively

The particular evolution of agricultural and rural development in Israel, for example, resulted in an extension service that is focused on working with the agricultural extension only principle. According to Sellener (1988:71), "one of the reasons is that agricultural extension is part of a 'creation - diffusion - utilization system' of technology transfer where the other sub-systems are working concomitantly." In developing countries where T&V was applied, these sub-systems are scarce, and general work inefficient, which obliges the extension services to perform tasks that otherwise, would be covered by the other sub-systems. (This will be expanded upon later as the discussion proceeds). The second reason is directly related to one of those sub-systems, the inputs- supply sub-system. The third one is related to the different organisations that are in charge of providing the bulk of necessary inputs for agricultural production.

Two issues will be discussed. The first is whether farmers perceive that extension service messages, recommendations or information should be only agro-technically oriented. Then it must be asked whether farmers perceive agro-technical advice as their first priority? If not, is the T&V approach to 'agricultural recommendations only' appropriate for the majority of small poor resource farmers in developing countries? The second issue that will be addressed is a description of the Israeli 'creation - diffusion - utilization system' of technology transfer. For the principle of 'agricultural extension only' to be successfully applied, proper conditions have to be present in the other sub-systems that make the 'creation, diffusion and utilisation' of agricultural technologies possible.

Sellener (1988:72) points out that, "in Israel, quasi-ideal conditions were present for the process of an efficient technology transfer." Following from this, a description of the sub-systems and their functioning is submitted to determine whether the situation found in Israel in respect to supportive systems is existent in developing countries.

6.10.4 Training and Visit Extension Exclusively

The following paragraph describes the concept, according to Benor, Harrison, and Baxter (1984:24-25): "Extension personnel should devote all their time exclusively to their professional agricultural extension work. They should not be assigned responsibility for the regulatory functions, supply of inputs, and collection of statistics; not to mention other assignments that have no connection with agriculture." These activities, besides being very time consuming, divert the focus of the extension staff from what should be the main thrust of their responsibilities. Thus, the farmers' trust in them will be undermined.

6.10.5 Problems with the Application of Extension in Developing Countries

According to the T&V system, the extension agent is not supposed to deal with non-agricultural problems. Thus, T&V can be seen as part of a technology-oriented approach to development. The T&V system fails to recognise a gap between the intended beneficiaries' concept of reality and the assumption upon which the extension services base their activities. Its applicants, due to cultural differences, often do not perceive the cultural aspects of the intended beneficiaries.

Therefore, a conflict is generated between the government's concept of development and farmers' concept of development that is intimately related to their cultural beliefs, socio-economic situations, indigenous knowledge systems and so forth. According to this situation, small poor-resource farmers sometimes

perceive that the new agricultural technology that government agents are trying to disseminate is not going to solve their problems of underdevelopment.

6.10.6 Extension Activities within a Systems Approach

In developing countries, where agricultural and rural development is a priority goal, the concern for increasing the productivity of small farmers should be seen from a holistic perspective. A reasonable strategy to follow would combine closely inter-related sub-systems within a system. The role played by extension in such a system should not be isolated from the whole. For extension to be effective, and for supportive institutions to be helpful, the farmers' socio-cultural, economic, ecological, political and physical environment should influence the design, implementation and utilisation of appropriate agricultural technology for sustainable agricultural and rural development. Research, extension, and the farmers' sub-systems are not the only sub-systems that intervene in this process of technology transfer. "Interrelationships among research, extension and farming were recognised by Axinn and Thorat (1972) in their 'conceptualisation' of a 'rural social system' as consisting of research, education/extension, production, farming, supply, marketing, and governance of sub-systems within a socio-political, economic, religious, cultural and physical environment, know as the Agricultural Knowledge System" (Mollel, 1986:100).

6.10.7 Agricultural Extension in Israel

Since the institutionalisation of extension activities in Israel around the 1960s, emphasis was placed on independence of extension workers from other functions of the Ministry, following the principle of 'agricultural extension only'. The reason why Israel involved an extension service which follows the 'agricultural extension only' approach is because, throughout the history of agricultural and rural development in Palestine/Israel, the other sub-systems which are needed for an efficient technology transfer were growing similarly at

the same time as the extension system. So, they arrived at a point where all the sub-systems of the agricultural knowledge system were balanced to the needs of the other sub-systems (State of Israel, Ministry of Agriculture, 1960). The Israeli extension service does not work independently, but supports and is supported by several sub-systems that work in a closely interrelated way with each other. The sub-systems are: research; extension; farmer; inputs; psycho-socio-cultural; administrative and organisational. A brief discussion of these subsystems will be explored in order to underscore their importance to the extension process.

- **Research**

"The Agricultural Research Organization is the instrument of research of Israel's Ministry of Agriculture, and comprises about 350 scientists with a total staff of close to 1,500. The approximately 1,000 projects researched in this organisation each year, yield 200 to 300 new articles for publication" (Palti, 1977:4). A process of feedback operates at all levels. Research scientists do not limit themselves to the presentation of their results in print; they frequently appear at farmers' meetings to discuss research findings. In addition to participation in field days organised by the extension service, the Agricultural Research Organization itself invites farmers to its three regional centres to present research results and hear comments. Such feedback is most valuable for the planning of subsequent research. "The Agricultural Research Organisation also holds courses on a wide range of subjects, mostly for advanced farmers, advisory staff and agricultural teachers" (Palti, 1977:4-5).

At present, agricultural extension in Israel can deal only with agro-technical issues and not concern itself with other tasks, because the other sub-systems are in place and working inter-independently with each other. Conversely, in many developing countries some of the sub-systems are either non-existent, or often not at all functional, so that, as a consequence, dysfunctional sub-systems impairs the effectiveness of extension activities. When the T&V system

implements 'agricultural extension only' and disregards other systems, it creates an imbalance. All the sub-systems need to grow together for each to be effective and for extension not to act in isolation. A strong case against neglecting other sub-systems will be made by the researcher as the discussion continues on the focus of input supply as one of the sub-systems.

6.10.8 Supply of Agricultural Inputs and Credit

A characteristic of the Israeli Agricultural Extension Service is its concentration on 'extension only', while closely involved, at the top level, with planning, credit farm supply, marketing organisations for private, co-operative or state institutions (Blum, 1986:171). In the Israeli context the 'agricultural extension only' principle could be applied efficiently mainly due to three reasons. The first reason was discussed and had to do with effective interrelationships among different sub-systems intervening in the 'creation, dissemination and utilization system' of technology transfer. The other two reasons will be discussed with particular reference to the organisational structure of the Kibbutzim and Moshavim in terms of state, private and co-operative organisations dealing with inputs supply. (This is indeed still the case in Israel in spite of the fact that nearly two decades have past in the implementation of the extension only principle in a unified extension service. This is precipitated by total government support and commitment by extension workers. The system is only modified on the basis of the application of new technology, Sellener (1989:82) makes the same point in his Master of Professional Studies Thesis).

6.10.9 The Principle: Supply of Input and Credit

Benor, Harrison, and Baxter (1984:32) describe the principle as follows: - The functions of the extension service and agricultural inputs and other service agencies must be clearly delineated. Extension requires an effective input supply system, and input agencies need extension to advise farmers of suitable

inputs and to teach them how to use these. But just as inputs supply, credit, and other support services are not responsible for agricultural extension, neither can the extension service be responsible for ensuring the availability of inputs to farmers, filling in loan applications, collecting debts and so on. While not being responsible for the actual supply of inputs, an extension service assists input agencies in a number of ways. An important aspect of this assistance is the undeniable fact that an extension service helps in creating a demand for the purchase of inputs.

As outlined previously, one of the main principles of the T&V system is that the extension staff should perform 'agricultural extension only'. A corollary of this principle is that in the T&V system, the supply of agricultural inputs and credit is not the task of the extension services, but should be dealt with separately. In this regard Benor et al (1984:82) state that: "Continuation over the responsibility of extension with respect to inputs is common although the relationship is clear; extension workers at any level do not handle any inputs and are not responsible for their distribution and sale. Extension does have an important role however in advising input agencies of the input supply situation in the field and anticipated demand."

6.10.10 Problems with the Application of the Supply of Inputs and Credit Principle

The application of the principle did not seem to work efficiently in the field. A study carried out in Tanzania shows as follows: "The sponsors of the T&V system project "handed over" the administration of the project (two years before the stipulated time) to the Regional Development Office after they (the sponsors) realised that they had not achieved their objectives of improving the extension organisation in the Tanga region and raising farmers' income through increased agricultural productivity. All the extension personnel interviewed agreed that lack of credit and inputs for farmers was a major factor that led to the failure of T&V

achieving its objectives" (Mollel, 1986:138).

A tremendous amount of international literature on extension is available, in terms of capturing and documenting the salient problems that confront extension services in settings similar to the former Bophuthatswana. However, extension services of India, Israel and Tanzania cannot be compared with those that were available in Bophuthatswana. This is due to their far superior nature. They are more co-ordinated in terms of objectives of laid down policy and in terms of expected outcome. This is further exemplified by the quality of research undertaken and the guiding of the various sub-systems, as observed by the data presented above. This vital component was absolutely absent in Bophuthatswana. Therefore, without appropriate and meaningful research, not much could be achieved.

6.10.11 Comparative Analysis: Inputs and Credit

There were basically two reasons in Israel why the extension agents did not have to deal with inputs supply and credit and thus could efficiently carry out 'agricultural extension only'. The first reason is that the particular organisational structure of the Kibbutzim and Moshavim, provided for well arranged, timely administered and sufficiently provisioned inputs and credit for the whole community. The second reason is the existence of national, regional and local organisations which could provide for inputs and credit.

6.10.12 Responsibilities for Inputs Supply and Credit

As addressed above, the first reason why the extension agent did not have to carry out inputs supply and credit activities in Israel is because these non-agricultural tasks in the different branches of production in the Kibbutzim and Moshavim, such as input supply, credit and so on, were carried out by groups of farmers within the community. However, in developing countries

where T&V has been applied, these tasks have been generally carried out by the extension agents because of the lack of an appropriate infrastructure. In the Kibbutzim and in the old Moshavim, these tasks were carried out by a separate branch within the same community. In the new "immigrants" Moshavim, inputs supply and credit was handled separately from agro-technical issues because there was a clear delineation of tasks between the general and the agricultural instruction.

The agricultural instructors' main task was teaching the settlers to perform elementary farm operations and the timing and co-ordination of all branches of farming. Their role became more important over time. They served one village and remained in it until it reached an independent stage.

6.10.13 Responsibilities for Inputs Supplies and Credit

The second main reason that allows the Israeli "agricultural extension only system" is that outside the communities, at a national, regional and local level there are enough private, co-operative and state organisations, which are well organised and supply the necessary inputs for agricultural production. Therefore, Israeli extension agents do not have to carry out inputs supply tasks in addition to their agro-technical advice functions and can concentrate on "agricultural extension only". In contrast, one characteristic of the Israeli process of rural development and of extension activities per se is the high degree of participation of the intended beneficiaries in the process of decision-making, implementation and evaluation of their own development and extension related activities. Each Kibbutz was a separate economic enterprise and social entity which could not be moulded according to a central plan, as conventional "blueprint" projects do. Central direction would, therefore, have been inefficient. Furthermore, it would have been incompatible with the spirit of voluntary pioneering without which the Kibbutz and the Moshavim could not have existed.

6.11 DELIVERY SYSTEMS FOR RURAL AND INTEGRATED DEVELOPMENT

Development practitioners have come to recognise recently how crucial institutional development is for the overall success of development. The US Agency for International Development (1987:17) states, that "institutional development is a key to promoting sustainable economic growth and social progress in poor countries." It points out that training to help build an indigenous analytical capacity to conceive, plan and implement development strategies and programmes is a very important component of institutional building. Development is about change and changing the way in which people use resources. Conflict is inherent in the process of change and it has been noted by Rondinelli (1987:148) that "effective development administration is unlikely to emerge from conventional principles (of administration); for in contrast it requires administrators who can respond creatively and quickly to changes ... and who view themselves as leaders rather than bureaucrats." An examination of the major types of institutional systems of rural development involves the consideration of three major concepts: - "centralisation versus decentralisation of the public sector system; deconcentration versus devolution on decision making powers; sectoral/functional versus area/spatial emphasis as regards the delivery of public sector products and services" (Agenrur, 1991:6).

It can be argued that the fallacy of this approach is not simply the "weakness" of the "modern bureaucratic machinery", but that this obvious weakness derives from the lack of political capacity of the national system (this was a stark reality in former Bophuthatswana). Low levels of specialisation, poor communications and limited power to raise funds limit the central ruling group's ability to influence behaviour in rural areas.

- Uphoff (1986) states that "a balance between spatial/area co-ordination, effective central government and its administration which is supportive of

> local government and its administration, will involve a consideration of the following principles: - centralisation versus decentralization; deconcentration versus devolution; area versus sectoral emphasis." Indeed, how the balance is to be achieved depends on the circumstances of the particular environment.

It as been recorded, articulated and expressed by many writers that, there is no "blueprint" formula for an appropriate institutional structure" (Korten, 1980; Rondinelli, 1979; Johnstone and Clarke, 1982). However, it must be remembered that the importance of an effective institutional delivery system for rural development, at all vertical and horizontal levels, has been stressed and by definition, therefore, this refers to all components of the delivery system including aid agencies and central governments.

Local institutional development is in itself a strategy for decentralisation as it creates capacity at local level. The extent to which a government "loses power" by decentralisation depends on how congruent its objectives are with those of the public. A process of decentralisation does not mean the elimination or even necessarily a weakening of central government since, in a decentralised administrative structure, the centre needs to be as strong as in a centralised one. The reorientation required is one of providing services rather than achieving hierarchial control. Effective decentralisation requires a combination of authority, finance, information, personnel, expertise, equipment and facilities. In the Agenrur document (1991:143), it is pointed out that "within the Southern African states, the system of government tends to be centralised. However, the link at central level between the government (Minister of Agriculture) and the Administration (Director General of Agriculture) tends to be weak" (this aspect has been discussed in great detail with examples in the Bophuthatswana context), and must never be allowed to occur under a new government and under any form of new restructuring.

6.12 CONCLUSION

This results in a lack of co-ordination between the political and executive processes of government at central let alone regional and local levels. In addition, within the Southern African states, local, regional and government bodies tend to be ineffective. Often they are dependent upon, but not supported by, central government. They have no control over the actions of sectoral administrative departments operating in their particular areas of local or regional government. In order to combat the above problems and, in the absence of a strong local and regional government, which is usually considered the optimal situation in a democratic society, this co-ordinating function could be built into the administration at central, regional and local levels. The body exercising this function requires the power/authority to control the actions of other departments. This introduces a spatial control dimension to a sectoral organised administration. The linkage between the co-ordinating administrative body and the government bodies, which should be playing this role, requires further attention and research.

CHAPTER 7
ANIMAL HEALTH SERVICES: CUSTOMER NEEDS AND PERCEPTIONS, 1992

7.1 INTRODUCTION

In this important chapter, issues in respect to proving some of the assertions made in this study, in respect to the failure of agriculture with particular reference to training of farmers, as it affected extension and, in particular veterinary services in the former Bophuthatswana is undertaken. The chapter captures and enunciates the salient findings of a study undertaken in 1992, in respect to Animal Health Services: Customer Needs and Perceptions. In order to encompass the chapter, in respect to other facets that engage the vast and complex field of agriculture, the chapter also undertakes a review of the situational analysis of agriculture as it pertains to both crop and animal production parameters in the erstwhile Bophuthatswana. An attempt is also made to briefly explore the possible future approach to agriculture in this region with particular reference to people – centred development and the possibilities of engaging, developing and implementing other agricultural models, in the context of agriculture in this region and, approaches to extension that have been used and implemented in Commonwealth African countries. Finally, the chapter will be enhanced in respect to possible strategies that may be utilized in respect to the approaches to rural development.

7.2 AN OVERVIEW OF THE SURVEY/STUDY

The above study was commissioned on behalf of the Directorate of Veterinary Services in support of the present study. This was done because the researcher wanted to ascertain, independently, the relevance of this study, and to provide empirical evidence on some of the parameters of uneven development and the failure of agricultural training programmes; coupled with

ascertaining possible ineffective service delivery by state/government institutions to the farming community of Bophuthatswana, with particular reference to resource poor farmers.

7.2.1 Purpose of the Study

In this regard, an independent researcher within Agricor's Development Research Section (I. Schmidt) was entrusted with the task in July 1992. The brief of the study consisted of two parts, as follows: - to identify the Bophuthatswana livestock owner's perceptions and needs with regards to animal health services and to assess the demand and availability of patent stock remedies at service centres.

The research emanating from the above brief had to provide answers to the following questions:

- Do animal health services provide the kind of services needed by the farmers?
- Which of the services offered were most needed and used by farmers?
- What were the animal health-related services needed by livestock owners, but not offered?
- How did the livestock owners feel about the provision of patent stock remedies at service centres?
- How frequently did livestock owners make use of the animal health services?
- What were the biggest problems of the livestock owners regarding animal health, and how did they see Agricor and the Directorate of Veterinary Services assisting them?
- What was the nature and extent of stock remedy provision by service centres?

7.2.2 Time Frame of the Study

The time frame of the study was from April to July 1992 (four months).

7.2.3 Report Format of the Study

The report format of the study entailed eight separate sections. The first section discusses the national findings and aims to provide information to strategists and policy-makers. The remaining seven sections were district discussion documents. These could have been used by the Agricor district office staff to develop their own strategies or change/adjust the services they provided. In some cases, districts with very similar characteristics were grouped together in order to save time and money.

7.2.4 District Summaries of the Study

In addition to the national overview, summaries of the survey results for each district or combination of districts were made available to the organisation as a whole. These documents were aimed at providing the districts with some basic statistics about the livestock owners' perceptions in their area. Ideally, these should have been interpreted and used by the district staff involved in the provision of animal health services and also by extension staff.

7.2.5 Target Population of the Study

The target population comprised of livestock owners living in the rural areas in Bophuthatswana. The study population was reduced to livestock owners who brought their livestock to be vaccinated against anthrax. This was due to practical and cost considerations. These vaccinations were compulsory and were done nationally from May to July each year.

7.2.6 Sample Size of the Study and Interview Procedure

The minimum sample size required per district or combination of two districts was 200. In cases where two districts were combined, 100 livestock owners were interviewed in each. Two-stage sampling techniques were used for this study. First, a random sample was drawn from all the vaccination points, scheduled for May and June 1992. The number of points selected per district varied between 10 and 20 depending on the total number of questionnaires required per district.

During the second phase of sampling, a number of livestock owners were randomly selected from each sampled vaccination point. The number of livestock owners selected depended on the total number of questionnaires needed for a particular district, and the number of livestock owners who used a particular vaccination point. In most cases, 10 livestock owners were interviewed at each selected vaccination point. If vaccinations did not go ahead as planned, the completion of questionnaires was postponed with the vaccination. In cases where postponement was not possible, another vaccination point, close to the one in question, was used as replacement. If neither of these options was practical, the required questionnaires were completed during stock inspection/brucellosis testing periods.

7.2.7 Fieldwork for the Study

Fieldwork was conducted by senior animal health officers and co-ordinated by them in each district. The animal health officers and, in some cases, extension officers completed the questionnaires in the field. Fieldworkers, trained and hired, completed the study for the Molopo and Ditsobotla district as animal health officers were unable/unwilling to do the survey. Naturally, some problems were encountered, but these were solved and did not impinge upon the study as a whole.

7.2.8 Methodology of the Study

The methodology was chosen against the background of limited time and money. Its biggest strength was that it was a low-cost survey, done within a relatively short period of time. However, the general information was not as high as it would have been if traditional and highly-controlled methodologies had been used. Despite its slightly lower quality, the data was still useable and provided a good insight into the situation on the ground and particularly in the rural areas. The positive aspects of this methodology in terms of its strong performance in three respects were as follows:

- Its biggest strength was its cost-effectiveness. The cost per questionnaire was only R5.75 as compared to R16.80 for a highly-controlled study of similar scope and size.

- Relatively very little time was needed to execute this survey; the study was completed in four months.

- Another advantage of this methodology is that the survey provided an opportunity for the livestock owners to give 'formal' feedback to the animal health officers. This form of direct feedback reduced the need for a report filled with statistics, since dedicated officers could use the information they had obtained immediately after completing the interviews.

Still, this methodology, like most methodologies, had its weaknesses. The most important of these were:

- The study population only represented approximately 79 percent of the target population. (Note: that the calves are not usually vaccinated and 3 percent of the cattle were excluded when calculating this percentage).

- Very little quality control could be carried out, as the study was done in different parts of the country.

- The survey placed additional pressure on the animal health staff.

Despite these negative aspects, the quality of the data was still sufficiently high. This is confirmed by internal consistencies and findings that correspond with these or other studies. The only data that had to be excluded, because of poor quality, were those received from the district of Ganyesa. Their data was replaced with extrapolations of the Kudumane data. The survey and sampling design required that sample sizes be adjusted, using weights, in order to get proportional representations. These proportions were based on livestock owner statistics as summarised in the Directorate of Veterinary Services, Annual Report, for October 1990 to September 1991.

7.2.9 Data Analysis of the Study

The SAS analysis package was used for the analysis of data. Frequency counts, percentages and chi-squares were the main statistical tools used. All percentages were rounded off to the nearest integer to facilitate easy reading. The methodology chosen for this study was the most appropriate, given time and financial constraints. (The questionnaires are included as appendices A and B for reference purposes). There were over 2,000 respondents. Open-ended questions were utilised. The researcher cannot provide all the data that emanated from this survey, due to its length and volume, nor will tables and graphs be presented as was done by Schmidt in the survey. In this regard, "an executive summary of the findings will be provided and, lastly, the conclusions and recommendations of the survey will be presented as captured by the independent researcher" (Schmidt, 1992:47-54).

