

## 2 FUTURE NEEDS AND PRIORITIES

### 2.1 The PU for CHE and the Reconstruction and Development Programme (RDP)

#### 2.1.1 The contribution of Higher Education to the Reconstruction and Development Programme (RDP)

It is clear that the new government in South Africa holds the expectation that higher education should make an important contribution to the RDP. In the policy paper of the ANC, **A policy framework for Education and Training** (1994:113), the vision of higher education is stated as follows:

*"There will be a well planned and integrated, high quality national system of Higher Education whose students and staff are increasingly representative of South African society. The system will be linked to national and provincial reconstruction, in particular to human resource development and the production of scientific and other knowledge to service the economic, political, cultural and intellectual development of our communities and nation."*

It is also stated in the RDP document (1994:66) that: "The higher education system represents a major resource for national development and contributes to the world-wide advance of knowledge."

It is also clear from both the above-mentioned documents that the government anticipates that higher education should make a contribution to address disparities of the past and to promote capacity-building and development. It comprises among other things that access of underprivileged students to higher education, and access between higher education institutions should be made more flexible by means of one national qualification structure. This also includes a restructuring of the governance structures, a new financial formula and re-curriculation. There is no doubt that higher education will become linked to national (and provincial) aims. In fact, in the RDP document (1994:7) the development of human resources is indicated as one of the five key programmes of the RDP and there is specific reference to the role of higher education in the RDP (1994:66).

#### 2.1.2 The meaning of the political transition in South Africa

With the events in Berlin in 1989 a new political era in the world emerged - one which was at that time optimistically considered as a "period of peace" by President Bush of the USA. However, after approximately only five years, large parts of the world are struggling simultaneously with two processes, namely political democratization and economical liberalisation. This transition away from the old world order towards the new has, however, also far-reaching and at times traumatic changes in the political, economic, social and institutional fields as a consequence. There are indications of new regional conflicts and ethnic tensions.

In South Africa the political transition towards democracy does not have a less traumatic course. In fact, the above mentioned transition is characterized by political instability which preceded the 1994 elections, violence, criminality, high unemployment rate, fear and new ethnic fervour. A new political centre emerged with stronger attempts than before to make the process inclusive (the Government of National Unity). However, during and after the elections a greater yearning for peace arose - a process which offers the hope that South Africa can be positioned on a new road of development.

For a successful transition to a new order in South Africa the following four processes have to progressed successfully:

- I democratization and legitimisation;
- II economic growth, development and reconstruction;
- III institutional reform of the bureaucracy; and
- IV reduction of violence and criminality which negatively affect potential investors

As a result of the centrifugal powers in South Africa, disharmony and the variety of cultures, it can be anticipated that it will be no easy task for a new government to administer the above-mentioned processes successfully. In fact, one of the greatest dangers is exactly that it

might not be possible to fulfil the expectations (even the minimum) of the broad mass of the population. This poses a particular danger, because democracy is burdened with demands with which it cannot comply - the so-called "burden of the democracy" (Van Zyl Slabbert, 1992; Coetzee, 1994). Because it will not be easy to fulfil the expectations concerning empowerment, accessibility, upward mobility, affirmative action and material improvement, it can be accepted that South Africa finds itself in a long-term political (10 years) and socio-economic (at least 20-30 years) transition.

It is important, however, to note that the transition will bring about an important shift in emphasis away from the needs and aspirations of the prosperous minority in the direction of the underprivileged majority. In this regard the five basic programmes of the RDP are therefore of particular importance:

- the satisfaction of basic needs;
- the development of human resources;
- the building up of the economy;
- the democratization of state and society; and
- the implementation of the above-mentioned programmes.

The emphasis falls strongly on human development and empowerment and the satisfaction of basic needs such as job opportunities; land; water; electricity; telecommunication; transport; the environment; nutrition; health care and social prosperity; education and training; and the roles of women in the economy and society (cf. ANC, 1994:33). In spite of the shifts in emphasis with regard to the economic policy during the past five years, it is also clear that the government is regarded as the most important vehicle to achieve these aims.