It must be acknowledged that, perhaps, this survey is narrowly based in that it looked at livestock farmers only and did not cater for those farming with different agricultural frames of reference. However, this does not alter the picture and supports the views of the researcher, that agriculture was a failure in the Bophuthatswana context. This survey provides more empirical evidence and data on the status of agriculture, extension and the processes of uneven development. The researcher is also of the opinion that livestock farming was the most important farming activity in Bophuthatswana, which was neither appreciated by the agricultural sector nor by the policy-makers within this sector. Therefore, the findings and conclusions of this survey/study weigh heavily upon the thought processes and general criticisms, as outlined and advanced throughout this dissertation.

7.2.10 Executive Summary - Salient Findings

The results of the Service Centre Evaluation indicated that of all the services offered by Agricor, animal health services were the mostly widely used. Yet, very little was known about these services and their problems. In April 1992, the Directorate of Veterinary Services, Department of Agriculture (Karodia, A.M. Principal State Veterinarian), requested the study on the perceptions and needs of the users of animal health services (in support of this dissertation). The study, therefore, became part of the official research programme of Agricor, in order to co-relate the assertions being made by the researcher in this dissertation. The perceptions and needs of livestock owners need to be seen against the backdrop of the structure of animal health services in Bophuthatswana. The support specialists were within the Department of Agriculture and the operational staff within Agricor. The tension and communication problems that emanated from this arrangement led to considerable confusion and friction, which had an influence on the quality of the service that was provided.

It was not only the structural arrangements, but also the distribution of staff and infrastructure that influenced the quality of state-provided animal health services. Serious staff shortages were identified in the western region, particularly in Taung, Kudumane and Ganyesa. Moretele, in the eastern region, needed more animal health officers. The central region had very high numbers of large stock/crushpen ratios and could have benefited from the erection of more crushpens. Districts with high small-stock/diptank ratios were also identified. However, as pointed out in the recommendations, building more dipping tanks might not have been the most appropriate answer. Most livestock owners found it difficult to get access to veterinarians and veterinary clinics. Districts in the western region needed at least two veterinarians each. Once a district had more than one veterinarian, the mobile clinic concept could have been the most cost effective and appropriate way to address problems related to clinic access. Ninety seven percent of the livestock owners used at least one of the animal health services, once a year or more often. Of these users, 62 percent were dissatisfied with one or more of the services they used. The highest level of dissatisfaction was in the central region with 26 percent, they were followed by the eastern region with 31 percent and the western region with 29 percent.

The three animal health services most utilised were: vaccinations, advice on the treatment of illnesses and diseases, and assistance with dipping. The regional usage patterns and levels of satisfaction for all these services, except dipping, were analysed. In the eastern region, where state assistance with dipping was limited to facilitation and advice, the livestock owners did not use the service regularly and many of those who did, were dissatisfied. Possible ways of addressing this problem are made in the recommendations.

Nationally, only 46 percent of livestock owners received training from the state, in at least one of the livestock-related aspects tested in the questionnaire. The regional variations were quite high. Sixty seven percent of the livestock

owners in the central region received training in at least one of the listed aspects. In the western and eastern regions, these percentages were 46 and 32 percent respectively. Training in general disease treatment was received by only 13 percent of the livestock owners. At the same time, 84 percent felt that they needed training in this regard.

The low percentages of livestock owners who received training in animal health-related activities could be symptomatic of the lack of direction and poor leadership of the Directorate of Veterinary Services, which had a minimum impact upon both field staff and clients. Further, animal health officers had to spend most of their time doing regulatory and control functions, which had a minimum impact upon development. This left little time for training and other disease-prevention activities. It was recommended that the operational staff within Agricor develop strategies to bring a greater balance between preventive and curative animal health services. The Taung district is a good example of a district where some progress was made in this regard.

In conclusion, it can be said that this particular study identified a variety of patterns and problems related to animal health services. However, what emerged clearly is that animal health was a very high priority for most livestock owners. Within this context it is hoped that animal health services will be given more strategic importance as part of a livestock and extension development strategy. From the data emerging from this study it could be confidently asserted that other sectors within agriculture were also in disarray and, if surveyed, the same or even worse patterns would have emerged" (Schmidt I and Karodia A.M, 1992:1-11).

7.3 CONCLUSIONS AND RECOMMENDATIONS

7.3.1 Staff and Infrastructure

All districts in the western region, except Thaba Nchu, were facing serious staff problems (Thaba Nchu is a very small district, with a very small animal population). Their animal health officers provided a service to nearly twice as many livestock owners as the officers in other regions. This did not only increase the work load of individual officers, but also adversely affected the quality of the service they provided. The same applied to the veterinarians in these districts. If one considers the fact that the western region was the main livestock producing area in Bophuthatswana, it becomes clear that attention should have been given to this problem without delay.

The distribution of animal health-related infrastructure did not have a clear pattern, as shown by the distribution of staff. The number of clinics per district appears to have had little influence on the farmers perception, on the ease with which the facility could be reached. This indicated that a need existed for more mobile clinics rather than more clinics. Also needed were regular visits by a state veterinary surgeon to fixed points in the district, on specified days. The mobile clinic concept would have been most useful in the western region and could best be implemented if there were at least two veterinarians per district. Crushpen/large-stock ratios indicated that priority needed to be given to the erection of crushpens in Ditsobotla, Molopo and Lehurutshe. Taung and Mankwe also had high ratios for crushpens, but the situation was not as serious as in the central region. In Kudumane and Taung, where small-stock dipping is compulsory, consideration should have been given to increasing the numbers of small-stock dipping tanks. However, such a decision could have been taken only after alternatives such as promoting the use of injectable dips, could have been taken into consideration. (The researcher feels it necessary to mention that trials with injectable dips have been carried out and that, in

addition to professional problems of missing animals, the exercise proved to be very expensive).

In Madikwe where dipping of small-stock was not compulsory there was also a high small-stock/diptank ratio. The erection of more tanks would have been entirely dependent on the needs and practices of the small-stock owners in that area. It is useful to point out that a high percentage of livestock owners in the eastern region were dissatisfied with the nature of the dipping support provided to them. One of the main reasons for these complaints was the nature of the service and the availability of the diptanks. The answer to these complaints was unlikely to be found in copying the type of dipping services available in other regions, as this region had unique needs and livestock owners. This was certainly a point where more strategic thinking was necessary.

7.3.2 Access to Services

In general, most livestock owners found it difficult to get access to veterinary clinics and veterinarians. The main reasons given for this were related to the distances to the service and poor road and transport networks. As already pointed out there was no clear relationship between the number of clinics per district and livestock owners perceptions on the ease of access to those services. More than 55 percent found it difficult to get help from animal health and extension officers, when needed. This was an unacceptable percentage. There was no distinct relationship between staff members and the farmers perceptions of ease of access to those staff members. This could have been related to people's perceptions and expectations regarding access to services. In the western region, where the state initiated relatively few development projects, people were often only too glad to receive the crumbs, and would therefore be happy with a less regular service.

7.3.3 Livestock Ownership

According to livestock ownership patterns, only 25 percent of these owners had more than 20 head of cattle in their herds. The majority of the clients who made use of animal health services, had small herds and required services geared towards small herds.

7.3.4 Provision of Patent Stock Remedies

Nearly all respondents felt that they required a service that provided them with patent stock remedies at cost price. The main benefits of retailing medicines at service centres were that remedies became more accessible and that there was a direct link between recommendations made by animal health officers and the available remedies. When considering the turnover of medicines at service centres in the western region, which was R45,700 in six months, it indicated that the service was underutilised when considering the number of farmers in the area.

7.3.5 Skills Development

Training of livestock owners is seen as one of the key elements in the growth and development of the livestock industry. The results of this survey indicated that very few livestock owners received training on key livestock-related aspects. The respondents in the central region received the most training (this was previously explained). They were followed by the western region and finally by the eastern region. The two aspects listed in the questionnaire that were most related to the functions of animal health officers, i.e. general disease treatment and preparation of specimens, were only enjoyed by few livestock owners. In the case of general disease treatment, less than 15 percent of the livestock owners received training, and yet training in general

disease treatment was the one aspect that most livestock owners felt that they needed training in.

One gets the impression that animal health officers spent so much time on unnecessary regulatory and control functions, that relatively little or no time was spent or left for training. As a result, livestock owners were not equipped with the skills that they needed to improve the health of their herds. Serious attention needed to be given to shifting the focus of their work from regulatory and curative to more preventive work. This commendable task was carried out in the Taung district and was solely due to the veterinarian stationed in this district and not due to the support of the Directorate of Veterinary Services or, for that matter, of the system. It must be noted that a shift to a more curative approach would only have been effective if staff shortages were meaningfully addressed.

7.3.6 Dipping

The vast majority of owners felt that they needed help from the state with dipping services. Most livestock owners in the central and western regions made use of this service and were satisfied. In the eastern region, where the state only facilitated dipping, 44 percent of those who made use of state help were unhappy with the service. They were mainly unhappy with the nature of the service and the distribution and availability of infrastructure. More strategic thinking needed to be done in this regard. However, the answer to the high level of dissatisfaction is not necessarily found in 'cloning' the type of dipping services provided by other regions, as the type of livestock owner and disease profiles are, and were, different.

7.3.7 Vaccination

The vaccination service provided by the state was the most commonly-used service. It was also the service with which most users were satisfied. This is obvious, because scheduled vaccinations, e.g. rabies, anthrax and other diseases are controlled and regulated by international codes via the Organisation International Epizootics in Paris, France. These vaccinations that were controlled and provided free of charge by the Bophuthatswana state were important because of the international movement of animals and also because of public health implications and considerations, but generally had no impact upon production parameters of livestock.

7.3.8 Advice on the Treatment of Illness and Diseases

Advice on the treatment of illnesses and diseases was the second most-used service. It was also the service with the second highest number of dissatisfied users. This service was closely related to training and, therefore, more attention had to be paid to this area on the basis that it is closely related to skills development and can thus form the very basis of future training programmes.

7.3.9 Assistance with Births and Operations

Improved nutrition was the animal health-related need of most livestock owners, particularly in the western region. These needs were related to the supply and access to fodder and supplements. Many actually wanted the state to give or heavily subsidise these inputs. The fact that this was not possible does not mean that no attention should have been paid to this need. At the root of the problem was the overstocking problem and also the episodes of drought. There are two ways in which adequate grazing can be addressed: through stock reduction (which was not only a very sensitive issue, but an

objective difficult to achieve) or by increasing the amount of food available. The second option was not explored extensively. Since it coincided with an expressed need of livestock owners, ways of tackling the overgrazing problem from this perspective, needed to be considered. The supply of fodder and supplements through service centres, at cost price, would have been a big move in this direction. Making this service available to more livestock owners, particularly during droughts, should have become a strategic priority. Water-related needs and problems featured as the second highest on the priority lists of the livestock owners. In the central region, the need for water-related infrastructure was even higher than the national average. This need was not known to the front-line staff and efforts in the future must be made to address it in a comprehensive and sustainable manner.

7.4 CONCLUSION

This study looked at a variety of factors that interacted with the health of livestock in Bophuthatswana, and which contributed either positively or negatively to the development of the agricultural sector. Overwhelmingly, viewpoints and criticism throughout this dissertation prove that agriculture was a failure in the Bophuthatswana context. Moreover, the agricultural sector under Agricor and all the other related parastatals including the Department of Agriculture had impacted negatively upon the entire process of rural development, had marginalised the rural periphery as intended beneficiaries and had contributed very significantly to the processes of uneven development.

The provision of animal health services is cardinal to agriculture and development in this region and the state must play a major role, particularly because animal health is central, firstly to the economy, and secondly in order to improve herd productivity, and thirdly to the very empowerment of the rural community. The study identified areas which negatively impacted upon agriculture and identified very few areas that impacted positively upon

development. It is hoped that these recommendations will be of use in any restructuring programme. (See/refer to appendices A. and B. for ease of reference).

7.5 SITUATIONAL ANALYSIS OF AGRICULTURE

Having outlined, in some detail, issues concerning the dynamics of training and the manifest problems faced by this crucial facet and component of the agricultural sector, it is necessary to furnish some information in respect of salient features of the agricultural sector, for purposes of clarity and greater understanding of the situational analysis embarked upon in this chapter. This was also undertaken bearing in mind that data thus far had been presented on livestock, which is only one important component of agricultural activities. Therefore, some data on crops and crop production are vital to the discussion and dissertation as a whole. These are presented below as summarised from a discussion paper prepared by Murray (1992:2-4) and subsequent discussion with the author.

- Of the rural population of 1,66 million people (84 percent of the de facto population), probably up to 70 percent used the land for agricultural purposes, mainly for subsistence.

- It was estimated that there were some 7,800 "commercial" farming families within Bophuthatswana (only 2,5 per cent of rural population). Most of the value of commercial agricultural output was derived from cropping, particularly maize.

- Up to 137,000 hectares of land was cultivated commercially every year. The largest maize intake was 130,000 tons in 1981/1982, but on average, only some 55,000 tons of maize were handled each year. National maize requirements were estimated at 250,000 tons per year,

indicating a self-sufficiency ratio of 22 percent (which will have tended to decline over time) in terms of commercial production.

- Farming debt to the Agricultural Bank of Bophuthatswana had increased since 1985 by more than 700 percent, and stood at some R156 million by the fall of the Bophuthatswana government. Since 1977 (and not including the latest drought year), government had been called upon to write off R127 million of farm debt.

- Even after discounting the disastrous effects of drought, there had been a widening gap in the lack of cropping profitability since the mid 1980s. In addition, crop farmers had shown an increasing dependency on external credit, manifesting in cash flow problems and an increasing inability to service debt. An Agribank calculation indicated that between R12 million and R15 million per annum would have been required to subsidise the cropping sector to compensate for likely losses which would have been incurred.

- The national tractor fleet in the former homeland gave rise to concern, because at least 60 percent of tractors needed to be rebuilt and some 20 percent had to be replaced. Rebuilding of tractors alone was likely to cost at least R15 million.

- National irrigation projects totalled some 4,200 hectares and never fulfilled the potential they represented. In fact, they were characterised by high debt burdens and a lack of profitability.

- The national cattle herd represented a rural capital resource of some R300 million, which was subject to an average annual turnover in the region of 10 percent. This performance was less than 50 per cent of the livestock sector's potential in commercial terms; most livestock owners

preferred to hold cattle for socio-cultural and household production purposes.

- Alarming to agriculturalists was the deterioration of the country's grazing resources. It had been calculated that the country was between 77 percent and 250 percent over-grazed, depending on the district concerned.

- Livestock ownership in Bophuthatswana showed a skewed distribution. Research indicated that there were 53,000 livestock owners, but that 75 per cent of these had herd sizes of less than 20 head of cattle, and that 53 percent of such households owned between 1 and 5 head. Conversely, between 10 and 20 percent of livestock-owning households accounted for more than 50 percent of the national herd.

- Since 1970, agriculture had not made a substantial contribution to GDP and had actually decreased from 9,1 percent in 1970 to 3,8 per cent in 1990 and was further declining.

- Agriculture accounted for 7,8 per cent of formal economic sector employment, but in regard to overall income benefits, contributed to a far wider cross-section of the population.

Human Science Research Council research indicated that up to 59 per cent of rural households engaged in some form of subsistence agricultural production (yielding up to 30 per cent of household income). It is therefore possible that agriculture contributed to the well-being of more than one million people (Murray, 1992: 2-4).

7.5.1 A Regional Goal for Agriculture

As planning involves anticipating the future and formulating systematic programmes of action to attain desired goals, such goals have to be set as a priority. Furthermore, the setting of such goals should be within the context of environmental capacity and reality. Within Bophuthatswana, one distinct feature of any agricultural scenario, was a continued dichotomy, reflecting a more highly-developed and surplus-producing commercial sector and a less-developed, household-producing small farmer unit. This division in the types of farming systems will not have been a regional goal per se, but will have continued to be a phenomenon of the region, due to land resource limitations, population growth and socio-economic aspects. Goal-setting, therefore, should have also been carried out in the context of both commercial and non-commercial agriculture.

7.5.2 Commercial Agriculture

The primary constraint to commercial agricultural production was that Bophuthatswana's resources were scarce. This was further exacerbated by commercial agriculture being placed, in the main, in the hands of ruling party members, who enjoyed the support from the regime at the expense of other sectors that could have made a significant contribution. Being a semi-arid region, lack of sufficient rainfall for widespread commercial cropping, rendered regional goal setting a relatively easy task. Similarly, although the region and its natural resources provided an ideal environment for extensive livestock production, the capacity for commercial production was limited. Therefore, commercial production goals are influenced primarily, and indeed set, by resource constraints, without having to contemplate the broader picture of likely future economic, political and social environments.

7.5.3 Commercial Cropping

Rainfall in the region under discussion varied from less than 300 mm in the western region to up to 600 mm in the east. If a long-term average annual rainfall of above 500 mm was considered adequate for commercial cropping and such rainfall areas were transposed with appropriate soil types, the areas depicted in Table 7.1 represent the assessed commercial cropping potential.

Table 7.1
Commercial Cropping Potential

AREA	CROPPING POTENTIAL	HA
Central region	High	46,000
	Medium	32,000
Eastern region	Medium	12,000
TOTAL		**90,000**

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

A long-term potential output level and profitability indicator could be calculated for this area (based on maize-using Agribank figures for crop budgets). This is reflected in Table 7.2

Table 7.2
Potential Output Level and Profitability Indicator by Calculation for Regional Targets

	CENTRAL REGION 46,000 (High)	EASTERN REGION 12,000 (Medium)		TOTAL 90,000 ha
Average yield per ha	1.9 tons	1.4 tons	(1.4 tons)	1.65 tons
Price per ton	R 446	R 446	(R 446)	R 446
Production	87,400 tons	44,800 tons		16,800 tons
Value Direct costs	R 38.8 m	R 19.9 m	(R 7.4 m)	R 66.1 m
Value of Gross Margin	R 7.4 m	R 4.0 m	(R 3.8 m)	R 15.2 m

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

A feature of the above regional targets was that the commercial viability was very yield-sensitive (a 20 percent yield variation would eliminate profitability

potential). The considered yield potential was higher than that depicted, but the yields used probably fairly reflected long-term realistic averages.

The relatively low gross margins should be noted, as should the fact that overhead farming costs (such as depreciation on capital equipment and the cost of any medium- and long-term financing) had still to be deducted to arrive at the potential for regional commercial cropping profitability. It was for this reason that commercial cropping on lower potential soils was excluded. As it was, cropping on the medium and high potential soils suffered financial losses in adverse climatic seasons.

It should also be noted that the commercial cropping model was based on maize only. In reality, maize would have probably accounted for some 65 to 70 per cent of the 90,000 hectare of identified potential commercial cropping land (indeed a maize enterprise replacement strategy could be considered to reduce commercial cropping risk further). After taking into account grain retention on farms by commercial maize producers themselves, the long term commercial production capacity of maize would not have been higher than some 75 000 - 90 000 tons.

7.5.4 Commercial Livestock Production

Up to 86 per cent of the region under discussion was estimated to be suitable for extensive grazing (3,5 million hectare). The long-term carrying capacity of the region's grazing land had been estimated to be some 421,000 large stock units. If some of the more marginal arable areas of the region were put down to dryland pastures, it might have been feasible to boost long-term carrying capacity to at least 450,000 large stock units (Murray, 1992:7). In monetary value terms a theoretical regional commercial livestock potential could have been calculated as follows:

Table 7.3

Calculation of Theoretical Commercial Livestock Potential in Monetary Value Terms

		Rm
Gross Output	(450,000 LSU at R 285)	128.25
Less Direct costs	(450,000 LSU at R 160)	72.00
National Gross Margin		**56.25**

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

However, it is debatable whether such a potential could ever have been attained in Bophuthatswana, although livestock, particularly with regard to its associated socio-cultural value system, played such a significant role in the expanding of the subsistence sector. In addition, even urban employed 'part-time farmers' would have continued to amass livestock on a wealth storage basis, rather than as a strict commercial production system. It could be argued that a herd of at least 30 (a 'single bull' herd) would have been necessary for commercial production. Agricor research (1987) indicated that "herds larger than 30 accounted for 242,600 head of cattle (some 54 per cent of the potential long-term carrying capacity) in the region" (Schmidt, 1992). It could therefore, be argued that medium-term commercial livestock production levels were unlikely to exceed the production potential for more than 60 percent of the long-term carrying capacity (60 percent of 450,000 LSU = 270,000 LSU). "Consequently, a regional goal for commercial livestock production (in terms of cattle) could have been established as follows" (Murray, 1992:7) and is shown in table 7.4.

Table 7.4
Regional Goal Calculation for Livestock Production

		Rm
Gross Output	(270,000 LSU at R 285)	76.95
Less Direct Costs	(270,000 LSU at R 160)	43.20
National Gross Margin		**33.75**

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

7.5.5 Non-Commercial Agriculture

Non-commercial agriculture (subsistence agriculture or agricultural production aimed at meeting household needs without consciously producing a surplus for the market) is a difficult and more abstract subject to grasp. It implies smallholder production, very often led by female de facto heads of households, and was difficult to quantify - either in physical terms or in its value to society. Empirical evidence has been supplied throughout this dissertation to show that ever since the region's so-called independence, the agricultural thrust focused on food production through capital-intensive agricultural projects, and that small-holder agriculture had not received the degree of official support that it deserved. This lack of support also led to a lack of statistical information of this sector. Its minimum potential value is shown in table 7.5 and can be estimated as follows:

Table 7.5

Minimum Potential Value for Non-Commercial Agriculture.

Theoretical availability of arable land for subsistence	325,000 ha
If planned to maize, average yield could be	0.5 tons/ha
Potential subsistence maize production	**162,000 tons**

162,000 tons maize	140,000 tons maize meal
Purchase cost at R 1,200/ton of maize meal	R168 million
Less: Subsistence cost of production 325,000 ha at R250	R81.25 million
Indication of regional potential value of subsistence cropping sector	**R86.75 million**

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

If such a quantity could be produced for household consumption, the benefit of such production would at least have equalled the household savings incurred in not having to purchase the maize. Further, the potential value of the subsistence sector would have, in reality, been higher if one were to consider

all food crops and included the backward and forward economic linkage effects, including employment, regional food security, nutrition, income distribution and social stability.

7.5.6 Subsistence Livestock

Subsistence livestock's value to society is extremely difficult to measure, mainly as a result of valuing the socio-cultural needs met through the holding of livestock. Furthermore, it is difficult to quantify those needs, let alone compile profile data in order to measure subsistence livestock holdings. However, if one looks at subsistence from just a wealth-storage point of view, and couples this with Agricor research findings (Schmidt, 1992) states that "with special reference to the Dryharts area in Taung district, then it could be assumed that livestock holding protects the farmer from inflation. It could then be argued that the annual benefit of subsistence livestock was at least equivalent to 15 per cent of its capital value" (this could have reduced in the longer term, if carrying capacity shrunked as a result of the regenerative ability of veld reducing because of overstocking). Therefore, the annual livestock benefit value in the subsistence sector can be shown to be at least as follows for that period and as reflected in table 7.6.

Table 7.6

Annual Livestock Benefit Value by Calculation for the Subsistence Sector

National livestock herd in LSU equivalents, 1991	700,000
Less: Potential commercial herd	270,000
Subsistence Livestock	**430,000**
Value of subsistence livestock at R 500/LSU	R215 m
*Annual benefit of livestock to the subsistence sector (at 15%)	R32.25 m

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

* Long-term inflation (at 15%)

7.6 FUTURE OPERATIONAL FOCUS OF AGRICULTURE

Having outlined a broad range of characteristics in relationship to possible outcomes that the redirectional approach of agriculture in the former homeland could have assumed via the application of proper planning and evaluation, the research will focus, very briefly, upon the possibilities of a future operational focus in respect of this sector. Basic economic development philosophy indicates the need for public sector resources allocation to optimise the needs of the society it serves. It is, therefore, advocated that future official sector support to agriculture should be balanced in terms of the industry's sectoral capacities. The indication of agricultural potential or capacities was analysed in a previous discussion earlier in this chapter, but is again summarised below as is reflected in table 7.7.

Table 7.7
Potential Production Capacity Benefits by Sector.

SECTOR	COMMERCIAL		NON-COMMERCIAL		TOTAL	
Cropping	15.20	(9%)	86.75	(52%)	101.95	(61%)
Livestock	33.75	(20%)	32.25	(19%)	66.00	(39%)
TOTAL	**48.95**	**(29%)**	**119.00**	**(71%)**	**167.95**	**(100%)**

(Source: Murray, Planning Directorate, Department of Agriculture, 1992)

While it is a relatively easy task to calculate the gross profitability or 'benefit' to the commercial sector, it must again be emphasized that the indicated potential 'benefit' capacity from agriculture in the non-commercial sector (small-holder production to meet household needs) was probably conservative. Moreover, it must be recognised that the commercial profitability capacity of agriculture will probably never be sufficient to sustain more than 3,260 farmers (assuming a current individual gross margin expectation of R15, 000 per annum, from farming). International experience indicates that, due to reducing agricultural gross margin, farm unit area increases and numbers of commercial farmers

decrease. In this context of finite commercial agricultural capacity in the former homeland, the public sector investment of resources in commercial agriculture had to be rationalised. Conversely, resources should have been redirected towards an intensive strategy to upgrade self-sufficiency and generally develop the non-commercial sector.

7.6.1 Future Approach to Agricultural Development

In the previous discussion, the research concentrated and tended to focus on the parameters of the physical production factors of agriculture (indicating the future direction of agricultural development, it is essential that agricultural policy also addresses the question of future method/s of agricultural development in this region). Essentially, agricultural development could be conducted in one of the following two ways:

7.6.1.1 Optimal Physical Production

The quickset way to attain physical production potential would be capital-intensive and expensive. A series of centrally-managed projects could increase production levels and create the needed employment in rural areas. Experience, however, has shown that apart from high operational and overhead cost levels, project objectives of ultimately establishing responsible and independent farmers are very seldom attained. After having worked hard throughout the season, many farmers have found that, after the deduction of input costs and overhead charges, resultant margins were small, or even non-existent. It was no wonder, therefore, that the leasing of land-use rights to RSA farmers on a share-cropping basis became an attractive option.

7.6.1.2 People-Centred Development

Having outlined a host of problems in this chapter; having also presented salient statistical data and having captured various scenarios in respect of commercial and subsistence farming in the region then defined as Bophuthatswana, the question is posed as to how to make people develop. In this regard it is the opinion of the researcher that, internationally, development was seen mainly as a process in material terms until the 1980s. It was assumed that technology could be transferred, resulting in economic development that could be planned and predicted. Traditional economists measured development in terms of GNP and expected economic growth to 'trickle down' to all levels of society. Since then, however, the realisation has been made that economic growth by itself is insufficient. Something else is necessary for the 'take off' conditions to be met, especially for the rural poor to benefit.

This has led to an increasing emphasis on human potential with the realisation that its development is the basic means and the ultimate purpose of any development effort. People's ideas, perceptions, socio-cultural values, motivation levels and perceived constraints should be the precursor for any development effort and, above all, the realisation that first-world models in the context of Bophuthatswana were both inappropriate and non-sustaining. The basic right of people, to be what they want, must be honoured and it must be recognised that involvement and commitment cannot be conjured up automatically by instructions from other quarters that have appraised the merits of a certain line of strategy. Developers have a role to play - that of assisting and working with the community because people's needs, motivation and the realisation of their own potential are critical to the success of any development initiative.

According to the researcher, in as much as it affects agriculture, certain statements about its future role can be confidently made as follows: as food is vital to human survival, agriculture will always be essential to social well-being; improved food production will be important because of increasing population pressure on finite production resources; and improved output of food production, especially if based on intensive, highly technical input, will not necessarily improve individual access to food.

The actual state of future agricultural development, especially for such a level to be sustainable, will largely depend on the extent of the rural agricultural development process. Furthermore, such 'participation' should not be used by developers, planners and policy-makers in a manner of token 'consulting' which was a haphazard feature of planning development in Bophuthatswana, but should be used to produce new knowledge, new direction, improved modes of organisation for a completely new commitment to agricultural, extension and development initiatives. What then is the conclusion to be drawn from the dismal state of affairs captured in this chapter? The traditional arguments which were put forward by the Bophuthatswana government and its economists assumed that gains would come from changes among sectors, each of which according to them was already efficient in terms of its own projection and production. The ability to respond or, better still, to anticipate changes is an essential part of dynamic productivity for economic decision-makers and it is arguable that spreading it is a basic element of what may be called development.

There is thus an interlinked set of constraints on any country's ability to develop, and there is no reason to assume that a solution necessarily existed in the Bophuthatswana agricultural dynamic and agricultural sector. Indeed, trade does encourage growth through demand and traditional efficiency gains, but this cannot be sufficient to cause 'development', it can only produce a series of one-off gains as the economy opens, and then a direct link to growth

in the external economy without any mechanism for catching up. Suffice it to say that, only if extended efficiency arguments work, either from exports or from industrialisation, can this region or any country develop, generally or in agricultural terms.

If neither works properly, and a government cannot (or does not) devise a policy substitute, there is no simple rule for producing development in any country at any time. Given the above and the absence of a coherent and sustained agricultural policy over time, agricultural development did, in no uncertain terms, elude Bophuthatswana. Its policy-makers had increasingly confused modernisation of insignificant agricultural sectors as 'development' and, in doing so, had thwarted the development of the human agricultural potential and had denied the emergence of the perceived or felt needs of farmers. The regime tended to be prescriptive over the years rather than being innovative; and failed to challenge the innate demands of agricultural development and its predominantly rural recipients.

7.7 INTEGRATED RURAL DEVELOPMENT

Integrated Rural Development (IRD) is not an outgrowth of an identifiable body of theory. It is, rather, the outcomes of assessments of performances of past development efforts, contributions, particularly from the social sciences, political considerations in the face of increasing polarisation in rural areas, and the need by donors for the new and hopefully more effective development approaches than those followed in the past (WG/Agen/Rural Dev. Doc., 1991:2). IRD gained popularity in the early 1970s when the limitations of industrially oriented, urban-based, sectoral-directed (including agriculture) development approaches emerged. It lost some of its appeal as implementation difficulties manifested themselves in the face of limited capacity. Towards the latter part of the 1980s, it again attracted interest as a comprehensive approach to poverty alleviation and development, though in

more explicit and practical terms. Although definitions and interpretation of IRD abound, it is generally agreed that the approach is characterised by: area limitation (e.g. region, district multi-sectoral activities, agriculture, health); mobilisation of people participation plus associated institution building to strengthen local initiative in the interests of sustainable development; integration of activities to maximise development impact.

This approach had been accepted by the Bophuthatswana Agricultural Development Corporation (Agricor) and Agriserve Board, in terms of its development thrust. The acceptance of this approach was based on the premise that it would cater for the full range of people living in rural areas, though specifically for the poor. An IRD approach should be tested against basic performance criteria such as:

- **Equity**
  - equal access to resources and means of production
  - physical resources;
  - support service for example knowledge;
  - the need to understand the nature of basic rights, rules of the game, who gets what;
  - it applies to communal and tribal areas (for example, landless rural dwellers) and new areas.
- **Efficiency**
  - regarding the use of capital, labour, natural resources. It is affected by the level of technology;
  - can efficiency be achieved before equity?
  - efficiency is strongly influenced by institutions;

- **Sustainability**
  - it is ecologically sound;

- it is socio-politically acceptable/human" (WG/Agen Doc, 143,1991)

In respect to the above, reference has already been made to the broad concepts of IRD throughout this dissertation and, therefore, it is not necessary to broaden the discussion any further, except to add that the concept of IRD was not implemented by Agricor/Agriserve in terms of the salient issues that ought to have been given the highest priority. To this end, examples have been provided throughout the study. After careful and close observations it can be safely stated that it was very unlikely for IRD to succeed in Bophuthatswana, because equity, efficiency and sustainability are concepts that were not followed within its agricultural sector. This was further aggravated by crisis management and cutbacks in the agricultural budgets (25% reduction of the 1993/1994 budget within the Department of Agriculture, as announced by the Secretary of Agriculture, February 1994, with immediate effect for the ensuing three months) and the retrenchment of staff within the agricultural sector (104 staff members as recently as January 1994), together with unfavourable macro-economic policies (for example, weak production, pricing, marketing).

The inter-relationships between macro-policies and sectoral policy issues relating to rural poverty alleviation need to be reviewed carefully before embarking on IRD (this was not considered by Bophuthatswana policy-makers). Strong commitment at all levels would have been required if IRD was to succeed in Bophuthatswana on the basis that policy-makers shared no commitment in this direction. Policy-makers were only concerned with what they could get out of the system, not what they could put into the system. In addition, the government of Bophuthatswana did not have the political will to respond to the weaknesses, it could not charter a direction for sustainable agricultural development. IRD was further doomed by the overambitious

objectives; management levels did not commensurate with the scale and complexity of multi-sectoral programmes.

Further, programmes were not tailored to suit local implementing capacity and did not pursue clear and specific goals. Bosman, Perkins, Rankin and Schmidt (1991) showed, that "one of the most common reasons for poor results was inappropriate design, resulting from a lack of information on the intended beneficiaries and their inadequate participation. Monitoring, evaluation and control leading to the process of sustained accountability was totally absent in Bophuthatswana. The other problem that IRD faced in Bophuthatswana was the all important fact that government needed to set the stage for IRD by facilitating its central role which should have been embodied in clear policy guidelines from which players involved in the process could derive their respective roles. This foundational tenet was almost absent in the central agricultural institutions within Bophuthatswana. In South Africa, IRD policy and the role of the public sector in implementing such an approach still needed to be defined in most cases".

The successful implementation for IRD calls for appropriately trained staff at all its stages and levels. This was totally absent at the practical level in Bophuthatswana and had to be addressed in the new regional context with great intensity and concern. Perhaps the greatest need in South Africa was at regional and local levels where field workers were required to facilitate involvement in the process by rural populations. A major pre-requisite for IRD would have been to analyse manpower and associated training needs in terms of the existing situation. Strategies could then be defined to address personnel and training needs as well as shortfalls. Unfortunately, this had not been done. Enquiries to the Bophuthatswana Manpower Authority revealed that it had only undertaken rudimentary, cursory and limited surveys, and that it had never been commissioned by Agricor, the related parastatals or the Department of Agriculture to conduct such surveys. Socio-economic studies were also

lacking in terms of the so-called developed and developing areas of Bophuthatswana and thus placed tremendous strain on the sustained implementation of IRD as an approach.

In terms of funding, IRD implies a complex mix of contributions to development both in cash and kind. Public assistance tends to dominate in the initial stages, but diminishes as beneficiaries and private sectors enter the arena of development issues. Support agencies take control of development. This facet was totally absent in Bophuthatswana because finance was supplied by government funds. Private philanthropic aid agencies in the form of NGOs were denied access to development, on the grounds that, if allowed, they would influence the political direction to the detriment of the government of Bophuthatswana and, above all, threaten its very existence. People participation was very limited and, therefore, negated the very concept of the success of IRD.

7.7.1 Farm Systems Research

The standard approach to Farm Systems Research (FSR) is normally a description of the farming system, design and testing of technology, followed by verification on the farm and, finally, extension inputs to achieve widespread adoption of suitable technology. "It is now widely accepted that FSR is influenced by a set of determinants which, in turn, can be influenced by the operation of the farming system itself" (Bembridge, 1987:68). If the determinants change, then so, to a greater or lesser extent, does the farming system. Indeed, this was a major problem in Bophuthatswana; not only did the determinants constantly change, but these determinants were not even properly analysed. Only after seventeen years of so-called independence did policy-makers realise that the livestock potential should have been developed as a policy imperative. A bigger problem was the uncertainty whether the most recent policy of FSR would be adhered to, given the situation that agricultural

policy was constantly changed and not vigorously followed to its logical conclusion.

FSR was further plagued by the overwhelming lack of literacy and numeracy of the local farmers and more aggravated by a lack of a comprehensive policy to address this parameter. All of these had a direct or indirect bias applicability in Bophuthatswana, in the sense that past policies had favoured the élite government patrons, who were, in the main, minority commercial farmers. There was no evidence to support the idea, that the introduction of FSR would have materially enhanced the lot of the predominantly small farmer and the rural masses, within the agricultural dynamic and sector. In this regard FSR was a utopian ideal, not because small farmers are necessarily unproductive, but because they had been neglected and were not supported by government initiatives; neither were there sufficient resources, land, capital, inputs, credit, appropriate policies, information, technology and marketing facilities. Some of these structures did exist in Bophuthatswana, but had developed into bureaucracies for the privileged few and their capabilities did not filter down to those most in need of these support mechanisms.

It can be concluded that there was a tremendous need for FSR in the region formerly known as Bophuthatswana. The constraints identified and outlined above will have to be urgently addressed and the anomalies urgently redressed in the shortest period of time. At the same time, there is a need to provide institutional support and incentives such as operational policy for agricultural development, land reform, improved extension and research systems, development of local organisations and leadership, as well as farming inputs. The greatest limitation to FSR which policy-makers of Agricor had not taken into consideration, is that FSR, as was practised in respect of diagnosis and solutions to farmers problems, tended to remain with the professional agriculturalist. Bembridge (1987:88) states that "farmers, especially those in the 'middle majority' category, should identify their own research needs and

priorities." This characteristic was also never allowed to emerge, nor did agricultural policies address this salient facet of agricultural development in the context of Bophuthatswana farmers.

7.7.2 The Grameen Bank System

In a search of an approach, the researcher has thus far attempted an outline of the strengths and limitations of a few extension approaches and, at the same time, has also attempted to synthesize the various approaches within the context of what this dissertation has set out to capture and evaluate. In this regard, and in terms of the motivation of this study, the researcher is of the opinion that the approach to development as motivated and implemented by Dr Muhammad Yunus in Bangladesh, warrants a discussion with a cursory look at the concept of the Grameen Bank System. This is a bank for villagers, which goes far beyond the usual banking scope and deals in more than money. In this regard Yakub (1988:9) states, "that compared with the recovery rate of institutional loans to the rich (10%), and that of agricultural loans (25%), the recovery rate of the Grameen loans is near perfect with 98 per cent." It is interesting to note here that policy-makers in Bophuthatswana, when approached, neither knew about this system, nor that it was applied in Bangladesh. This again proves the assertions that there was a paucity of intellectual policy thinking and understanding in terms of international agendas on the part of policy-makers in Bophuthatswana. The framework of thinking was very bias towards research and models emanating from the east and, therefore, mind sets were geared only at looking at development issues from a western or Eurocentric frame of reference.

Party politics also followed and accompanied the new avenue of spending as was the case in Bophuthatswana in all its years of existence, where only trickles reached the villagers' fields. Zyambo (1993) (from Zambia), Senior State Veterinarian of the Molopo District, pointed out that, "in terms of the large

development budget in his district, a mere 38 cents reached the rural poor at field level - the meagre price of a single doze of vaccine for animals, too little to make their fields green."

The Bangladesh famine of 1974, coming two years after its traumatic struggle of independence, proved to be a turning point in Dr Muhammad Yunus's life. A professor of economics at the University of Chittagong, "he realised then with a shock that the abstractions of economics had no connection with real life situations. In the villages of Chittagong, he learnt about poverty directly from the poor.

Institutional solutions had condemned the poor to a 'life sentence on survival on welfare' and their error was to treat the poor as deficient in imagination. The Grameen Bank denies all of this, and draws especially on the greater strength of women in poverty. The concept addresses the perceived needs of people wanting to improve their lot, according to their mind sets, via a process of sustainable guidance and in terms of their own attainable self-actualization. Groenou (1988:8) quotes Yunus as saying "loan to a women will benefit the children. While men's horizons are short, women seek long-term security. Men disappear when a crisis hits the family, women never abandon their children".

Bophuthatswana, could not afford the type of agricultural development it had embarked upon. Therefore, it would have made sound economic and agricultural sense if it could have taken cognisance of its poor performance and made the necessary adjustments to direct its agricultural imperatives towards a perspective that would have addressed the plight of its rural masses. By the same token, it needed to incorporate and adjust its emphasis from the wide models presented, and particularly survey the possibility of a modified Grameen system for parts of the region.

Having outlined some aspects of development theory, in terms of approaches to development, it is necessary to extend the debate to the formulation of approaches by capturing the experiences of Commonwealth Developing Countries in respect to small farmer development.

7.7.3 Approaches within Commonwealth Countries

Exclusive small farmer development projects in Sri Lanka and Bangladesh adopted a model using a 'participatory approach' with either informal or formal grouping of clients (Hassanullah, 1990:373). Chowdhury (1987:17) points out that "groups of clients' act as 'service receiving utilising mechanisms". Such support for the concept of 'grouping clients' contains an assumption that all such groups will become viable, self-perpetuating mechanisms to accomplish agricultural development tasks. In extension work the concept of a group is not always relevant. Extension, to be effective, must resort to individual, group and mass contacts as and when required. Dependence only upon formal groups may sometimes obstruct the free flow of technological information between agents and their clients, for example, when group leaders block the dissemination of information or resources. Extension, therefore, may not use the group as the sole mechanism of educating its clients but should utilise such groups as and when required for educational purposes.

The major conclusions reached by Hassanullah (1990:375) in respect of the review of the experiences of Commonwealth developing countries are as follows: Small farmers pose a serious problem in almost all these countries. Appropriate government interventions help to reduce the problem as reported in Zimbabwe and India. Small farmers need to be defined and differentiated by using objective criteria with institutional arrangements for proper identification and registration. The discriminating practices of the on-going agricultural development programmes and projects against small farmers need to be identified and removed, to slow down, if not halt, the process of pauperization.

Instead of remaining content with area based growth strategies and/or a few exclusive small farmer development projects, governments need to adopt growth cum beneficiary oriented strategies. The focus must be to ensure that all programme benefits being explicit in favour of small farmers and the poorest sections of the society with the provisions of special quotas, subsidies and grants, for extremely disadvantaged individuals.

The researcher posits that Africa as a whole and particularly Southern Africa, should endeavour to search for an approach/approaches, that will best suit their agricultural requirements. This search must be relentlessly pursued in the wake of international experience, and the ability to contribute to the entire process of rural development, training and extension in order to redress the imbalances created by apartheid and the, now defunct, homeland governments.

7.8 COMMONWEALTH EXPERIENCES

Small farmers have recently been receiving greater attention at both national and international levels. As their numbers are steadily increasing, they pose a problem, particularly in developing countries. With a primarily agro-based economy, the development initiatives of those countries are likely to be frustrated if the small farmers are not provided with the scope for increasing their productivity, income and standard of living. The problem needs to be thoroughly understood in order to design an appropriate national programme. The experiences of commonwealth developing countries may help to identify various dimensions of the problems and to adopt an appropriate strategy for programme development.

7.8.1 Magnitude and Dimensions of the Problem

Hassanullah (1990:362) reiterates that small farmers pose a serious problem for the growth and development of agriculture in particular, and economic development in general, in almost all developing countries, as they are increasing in number and share substantial agricultural resources. Small farmers share of the farming households ranged from 61,22 per cent in Zimbabwe to 86,40 per cent in Sri Lanka and occupied from 8,01 per cent (Zimbabwe) to 48,42 per cent (Malawi) of the total arable land. "The problem is critical in a country like Bangladesh where their number increases by 3,45 per cent annually. On the other hand, the numbers of "medium and large farmers have been decreasing annually by 2,70 per cent and 0,75 per cent respectively since 1977" (Bari, 1987:2). The growth rate of small farmers seems to be lower in India because of massive and timely government intervention. "In Zimbabwe, the number of small farmer households is slowly reducing at a rate of 0,36 per cent annually. The problem seems to be equally acute in Uganda, Tanzania, Sierra Leone and Malawi" (Okello, 1987; Moyo, 1987; Allie, 1987; and Murotho, 1987).