Whether the above-mentioned needs can successfully be satisfied will be determined by the degree to which a stable transition can be accomplished, a climate for private investment and economic growth be created, sound economic policy be formulated and administered, whether South Africa keeps exports on a high level and whether a balance between the progress of economic growth on the one hand and human development and redistribution aims on the other hand can be reached.

In order to develop a research development programme the PU for CHE took note of the above-mentioned changes in its external environment and positioned the University accordingly.

#### **2.1.2.1 The nature of South Africa's problems of development**

South Africa is considered internationally as a country which has made a relatively successful transition towards democracy. This course of events is important especially on the continent of Africa where democracy has been spreading rapidly during the nineties, but has become threatened by poverty, unemployment, diseases, droughts, ethnic stress, conflict and the marginalization of Africa (Coetzee, 1993). Elsewhere in the world democracy is also threatened by social disintegration.

South Africa falls within the high-medium income category of countries and is a semi-industrialised and a medium human development country according to international classification (UNDP, 1994; World Bank, 1990). The country has a small but vibrant modern sector of the economy, but also enormous development issues inside his boundaries. In South Africa the democracy can become pressurised as a result of complex developments and other problems (Coetzee et al., 1994:10; Coetzee, 1994b):

- A deeply divided society and ethnic stress, which are factors which hamper nation-building.
- A culture of violence of which a large percentage of the youth has become a part.
- Social disintegration (disintegration of family life, the breakdown of authority, civil disobedience, people who are marginalized and the phenomenon of street children).
- Socio-economic imbalances with regard to housing, health and education.

- Disparities in income, asset ownership and regional development patterns.
- Threats to the ecology caused by urbanisation and rural underdevelopment.
- Economic stagnation, inadequate economic growth and an inadequate material foundation for development.

From the discussion above it is clear that South Africa has only begun to travel the steep new road and that the so-called Second Liberation Struggle (liberation from poverty) can be even more difficult than the First Struggle (liberation from political repression). The developmental challenges are problematic especially at the regional level because of the uneven distribution of economic activities between regions and the relative overdevelopment of certain metropolitan regions and underdevelopment of regions with a predominantly rural character.

The combination of a First and Third World country is not a unique phenomenon in the world. In fact, practically all developing countries are characterized by this duality. What is unique, however, is the fact that (i) the First World sector in South Africa is much stronger than in most comparable countries; and (ii) South Africa has enormous developmental problems inside its borders and the developing sector of the economy has, up to now, not yet achieved the establishment of a permeating effect which might have alleviated the above mentioned problems.

Moreover, it is of crucial importance that in the development attempts in South Africa the focus will be on both the developed and the developing sectors. Although South Africa can probably not be an international leading country in the fields of science and technology it is, however, very important to invest in these in order to ensure that the generators of prosperity, namely new knowledge and technological innovation, will not be harmed. In fact, it can be anticipated that South Africa will be the leading country in Africa in that field. To fulfil this leading role it is also essential that comparative cost advantages with regard to products such as chemicals, petrochemical products, mining equipment, food and wine and others will be fully utilized in order to stimulate exports. Through this, South Africa's competitive edge can be retained and the country can also embody technology in products which African countries can import more cheaply than from elsewhere in the world. Furthermore, science and technology should also be made applicable and used to alleviate the problems of development (cf. Whiston, 1994).

The above-mentioned issues are manifested at the regional level too. In the new North-West Province all the well-known development issues such as socio-economical imbalances and disparities, rural stagnation, high population growth, urbanisation and unemployment are to be found. On top of this, the painful adjustments of the mining sector in recent years, droughts, the long-term decrease of commodity prices and lower local and international economic growth rates caused economical stagnation. There can thus be no doubt that in the immediate environment of the PU for CHE and in its broader operational environment there are enormous development issues which will create fierce demands, but which will also reveal new challenges, in terms of both the long and short term goals of the University in the fields of training, research and community service. If priorities must be set, it is important to look briefly at the importance of regional development in the new South Africa and the developmental challenges of the North-West.