Irrespective of their country, small farmers seem to face similar problems, though the intensity of the problems varies widely. "The most frequently stated constraint on small farmers are their comparatively large families, the small farm size, the low productivity of their land, their subsistence mode of production, their use of traditional technology, their low productivity, their lack of access to public resources and services, exploitative marketing channels, low wages, poor health and nutrition, illiteracy, wasteful habits, risk aversion and fatalism with no opportunities and hence no hope for the future" (Abrew, 1987:10-14). According to Hassanullah (1990:364), "in commonwealth developing countries such as Sri Lanka, India, Ghana, Kenya and Malawi, an established definition of small farmers exists. He further points out that the lack of conceptual clarity is likely to create problems in implementing small

farmer development programmes". A clear conceptual framework and an acceptable working definition of small farmers was absent in Bophuthatswana. This lacuna needs to be removed before small farmer development programmes can be designed and operated effectively.

7.8.2 The Role of Extension

The extension system plays a significant role in agricultural development. Its orientation, design and operation can promote or hinder development of small farmers. Hassanullah (1990:370) and Okello (1987) state that "all Commonwealth developing countries, at the time of independence, had inherited imperial agricultural services whose primary tasks were to help farmers with production inputs and credit." Such priorities are still observed in some countries and Bophuthatswana was no exception in this regard, despite chronic food deficits.

In order to overcome this situation, the Training and Visit model has been introduced by departments of agriculture in some commonwealth countries like Sri Lanka, Bangladesh and Malawi (World Bank, 1985). The T&V model has restored functional exclusivity to agricultural extension services and provided a system of ensuring individual contacts with a limited number of selected clients, the Contact Farmers (CF's). The relevance of the Grameen Bank System and Commonwealth experiences in respect to extension and development initiatives are vital to the study, from the perspective of intervention strategies, in order to address the problems of development and the plight of the poor in general. In other words the administrative and management systems of governments must, at all times look at the possibilities of innovative strategies to alleviate the problems of the poor. An attempt will be made to support the discussion with empirical evidence in terms of a comparison of extension systems in some Asian and African commonwealth countries.

7.8.3 Comparison of Extension Systems

A comparison of extension systems in some Asian and African countries, which is of tremendous relevance to this study, is presented in table 7.8.

Table 7.8
A Comparison of Extension Systems

	ASIAN COUNTRIES			AFRICAN COUNTRIES					
	Bangla-desh	India	Sri Lanka	Ghana	Malawi	Sierra Leone	Tanzania	Uganda	Zimbabwe
GENERAL AGRICULTURAL EXTENSION SYSTEM									
1. Type of Agency	multiple	multiple	multiple	multiple	multiple	multiple	multiple	multiple	multiple
2. Model	T&V	T&V	T&V	SDM	T&V	SDM	SDM	SDM	ASM
3. Agent/Farmer Ratio	837	not available	800	not available	500	450	425	500	800
4. Impact	not accessed			not accessed					
EXTENSION SYSTEM									
Development Model	Group	T&V	Group	No Extension Model	Group	No Extension Model	No Extension Model	No Extension Model	No Extension Model

(Source: Country Reports presented in the Commonwealth Workshop, Comilla, Bangladesh, 25-30 April 1987)

However, it must be noted that, according to Hassanullah (1990:371-373), intensive or integrated production or development projects have retained their multiple functions with a 'service delivery model. Dissatisfaction has been increased with the impact of the T&V model, as well as with the service delivery model on small farmers, who constitute the vast majority of rural populations. Extension under these systems and models seem to discriminate against small farmers, and further states that some of the countries or projects had openly advocated or adopted modified forms of the T&V model. India, however, made a quota for 37,5 per cent of contact farmers to be

representatives of small farmers, marginal farmers and the weaker sections of society. Khanna (1987), however, states that "World Bank evaluations show that only about 12 to 15,71 per cent of contact farmers were, in fact, small and marginal farmers."

The problem of extension, training and rural development in Bophuthatswana as a region was intrinsic to the very nature of society itself. For that reason, any understanding of these issues presupposes some awareness of the social environment within which it operated. It must, in other words, appreciate the basis from which the limitations in the agrarian crisis in Bophuthatswana operated. In addition, it should have understood these historically, because it would have then been possible to attend constructively to the pressing needs relevant to the provision of extension, training and rural development in the region now re-integrated into South Africa. There is no doubt that agriculture is one of the major areas of concern in the attempt to change society and to create an environment of stability.

It is also clear to the researcher that, in the main, agricultural extension and training was an unchartered terrain in the context of Mangope's homeland. A great deal more needed to be done in the nature of empirical studies in the rethinking of theories and models, and clear assessment of the multiplicity of interests and the constituencies, particularly the rural constituency, which was not served. All of this would have entailed the development and modification of proper theory of agricultural development, to suit local conditions in South Africa as a whole and which did not exist. In a sense it would appear that most agricultural and extension agencies proceeded on the basis of ad hoc generalisations, subject to the vagaries of guesswork and speculation. Local extension and agricultural theory needed to be created.

There is, as was evidenced in the dissertation as a whole, a wide variety of literature on the subject which deals with the problems and progress in other

countries. It can be said that these bear, from many of the starting points of these enquiries, similarities to the Bophuthatswana situation. However, in the researcher's view, that in itself was not an adequate reason for a simple 'transfusion' of those analyses to the situation in the erstwhile Bophuthatswana. It is therefore, imperative to recognise that there are real material and objective difficulties which have to be accounted for. It is essential to understand these difficulties before any prescriptions are made, which may have had doubtful relevance to the local situation. In this connection there was considerable vigour and relevance in the debate between the followers of 'dependency' and 'development viewpoints'.

It is quite clear that the development and extension programmes of the organisations examined in the agricultural sector of former Bophuthatswana fell inevitably on the side of developmental theorists only; without practical application and implementation strategies, modified and accepted for local use. This was indeed a major problem. If one were to examine performance of the agencies of agricultural development within Bophuthatswana, there would have been a compelling need to upgrade the conceptual framework of all agricultural subject matters and strategies, because of their irrelevance, content and application in terms of development. Yet there was not a single agricultural organisation in agricultural development in Bophuthatswana which explicitly set out to address this difficulty. The very fact of its neglect is a confirmation of the particular value basis of the majority of agricultural organisations and agencies which were operating in agricultural development within Bophuthatswana. This points to the criticism raised in this study and a recognition of their obvious interests and agendas. The research also reveals that the agencies in question were doing 'very little' or 'absolutely nothing tangible' in order to address the pressing needs of agricultural development in Bophuthatswana.

7.8.4 Reflections on Strategy

Firstly, if any progress was to be made, a regional agricultural development plan needed to be put into place without delay. It should have been derived from a strategic planning process involving all 'players' in agriculture - from the political to the farmer level. The plan should have had the tacit and real approval, commitment and support of the government and, above all, the farmers. The question of land must be cleared and resolved, organised agriculture (e.g. co-operatives, farmers unions/associations) must become more prominent, get involved and be supported on a democratic basis. There must be recognition and support of the fact that not all rural dwellers can have access to agricultural land and credit. Therefore, strategies need to be developed to create employment. Policies must be pursued which are aimed at reducing poverty, strengthening economic growth and structured development programmes, towards a process of public accountability and efficiency, in an increasing attempt of promoting the general welfare.

7.8.5 Approaches to Rural Development

Farm Oriented Rural Development: Projects, which are oriented towards enhancing production on peasant farms are those for which the greatest experience has been accumulated through numerous integrated rural development initiatives since the early 1990s (de Janvry, 1981; Lacroix, 1985). The instrument that these projects use to stimulate production are as follows: credit, new technological alternatives, soil conservation, water control, infrastructure investments, marketing, the promotion of grassroots organisations and, most importantly, reasoned extension. A realistic assessment of the potential which such programmes have to reduce rural poverty, calls for explicitly confining them to the highest strata of peasant farms. De Janvry and Sadoulet (1989:1219) state that, "for irrigated land, the minimum viable farm size will generally be about 1 to 2 hectares; for those

without irrigation, it is above 5 hectares." In addition to the need for a stricter definition of the viable clientele for these projects, another commonly observed difficulty is the excessive number of activities which they attempt to promote simultaneously. De Janvry and Sadoulet (1989:1203-1221) recommend that "this type of rural development project be focused on the productive aspects of the peasant farm. Typically these would include irrigation, flexible access to credit without collateral requirements, appropriate technologies for peasant farming systems, and participation in the definition and management of projects to ensure self-sustainability." The researcher is of the opinion that, while integrated rural development projects sometimes proved to be effective, they also met with considerable problems due to the difficulty of integrating the delivery of public services to peasant farms in Bophuthatswana. Leonard (1984:177-186) states in this regard that "these services originate in different branches of the public sector apparatus" - this is precisely what had happened in Bophuthatswana. The researcher, therefore, concludes that if a careful priority of ordering of limiting factors can be established, projects can be replaced by national or regional programmes specifically aimed at removing a particular bottleneck. For the promotion of technological change, for instance, commodity programmes have proved to be more effective than integrated projects.

Household-Orientated Rural Development: Rural households with little access to land must compensate for the scarcity of productive resources by including a multiplicity of activities in their annual strategies. Households on small farms must engage in a variety of activities that are complimentary to agriculture. This must include the raising of small animals and dairy cows, different kinds of handicrafts, trade, the transportation of agricultural products, manufacturing activities and so on. In spite of the low percentage of total income derived from a land plot generally, it is clear that the farm, however small, is an essential element of the household's income, security and demographic reproduction. In this regard the researcher is of the view that,

since women are supposedly the non-agriculturalists, there exist very special restrictions to raising labour productivity on these farms. Given these constraints, rural development initiatives must take a 'household' approach as opposed to a 'farm' approach. According to Korten (1980), "these programmes require a strong component of monitoring and evaluation because of the great diversity of situations that characterise their clientele and must be designed in experimentation with other approaches." Non-governmental organisations have been more successful than public sector agencies in this domain. Progressive NGOs, who were previously denied participation, must be utilised in any future restructuring programme.

Access to Land Reform: Any strategy directed at alleviating rural poverty must take into account the fact that access to land is the major determinant of rural welfare. In spite of decades of land reform initiatives in both South Africa and former Bophuthatswana, access to land remains concentrated in the hands of the privileged minority. Concentration has caused irreversible damage, that is, demographic explosion, soil erosion, paralysis of land reforms, insufficient investment to increase land productivity, loss of employment opportunities in agriculture, low labour absorption capacity in the urban-industrial sector.

Employment Creation and Labour Market Rationalization: Landless workers and marginal farmers rely heavily on agricultural wages as a major source of income. Yet, in Bophuthatswana as observed by the researcher, there were a number of unfavourable tendencies to the protection of this source of income. They included labour displacement by mechanisation and livestock, replacement of permanent workers with seasonal workers of peasant origin from the temporary labour market, and the absence of labour unions. Many of these have to be eliminated completely. Rationalising the farm labour market is vital in order to make the mechanisms of supply and demand more transparent. Labour laws must be instituted in this region more meaningfully,

in order to protect rural households from loss of rural employment and the erosion of real wages created by rising food prices.

Rural Linkages: It is clear that, under the Mangope regime, agriculture could not offer a solution to rural poverty in Bophuthatswana for a significant fraction of the rural population. It is suggested by de Janvry and Sadoulet (1989:1220-1) that "an extensive, redistributive land reform and successful rural development projects would reduce this fraction but would still have a significant quota of agricultural poverty to be solved outside of agriculture." Given the magnitude of the investments required in rural industries, private capital needs to be attracted. Bophuthatswana could not hope to do this because it could not attract foreign capital. It only succeeded in attracting some national capital from South Africa and from a few minor industrialists from Taiwan and Israel. The latter did not serve employment, but rather their own economic interests by exploiting local labour with minimum wages and capitalising on wage subsidies, decentralisation benefits, relocation costs, tax incentives, importing unskilled labour and, above all, channelling large sums of money out of the country in the form of foreign exchange.. In any new restructuring, all of this had to be revisited, in order to promulgate greater controls and accountability.

Agricultural development is not, however, synonymous with rural development. On the supply side, reactivation of agriculture must be complimented by the specific reactivation of peasant production to safeguard an effective development strategy, not only in accelerating economic but also in reducing rural poverty. In this regard, de Janvry and Sadoulet (1989:1216) identify two conditions, emanating from past experiences of a certain sector of the peasantry who had sufficient access to productive resources, who proved to be highly competitive with large farms. The numerous anti-peasant biases, which exist in rural institutions and in the functioning of the markets in which peasants operate, are eliminated. Strong biases do indeed exist, particularly in the

access to credit, appropriate technology, information, irrigation and infrastructure, and other public goods and services. Markets are also less favourable to peasant producers due to their weak bargaining power with merchants and lack of access to public sector marketing channels, which they directly control. Rural development programmes, oriented at enhancing peasant production, are organised and thus can identify and remove the main bottlenecks to peasant competitiveness. Even in an unbiased, institutional context, these programmes will continue to be necessary due to the large number of peasants to be serviced and their weak individual ability to have access to public services.

7.8.6 Organisation, Administration and Farmer Participation

For any approach to agricultural development that incorporates the majority of rural people, not merely the minority of large-scale commercial farmers, there are four necessary components. Esman, Colle, Uphoff et al (1980) identify these components as follows: A set of government policies that stimulates higher productivity and greater income-earning opportunities. In addition to fair prices for agricultural commodities, they include tariff and credit measures to discourage premature mechanisation, which displace agricultural labourers for whom there are no alternative job opportunities. Government investments and expenditure on physical and social infrastructure that enhances productivity and rural welfare. These infrastructural facilities include roads, irrigation and drainage works, research and training centres, schools and sanitary water supply. Technologies, such as higher-yielding varieties and improved cropping and husbandry practices, that are suitable to the specific needs of small farmers in their distinctive micro-environments and that they can afford to adopt. Organisation to guide group action in the pursuit of common goals.

7.8.6.1 Kinds of Organisations

Among the several kinds of organisations instrumental in rural development and rural progress are the bureaucratic agencies of government that provide necessary services to small and marginal farmers in the form of research, extension, credit, marketing, irrigation, animal health and so on. They also include privately-owned and -managed commercial enterprises that, at a profit and following the logic of supply and demand, meet some farmers' needs for credit, production inputs, processing and marketing facilities. They further include voluntary non-governmental agencies, which, on a non-profit basis, work with rural communities to promote their development and progress. Rural organisations also encompass associations of farmers and other rural people who are controlled by, and accountable, primarily to their members.

Progressive agriculture everywhere, including the advanced scientific farming in the United States, Japan and Western Europe - depends on networks of supporting and facilitating government services (Esman and Uphoff, 1982). Most developing countries are attempting to provide and to improve the coverage and the quality of such services, but this is a slow and gradual process and it confronts many problems. Among them are the insufficient financial resources available to governments to extend such services to the mass of small farmers. Most LDC governments are simply too limited in their budgetary capabilities to provide sufficient services. "This problem is aggravated by their tendency to neglect peasant agriculture and to concentrate funds and trained personnel on urban areas and on agricultural services to the larger-scale commercial farmers, especially those that produce for export" (Esman and Uphoff, 1982). "Even when governments attempt to target resources and services to smaller and marginal farmers, these resources are frequently pre-empted by political and social power, as was observed in Bophuthatswana, and, therefore, a democratic government must attempt to curb this political power" (Karodia, 1990:9).

7.8.6.2 Some Weaknesses of Government Organisations

A common weakness in government organisations providing agricultural services is the indifferent performance of their field staff, of the technicians, who are in direct contact with rural people and are responsible for the actual delivery of services. "These field level personnel are often poorly trained, overloaded with routine tasks, are insufficiently supported with information, transportation and other resources they need to deliver the goods to local farmers" (Esman, Colle and Uphoff, 1980). "They often feel neglected, insufficiently compensated, inadequately supervised, condemned to dead-end jobs, constrained by rigid and inflexible rules and, thus, are poorly motivated" (Esman and Uphoff, 1982).

This was the reality in Bophuthatswana throughout its existence. Rural people, in turn, often had little confidence in the personnel's ability or willingness to help in the practical struggle to earn a livelihood under what were frequently harsh agronomic, social and economic conditions in the fragmented country. This must be looked at seriously in any reconstruction programme.

Reaching the majority of rural people with services that cater in a timely way to their specific needs for information, production inputs, plant protection, marketing, employment and so forth, presents a very difficult set of administrative problems for governments and foreign assistance agencies interested in improving their productivity and welfare. Major reforms are required in the administration of provincial government services in the new North West, which must be oriented to small farmers and landless workers. "Because governments have trouble financing and managing services in rural areas, they should make the maximum use of private sector initiatives, relying on regulation to prevent abuses, rather than resorting unnecessarily to the direct provision of services" (Karodia and Karodia, 1991:5).

7.8.6.3 Non-formal and Formal Organisations

Though the situation varies from area to area, there is a well established tendency among rural people to associate on behalf of their common needs. Roughly stated, there are two kinds of local organisations of rural people: non-formal and formal. "Non-formal organisations function without written constitutions or bye-laws" (Karodia, 1986); "they are means by which local people meet their collective needs for the operation of small irrigated systems, for the sharing of labour, for the mobilisation and allocation of credit, for the management of facilities, such as cattle dips" (Esman and Uphoff, 1982). Usually small in scale, these non-formal associations that are vital to the maintenance of rural life, escape the notice of most government officials and foreign observers. "There are also many formal organisations which operate in rural areas. Usually, they have officers, bye-laws, formal membership requirements; they collect membership fees, and are recognised by government" (Karodia, 1986). "They range from water users' associations to credit unions, from tenants leagues to mother clubs, from local development associations to service co-operatives" (Johnstone and Clarke, 1982). Some, like credit unions, perform a single function. Others, like local development associations, are multi-functional. "The more successful and long-lasting organisations are often multi-tiered" (Karodia, 1986). These aspects, which were saliently absent in Bophuthatswana, must be looked at seriously in any regional reconstruction programme.

Small non-formal groups, which form the base, are held together by kinship or neighbourhood ties, fostering group solidarity and social control at the grass roots. These are combined at the next level into more formal associations that enjoy the benefit of a larger scale, that can mobilise substantial funds and skills and thus manage activities beyond the capabilities of the small non-formal groups (Johnstone and Clarke, 1982). Frequently, such entities are, in turn, federated into apex organisations that operate as pressure groups at the level

of the state and national governments and conduct nation wide business, insurance or processing activities. This multi-tiered pattern of organisation among rural people combines the benefit of solidarity and scale. This is an option that must be pursued in a reassessment programme of agriculture in this region.

7.8.6.4 Role of Membership Organisations

Membership organisations perform three main functions for their members: They facilitate the mobilisation of local resources, labour, money, information, and management skills, that permit local people to achieve for themselves jointly, what they cannot attempt as individuals. Through mutual assistance they help rural people to take greater responsibility for their own development. They contribute to improving the effectiveness and efficiency of government services intended for rural people. They can 'retail' to their individual members, through their information and organisation networks, resources that the government is able to provide only on a 'wholesale' basis. They can provide government agencies with accurate information about the specific and changing needs of their members, which would otherwise not be available to government staff. By such consultation and dialogue they help the agencies to better adapt their activities and services to the real needs, capabilities, and priorities of local people. As a group they can make claims on politicians, governments and the local élite for more adequate and more responsive services in ways that would be impossible for their individual members (Leonard, 1977).

None of this was ever allowed to develop in Bophuthatswana, because it would have threatened the power of the local élite and, above all, government structures that were charged with the responsibility of maintaining the status quo. From the above, it can be confidently stated that membership organisations help to make government and its operations more accountable to

rural people. In this respect, organisation is a channel that the rural poor can use to demand more and better services, and more relevant and responsive policies from those who control the resources that they need. Although membership organisations have proved to be enormously useful to rural people, they do not develop easily without struggle. Membership and participation in local associations produce important opportunities and benefits, but they also exact costs - in time and often in strained relationships. People will not participate in organisations unless they feel that the material and psychic benefits outweigh the risks and the costs, but often the practical benefits lag behind the apparent costs. According to Leonard (1977), most local societies contain individuals and groups who do not share common interest. Landlords and tenants, hostile ethnic groups or adherents to conflicting religious sects, often find it difficult or even impossible to co-operate in the same organisation. Local organisations may not be able to enforce discipline, for example, the repayment of loans from their members. They may suffer from basic management experiences and business skills, may be victimized by corruption among their leaders, or may fail for other reasons to sustain the organisation. In strengthening and enforcing this viewpoint and observation, Uphoff, Cohen and Goldsmith (1979) argue that "some governments are hostile to any organisation among the rural poor that the state does not control, for fear that they would fall into the hands of enemies of the regime."

Locally influential landlords, merchants, politicians and civil servants may look upon local peasant organisations as challengers to their power and status and would attempt, by manipulation or even intimidation, to take them over or to destroy them. This is precisely what happened within the Bophuthatswana agricultural sector and this was supported by the regime.

7.8.6.5 Role of Trade Unions

The government of former Bophuthatswana did not recognise trade unions in any form and actively resisted their implementation. It viewed unions as a threat to its power base and an instrument of politicization and polarisation of the masses, and as a challenge to its very survival. This led to the absolute exploitation of the worker and farm labour. In addition, the government did not allow the formation of a public servants association. Agricultural parastatals and other institutions did not encourage the formation of staff associations. This worked against the government in many ways. One of the main problems was that government had lost a significant input from this constituency and had thus remained far removed and aloof from the people in general. This led to a government over-suspicious of any criticism of its policies, reacting with crackdowns on hearsay and rumours, leading to fear and subsequent oppression. Its policies remained prescriptive, rather than inculcating a system of incorporating public thinking in the form of pressure groups, guiding the formulation of policy and decision-making via a process of participatory democracy.

In any new regional agricultural dispensation, trade unions will have to be allowed to operate openly to assist in the development process as a whole. Union action, generally, use well thought-out strategies and their actions are well orchestrated. Union actions on farms within Bophuthatswana were not comprehensive nor allowed even if attempted, because primary agriculture does not lend itself to cost-effective union action; another reason was intimidation by the regime. In the South African context, they have exerted their influence in secondary agriculture, due to the lack of mobilisation and problems faced in primary agriculture. It must be the democratic right of the farm worker to challenge management's right to hire and fire arbitrarily, to use workers employed for general farm work as skilled and unskilled labour without adequate remuneration, to draw up contracts and job descriptions and so on.