### **2.1.3 The importance of regional development in the new South Africa**

In the new political and constitutional dispensation the country is divided into nine provinces, each with its own provincial government. Although South Africa now has a federal dispensation with stronger central and weaker provincial powers, there exists, however, no doubt that regional development will be of crucial importance in the new South Africa. In fact, strong regional identities are developing and leaders on provincial level have already remarked that more authority will have to be delegated to the regions in order to promote development at grassroots level.

It is not hyperbolic to maintain that the success of the development will be determined on the regional level. Provincial and local authorities are closest to the people living in poverty and should therefore also be able to best interpret their problems and needs. The latter authorities are also the most important instruments for the implementation of the government's

Reconstruction and Development Programme (RDP), in consultation with civil society ("civics") and with non-government organizations (the so-called "NGO's").

Although provincial authorities only have limited control concerning economic policy (monetary and fiscal policies are Central Government Functions) they do, however, play an important role in the implementation of development and in determining of strategic development priorities on regional level.

#### **2.1.4 The development challenges in the North-West Province**

The Potchefstroom campus of the PU for CHE is situated inside the North-West Province (NWP), and although the University naturally also has a national focus, the University is very intimately linked to the fortunes and misfortunes of people in this province. A cursory glance at these development problems in the NWP reveals the following features (Coetzee, 1994:407; DBSA, 1994):

- A population size of 3,5 million and a high population growth of 3,1% per year. A human development index of 0,59, which is the third lowest of the nine provinces.
- A high level of illiteracy of 38,0%.
- Fifty-three percent of all households are below the minimum subsistence level (in other words there are high levels of poverty).
- Inadequate provision in basic human needs with a housing deficit of 100 000 houses; 30-40% of the population does not have direct access to drinking-water; inadequate sanitary facilities; and 50% of the children between 2 and 5 years old suffer from impaired growth.
- A process of rapid urbanisation and the establishment of squatter camps close to rural towns.
- Damage to the environment as a result of underdevelopment, population growth and destructive grazing customs in rural areas of the former Bophuthatswana.
- Inadequate economic growth which, in conjunction with the high population growth, gives rise to negative growth of the per capita income of the population.
- A distortion in the economic structure which is caused by the dominant role of mining which contributes approximately 60,0% to the Gross Geographic Product of the NWP, as opposed to the 6,3% and 6,5% of the manufacturing and agricultural sectors respectively.

From the above-mentioned discussion it can be deduced that the NWP will have to place particular emphasis on:

- human development, new forms of human security and survival strategies for poor societies. The UNDP (1994:3) states that human security exhibits two sides of the same coin: "The security from want where victory spells freedom from fear and the economic and social front where victory means freedom from want. Only victory on both fronts can assure the world of enduring peace";
- higher, more equal job opportunity creating and sustained patterns of economic growth. It comprises also an emphasis on economic diversification, concentration of industrial development, industrial, business, mining and small scale agricultural development, the promotion of ecotourism and the upgrading of infrastructure in rural and urban areas (SENRIO, 1995);
- a relevant investment programme and investment code and the increase of access to overseas donor funds;
- sustainable patterns of development which maintain the balance between economic growth, human development and the environment.

Against the background of the above-mentioned development challenges on national and region level the government reacted, after the 1994 elections, with the acceptance of the White Paper for the RDP.

### 2.1.5 The government's Reconstruction and Development Programme (RDP)

It is obvious that the RDP is an attempt to eliminate the legacy of apartheid (cf. RDP, 1994:2-4): "Our history has been a bitter one dominated by colonialism, racism, sexism and repressive labour policies" (RDP, 1994:2) and "The result is that in every sphere of our society - economic, social, political, moral, cultural, environmental - South Africans are confronted by serious problems". However, the RDP document subsequently states (1994:4) that: "No political democracy can survive and flourish if the mass of our people remain in poverty, without land, without tangible prospects for a better life. Attacking poverty and deprivation must therefore be the first priority of a democratic government".

The RDP is based on the following principles (1994:4-7):

- An integrated and sustainable programme
- A people-centred process
- Peace and safety for everybody
- Nation-building
- A link between reconstruction and development
- Democratizing of South Africa.

To execute the programme there are five programmes which are linked to each other and which have to be implemented:

- The satisfaction of basic needs
- The development of human resources
- The reconstruction of the economy
- Democratization of the state and society
- Efficient and applicable structures to implement the RDP.

The basic needs of the population are broadly defined according to the RDP:

- Land reform
- Housing and services
- Water and sanitation
- Energy and electrification
- Telecommunication
- Transport
- The environment
- Nutrition
- Health and social security and welfare.

The development of human resources includes:

- A restructuring of education and training to focus on women, girls, pre-primary instruction and a new system of education
- A new arts and culture policy
- Sports and recreational policy
- Youth Development and capacity-building programmes.

The RDP further states that the programme can only be executed if the economy is restructured to concentrate on poverty, unemployment, deprivation and gender inequality, and if economic concentration is counteracted by means of a policy of competition and small business development.

Since the publication of the RDP's base document an RDP White Paper has been published as a discussion document which explains the role of the government, the economic policy framework, financial limitations, the restructuring of the public sector (including affirmative action and rationalization) and the organizational structure, as well as the way in which consultation, participation and capacity-building have to be administered. It is especially with regard to economic policy that the RDP White Paper has made the most decisive move towards the reduction of the relationship of debt to GNP, to ensure that current government expenditure does not increase in real terms, to encourage increased government investment and to implement the RDP as a means of restructuring government expenses on national, regional and local levels; rather than by means of a radical redistribution strategy (White Paper, 1994:1). Furthermore, RDP projects are approved only if business plans for these have been approved.

From the above-mentioned discussion it can be deduced that the political transformation in South Africa has brought about a revolution in government policy: moving away from the privileging of a small minority of the population, towards the needs of the broad mass of the population. There can be no doubt that this shift in emphasis will imply a drastic change for research policy in the country and thus will give rise to a shift in emphasis in research priorities.

Before the programme for research development at the PU for CHE is discussed, the development of ideas with regard to the concept of development will be considered briefly. This will give an indication of the suggested nature of the role of a university in the development process.

#### **2.1.6 The concept of development: from growth to human development and capacity-building**

In the main stream of thought on development the following shifts have occurred in the course of time:

- I. Pursuing the aim of economic growth as the most important developmental objective (1950-1969). During this phase developing countries had grown rapidly, but in spite of visible progress socio-economic development did not occur at the same rate.
- II. Redistribution by means of growth (1970-1976). Here the emphasis falls on the administering of redistribution and the role of the government to realize redistribution in such a way that the poor will be favoured (early seventies).
- III. Satisfaction of basic needs (1976-1982). Here the emphasis falls on the satisfaction of basic needs ("To put first things first") and a pattern of economic growth which will accomplish a permeating effect to the poor.
- IV. The era of structural economic adjustment (1982-1990). As a result of the debt burden of the Latin American and African countries in the early eighties, the World Bank and IMF formulated definite economic prescriptions within the framework of structural economic adjustment for developing countries. This did indeed work in some cases, but especially in Africa socio-economic problems and poverty have become aggravated, because expenditure for education, health, housing, etc. has been cut severely.
- V. Human development (since 1990). In its report on poverty the World Bank (1990) remarked on the big backlogs in human development which exist in many parts of the world, in spite of the progress made in this regard since the sixties. It was the United Nations' Programme for Human Development which shifted the focus towards the human being, the improvement of human capabilities and human capacities (or capacity-building) as the most important aim of development (cf. UNDP, 1990 and 1992). Here particular emphasis is placed on the encouragement of people empowerment for self-sufficiency. Emphasis also is placed on the improvement of opportunities for prolific recruitment by finding balances between the promotion of economic growth and human development, as these had been applied very successfully in countries of South East Asia (cf. World Bank, 1990; World Bank, 1993).