Farmers must not be allowed to determine wages unilaterally. "In Bophuthatswana, the government paid farm labourers less than R4.20 per day" (Fourie, 1988). Challenging the traditional cash-for-kind system of remuneration, unions must be rightfully allowed to campaign in order to compare wages to those in the industrial sector. On the other hand, farmers must be assisted to develop sound labour management principles and practices.

7.8.6.6 Surmounting Obstacles

Organisations that succeed in surmounting these obstacles must often deal with governments that favour local organisations in principle, but tend to smother them with excessive oversight and patronage. These may include standardised rules and intensive supervision by government personnel, both of which inhibit local initiative. According to Leonard (1977), "equally debilitating is the tendency of well-meaning governments to provide services, loans, resources or facilities to local organisations and their members, without the expectation of repayment and without requiring any local contribution." The common effects of such patronage and paternalism are to undermine local traditions of mutual assistance and create a crippling sense of dependency. As a result, rural people abandon efforts at self-help and turn to government to solve all their problems. This must be avoided at all costs by any new regional government.

Experience has shown that governments wish to stimulate local self-help and strengthen their political base in rural areas. They must avoid overwhelming local organisations with subsidies that destroy local incentives for initiative and co-operation. Given the acute resource scarcities that confront all developing countries, rural societies that depend primarily on government patronage or subsidies are unlikely to achieve economic or social progress. There is compelling evidence that agricultural development strategies designed to

increase the productivity, welfare and employment opportunities of small farmers, tenants and landless workers require far more attention to organisation than that subject has received to date. Esman, Colle et al (1980), "point out and recognise that institutions need to be built and strengthened at the local level to develop more local-action capabilities."

Without such institutional development at the grass roots, (which the Bophuthatswana government failed to harness), no policies, technologies, or infrastructures can be effectively implemented. The performance of government agencies serving rural people can be improved by more rigorous staff training, by rewarding personnel for effective service rather than rigid adherence to rules; by decentralizing decision-making and power to act to personnel closer to the local level; by innovations such as para-professionals, that extend the range of government services to large numbers of rural cultivators, who would otherwise not be reached. "At the same time, the capabilities of local membership associations need to be strengthened so that local people can do more for themselves and become active partners with government in the process of rural development" (Uphoff and Esman, 1974).

7.9 CONCLUSION

Whereas control by government stifles local organisations, complete autonomy usually leads to futility. This is what had occurred in relationship to the Department of Agriculture and its numerous agricultural parastatals within Bophuthatswana. Government agencies require an organised rural population in order to do its job efficiently, and local organisations need the supportive policies, resources, services, and technical expertise that government agencies can supply. It is the linkage between the two that needs to be cultivated and further developed.

As a gestalt to the entire study the researcher attempted in large parts to capture and show that society is based on a delicate network of human relationships which, under the slightest of provocations may become tangled, broken or distorted. Injustice of a lesser or greater gravity is the usual result of such aberrations. What then does it take to keep the balance of justice? Clearly, laws must be framed which correspond to moral imperatives, which are enforceable and which maintain a proper equilibrium between the permanent and the peripheral. Despite the urgent need for such laws, society has failed to evolve a universally acceptable principle on which a viable set of laws might be based.

Rural development, though dependent primarily on small-farmer agricultural progress, implies much more. It encompasses efforts to raise both farm and non-farm rural real incomes through job creation, rural industrialisation, and the increased provision of education, training, health and nutrition, housing, and a variety of related social and welfare services. A decreasing inequality in the distribution of rural incomes and a lessening of urban-rural imbalances in incomes and opportunities; and the capacity of the rural sector to sustain and accelerate the pace of these improvements over time. This proposition is self explanatory. We need only add that the achievements of these objectives are vital to national development. This is not only because the majority of the so-called "Third World" population are located in the rural areas but also because of the burgeoning problems of urban unemployment and population congestion must find their ultimate solution in the improvement of the rural environment. By restoring a proper balance between urban and rural economic opportunities and by creating the conditions for broad popular participation in national and regional development efforts and rewards, developing nations will have taken a giant leap and step toward the realisation of the true meaning of development.

CHAPTER 8

SUMMARY AND RECOMMENDATIONS

8.1 INTRODUCTION

The concluding chapter of the study will provide a synopsis in the form of a summary of each of the chapters that make up this study. In addition, the manner and extent in respect to the realisation of the objectives of the study as stated in chapter one will be presented. The hypothesis as a central construct of the study will be validated by means of the methods of research, employed in this study. This will be followed by enumerating the research findings, as critical outcomes of the research. Finally, a series of recommendations in two forms as they pertain to improving veterinary services policy and, recommendations for further research in respect to extension will be made.

8.2 SUMMARY

The first part of the study or chapter one introduces not only the motivation and the feasibility of the study, but also the aims and purposes of the investigation, its limitations and the methodology that was used. In this chapter, the researcher attempted to situate the study within the social, historical and economic milieu in which it is concerned, with particular reference to the fiscal, administrative and discontinuity crisis of the Bophuthatswana state, and in terms of agricultural policy and its discourse.

In chapter two, a theoretical overview of legitimacy as a concept was addressed in terms of politics and public administration, of the erstwhile Bophuthatswana state and its government. Legitimacy and human rights in relationship to the criteria for statehood, as it affected Bophuthatswana was explored and clarified.

The chapter also entailed looking at concepts such as irredentism, ethnicity, Batswana nationalism, oppression and the sub-ordination of the rural masses by the Bophuthatswana government. Political patronage, its emergence as a state, and acts of state repression were enunciated, in terms of the authoritative force under the leadership of President Lucas Mangope and his United Christian Democratic Party. The Bafokeng conflict as it related to mining rights and oppression in the former homeland was briefly discussed. The Bophuthatswana donkey massacre was discussed not only in terms of oppression, but in terms of its relevance to agricultural discourse in as much as it affected this study. This comprehensive chapter in many ways encompassed the issues that affected the Bophuthatswana state, in terms of the legitimacy crisis that confronted it as a government and that all of these issues impacted negatively upon its very survival, in a period of negotiation politics that had emerged in respect to the creation of a democratic South Africa.

Chapter three outlined the geographical location, the demographic characteristics and the fiscal and administrative crisis of the Bophuthatswana state. A historical review from the pre - colonial period to the colonial period was briefly outlined, including agriculture during the pre - independence period up to independence and thereafter. An overview of the main agricultural institutions in Bophuthatswana were presented. In addition the chapter reflected upon the strategies, in respect of agriculture, employed by the agricultural institutions within Bophuthatswana, over time. Other relevant issues in respect to agrarian reform were raised. These included the African peasantry as an anomaly, the role of women in agricultural development, factors affecting the access to credit and health issues. The concept of participatory development together with the synthesis of culture and appropriate technology was discussed, as it pertained to agriculture. This chapter therefore, had set the pace; tone and trajectory to further analyse and reflect upon agriculture, extension, veterinary services and issues related to training in subsequent chapters of the study.

Discussion relating to the factors contributing to the process of uneven development within Bophuthatswana was undertaken in chapter four. The chapter attempted to situate the study in respect of the manifest problems experienced in respect of agricultural policy, thus allowing for an exploration of the key role of agriculture with regards development. Subsequently, an analysis of the rise and fall of the African peasantry was reflected upon as it related to the study as a whole. This chapter also addressed the implications of under- funding research and extension. In so doing a conceptual framework in respect to developing a funding model for extension was deliberated upon and presented together, with the effects of under-funding and its consequences with regard to agriculture. Leading from the above, the manpower problems experienced by the Bophuthatswana government were presented, discussed and analysed, in some detail. Following from this, development indicators pre and post independence was projected upon as they crucially related to the study The salient issue raised in this chapter were the causes leading to the breakdown of extension and development within the homeland. A host of policy issues were raised as it pertained and related to economic policy making and coordination of agriculture. The chapter very briefly looked at the problems within the cooperative movement in Bophuthatswana. The issues raised in this chapter were fundamental to the study, on the basis that, it captured salient and important issues that contributed to the retardation of agriculture in this region, but more importantly stymied general development.

Chapter five entailed capturing policy issues that revolved around and concerned extension with particular reference to the goals and objectives of agriculture. The Training and Visit System of extension together with crucial facets such as manpower ratios, female extension officers and the historical problems experienced within the extension system was detailed. This chapter also examined the problems experienced by the state veterinary services, which is a fundamental service given its importance to the development of resource poor

farmers engaged in livestock production, in this region. Budgetary constraints were highlighted together with the audit and evaluation procedures utilised by the state, which impeded agricultural development in relationship to socio-economic development as was observed in the Molopo and Ditsobotla districts of Bophuthatswana. Policy issues as concerns other homelands were reviewed as was applicable, in order to situate the problems that confronted agriculture within the framework of development. Finally, the chapter attempted to analyse the issue of illiteracy that contributed significantly to the processes of underdevelopment and uneven development within Bophuthatswana.

Chapter six attempted to outline some vital statistical parameters and the issues of training and education as they related to the study In so doing the categorisation of farmers was presented together with a series of tables capturing the issues of land tenure, land usage, livestock numbers, and cultivation of crops, physical development, income estimates for both commercial and subsistence agriculture, together with contribution of agriculture to gross domestic product. Effectiveness of training, assessing needs in programme planning and ethical issues were discussed and presented. The philosophy of extension, its principles and the definitions of extension were also examined in this chapter.

Chapter seven assumed significance in the context of the study, on the basis that it deals with issues in respect to proving some of the assertions made in this study. The chapter, in relationship to the above assertion captured, in detail the failures via a study conducted in 1992 and commissioned by the researcher, in order to verify these assertions. In addition, a review of the situational analysis of agriculture as it pertained to both crop and animal production within Bophuthatswana was analysed. The approaches to extension that have been used and successfully implemented in commonwealth developing countries was explored.

8.3 REALISATION OF OBJECTIVES

This section briefly sets out to explain the extent and manner by which each of the objectives outlined and stated in chapter one has been realised. This is undertaken hereunder, as follows: A theoretical exposition of the nature of government relations with particular reference to legitimacy, the fiscal and administrative crisis of the Bophuthatswana state and government was sufficiently provided in the study. This was undertaken on the basis of empirical evidence, through the use of national and international literature, pertaining to the subject matter. On the other hand, Bophuthatswana faced tremendous upheaval internally and also resistance from the liberation movements, as spearheaded and led by the African National Congress. This political reality and dynamic impacted negatively on all aspects of its government and impinged upon the management of agriculture and upon its very survival as a so- called independent sovereign state. These issues have been discussed in detail within the study, citing local and international literature. On this basis the objective has been realised.

On the other hand the legitimacy crisis impacted negatively upon the fiscal and administrative management of agriculture, as it related to the development of this sector, as a whole. The study has also shown that aid and monetary inputs were channelled into prestige programmes of modern nation building, rather than the development of the people and towards the pursuit of justice and the improving of the general welfare. The study has encapsulated these issues on the basis of observations by the researcher, data from the media, bulletins and statements made by the Bophuthatswana government, statements by South African politicians, including the ambassador of South Africa to the homeland, a host of key role players within agriculture, personal communication to the researcher by individuals within the former agricultural system and the use of literature as it pertained to these issues. In so doing the system was sufficiently penetrable and

as such, this objective as captured in chapter one was more than adequately realised.

The objective, in respect to ethnicity and repression on the management of agriculture and upon the masses of the people, in the former homeland was realised as enunciated in chapter one of the study. The resilience of ethnicity as both politics, ideology and reality, was one of the few apparent apartheid contradictions since the independence of Bophuthatswana. Ethnicity and Batswana nationalism was used in a period of economic crisis by the state. The period of continuing contraction, competition for resources and so forth generated its own response – regulation and repression. The containment of ethnic antagonisms had become a major preoccupation of the ruling classes of Bophuthatswana. Once politics became entangled with the politics of production and distribution in Bophuthatswana, into primary political and economic determinants, it moved from the concept of misguided nationalism into the argument and justification of nations. The state used repressive measures with extreme brutality and with all its might. The aspects of ethnicity and repression are adequately documented and intensely subjected to analysis in the study. The researcher is more than satisfied that this objective as outlined in chapter one has been realised. This was achieved by subjecting the issues of ethnicity and repression to a literature review of local and international academics, using and subjecting their writings to analysis, including an array of publications on the subject matter, coupled with reports in the local media and observations by the researcher, over time. Individuals within the state apparatus were also interviewed and consulted, which included the presidential advisor on agricultural affairs and also the Chief of the Bophuthatswana Intelligence services.

This objective related to the factors that contributed to the process of uneven development in the management of agriculture, in the former Bophuthatswana. The study, in realising this objective raised the issue of policy reforms in general,

on the basis that the amount of external assistance from South Africa that, would have been needed would have been substantially higher and would have been required for a much longer period. Population growth, statistical information and implementation problems had further relegated the importance of the role of agriculture and thus contributed to underdevelopment. Infrastructure in respect to servicing agriculture and rural development was woefully inadequate and the role of cooperatives was totally emasculated, destroyed and rendered impotent. In realising this objective a number of internal documents, memoranda, discussions with a number of role players within agriculture, the literature reviewed, local and international experience and the presentation of tables sufficiently assisted in satisfying this objective, as was captured in the postulates of the research proposal.

In respect to the functional problems and policy issues that hampered the management of agricultural extension and veterinary services in Bophuthatswana, attention was drawn to the very important fact that, the study in the main looked at agricultural extension and veterinary services as the central components of this study. It is therefore correct to state that within the ambit of the study, a host of extension models and their application and implementation together, with the problems attached to the veterinary services, coupled with the approaches to extension were discussed and subjected to in depth analysis in this chapter. In order to prove some of these assertions an independent researcher was commissioned to undertake a study, in respect of Animal Health Services: Customer Needs and Perceptions. This study proved in no uncertain terms that veterinary services and extension had failed its intended audience as recipients of training and development. By virtue of this study and the comprehensive analysis undertaken in this chapter as it relates to extension and veterinary services through local and international experience as it related to the subject matter in this chapter, the experiences of other African countries, the literature reviewed, discussion and personal communication with role players

within these fields of expertise, the objective in terms of the research proposal was realised.

The objective in respect to recommendations for change in some agricultural programmes and for drawing implications, in respect to policy and the planning of extension programmes in this region, have been realised by drawing from the body composite of the entire study. In addition local and international experience was used, together with the observations of the researcher, in drawing up the set of recommendations. In this regard the objective as enunciated within the ambit of the research proposal has therefore, been realised.

8.3.1 Testing the Hypothesis

The hypothesis as enunciated in chapter one of the study was validated by using the following methods: In subjecting the hypothesis to analysis, qualitative open-ended interview schedules were utilised. In addition discussion by the process of interview with personnel within specific organisations in the agricultural sector and other departments within the administrative services were conducted, over time. In further validating the hypothesis, quantitative structured questions were constructed with the aid of a study leader and tested with a pilot group. Field work was conducted at selected sites within the erstwhile Bophuthatswana. Finally, the collection and use of statistical data made available by government institutions at the time was utilised. The above methodologies lent themselves to proving the assertions made in the study, which led to validating the hypothesis.

8.3.2 Research Findings

A number of research findings emanated from the study as a whole. The critical outcomes of the research are tabled as follows:

- The study findings indicate that a regime such as the Bophuthatswana government, would have reached the limits of reformism, from its very inception as a so-called independent entity and state and thus, will have entered into a fiscal, administrative and discontinuity crisis. The study confirms these assertions and verifies these considerations.
- Land reform and rural development programmes that forment collective action and a consciousness can be effective mechanisms in the creation of social articulation and mass based democratic regimes. In this regard, the study clearly shows that this was not achievable in Bophuthatswana, due to a host of issues and factors that were captured and articulated in this study.
- The contradictions of the agrarian question and unequal development within the former Bophuthatswana, against the equation of food and massive poverty, can only be expected to deepen in this region of South Africa. The study clearly indicates that its solution lies in social and structural changes at the level of the total social formation, as it pertains to this region.
- The study confirms that extension and training within agricultural development can play a pivotal role in accommodating change through the effective development of a vast, and hitherto untapped, reservoir of human resources in the territory formerly defined as Bophuthatswana.
- Black upliftment and advancement in the large rural periphery in terms of the findings of the study, must continue and confirms the view that non-formal education, extension, training and agricultural development must be relentlessly pursued and coordinated, in the interests of a more acceptable society.
- The study, further confirms the view that many aspects in respect of agricultural and rural development discourse was a 'novelty' within Bophuthatswana. Another contributory factor was the relative infancy of the organisations which were charged with the responsibility of addressing

agricultural and extension needs of communities and, particularly, the rural masses as intended beneficiaries of development initiatives within Bophuthatswana.

- The research findings also show explicitly that, the dynamic nature of non-formal extension education and training is an area of development theory and practice which is heavily influenced by time and the historical and political context within which it exists and operates. For this reason, it was not possible to make finite judgements about trends in extension education, trends within the actual delivery systems of extension or for that matter, in respect of training, either about its content or its methodology, as was applied and implemented in this region.
- The study confirms that an assessment of non-formal extension education, training and veterinary services must primarily concern itself with the role that extension, training and agricultural development can play within agriculture. A further confirmation in respect of the research undertaken, is that, it must be seen in the context of its orientation towards positive and much needed change, in the historical and social fabric of the present South African society that has suffered from the constraints of apartheid policy and ideology, in order to promote the general welfare and for the purposes of orderly government and society.
- The research findings clearly show that, the problems of agricultural development in general and of non-formal extension education and training in particular, is the question of change. Further, that the solutions to these problems lie in the practices of organisations in agricultural development, non-formal extension education and training.
- The research findings confirm that, the principal difficulty encountered was one which arose from the paucity of material dealing with development, particularly extension and training in Bophuthatswana. This was further exacerbated by the difficulties encountered in harnessing material and engaging role players and the management involved in agricultural

development in Bophuthatswana and therefore, most of their work consisted of formal reports and memoranda and these were hardly adequate for the purpose of making any deep-seated analysis.

- Finally, the study in terms of the research findings strongly confirms that, the major stumbling block to development in this region was the major pre-occupation by the ruling elite, with modernising imperatives, in an attempt to gain legitimacy, credibility and recognition of the Bophuthatswana regime on the international arena. In terms of agriculture, there was a total lack of understanding that development is not in the game for making huge profits, but is an investment towards human development and therefore, could not be quantified solely in monetary terms as was the case in the erstwhile Bophuthatswana.

8.4 RECOMMENDATIONS

From the evidence presented as a result of this study, some might perhaps strengthen the work of organisations which have similar objectives in the pursuit of extension, training and agricultural development. The recommendations that follow are not meant to presume upon the wealth of experience which organisations themselves have on practical questions. For that reason the recommendations are at a general level.

8.4.1 Recommendations for Improving Veterinary Services Policy

- It is recommended that that the New Institutional Economics (NIE) be given serious consideration by governments in respect to the structural reform of the state veterinary services, by means of consensus by all role players. It would be feasible to look at the model critically and to modify some of its features to suit local conditions, before any implementation is considered in a regional or national context, as a component of a strategy

to improve the income position of the poor, thus allowing the rural periphery to re-emphasise the growth of primary sector exports.

- It is generally accepted that a veterinary service in Africa will be ineffective if staff salaries represent more than 60 percent of its budget, leaving less than 40 percent for veterinary supplies and transport. This has led to the collapse of many African state veterinary services and Bophuthatswana was no exception. It is therefore recommended that serious consideration be given to the reversal of this situation and that, budgets be so constructed, allowing for service delivery, the supply of inputs, veterinary extension and training as priorities.
- African states in general but more importantly South Africa must be engaged in more interesting and applicable experimentation, in the hope of finding new models for animal health systems that will be better adapted to contemporary reality.
- The need to retain a central role for para-professionals in any new delivery system and the desirability of competition between the veterinary and para veterinary professions is a recommendation that must be pursued and considered by governments.
- The importance of developing state contracting procedures for assisting the private delivery of animal health, given the shortages of veterinarians in the Republic of South Africa, that will avoid the problems of local monopoly.
- The strengthened role that the new and strengthened professional associations will have to play in this area, if collective goods and the public interest are to be served. Professional associations it is recommended must be very seriously engaged in respect of their participation.
- The amelioration of poverty in the rural areas of this region must be addressed in respect of the veterinary services moving away from being a regulatory service to a service oriented towards veterinary extension and training. It must pay special attention to preventive disease control and

the development of the resource poor farmer. This is a crucial recommendation and must be looked at seriously by government.

- It is recommended that the government of South Africa address the critical shortage of veterinary professionals, veterinary structures, veterinary laboratory capabilities in rural areas, the construction of more rural and mobile clinics and veterinary infrastructure across the provinces.
- Salaries must be improved drastically in order to avoid the reliance on expatriate professionals and to retain veterinary professionals who are immigrating to the developed nations of the world. This will also allow for recruiting students to pursue a career in the veterinary sciences.
- It is also recommended that successful state veterinary services in the continent of Africa be engaged, in order to learn best practices in respect of livestock production and the experiences of resource poor farmers. This will allow for the understanding of local indigenous culture and its application to modern veterinary intervention strategies. African countries have much to offer South Africa, towards the development of agricultural systems and the general improvement and delivery of services, extension and the modalities for training. It is strongly recommended that these issues be pursued by the democratic government of South Africa.

8.4.2 Recommendations for Further Research

- Research on the characteristics of farmers and the physical characteristics of extension areas, gender and material status together with the educational level of the training of farmers, employment and sources of income of households and of farmers are vital. Also the possession of capital goods by farmers/recipients must be established.
- It is also recommended that the role of the different institutions within the same government, which carry out and pursue extension activities be

established, determined and researched, in order that a unified and cohesive extension strategy be developed.