In the South African situation decisive proof exists that both economic growth and human development are important policy aims which should be approached in a balanced way. Economic growth is necessary to create new prosperity from which human development should be financed and new opportunities (especially job opportunities) created. The need for human development emerges clearly from the socio-economic imbalances referred above, but can also be understood in the light of the envisioned shortage of approximately 600 000 people in executive and highly skilled jobs which will exist by the end of the century. On the other hand, nearly 2,3 million members of the labour force will still be unskilled. For a country in the process of the most important political transition in its history these imbalances are exceptionally problematic. The development of the country will make particular demands, but will also offer vast opportunities for Universities in terms of training, research and community service. It is important, however, to keep in mind that a university's role in development should be based clearly on its traditional functions and that its role should be of a supporting and facilitating nature. The PU for CHE is comprehensively involved in the development process by means of education, research and community service in particular, but leaves the implementation of development to the government and society.

#### **2.1.7 A programme for research development at the PU for CHE**

From the above-mentioned discussion it can be deduced that the Programme for Research Development at the PU for CHE is committed to the possibilities offered by both the "First and Third World sectors" in South Africa. The modern sector of the economy must, in order to be internationally competitive, be supported by innovations and inventions. In short, science and technology have to develop further to enable South Africa to retain its competitive edge with regard to certain products and services and even to develop new competitive edges. As a result of the expected shift of the priorities of the authority towards the basic needs of the population, financial pressures will, however, necessitate that the development of modern science and technology will take place selectively.

Modern science and technology must, however, as stated above, be employed to address the major development issues concerning health, education, housing, water and energy supply and others. Apart from the role of modern technology there is also a pertinent place for the development of applicable and adapted forms of technology to accomplish new breakthroughs with regard to the abovementioned issues.

As a result of the severe shortage of trained manpower in South Africa and the need for basic skills which have emerged with the restructuring of the bureaucracy both on national and provincial level, the Universities are faced with a new challenge, namely to offer, apart from the standard degree and diploma training also short courses for non-degree or non-diploma purposes (so-called certificate courses). The PU for CHE has already made a beginning in this regard. The training of officials in the basic principles of the public administration is an example of this. High-quality courses in environmental management are also offered. In addition to these, Saturday schools, bridging programmes and language courses are offered, while the University further serves society by providing clinics and nutritional guidance (as indicated further on).

Against the backdrop of the above, a Programme for Research Development at the PU for CHE was formulated, consisting of three sections:

- I. The advancement of scientific research and technology to make a contribution to keep South Africa internationally competitive and to equip students on a higher level for the challenges of the technological age, for the cultivation of a culture of entrepreneurship with students and to make possible the generation of funds for the University by means of active co-operation with the industrial sector.
- II. Research which is directed towards the finding of solutions for the developmental issues of South Africa, especially in the North-West Province where the PU for CHE is situated and thus has a competitive edge.
- III. Capacity-building programmes which provide a service to the community, but also contribute to the improvement of the skills and abilities of people, supplementing and sustaining the traditional educational task of the University.

## **2.1.8 Contribution of the PU for CHE to development and the RDP**

### **2.1.8.1 Advancement of high-level science and technology to make a contribution to international competitiveness**

Three examples at the PU for CHE to be discussed in this category are the Sasol Centre for Separation Technology, the Centre for Health Care and training in Business Administration. All three these programmes are unique contributions that the PU for CHE can make in the national context. On the one hand it is a direct contribution of the PU for CHE to the RDP. On the other hand these are focus areas specifically present at the PU for CHE by means of which the spectrum of high-level expertise of the South African university system as a whole can be promoted.

#### **2.1.8.1.1 Sasol Centre for Chemistry (SCC)**

To increase the standard of living in the country, knowledge, creative thoughts and enterprise are required, among other things. Knowledge of the sciences and technology and the use of these form a foundation on which a country and its people can build in order to satisfy some of its development needs. For science and technology to advance it is necessary that adequate and proficient experts are trained and delivered will who can perform duties and meet challenges successfully.

The Department of Chemistry at the University makes a significant contribution through the programmes which are offered and by the research which is done. To enable this contribution to reach its full potential, adequate funds are necessary which can be obtained if there is close co-operation between the university, state and industry. Negotiations with SASOL led to financial support for the upgrading of the chemistry laboratories so that the best opportunities in the field of education can be created for students. Discussions with other industries are also under way, so that further support for training programmes in the Department can be obtained.