- Intensive research on the types of infrastructural development, the land tenure system, human potential in conjunction with the socio-economic factors that affect extension; the characteristics of individual extension agents, the aptitude of extension workers, their knowledge of communities, geography, topography and the evaluation of job descriptions must be established. This will assist to modify the approaches in purely local terms, thereby contributing to the construction of more equitable local extension and development initiatives.
- It is recommended that non- formal extension education in the regional context be subjected to detailed research, in respect to establishing actual needs, the competing theories and to establish problems in respect to methodology.
- The identification of problems of individuals and solutions to them, the promotion of critical analysis, the development of simple materials and evaluation tools, including the planning of lessons relevant to needs must receive the attention of research. In addition it is also recommended that a situational analysis of the entire system be subjected to intensive research.
- A further recommendation is that agencies engaged in extension need to be cautious in "transfusing" imported programmes without first establishing their effectiveness through research and that, organisations' design and construct through research, relevant and purposeful programme packages, specific to the needs of the communities within which they operate. It is also recommended that extension models should not be "top-down" and paternalistic. Innovation of the linkage between research and extension must be obtained and developed by conducting experiments in farmer's fields and using them for demonstration purposes on an ongoing basis, particularly on field days.

- It is essential for an extension and research system to have competent village level extension workers, who will visit farms regularly with relevant technical skills and information and who bring farmers problems to research. The challenge with extension is to identify technology which is most appropriate to a given situation and to communicate to farmers how to use technology together with research findings? A need exists to separate field extension services for commercial and communal land owners. This must be further explored via extensive research, in respect to the region under consideration.
- Subject Matter Specialists (SMS's) should work with appropriate researchers and research stations and, undertake regular study to become competent in their field of specialisation. They should organise and implement adaptive research and training programmes with senior field staff. They should also undertake field visits to lay out and monitor field trials; carry out statistical surveys and market analysis, as well as document specialist and research activities at all levels. It is also recommended that, it should be their task to convey suitable innovations to district and area extension staff, which in turn, must pass on information to small-scale landholders and commercial farmers.
- It is recommended that an adaptive research committee be established, in order to define the work of extension workers, thereby formulating research priorities and designing extension programmes for each district. This must become the forum of interaction and a multi-disciplinary approach to extension must be applied and rigorously followed.
- Research must become a priority. Linkages with local colleges, universities, other agricultural departments and agricultural institutions must be pursued. Unnecessary, irrelevant and duplicated research must be avoided. Research in the region under consideration must move away from single cropping and reflect on a dual approach.

- Research recommendations need to be tailored for different target groups. Institutional support for farmers must become a policy imperative. This means that inputs, credit, marketing and the constraints of mechanisation must be examined continually because of high costs.
- Pilot extension projects must be put into place before launching regional or national programmes. Such projects and research can only succeed if there is a strong political commitment, cooperative tribal authorities, sound planning and provision for institutional support and inputs together with application of sound management principles, adequate supervision, training and control of field staff.

BIBLIOGRAPHY

Abrew, S. 1987. **Country Paper on Small Farmer Development Efforts in Sri Lana**. Ministry of Agricultural Development and Research, 73/1. Calle Road, Colombo.

Agarwal, B. 1989. **"Work Participation of Rural Women in the Third World: Some Data and Conceptual Bases"** in Young K. (ed). Serving Two Masters. Allied Publishers, New Delhi.

Agenrur Document, 1991. Number 143:1-6.

Agricor, 1988. **Policy on Salaries**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricor, 1989. **Livestock Production Strategies**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricor, 1990. 1991. **Policy Documents in Agricultural Imperatives**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricor, 1992. **Classification of Rural Development Programmes**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricor, 1992. **National Overview of Extension in Bophuthatswana by Audit and Evaluation**. Internal Audit Section. Department of Finance. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricor, 1992. **The Small Stock Programme Manual**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Agricultural Development Corporation, 1989. **Policy Document.** Government of Bophuthatswana. Mmabatho.

Agricultural Statistics, 1987. Government of the Republic of South Africa. Department of Agriculture, Economics and Marketing. Pretoria.

Agricultural Policy Document, 1990 and 1991. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Alcock, N.R. 1973. **Thoughts on Kwa-Zulu's Agricultural Future**. Kwa Zulu Government. Pietermaritzburg. 2-26.

Allie, S.R. 1987. **Country Report on Small Farmer Development**. Sierre Leone. Ministry of Agriculture. Freetown. Sierre Leone.

Amuah, I. 1989. **Contrast Between African Traditional Beliefs and Western Scientific Ways of Thought**. Scientific Reasoning Research Institute. Vol. 4, No.2. University of Massachussetts. Amherst. Mass. 2-5.

Anan, K., 2006. **United Nations Human Development Report**. United Nations. New York. 6-35.

Annual Report, 1966-1967. **Soil Conservation Board**. Kwa Zulu Government. Pietermaritzburg.

Annual Report, 1989. Government of the Republic of South Africa. Department of Agriculture, Economics and Marketing. Pretoria.

Annual Report, 1988. Government of the Republic of South Africa. Department of Finance. Pretoria.

Annual Reports, 1991 and 1992. Department of Economic Affairs. Government of Bophuthatswana. Mmabatho.

Annual Report, 1988. Government of Bophuthatswana. Department of Agriculture and Natural Resources. Directorate of Veterinary Services, Mmabatho.

Annual Reports, 1982 and 1984. Department of Economic Affairs. Government of Bophuthatswana. Mmabatho.

Annual Report, 1990. Government of Bophuthatswana. Department of Agriculture and Natural Resources. Directorate of Veterinary Services, Mmabatho.

Annual Reports, 1991 and 1992. Department of Agriculture and Natural Resources. Directorate of Veterinary Services. Government of Bophuthatswana. Mmabatho.

Annual Report, 1985. Department of Agriculture and Natural Resources. Directorate of Veterinary Services. Mmabatho.

Annual Report, 1980 and 1990. Department of Agriculture and Natural Resources. Directorate of Veterinary Services. Government of Bophuthatswana. Mmabatho.

Annual Report, 1990. Meat Board of the Republic of South Africa. Pretoria.

Annual Report, 1988. Department of Education. Government of Bophuthatswana. Mmabatho.

Annual Report, 1960-1962. Government of the Republic of South Africa. Department of Bantu Administration and Development. Pretoria.

Annual Report, 1988-1989. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Annual Report, 1984. Department of Agriculture. Government of Republic of South Africa. Pretoria.

Ardington, E.M., 1988. **Nkandla Revisited: a Longitudinal Study of the Strategies Adopted to Alleviate Poverty in a Rural Community**. University of Natal. Durban.

Arffin, D.H., Wafa, S.H., and Mohd., Nor, A.G., 1972. **"The Concept of People's Participation in Development: A Case Study."** Development Forum. Kuala Lampur. Malaysia. 1-39.

Awa, N.E., 1986. **"The Concept of Participation in National Development".** Paper Presented at the 36th Annual Conference of the International Communication Association. Chicago. Illinois.

Axinn, G.H. and Thorat S., 1972. **Modernizing World Agriculture: A Comparative Study of Agricultural Education Extension System**. Praeger. New York.

Baatjes, I. 2003. **New Knowledge – Rich Society: Perpetuating Marginalisation and Exclusion.** Journal of Education, 29. 178-204.

Bamberger, M., 1988. **"The Role of Community Participation in Development Planning and Project Management."** EDI Policy Seminar Report No. 13. Economic Development Institute of the World Bank. Washington, D.C.

Barat, S.K., 1975. **"Hides, Skins, and Animal by-products."** World Animal Revolution. 132.

Bari, F., 1987. **Bangladesh Country Paper on Small Farmer Development**. Comilla. Bangladesh.

Barlow, M.L. (ed), 1974. **The Philosophy for Quality Vocational Programmes. American Vocational Association.** Washington D.C.

Barraclough, S., 1973. **"Agrarian Structure in Latin America."** Lexington Books. Lexington. Mass.

Beloff, M. 1967. **Politics and the Administrator. SAIPA**. 2(3), 355-365.

Behr, W., 1991;1992; 1993. **Discussions with the Advisor to the President of Bophuthatswana on Agricultural Affairs and Chairperson of the Agricultural Services Board.**

Bembridge, T.J., 1987. **"An Overview Of Existing Institutions And Structures In The Less Developed Areas Of Southern Africa To Achieve Rural Development".** Development Southern Africa. Sandton. Johannesburg.

Bembridge, T.J., 1987. **Crop Farming System Constraints in Transkei: Implications for Research and Extension**. Development Southern Africa. Sandton. Johannesburg. 4(1):64-89.

Bembridge, T.J., 1991. **Technology Transfer in Small-Scale Dryland Crop Production: Future Challenges.** Development Southern Africa. Sandton. Johannesburg. 8(4) 479-493.

Beneria, I., 1981. **"Conceptualizing the Labour Force: The Underestimation of Women's Economic Activities".** In Nelson N. (ed). African Women in the Development Process. Frank Cass. London.

Benor, D., Harrison, J.Q. and Baxter, M., 1984. **Agricultural Extension: The Training and Visit System.** World Bank. Washington, D.C.

Berman, B. and Lonsdale, J. 1992. **Unhappy Valley: Conflict in Kenya and Africa.** James Curry. 466.

Beuster, D., 1988. **Livestock Production Strategies – Bophuthatswana.** Secretary of Agriculture. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Biddle, W.W. and Williams W., 1988. **"The Community Development Process."** Holt, Rhinehart and Winson Inc. Chicago.

Biswanger, H. and Silliers, D.A., 1983. **'Risk Aversion and Credit Constraints in Farmers' Decision Making: A Reinterpretation**. Journal of Development Studies. 20:5-21.

Blum, A., 1986. **"The Israeli Experience in Agricultural Extension and its Application to Developing Countries." Agricultural Extension Worldwide: Issues, Features and Emerging Issues.** In Rivera, W. and Schram, S. (eds), Croom Helm. London – New York.

BOFCOC, 1990. **Memorandum to Agricor on Unfair Competition**. Mmabatho.

Bonner, P., 1988. **Contrary to Opinion Early Peasants Knew Their Business.** Review of Colin Bundy's Book. 2nd ed. The Rise and fall of the South African Peasantry. The Star. December 5:16.

Bophuthatswana, 1977-1987. **Ten Proud Years.** Department of Communications. Government of Bophuthatswana. Mmabatho.

Bophuthatswana Agricultural Survey, 1988. Bureau of Market Research. University of South Africa. Pretoria.

Bophuthatswana, 1987. **A Nation on the March.** Dixon Soule Associates. Hans Strydom Publishers, Bophuthatswana, 10-205.

Bophuthatswana, Cooperatives Act. Act No 27 of 1977. Government of Bophuthatswana. Mmabatho.

Bophuthatswana Agricultural Survey, 1988. Department of Agriculture. Government of Bophuthatswana. Mmabatho.

Bosman, A., Perkins, D., Rankin. S. and Schmidt, I., 1991. **An Evolution of Agricor's Rural Service Centres in Bophuthatswana.** Development Research Agricor, Mmabatho.

Bosman, J.D., 1991. **Consolidation of Debts in Proposed Policy Document.** Internal Memorandum. Secretary for Agriculture. Government of Bophuthatswana. Mmabatho.

Bosman, J.D., 1994. **Restrictions on Development and Operational Expenditure.** Internal Directive. Secretary for Agriculture. Department of Agriculture and National Resources. Mmabatho.

Botha, 1988. In Cuthbert, F.K., 1993. **A Pre-Feasibility Study for a "C" 30 Abattoir for Mmabatho – Mafikeng**. Senior Researcher, Institute of Development Research. University of Bophuthatswana. Mmabatho.

Bratton, M., 1986. **"Farmer Organizations and Food Production in Zimbabwe."** World Development, 16(2). February / March.

Breutz, P.L., 1987. **History of the Batswana.** Margate. Natal. R.S.A. 21-28.

Brock, J.C. 1982. **Horse Power: A History of the Horse and the Donkey in Human Societies**. Cambridge. Mass. 62-66.

Braverman, A. and Guasch, J.L., 1988. **"Institutional Aspects of Credit Cooperatives"**. Working Papers. Agricultural Policy. Agriculture and Rural Development Department. World Bank. Washington, D.C.

Breytenback, W.J., 1977. **Bophuthatswana Independence – A Political Backgrounder. Department of Information**. Mmabatho. 13

Broudy, H.S., 1961. **Building a Philosophy of Education.** Prentice Hall Inc. Englewood Cliffs. New Jersey.

British Broadcasting Corporation, 2005. **World News.** BBC World News. Comm. October 3.

Burger, P.J. and Duvel, G.H. 1992. **An Operational Model for Programmed Agricultural Development.** Department of Agrarian Extension. University of Pretoria.

Bundy, C. 1988. **The Rise and Fall of the African Peasantry**. David Philip Publishers. Claremont. South Africa. 1-246.

Buttel, F.H. and Raynolds, L.T., 1989. **"Population Growth, Agrarian, Structure, Food Production, and Food Distribution in the Third World".** Cornell University. Ithaca. Academic Press Inc. 325-357.

Butler, J. J., 1997. **The Black Homelands of South Africa: The Political and Economic Development of Bophuthatswana and Kwa Zulu**. Berkley, California. 28-178.

Calitz, L.P., 1986. **Onderwysvoorsiening, vir die non-formele onderwyssektor en die implikasies daarvan onderwysbetuur**. Unisa. Pretoria.

Campion, C., 1990. **Document to the Secretary for Agriculture on Thusano Foundation.** Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Cepionca, K., 1991. **Flowchart of Factors Influencing Economic Performance in Bophuthatswana**. Stanbo. Mmabatho.

City Press, 1991. October 29. 6.

Chambers, R., 1983. **"Rural Development"**. Longman, New York.

Chapman, N.P., 1987. **"The Evaluation of the T and V System in Somalia".** Agricultural Administration and Extension. 26 (3) 151-163.

Chayanov, A., 1996. **The Theory of Peasant Economy**, in D. Thorner, B. Kervlay and R. Smith (eds). Irwin Press. Homewood. Illinois.

Chenery et al, 1979. In Streeten, P., 1983. **Development Dichotomies.** World Development. 11 (10 October).

Cloete, J.J.N. **South African Public Administration**. J.L. van Schaik Ltd. Pretoria. 23-29.

Chowdhury, S.D., 1987. **Key Note Paper on Small Farmer Development, BARD**. Comilla. Bangladesh.

Coetzee, A., 1991. **Proper Performance Management of Extension Officers in Bophuthatswana**. A Reply to Memorandum from K.T. Jonck. Agricor. Mmabatho.

Coetzee, A., 1992. **Extension: Before 1988 and now March 1992.** Head of Extension Services. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Coetzee, A., 1992. **Critical Functions and Performance Indicators for Evaluating Progress in Programmed Extension**. Head of Extension Services. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Cohen, J.H. and Uphoff, N.T., 1980. **"Participation's Place in Rural Development: Seeking Clarity through Specificity".** World Development. Vol. 8. Pergamon Press. London.

Collins Pocket Dictionary, 1981. Wm. Collins Sons and Company, Ltd.

Compton, J.L., 1984. **"Linking Scientist and Farmer: Rethinking Extension's Role".** World Food Issues. Cornell University. Ithaca. New York. 79-86.

Comrie, R.G., 1994. **Matter Between L.M. Mangope and the Joint Administrators of Bophuthatswana**. In the Supreme Court of Bophuthatswana. Judgement Relating to the Overthrow of the Government. Judge of the Supreme Court. Mmabatho.

Coombs, P.H., 1973. **New Paths to Learning for Rural Children and Youth**. UNICEF. U.S.A.

Cooper, C. 1984. **Survey of Race Relations**. Institute of Race Relations. Johannesburg, South Africa. 376-517.

Cuthbert, F.K., 1993. **A Pre-Feasibility Study For A "C" 30 Abattoir for Mmabatho / Mafikeng**. Institute of Development Research. University of Bophuthatswana. Mmabatho. 5-45.

Cutler, J. and Gordon S. 2007. Personnel Discussion and Interview on Kalmonouitz, S.

Davis, J.S. **"Standards and Context of Living."** American Economic Reviews XV. March 1945. 1-45.

Dahl, R.A. 2005. **Legitimacy (Political Science).** Wiekepedia. Free Documentation Licence.

DBSA, 1989. **Development Bank of Southern Africa. "Statistical Abstracts of SATBVC countries"**. Midrand. South Africa.

de Clercq, F., 1984. **Education and Development in Bophuthatswana, Potential and Limitations**. Education research monograph. No.3. Institute of Education. University of Bophuthatswana. Mmabatho.

de Clercq, F., 1984. **Employment in Bophuthatswana**. Institute of Education. University of Bophuthatswana. Mmabatho.

de Janvry, A., 1981. **"The Agrarian Question and Reformism in Latin America".** John Hopkins Press. Baltimore. Maryland.

de Janvry, A., Sadoulet, E. and Wilcox. L., 1986. **"Rural Labour in Latin America"**. ILO Working paper. 10-6/WP79. ILO. Geneva.

de Janvry, A. and Sadoulet, E., 1988. **"The Conditions for Comparability Between Aid and Trade in Agriculture"**. Economic Development and Cultural change. 37(1): 1-30.

de Janvry, A. and Sadoulet, E., 1989. **Investment Strategies to Combat Rural Poverty: A Proposal for Latin America**. World Development 17 (8) 1220-1221. Pergamon Press.

de Smidt, N., 1992. **Evaluation of Introductory Programme of Community Development. Manager Programme Coordination**. Internal Document. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Department of Agriculture and Natural Resources. **New Policy Document, 1989.** Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1979. **Policy of the Division of Veterinary Services**. Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1989/1990. **Increases from Agriculture**. Directorate of Statistics. Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1991. **Land Tenure and Land Usage.** Directorate of Statistics. Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1991. **Physical Development and Other Activities**. Directorate of Statistics. Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1993. **Retrenchment Policy.** Secretary for Agriculture. Government of Bophuthatswana. Mmabatho.

Department of Agriculture and Natural Resources, 1994. **Memorandum on Restructuring**. Secretary for Agriculture. Coopers and Lybrand Workshop on Restructuring. Government of Bophuthatswana. Mmabatho.

Department of Education, 1983; 1986. **Report on the 2nd National Education Commission**. Government of Bophuthatswana. Mmabatho.

Department of Education, 1985. **Report on the 2nd National Education Commission.** Government of Bophuthatswana. Mmabatho.

Department of Economic Affairs, 1982. **Trade Liberalisation within Bophuthatswana**. Government of Bophuthatswana. Mmabatho.

Dillion, J.L., 1976. **"The Economics of Systems Research"**. Agricultural Systems. Applied Science Publishers Ltd. England.

Director of Veterinary Services, 1988. **Veterinary Training. Communication to the School of Agriculture**. University of Bophuthatswana. Mmabatho.

Dixan, R.B. 1982. **"Women in Agriculture; Counting the Labour Force in Developing Countries"**. Population and Labour Review. 18:539-66.

Dreze, J., and Amartya, Sen. 2002. **India: Development and Participation**. New Delhi. Oxford University Press.

Drosdoff, M. 1984. **"Perspectives of the World Food Situation".** World Food Issues. Cornell University. Ithaca. New York.

Drummond, J. **"Land Use in a Rural Village – Dinokana.** Geo Journal. 22.3. 335-343.

Dugard, J. 1980. **South Africa's Independent Homelands**. An Exersise in Denationalization, Denver. Journal of International Law and Policy 11. 98-100.

Dugard, J. 2000. **International Law, A South African Perspective.** Juta and Company, Ltd. Cape Town and Johannesburg. South Africa.

Duvel, G.H. 1992. **Educational Requirements for Agricultural Extensionists. Proceedings of SASAE (TVL). Symposium Regarding the Demands and Challenges of Professional Extensionists.** September 10:25-33. Pretoria.

Ecological Task Group, 1985. **Report on Ecology**. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Edelman, M. 1964. **The Symbolic Uses of Politics.** University of Illinois Press. 56-93. Illinois, USA.

Esman, M.J., and Uphoff, N. 1982. **Local Organization and Rural Development: The-State-of the Art.** Rural Development Committee. Centre for International Studies. Cornell University. Ithaca. New York.

Esman, M.J., Colle, R. and Uphoff, N.T. 1980. **Local Organizations. Intermediaries in Rural Developments (eds).** Cornell University. Ithaca. New York.

Estherhuisen, J. 1988. Chief of National Intelligence, Bophuthatswana. Personal Discussion. June/July.

Eswaran, M., and Kotwal, A. 1986. **Access to Capital and Agrarian Production Organisation.** Economic Journal. 96 (June):482-98.

Evanson, D.R. 1981. **The Planning of Non-Formal Education.** UNESCO. Paris.

Evanson, R.E. 1967. **"The Contributions of Agricultural Research and Extension to Agricultural Productivity".** Journal of Farm Economics. 49. 1415-25.

Eyster, G. 1976. **A Guide to Needs Assessment in Community Education.** US. Government Printing Office.

Food and Agricultural Organization (FAO). 1984. **Definition of Extension. Foundations of Extension and Adult Education.** Department of Education. Cornell University. Ithaca. New York. 680:2.

Food and Agricultural Organization (FAO). 1981. **Strengthen Assistance to Agricultural Development / Intensive Farm Production.** Phase II.

Faseh, M. 1982. **"Mathematics, Culture, and Authority"** FLM Publishing Association. Montreal. Canada. 2-8.

Fourie, F. 1988. **Personnel Communication on Government Daily Wages for Labourers**. Chief Forester. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Fox, K.A., Sengupta, J.K. and Thorbecke, E. 1966. **The Theory of Quantitative Economic Policy with Applications to Economic Growth and Stabilization.** Rand-McNally. Chicago.

Freire, P. 1973. **Education for Critical Consciousness.** Seabury Press. USA.

Freire, P. 1970. **Paedagogy of the Oppressed.** Seabury Press. USA.

Frakenstein, M. 1983. **"Critical Mathematics Education: An Application of Paulo Freire's Epistemology".** Unpublished Manuscript. University of Massachussetts. 180-185.

Friedman, S. 2005. **The Two State Solution.** Business Day. August 17. 14.

French, E. 1989. **Adult Literacy Work in South Africa: Issues, Controversies and Directions.** Matlhasedi. Institute of Education. University of Bophuthatswana. Mmabatho (8):6-7.

Giroux, H. 1981. **Ideology, Culture, and Process of Schooling".** Temple University Press. 26. Philadelphia. USA.

Goe, M.R., and McDowell, R.E. 1980. **"Animal Traction: Guidelines for Utilisation".** Cornell Int. Agric. Memo 81. NYS College of Agric. and Life Sci. Cornell University. Ithaca. New York.

Govinda, R. 2002. **Basic Education: Making it Work for the Poor, Experiences from the South.** New Delhi. Institute of Educaiton Planning and Administration.

Graff, J. 2003. **Poverty and Development.** Oxford. Oxford University Press. London.

Grallocks, T. 1964. **Research Expenditures, Education, and the Aggregate Agricultural Production Function.** American Economic Review. 54:961-74.

Griffin, K.B. 1979. **"Growth and Impoverishment in Rural Areas of Asia".** World Development. 7(4-5).

Grindle, M. 1985. **"State and Countryside".** John Hopkins Press, Baltimore; Maryland.

Groenou, W.V. 1988. **A Bank for Villagers: A New Approach to Development.** India Currents. Santa Clara. Ca. 2(5):8.

Hansard, H.C. 1988. Volume 126, 3 February. 760-61.

Harare Document, 1990. African National Congress. Harare. Zimbabwe.

Harrison, J.R., and Benor, D. 1977. **Agricultural Extension: The Training and Visit System.** World Bank. May.

Hassanullah, M. 1990. **Small Farmer Development: Experiences of Commonwealth Developing Countries.** Elsevier Science Publishers Ltd. England.

Giliomee, H., and Mbenga, B. 2006. **New History of South Africa. The Road to Democracy in South Africa.** Volume 2 (1970-1980). See Manson and Mbenga. South African Democracy Education Trust. University of South Africa Press. 782-802.

Herzberg, F. 1971. **"Work and Nature of Man".** World Publishing. New York.

Hull, H. 1977 and Erasmus, G. 1988. **The Anarchical Society and 'Criteria for Determining Statehood'.** SAJHR. 207. 212-220.

Huizer, G. 1972. **The Revolutionary Potential of Peasants in Latin America.** Health Lexington Books. Lexington. MA.

Huizer, G. 1973. **Peasant Rebellion in Latin America.** Harmondsworth. Penguin Books.

Hyden, G. 1986. **"African Social Structure and Economic Development Strategies of Economic Development".** University of California Press. Berkeley.

IEMVT, 1988. In Leonard, D.K. 1993. University of Chicago Press. Chicago.

Internal Document, 1989. **Agricultural Priorities**. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Internal Document, 1991. **Planning of Extension.** Group Manager. Planning Services. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Internal Document, 1991. **Agriculture in Perspective.** Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Internal Document, 1991. **Strategies**. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Internal Document and Discussion, 1990. **Policy.** Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Internal Memorandum, 1992. **The Status of Veterinary Service**. Department of Agriculture and Natural Resources. Directorate of Veterinary Services. Government of Bophuthatswana. Mmabatho.

Internal Audit Report, 1992. **Evaluation of the Budget in terms of the Mission of the Corporation.** Report No. 92/64. Department of Finance. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Internal Report, 1991. **History of Cooperatives in Bophuthatswana**. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Interview and Discussion, 1991. Directorate of Finance. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Interview and Discussion, 1991, 1992 and 1993. Secretary for Agriculture. Department of Agriculture and Natural Resources. Government of Bophuthatswana. Mmabatho.

Interview and Discussion, 1992. Head of Department. Faculty of Agriculture. University of Bophuthatswana. Mmabatho.

Interview and Discussion, 1993. Human Resources Manager. Human Resources. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Interview, Discussions and Reports, 1992. District Veterinary Officers. All Districts of Bophuthatswana. Bophuthatswana Agricultural Development Corporation and Department of Agriculture and Natural Resources. Mmabatho.

Interview and Discussion, 1992. Managing Director. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Interview and Discussions, 1992 and 1993. Manager Support Services. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Interview and Discussion, 1991, 1992 and 1993. Extension Coordinator. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Jacobs, J.J. 1990. **The Supply of Manpower in the Republic of Bophuthatswana, 1993**. HSRC. Pretoria.

Jacobs, E.H. 1961. **"Agrarian Unrest in Southeast Asia"**. Asia Publishing House. Bombay.

Jacobs, N.J. 2001. **The Great Bophuthatswana Donkey Massacre**. American Historical Review. American Historical Association. USA. 485-507.

Jaiswal, N.K., Arya, H.P.S. and Kolte, N.V., 1981. **Management of Agricultural Extension. A Study of the T and V System in Rajasthan and Madya Pradesh**. National Institute of Rural Development. Hyderabad. India.

Jaiswal, N.K. 1983. **Transfer of Technology under the T and V. Problem Identification. Workshop on Management of Transfer of Farm Technology under the Training and Visit System.** National Institute of Rural Development. Hyderabad. India.

Jennings, R. and Watts, A., 1992. **Oppenheim's International Law**, 9th Ed. Volume 1. S.A. Law Society. 16.

Johnson, P.M. 2005. **A Glossary of Political Terms.** Department of Political Science. Auburn. Auburn University.

Johnstone, B.F. and Clarke, W.C. 1982. **"Redesigning Rural Development".** John Hopkins Press. Baltimore. Maryland.

Jonck, K.T. 1991. Memorandum to the Head of Extension, Agricor. **Result Oriented Approach to Extension in the Future.** Agricultural Development Corporation. Mmabatho.

Jones, P.S., 1999. **'To Come Together for Progress: Modernization and Nation Building in South Africa's Bantustan Periphery – The Case of Bophuthatswana.** Department of Geography, University of Liverpool. Journal of South African Studies. 499-605.

Jordan, R. 1986. **A Critical View of Extension in Bophuthatswana and Suggested Guidelines for Implementing the New Dispensation.** Internal Document. Department of Agriculture and Natural Resources. Directorate of Extension. Mmabatho.

Kabeer, N. 1989. **Gender Dimensions of Rural Poverty. Analysis from Bangladesh.** Revised version of IDS discussion paper 255. University of Sussex. Brighton. U.K. 241-262.

Karodia, A.M. 1990. **Multidisciplinary Approach to Health Planning on Irrigated Agriculture. Part 1 and 11.** Community Health in South Africa. Journal of the Institute of Public Health. 5(3-4):24-28, 13-16.

Karodia, A.M. 1991. **A Viewpoint. Resource Conservation for Sustained Agricultural Development for Bophuthatswana.** Unpublished Manuscript. Development Southern Africa. Sandton. RSA.

Karodia, A.M. 1995. **Regional Conference of the African Regional Division of the Organization International Epizootics**. Rabat, Morocco. January. South African Government Delegate.

Karodia, A.M. 1992. **The Scope of Health Planning on Irrigated Agriculture with Reference to Primary Health Care, Education and Water Resources Development in Bophuthatswana**. Unpublished Manuscript. Development Southern Africa. Sandton. RSA.

Karodia, A.M. 1992. **"Studies in Agricultural Extension Education and Health Indicators Necessary for Rural Development: A Challenge to Agrarian Reform in Bophuthatswana**. Unpublished Manuscript. Development Southern Africa. Sandton. RSA.

Karodia, A.M. 1993/4. Comments and Inclusions to Schmidt, I. (Agricor). National Survey. **"Animal Health" Services: Customer Needs and Perceptions 1992.** Department of Agriculture and National-Resources. Directorate of Veterinary Services. Mmabatho.

Karodia, A.M. 1994. **Let Us Not Make the Same Mistakes as Sub-Saharan Africa in the Restructuring of Veterinary Services**. Veterinary News. South African Veterinary Association. Pretoria.

Karodia, A.M., and Haines, N. 1992. **A Comparison of Salaries within Government versus Agricor**. Internal Document. Department of Agriculture and Bophuthatswana Agricultural Development Corporation. Mmabatho.

Karodia, Y.M. 1986. **Non-Formal Education for Blacks in the Durban Area**. Master of Education Thesis. University of South Africa. Pretoria.

Karodia, Y.M., and Karodia, A.M. 1992. **Farmer Participation, Organisation and Administration**. Unpublished Manuscript. Development Southern Africa. Sandton. Johannesburg.

Kasfir, N. 1986. **"Are Africans Peasants Self-Sufficient."** Development and Change. 17(2): 335-57.

Katz, D., and Kahn, R.L. 1966. **"The Social Psychology of Organization".** John Wiley and Sons Inc. New York.

Keenan, J. 1986. **"Pandoras Box" The Private Accounts of Bantustan Local Authority**. South African Review. 3.

Kelsen, H. 1941. **'Recognition in International Law'**. 35 AJIL. 605-611.

Khanna, I. 1987. **India: Country Paper on Small Farmer Development.** Department of Rural Development. Ministry of Agriculture. New Delhi.

Klayman, M.I. 1970. **The Moshav in Israel: A Case Study of Institution – Building for Agricultural Development.** Praeger Special Studies in International Economics and Development. Praeger Publishers. New York and Washington.

Knowles, M.S. 1977. **The Modern Practices of Adult Education.** Association Press. USA.

Korten, D. C. 1980. **Community Development and Rural Development: A Learning Process Approach**. In Public Administration Review. Vol.4. No.3. 371.

Kotsokoane, K.M. 1989. **What is Agricultural Extension?** UNIBO. Department of Communication. Matlhasedi. (8):26. Mmabatho.

Lacroix, R. 1985. **"Integrated Rural Development in Latin America."** World Bank Staff Working paper. No. 716. Washington, D.C.

Ladman, J.R., and Adams, D.W. 1978. **"The Rural Poor and Recent Performance of Formal Rural Finance Markets in the Dominican Republic."** Canadian Journal of Agricultural Economics. 26(1):43-50.

Land Act. Act No 27 of 1913. Government Printer, Pretoria.

Latham, M.C. 1984. **"International Nutrition Problems and Policies."** World Food Issues. Cornell University. Ithaca. New York. 55-64.

Lawrence, M. and Manson, A. 1994. **'The Dog of the Boers: The Rise and Fall of Mangope in Bophuthatswana.'** Journal of South African Studies, 203. 447-461.

Lawrence, M. and Paterson, A. 1991. **SA's Rural Chickens Come Home to Roost.** Matlhasedi. UNIBO. Institute of Education. 10(1): 2-4. Mmabatho.

Leah, M., and Mearns, R. eds, 1996. **The Life of the Land: Challenging Received Wisdom on the African Environment**. Cambridge University Press. London. 1-33.

Legotlo, W. 1985. **A Study on Standard Ten School Leavers of 1981-1993 in Lehurutshe. Bophuthatswana.** Unpublished Manuscript. Bophuthatswana Agricultural Corporation. Mmabatho.

Legal Reform Law Text, 1977. **New Values and Attitudes of the Revolutionary Society**. London. Ithaca Press. 118-20.

Lehman, D. 1974. 'Introduction' in Lehman, D. (ed). **Agrarian Reform and Agrarian Reformism: Studies of Peru, Chile, China and India**. Faber. London.

Lehman, D. 1978. **"The Death of Land Reform: A Polemic."** World Development. Vol. 6. 339-45.

Leonard, D.K. 1977. **Reaching the Peasant Farmer: Organization Theory and Practice in Kenya**. University of Chicago Press. Chicago.

Leonard, D. 1984. **"Disintegrating Agricultural Development."** Food Research Institute Studies. 19(2): 177-186.

Leonard, D.K. 1993. **Structural Reform of the Veterinary Profession in Africa and the New Institutional Economics. Journal of Development and Change.** University of Cambridge Press. London. 24. 227-267.

Lipton, M. 1976. **"Agricultural Finance and Rural Credit in Poor Countries**. World Development. 4(7):543-53.

Lipton, M., and Longhurst, R. 1985. **Modern Varieties, International Agricultural Research and the Poor**. Study Paper No. 2 C.Giar. World Bank. Washington, D.C.

Lipton, M., and Longhurst, R. 1989. **"New Seeds and Poor People."** John Hopkins University Press. Baltimore. Maryland.

Low, A. 1986. **Agricultural Development in Southern Africa: Farm Household Economies and the Food Crisis**. David Philip. Cape Town.

Lynton, R.P., and Pareek, U. 1967. **Training and Development**. Kumarian Press. West Harford. Conn.

Macridis, R.C. 1978. **Modern Political Systems, Europe.** In World Book Encyclopedia. 4th Ed. Prentice Hall. 275-277.

MacPherson, A. 1983. **Social Policy in the Third World**. Havester Press. New York, USA.

Mafikeng Mail, 1975. 3 January. Bophuthatswana's National Weekly. Mmabatho.

Mafikeng Mail, 1991 and 1992. Bophuthatswana's National Weekly. Mmabatho.

Mafikeng Mail, 1973. 27 July. Bophuthatswana's National Weekly. Mmabatho.

Makhijaivi, A., and Poole, A. 1975. **"Energy and Agriculture in the Third World."** Ballinger Publishing Co. Cambridge. Mass.

Mandab. 1990, 1991 and 1992. Personnel Communication. **Some Manpower Statistics**. Manpower Development Authority of Bophuthatswana. Mmabatho.

Manson, A., and Mbenga, B. 2006. **Bophuthatswana. See the Road to Democracy in South Africa.** Volume 2, 1970-1980. South African Democracy Education Trust Text. University of South Africa Press. 782-802.

Mangope, L.M. 1990. **Establishment of the Directorate Land Administration.** Presidential Directive. Department of the Presidency. Government of Bophuthatswana. Mmabatho.

Manley, M. 1975. **The Politics of Change: A Jaimacan Testament.** Andre Deutsch Limited. United Kingdom. 11-220.

Manson, A., and Mbenga, B. 2003. **'The Richest Tribe in Africa': Platinum – Mining and the Bafokeng in South Africa's North West Province, 1965-1999.** Journal of Southern African Studies. Volume 9. Number 1. 25-47.

March, J.G., and Simon, H.A. 1959. **"Organisation".** John Wiley and Sons Inc. New York.

Maslow, A.H. 1970. **"Motivation and Personality".** Harper and Row Publishers. New York.

Mawhood, P. 1974. **Negotiating from Weakness: The Search for a Model of Local Government in Countries of the Third World.** In Planning and Administration. November (1):17-32.

McCann, J. 1997. **"The Plow and the Forest: Narratives of Deforestation in Ethopia, 1840 -1992.** Environmental History. 138-159.

McDowell, R.E. 1979. **The Role of Animals in Developing Countries.** AS Symposium 42. Animals, Feed, Food and People. 103-120.

McDowell, R.E. 1980. **Ruminant Products: More Than Meat and Milk.** Winrock Report. No. 3. Winrock International Livestock and Training Centre. Morrilton. Ark.

McDowell, P.E. 1984. **"The Role of Animals in Developing Countries: Animals, Feed, Food and People."** Baldwin (ed). Westview Press. Boulder. Colorado.

McGehee, W. 1977. **Training and Development Theory, Policies and Practices.** Paper, Henman, H. (eds). In Training Development. ASPA Handbook of Personnel and Human Relations. Bureau of National Affairs Inc. Vol. 5. 4-19.

McMahon, E.E. 1970. **Needs of People and Their Communities and Adult Education.** Adult Education Association of the USA.

Mellor, J.W. 1980. **The Economics of Agricultural Development.** Cornell University Press. Ithaca and London.

Mills, J.J. 1986. **A Pilot Study to Assess Rural Water and Sanitation Conditions on the Pengalor Floodplain: A Social Anthropological Perspective.** Development Southern Africa. 3(3). Sandton. Johannesburg.

Minister of Finance, 1989. **Parliamentary Speech.** Department of Finance. Government of Bophuthatswana. Mmabatho.

Minister of Population Development, 1992. **Parliamentary Speech – Population Development.** Department of Population Development. Government of Bophuthatswana. Mmabatho.

Mirjana, R. 1989. **Educational Research Monograph: Adult Literacy in Bophuthatswana.** UNIBO. Institute of Education. Matlhasedi. Mmabatho.

Moatshe, T. 1973. Mafikeng Mail, 31 August. Bophuthatswana's National Weekly. Mmabatho.

Mohapi, T. **Agricor Fights Illiteracy.** Agricor Course Developer. Matlhasedi. Mmabatho. (8):12.

Mollel, N.M. 1986. **An Evaluation of the Training and Visit System of Agricultural Extension in Muheza District, Tanga Region.** M.Sc. Thesis. University of Illinois. Urbana. 1-20.

Moerdjik, D. 1981. **Anti-Development, South Africa and its Bantustans.** Unesco Press. Paris.

Mohlala, T., and Pretorious, C. 2007. **An ABC Plan to Reach XYZ.** Mail and Guardian. August 31 to September 6. 12.

Moore, M. 1981. **"Institutional Development, the World Bank, and India's New Agricultural Extension Programme."** The Journal of Development Studies. 20 (4):303-317.

Moriti, M.D. 1992. **Personnel Communication. Housing Questions for AHOs.** Department of Agriculture and Natural Resources. Chief Animal Health Officer. Government of Bophuthatswana. Mmabatho.

Motala Enver and Chaka, T. 2004. **The Case for Basic Education.** Occasional Paper No.4. Centre for Education Policy Development, Braamfontein. Johannesburg. 5-43.

Motala, Z. 1997. **'Under International Law, Does the New Order in South Africa Assume the Obligations and Responsibilities of the Apartheid Order?** CILSA. 287.

Moyo, E.C. 1987. **Tanzania: A Country Paper on Small Farmer Development.** Ministry of Agriculture and Livestock Development. Arusha. Tanzania.

Murotho, S.M. 1987. **Small Farmer Development in Malawi.** Ministry of Agriculture. Blantyre. Malawi.

Murray, M. 1992. Discussion and Interview. **Proposed Agricultural Policy for the Department of Agriculture.** Bophuthatswana. Department of Agriculture and Natural Resources. Directorate of Planning. Mmabatho.

Nasson, 1988. In Wilson, F., and Ramphele, M. 1989. The Many Faces of Poverty. **Uprooting Poverty: The South African Challenge**. David Phillip. Cape Town.

National Institute of Rural Development, 1981. **Management of Transfer of Farm Technology.** Rajendranagar. Hyderabad. India.

National Institute of Rural Development, 1986. **Training and Visit System of Agricultural Extension. The Indian Experience.** Jaiswal; Reddy; Rao and Pravena. Papers and Proceeding of Workshop held at NIRD. February. 180-1. Rajendranagar. Hyderabad. India.

New Nation, 1991. January. (17-23):7.

New Nation, 1993. March. (5-11) 10-11.

New Nation, 1993. **Bop Gets Billions from Pretoria.** March (5-11) 24-25.

Newsweek, 1991. **"Withering Homelands". South Africa's Black Pseudo-States will Disappear but not their Poverty.** March. (25)32-33. Newsweek Inc. New York.

Nicholas, G. 1991. **Why Our Farmers do badly.** The Star. 9.

Nie, N.H. et al, 1975. **Statistical Package for the Social Sciences.** 2nd ed. McGraw Hill. London.

Norman, H.N. 1975. **Statistical Package for the Social Sciences.** McGraw Hill. London.

Okello, A. 1987. **Features of Small Farmer Development in Uganda.** Ministry of Agriculture and Forestry. Kampala, Uganda.

Oxford Dictionary of English, 2004. First Edition, Oxford University Press. University of Oxford, UK. 1787; 1225.

Parsons, K.H. 1973. **"FAO Research in Contemporary Changes in Agrarian Structure."** LTC Reprint. No. 106.

Paul, S. 1987. **"Community Participation in Development Projects; The World Bank Experience."** World Bank Discussion Paper No. 6. World Bank. Washington, D.C.

Personnel Communication, 1991. Development Officer. Molefe, C and Mogokosi, E. **Cooperatives in Bophuthatswana.** Bophuthatswana Agricultural Development Corporation. Mmabatho.

Personnel Communication, 1991. Hartnick. F. Stocks and Stocks. Bophuthatswana. Mmabatho.

Personnel Communication, 1992. Department of Economic Affairs. Government of Bophuthatswana. Mmabatho.

Personnel Communication, 1992. District Veterinary Officers. Directorate of Veterinary Services. Department of Agriculture. Mmabatho.

Personnel Communication, 1993. **A Breakdown of Fieldworkers Statistics.** Human Resource. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Personnel Communication, 1993. **Middle Management Qualifications.** Human Resources. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Personnel Communication, 1993. **Qualifications and Suitability.** Human Resources. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Personnel Communication, 1991. Town Clerk. Mmabatho City Coucil. Mmabatho.

Personnel Communication, 1993. **Transaction Development Costs.** Senior State Veterinarian. Zyambo, G.C.N. Molopo District. Mmabatho.

Personnel Communication, 1993-1994. **Distribution of Extension, Technical and Veterinary Staff.** Human Resources. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Personnel Communication, 1994. **Salary Ranges for Different Categories of Staff.** Human Resources. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Pesson, L.L. 1966. **"Extension Programme Development with Participation of Clientele: The Cooperative Extension Service."** Extension Models. H.C. Saunders (ed). Englewood Cliffs Prentice Hill Inc. New Jersey.

Pienaar, S. 1989. **Bophuthatswana's Agriculture.** Internal Document. Bophuthatswana Agricultural Development Corporation. Mmabatho. 1-35.

Pienaar, S. 1990. **Bophuthatswana's Agriculture – Yesterday, Today and Tomorrow.** Internal Document. Submitted to the Executive Council of Bophuthatswana. Agricultural Development Corporation of Bophuthatswana. Mmabatho. 1-45.

Pieterse, J.M. 1984. **Republic of Bophuthatswana: Economic and Social Statistics.** Government of Bophuthatswana. Mmabatho. 6.

Pigossi, M.J. 1982. **Participation in Non-Formal Education Projects: Some Possible Negative Outcomes.** Convergence. XV (3):6-17.

Pim Goldby, 1989. **"Bophuthatswana, Agriculture and Related Rural Development – The New Direction."** Commissioned by the Department of Agriculture and Natural Resources. Government of Bophuthatswana.