To make possible the provision of technological expertise and human resources, which are necessary for the provision of the technological needs of the industry, students are also trained in different fields of expertise. A business-initiated growth point, namely the Sasol Centre for Separation Technology (SCST) has been established inside of the Sasol Centre for Chemistry. Support from SASOL and the FRD with its Technology and Human Resources for the Industry Programme (THRIP) has also been received for the operation of this Centre. The SCST is multi-disciplinary in nature, and particular practice-orientated problem areas are investigated. Among other things progress has already been made with the development of membrane technology for the separation and purification of substances. This knowledge and technology can, for example, be applied to help to solve the very urgent problem of the acquisition of clean water for everybody. Service is provided to the community by exploring new knowledge, developing skills and technology and delivering students who are useful in the development of the country and its people.

Concerning training and education, the Department supplies a variety of services which are of substantial value in view of the RDP.

The SSC is of the opinion that the electronic media will play an important role in the training of students, and the development and use of this medium have already been explored. Computer-assisted education is used for milieu-disadvantaged students, and for helping students who experience problems with study material. Evaluation and education programmes are used and are still further expanded and developed to meet these needs. This type of education has indicated a positive contribution to the improvement in the performances of students. A team of experts is used to assist students, where necessary, on a continual basis.

In the normal class situation the progress of students is monitored regularly and problem cases are identified. Assistance is provided to these students in special tutorial classes.

In 1994 an annual Winter School was initiated, which is sponsored by SAMANCOR. Matric pupils of employees of SAMANCOR are coached in Science as well as in Mathematics. During these Schools information is passed on to the pupils regarding study and career opportunities in the natural sciences and technology.



Members of the SSC are also involved in the establishment of a Centre for in-service training of Science teachers with a view to the improvement of their qualifications. Furthermore, the SSC is also involved with the after-hours programme HED (Sec) for the training and retraining of Science and Mathematics teachers.

The preceding discussion should be viewed in the light of the mission of the SSC to which staff are committed: to provide innovative scientists through excellent training and research and to contribute to the training of well-equipped teachers in the Natural Sciences, in order to provide the correct scientific foundation to pupils at school level already.

#### **2.1.8.1.2 Centre for Health Care**

The Faculty of Pharmacy at the PU for CHE has a proven record of high-level research and training and a commitment to serve the government of the day, the pharmaceutical profession and the public in general. The Faculty consists of the departments of Pharmacology, Pharmaceutics, Pharmaceutical Chemistry and Pharmacy Practice, and it also houses the

- Medicine Control Board Laboratory, a quality control laboratory which has supplied services to the S.A. Medicine Control Board over the past eight years.
- The Research Institute for Industrial Pharmacy, where research is done on dosage form-development and medicine registration on behalf of the pharmaceutical manufacturing industry.
- The Research group Pharmaco-economy, which does research on pharmaceutical and medicine affairs, especially with regard to the requirements of the Government's RDP.

The Faculty of Pharmacy, in co-operation with the Pharmacy Department of the University of the North and Medunsa, is at present negotiating the establishment of a Centre for Quality Assurance with the World Health Organization. This intended Centre, which is in an advanced stage of development, will actively invigorate the country's resources with regard to information, services, research and training, and will promote co-operation with other countries in the African region especially concerning primary health care and quality control of medicine. Consequently, ties will also be forged for training and the exchange of information on medicine and medicine policy together with the mutual reinforcement of universities and medication control authorities and the promotion of technical co-operation between developing countries.

The above-mentioned Laboratory for Quality Assurance of the Centre for Health Care envisages emphasis on research, training and service. In these fields there will be particular expertise in the field of medicines and the application of these in the Centre:

##### **Research**

Research of the Centre will focus on

- The establishment and updating of a database on pharmaceutical raw material specifications.
- The expansion of the current database of pharmaceutical products already on the market.
- The development of analytical procedures, including stability-indicating methods and screening tests for the tracing of counterfeit medicines.
- Standards and other policy measures to assist medication control authorities to register medicine products of an internationally accepted standard.