Pim Goldby, 1991. **Management Consultants**. Bophuthatswana Parastatals in New Nation. (1991):6.

Population Census, 1985. **Republic of South Africa and Republic of Bophuthatswana**. Pretoria and Mmabatho.

Palti, J. 1977. **"Transfer Research Results to the Farmer."** Israel Agriculture. Agricultural Research Organization. Beit Dagan. Israel. 2-12.

Promnitz, C. 1983. **Rural Development Support – Central Region: Front Line Strategy.** Internal Document. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Promnitz, C. 1992. **Agricultural Extension in Bophuthatswana.** An Internal Paper Prepared for Dr. A.M. Karodia. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Prosser, R. 1967. **"Adult Education for Developing Countries."** East Africa Publishing House. Nairobi.

Raditapole, N.N. 1990. **Internal Memorandum to His Excellency The State President of Bophuthatswana – Veterinary Services.** Department of Agriculture, Directorate of Veterinary Services. Mmabatho.

Raditapole, N.N. 1992. **A Critical Review of National Veterinary Services: The Case for Retention of Disease Control Functions by the State.** Department of Agriculture and Natural Resources. Directorate of Veterinary Services. Internal Discussion Document. Mmabatho.

Rand Daily Mail, 1976. 21 February. 4.

Rich, P.B. 1996. **State Power and Black Politics in South Africa.** 1912-1951. Synne Reiner Publishers. Boulder. Colorado. USA.

Rogers, C. 1989. **Freedom to Learn.** Charles E. Merrill Publishing Company. USA.

Rogers, E.M. 1969. **Diffusion of Innovations.** The Free Press of Glencoe, Inc. New York. 96-112.

Rondinelli, D.A. 1979. **Administration of Integrated Rural Development Policy in World Politics.** 13(3):389-416. Merrill Publishing Company. USA.

Rondinelli, D.A. 1987(b). **Development Administration and United States Foreign Policy.** Synne Reiner Publishers. Boulder. Colorado. USA.

Rondinelli, D.A. 1987(a). **Development Projects as Policy Experiments.** Methuen. New York.

Roodt, J. 1985. **Bophuthatswana's State Farming Projects. An Agro-Business?** Indicator South Africa, 3.1.6-9.

Ross, J.C. 1966. Former Director of Conservation Kwa Zulu. Quoted by Alcock, N.R. in Article – **Thoughts in Kwa Zulu's Agricultural Future**. Kwa Zulu Government. Pietermaritzburg.

Ruppin, A. 1926. **The Agricultural Colonization of the Zionists Organization in Palestine**. Martin Hopkinson and Company Ltd. U.K.

Ruttan, V.W. 1986. **"Assistance to Expand Agricultural Development**. World Development 14.1-8.

Ruttan, V.W. 1973. **"The Future of Agriculture".** Fifteenth International Conference of the International Association of Agricultural Economists (IAAE). Oxford University.

Ruttan, V.W. 1980. **"The Case of Agricultural Research: Bureaucratic Productivity."** Public Choice. 35. 529-47.

SABC, 1994. **Election Results**. Auckland Park, Johannesburg.

Samir – Al Khalil, 1990. **Republic of Fear**. Berkley. University of California Press. 61-62; 100; 3-150.

Sanders, H.C. 1966. **The Cooperative Extension Service**. Prentice Hall Inc. USA.

Shaffer, R.P. 1978. **A Critical Analysis of the Treaty – Making Powers of the Union of South Africa and the Republic of South Africa.** PHD Thesis. University of Witwatersrand.

Scapera, I. 1984. **The Tswana**. International African Institute. Hartwall Print. Badman. Cornwall. U.K. 9-15.

Security Council Resolutions on Rhodesia, 1964-5, 1971. United Nations. New York.

Schatzberg, M.G. 1981. **Ethnicity and Class at the Local Level**. Comparative Politics. 4 July, 13:461-78.

Schmidt, I. 1992. **National Survey. Animal Health Services: Customer Needs and Perceptions**. Development Research Department. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Schultz, T. 1963. **The Economic Value of Education.** New York. Columbia University Press.

Schutte, J.L. 1992. **Bophuthatswana National Land Use Plan 1992**, Volume 2. Institute for Planning and Development. Potchefstroom University for Christian Higher Education. 1-122.

Seery, B. 1993. **Mangope in Land Scam, Audit Reveals**. Saturday Star, December 11:9.

Sellener, J.D. 1988. **Critical Role of Farmers. 'Participation in the Process of Communication and Education in Rural Development.** Unpublished Manuscript. Cornell University. Ithaca. New York.

Sellener, J.D. 1989. **The Historical Development of the Training and Visit System of Agricultural Extension Implications for Developing Countries.** Master of Professional Studies Thesis. Department of International Agriculture and Rural Development. Cornell University. Ithaca. New York.

Senaratne, S.G. 1992. **Audit Report on the Preparation and Control of the Bophuthatswana Agricultural Development Corporations (Agricor) Budget**.

Internal Audit Section. Department of Finance. Agricor. Report No. 92/94. Mmabatho.

Shah, A. 2006. **Causes of Poverty. Facts and Statistics.** http:/www.global issues org. Accessed 29 July, 2007. 1-7.

Shanin, T. 1987. **"Chayanovs' Message: Illuminations, Miscomprehensions and Contemporary Development Theory."** Foreword to A.V. Chayanov. The Theory of Peasant Economy. Oxford University Press. New Delhi.

Shaw, M.N. 1997. **International Law**. 4th Ed. Maskew Miller, Cape Town. 143.

Simkins, C. 1981. **"Agricultural Production in the African Reserves of South Africa, 1918-1969**. Journal of South African Studies 8. 267-268.

Simkins, C. 1982. **"Structural Unemployment Revisited."** Soldru Fact Sheet. South Africa.

Singh, K.N., Rao, C.S., and Sahay, B.N. (eds), 1978. **"Research in Extension Education."** Coxton Press Pvt. Ltd. New Delhi.

Singh, R.N. 1983. **T and V in Chabel Command Area of Kota District: Some Observations.** Background papers. Workshop on Management of Transfer of Farm Technology under the T and V System. NIRD. Hyderabad. India.

Smith, D.H., Reddy, R.D., and Baldwin, B.R. (eds) 1972. **"Voluntary Action Research."** D.C. Heath and Co. Lexington. Mass.

Snyman, A.P., and Maree, W.A. 1988. **Extension Policy of the Bophuthatswana Agricultural Development Corporation.** Department of Agriculture. Mmabatho.

South African Labour Bulletin, 1989.

State versus Banda, 1989. (4). SA 519(B). 5436.

State of Israel. Ministry of Agriculture, 1960. **An Agreement of Integration of the Extension Services**.

Status Reports, 1991. **Status Reports on Agriculture. Bophuthatswana and RSA.** Development Regions B.C.H and J. Government of Bophuthatswana. Mmabatho.

Sparks, A. 2005. **One State Solution**. The Star, 21 September. 14.

Stewart, D.A. 1986. **An Economic Analysis of Labour Allocation in Rural Kwa Zulu Households**. University of Natal. Pietermaritzburg.

Streeten, P. 1983. **"Development Dichotomies.** World Development. 11. October. 10.

Strydom, H.A. 1997. **'The International Law Openness of the South African Constitution'** in G. Carpenter and N. Botha (eds) Suprema Lex. Essays on the Constitution. Presented to Marinus Weiuchers.

Strydom, H. 1987. **A Nation on the March**. Strydom Publishers. Bophuthatswana (Pty) Ltd. Melville. RSA. 12-20.

Sunday Times, 1991. Staff Reporter Robertson. April. 6.

Sunday Times, 1994. February 20. 1.

Telephone Discussion, 1992. Auditor General's Office. Government of Bophuthatswana. Mmabatho.

The Montevideo Convention, 1933. United Nations. New York.

The Pocket Oxford Dictionary, 1984. Oxford University Press. Oxford OX260.P. U.K. 390.

The Star, 1988. February, 11.

The Star, 1990. February 14. 14.

The Star, 1991. Michael Chester, December 27:10.

The Star, 1994. January, 19.

The Star, 1994. Staff Reporter Spira. May.

The Star, 2005. **A Place for you in the Sun**. September, 19. 1.

The World, 1997. March, 11.

Thomas, W.H. 1971. **Regional Development in a Federal South Africa**. 3(3). Development Southern Africa. Sandton. Johannesburg.

Thurairaj, 1986. In NIRD and Singh, in NIRD, 1986:159. Hyderabad. India. Chapman, in NIRD, 1986:158, Hyderabad. India Galgali, in NIRD, 1986:115, Hyderabad. India.

Todaro, M.P. 1994. **Economic Development**. Longman. Essex. England. 3-360.

Tindall, J. 1993. An Internal Memorandum to Promnitz C. **Requesting Help in Developing a System of Simple Tools to "Assist Line Management to Develop and Create Effectiveness in Monitoring Front Line Performance.** "Regional Manager, Central Region. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Tire, F. 1991. **Bophuthatswana Rural Data Base**. First Ed. Development Research. Bophuthatswana Agricultural Development Corporation. Mmabatho.

Tomlinson Commission, 1955. **Summary of the Report of the Commission for Socioeconomic Development of the Bantu Areas within the Union of South Africa**. Government Printer. Pretoria.

UNESCO, 1990. Yearbook. Paris.

United States Department of Agriculture and USAID, 1987. **"Increasing the Sustainability of Development Assistance Efforts – Lessons Learned and Implications for Donor Agencies."** Development Programme Management Centre. Office for International Cooperation and University of Maryland, at College Park. International Development Management Centre. Office of International Programmes. Colleges of Agricultural and Life Sciences.

Unterhalter, E. 2002. **The Capabilities Approach and Gendered Education: An Examination of South African Complexities**. London. Institute of Education.

Uphoff, N., and Esman, M. 1974. **Local Organisation for Rural Development: Analysis of Asian Experience**. Rural Development Committee, Centre for Int. Studies. Cornell University. Ithaca. New York.

Uphoff, N., Cohen, J., and Goldsmith, A. 1979. **Feasibility and Application of Rural Development Participation: A State-of the-Art Paper**. Rural Development Committee, Centre for Int. Studies. Cornell University. Ithaca. New York.

Uphoff, N.T. 1986. **Local Institutional Development: An Analytical Source Book with Cases**. Kumarin Press. Connecticut.

USDA, 1989. **Extension Service Definition**. Foundation of Extension and Adult Education. Department of Education. Cornell University. Ithaca. New York.

Van den Ban, H.S., and Hawkins, H.S. 1988. **Agricultural Extension.** Chee Leong Press. Ipoh Perak, Malaysia. Williams in Van Den Ban and Hawkins. 1990.

Van Rooyen, C.J., Fenyes, T.I., and Van Zyl, J. 1987. **A Comparison of the Contribution and Relative Performance of Agriculture in Southern Africa.** Development Southern Africa. Sandton. Johannesburg. 2.4.

Van Zyl, H.C. 1972. **Political Neutrality of the Civil Service**. SAIPA. 7(1). 61-63.

Veenstra, H. 1987. In Lugg, Harrison and Associates. **"Bophuthatswana Agricultural Marketing Study"**. Unpublished Manuscript. Government of Bophuthatswana. Mmabatho.

Von Pischke, J.D.1983. **Rural Financial Markets in Developing Countries: Their Use and Abuse**. John Hopkins University Press. Baltimore. MD. 36.98.

Vorster, M.P. 1978. **'The International Legal Personality of Nasciturus States.'** 4 SAYIL. 1.

Warren, P. 1984. **Some Principles Underlying Extension Activity: Adult and Continuing Education Through the Cooperative Extension Service.** University Printing Services. Columbia. Missouri.

Warriner, D. 1962. **"Land Reform and Development in the Middle East."** 2nd Ed. Oxford University Press. London.

WG/AGEN/Rural Dev. Document 143, 1991. **Integrated Development: A Broad Policy Framework**. Draft Discussion Document. Number 2:1-15. Pretoria.

White Paper, 1981. **Bophuthatswana White Paper for Development.** Department of Economic Affairs. Government of Bophuthatswana. Mmabatho. 24-25.

White, F.C., and Havlicek, J. 1982. **Optimal Expenditures for Agricultural Research and Extension: Implications of Underfunding**. American Journal of Agricultural Economics. 64(1):47-55.

Wikepedia. Comm. 2007. U.N. **Estimates and Official Chinese Population Clock**. Accessed July 15, figures as of 13 July.

Wolf, A. 2002. **Does Education Matter? Myths about Education and Economic Growth.** Penguin Books. London.

World Book Encyclopedia, 1983. World Book Incorporated, Chicago. USA. 913-963; 275-277.

World Bank, 1985. **Agricultural Research and Extension: An Evaluation of the World Bank's Experience**. Washington, D.C.

Wolpe, H. 1972. **Capitalism and Cheap Labour Power in South Africa: From Segregation to Apartheid Economy and Society**. Volume 1. Juta and Company London.

World Bank, 1989. **Eastern and Southern Africa Agricultural Research Review.** Eastern and Southern Africa Projects Department. World Bank. Washington, D.C.

Wylie, D. 2006. **Myth of Iron: Shaka in History**. University of Kwa-Zulu Natal Press. Scotsville. Pietermaritzburg. 11-49.

Yakub, N. 1988. **It Deals in More Than Money.** India Currents. Santa Clara. Ca. 2(5):9-28.

Youngman, F. 2000. **The Political Economy of Adult Education and Development.** 7 ed. London and New York.

APPENDIX A

QNA ☐☐☐☐

ANIMAL HEALTH SERVICES CUSTOMER NEEDS AND PERCEPTIONS QUESTIONNAIRE

INTRODUCTION

The Department of Agriculture and Agricor would like to improve the services that we provide to you. But we can only do this if we know more about your needs and problems. For this reason, I would like to ask you a few questions.

WARD _____ ☐☐

DISTRICT _____ ☐☐

NATURE OF GROUP STUDIED

Dipping	**Yes/No**	
Small Stock	_____	☐
Large Stock	_____	
Vaccination		
Small Stock	_____	☐
Large Stock	_____	

Date: _____

NAME OF THE INTERVIEWER: _____

QUESTIONNAIRE CHECKED: Yes/No

Q1. What is the relationship between the person interviewed and the owner of the livestock?

1.	*The owner*	1
2.	*Child/Wife/Husband* of the owner	2
3.	Another *relative* of the owner	3
4.	A *friend* and not a relative of the owner	4
5.	*Livestock herder* employed by the owner	5
6.	Other (specify).....	6

Q2. Please copy the numbers of livestock owned as recorded in the stock count book.

Total Number of Cattle	Total Number of Goats	Total Number of Sheep

Q3. How easy is it for you to get help from the following people and places when you need help with your animals?

	Not easy	Just right	Very easy
Veterinary Clinic Facilities	1	1	1
Mobile Clinics	2	2	2
Veterinarians	3	3	3
Dipping Facilities	4	4	4
Animal Health Officer	5	5	5
Extension Officer	6	6	6

Q4. What do you, or the owner, *usually* do when the *cattle* and *small stock* are ill?

I or the owner:

1.	Treat them *myself* with *home made remedies*	1
2.	Treat them *myself* with *bought remedies*	2
3.	Get help from one of the *local people* who know how to treat sick animals	3
4.	Get help from the *pharmacy*	4
5.	Get help from the *Animal Health Officer*	5
6.	Get help from the *Veterinarian*	6
7.	Get help from the *local co-operatives*	6
8.	Get help from the *Extension Officer.*	6

Q5. If you do not usually go to the Animal Health Officer or Veterinarian for advice, what are the reasons for not asking their advice?

_____

_____

_____

_____

_____

_____

_____

_____

Q6. How often do you or the owner make use of the following services offered by Government?

	SERVICE	12 or more times per year	4-11 times per year	1-3 times per year	Less than once a year	This is the first time
1.	Dipping of stock	1	2	3	4	5
2.	Vaccinations	1	2	3	4	5
3.	Advice on the treatment of illness and diseases	1	2	3	4	5
4.	The supply of basic medicine at cost price	1	2	3	4	5
5.	Assistance with births, operations, etc	1	2	3	4	5
6.	Other (specify)	1	2	3	4	5

Q7. Which of the following Animal Health Services offered by the Government do you need?

	SERVICE	Very necessary	Just necessary	Not necessary
1.	Dipping of stock	1	2	3
2.	Vaccinations	1	2	3
3.	Advice on the treatment of illness and diseases	1	2	3
4.	The supply of basic medicine at cost price	1	2	3
5.	Assistance with births, operations, etc	1	2	3
6.	Other (specify)	1	2	3

Q8. How satisfied are you with the way in which these services are offered?

	SERVICE	Very satisfied	Just satisfied	Not satisfied
1.	Dipping of stock	1	2	3
2.	Vaccinations	1	2	3
3.	Advice on the treatment of illness and diseases	1	2	3
4.	The supply of basic medicine at cost price	1	2	3
5.	Assistance with births, operations, etc	1	2	3
6.	Other (specify)	1	2	3

Q9. If you are not *satisfied* with any of the services, please give the reasons why.

_____

_____

_____

_____

_____

_____

_____

Q10. What are your biggest animal health related problems?

Q11. Are there Animal Health related services, not offered by the Government at present, which you need?

Q12. a) Have you *received training* on the following aspects?

b) Do you think you *need* more *training* or information on any of he following aspects?

		Received Training		Need Training	
		Yes	No	Yes	NO
1.	Dehorning livestock	1	2	1	2
2.	Vaccinating livestock	1	2	1	2
3.	General disease treatment	1	2	1	2
4.	Castrating male animals	1	2	1	2
5.	Determining the age of livestock	1	2	1	2
6.	Marketing of livestock	1	2	1	2
7.	Culling of poor quality livestock	1	2	1	2
8.	Prepare specimens for laboratory	1	2	1	2
9.	Other (Specify)	1	2	1	2

APPENDIX B

NATIONAL OVERVIEW: CUSTOMER NEEDS AND PERCEPTIONS

The Provincial Overview is a synthesis of 13 volumes of questionnaire results encompassing the districts of the erstwhile Bophuthatswana. These outcomes are depicted in the following six tables. (Individual district results can be obtained upon request from the North West Provincial Department of Agriculture at Mafikeng).

Table 1

The livestock owner's perception on how easy it is to get help from Agricor staff or get access to Animal Health Facilities can be summarized as follows:

ANIMAL HEALTH FACILITY	PERCENTAGE OF OWNERS WHO FIND ACCES *NOT* EASY			
	All	EAST	CENTRAL	WEST
Veterinary Clinic Facilities	**80**	83	80	78
Mobile Clinics	**71**	62	51	94
Veterinary Surgeons	**66**	66	56	74
Dipping Facilities	**25**	68	10	9
Animal Health Officers	**10**	11	12	7
Extension Officers	**19**	28	12	18

* Mobile clinics are used in the broader sense of the word to include veterinary surgeons who pay scheduled or emergency visits to communities/livestock owners.

Table 2

The relationship of the respondents to the owner of the livestock are represented in the following table:

RELATIONS TO THE OWNER	PERCENTAGE OF THOSE INTERVIEWED			
	All	EAST	CENTRAL	WEST
The livestock owner	**63**	60	68	61
Child/Wife/Husband of owner	**24**	24	23	24
Another relative of the owner	**8**	8	5	9
A friend of the owner	**1**	1	1	2
A livestock herder	**4**	6	3	4
Other people	**1**	1	1	1

Table 3

The cattle herd sizes of the livestock owners included in the survey are summarized in this table:

ANIMAL HEALTH FACILITY	PERCENTAGE OF OWNERS WHO FIND ACCES *NOT* EASY			
	All	EAST	CENTRAL	WEST
Less than 10	**51**	40	46	63
Between 11 and 20	**24**	25	27	21
Between 21 and 30	**10**	13	11	7
Between 31 and 40	**6**	8	7	4
Between 41 and 50	**3**	4	3	3
Between 51 and 60	**2**	4	2	1
More than 60	**4**	7	4	2

Table 4

This table contains the answers to the question: what do you usually do when your cattle are ill?

COURSE OF ACTION USUALLY TAKEN	PERCENTAGE OF OWNERS WHO TAKE ACTION			
	All	EAST	CENTRAL	WEST
I treat them myself with homemade remedies	**5**	1	17	1
I treat them myself with bought remedies	**13**	14	12	13
I get help from one of the local people	**8**	7	4	11
I get help from the pharmacy	**4**	7	4	2
I get help from the AHO/Veterinarian/Extension Officer	**50**	48	60	45
I get help from the local co-operatives	**13**	17	1	15
I get help from the pharmacy	**8**	6	2	13

Please note that this question was not uniformly completed by all districts. As a result, 25% of the cases, most of them from the central region, were excluded during analysis. The above is, therefore, not a representative picture of the total study population, but provides an idea about the general trends.

Table 5

Percentage of livestock owners who have received training in certain livestock related aspects:

TRAINING AREA	PERCENTAGE OF OWNERS WHO RECEIVED TRAINING			
	All	EAST	CENTRAL	WEST
Dehorning livestock	**21**	8	25	28
Vaccinating livestock	**23**	17	27	24
General disease treatment	**13**	9	16	13
Castrating male animals	**31**	21	39	33
Determining the age of livestock	**21**	7	37	20
Marketing of livestock	**19**	6	38	15
Culling of poor quality livestock	**19**	7	37	16
Preparing specimens for laboratory	**4**	1	8	4

Table 6

Percentage of livestock owners who feel that they need training in the listed livestock aspects:

TRAINING AREA	PERCENTAGE OF OWNERS WHO FEEL THEY NEED TRAINING			
	All	EAST	CENTRAL	WEST
Dehorning livestock	**78**	79	71	82
Vaccinating livestock	**79**	81	74	82
General disease treatment	**84**	84	82	85
Castrating male animals	**74**	72	67	81
Determining the age of livestock	**74**	75	66	80
Marketing of livestock	**72**	77	61	77
Culling of poor quality livestock	**71**	74	63	76
Preparing specimens for laboratory	**67**	69	82	56