##### **Training**

Additional to the University's undergraduate and postgraduate training, training will be provided to:

- Analytical control personnel.
- Medicine control officials.

- Health workers.

### **Services**

The services of the Centre will include:

- Analytical testing of pharmaceutical raw materials
- Analytical control of medicine in the pre- and post-registration stage.
- Testing and monitoring of multiple source exchangeable medicines (generic medicine) with regard to compliance with bio-equivalence, bio-available and pharmaceutical availability requirements and general compliance with pharmacopoeia or regulatory requirements with regard to sterility, preservative efficiency, chemical and physical stability, dissolution, etc.
- The providing of library and literature services by means of direct access to computer network formation with national and international scientific pharmacopoeia databases.
- Giving access to the national medicine database at the PU for CHE.
- Giving access to sophisticated analytical equipment and facilities.
- Providing advice to health authorities in general and regulatory control bodies in particular, especially on policy matters which fall inside the field of research expertise of the Centre.

#### **2.1.8.1.3 Business Administration and Entrepreneurship**

The Faculty of Economic and Management Sciences at the PU for CHE has developed a professional Bachelor's Degree in Business Administration in co-operation with the private sector and the School for Business Administration of the California State University. The inception of the degree has just been approved by Advisory Council of Universities and Technikons (AUT) of the Department of Education.

The purpose of the above-mentioned course is to provide the maximum number of persons with the opportunity to register for the course. It will be offered extra-murally and in English. If facilities are available for the Open Learning Method, it will be the ideal method with regard to training for the programme.

Concerning the RDP, the institution of the degree was motivated as follows at the AUT:

*There is a need to increase the capacity of people to enter the world of business management equipped with the necessary academic and professional education early on in their careers. This can be accommodated through a developmental approach based on academic grounds which facilitates the following:*

- *Development of a focused curriculum which is based on different current degree curricula and the real and relevant needs of business and which includes all the essentials for a comprehensive and professional development approach leading to a degree.*
- *A degree consisting of consecutive programmes at different levels of development to accommodate the development potential or need of the learner. The educational philosophy would therefore be a learner-centred approach.*
- *It is the aim of the educational approach to enable students to apply their knowledge and skills and their academic progress immediately. This can be regarded as an accelerated, productive utilisation of resources.*
- *Greater accessibility in terms of cost may be implied for students because of the involvement of business.*
- *Development of the learner in the work-place or own environment for those students involved in extramural teaching.*

## **2.1.8.2 Contributions in the field of selected developmental issues**

### **2.1.8.2.1 Regional Development: The Centre for Regional Development (SENRIO)**

In order to enable the University to support the RDP and to make available and market its expertise on development, the Council of the PU for CHE has approved the establishment of a Centre for Regional Development (SENRIO). SENRIO aims to undertake research of high quality in an integrated and trans-disciplinary manner, in order to stimulate sustainable human development and new forms of human security, and to promote sustainable, more equal development and job opportunities which in turn will stimulate economic growth. SENRIO has the task of co-ordinating development orientated research, providing consultation services, making policy analyses and acting supportively in co-operation with the Department of Training Co-ordination of the PU for CHE, with regard to training for development.

#### **Vision of SENRIO**

To conduct research and policy analysis as a Centre of the PU for CHE, in a trans-disciplinary and integrated fashion, which will support sustainable, people centred development.

#### **Objectives of SENRIO**

SENRIO is a centre which

- undertakes and promotes research on development issues;
- builds up and promotes expertise on development;
- stimulates the debate on development;
- wants to make a contribution to the promotion of sustainable, people centred development.

#### **Functions of SENRIO**

The functions of SENRIO are to

- do high quality research on development issues;
- to undertake analysis of development policy;
- to offer advice on development policy;
- to support development planning;
- to undertake viability studies with a view to the identification of development projects.

#### **Working method of SENRIO**

SENRIO plays a supporting and facilitating role in the field of development and does not implement or manage projects. The Executive Director of SENRIO makes use of the expertise of the University in the different faculties on a matrix system, in consultation with the line functionaries and with incentives for personnel as determined by the remuneration policy and policy of SENRIO. SENRIO operates in close co-operation with government functionaries and development agencies responsible for development efforts on both national and regional levels.

#### **Management and control structure of SENRIO**

The Vice-Rector (Research Development) has the overall responsibility for the activities of SENRIO and reports on this to the Rector. Further the management and control structure consists of an Advisory Council, an Executive Committee, an Inter-Faculty Committee for Regional Development and SENRIO Faculty Committees.

#### **The Advisory Council of SENRIO**

The Advisory Council is a body which involves expertise and interest groups from outside the University in SENRIO's activities. The Advisory Council consists of representatives of the following institutions:

- The North-West Province
- Development institutions
- North-West Development Corporation
- Agricor
- Development Bank of Southern Africa
- The private sector
- The banking industry
- Industry
- Mining
- Gencor as sponsor of SENRIO
- The City Council of Potchefstroom
- An RDP representative of the province
- The UNIDO representative in South Africa (SENRIO has a UNIDO contract to undertake viability studies)
- A representative of the Vaal Triangle Campus
- Two experts in the field of development.

The superstructure which was established by means of SENRIO, enables the PU for CHE to market and mobilise its expertise in development. SENRIO is supported directly by the Department of Town and Regional Planning and the Institute for Future Studies of the PU for CHE. Moreover, SENRIO/Development-orientated committees were also established in each of the respective faculties to reflect on development and development-orientated research and to serve as network for SENRIO. In this regard some faculties of the PU for CHE, like the faculty of Economic and Management Sciences, established committees specifically for the RDP.

It is important to note that the management model of SENRIO is based on modern management principles and a matrix management system and not on the hierarchical model for management. SENRIO committees in the respective faculties form "pools" of expertise from which project teams for development-orientated research can be mobilized. A small internal Management Committee controls the activities of the Centre on a continuous basis, while expertise from outside and interest groups with regard to the field of development are represented in the Advisory Council of SENRIO.

**SENRIO started off on a high note with the awarding of the licence for the COMFAIR III Expert software package of the United Nations Industrial Development Organisation (UNIDO) to the Centre. The software package enables the Centre to undertake feasibility studies for development projects in South Africa and other African countries. The first feasibility study was done with regard to the fishing industry in Uganda.**

SENRIO plays a pro-active role with regard to research in the North-West Province and was responsible for the formulation of the economic development strategy of the Economic Advisory Council of the Premier of the North-West Province. There are also indications that the Centre will become involved in several other similar research projects. Different task teams also support the Provincial Government in terms of the formulation of policy with regard to health, economic matters, public works and small business development.

From the above-mentioned course of events it can be deduced that SENRIO is focused on the North-West Province but has also covered a wider area from the start. There are also already enquiries from other provinces in South Africa concerning the services of the Centre.

#### **2.1.8.2.2 The Small Business Advisory Bureau (SBAB) (Afr.: ABKS)**

The SBAB is one of the pioneering institutions which was already established at the PU for CHE in 1970 and which has rendered an invaluable service over the years.

##### **Mission**

As an Institute of the PU for CHE, the SBAB strives towards promoting entrepreneurship by means of comprehensive programmes in the formal and informal small and medium business sectors in Southern Africa on a non-profit, efficient and adaptable basis.

##### **Objectives**

The objectives of the SBAB, which fit in neatly with the Government's Reconstruction and Development Programme, are as follows:

- To promote and develop entrepreneurship and an entrepreneurial culture.
- To increase the efficiency and profitability of small and medium businesses.
- To develop and stimulate a sound, efficient and balanced small and medium business sector.
- To develop a sound and competitive business community by means of direct assistance, or in co-operation with other institutions.
- To develop, expand and maintain a basis of expertise aimed at these objectives.

##### **Services offered by the SBAB**

In order to realize its objectives, the following services of the SBAB are available to businesses of all communities countrywide:

- Assistance and advice in the establishing of businesses.
- Training in entrepreneurship and business expertise, from beginner up to advanced level.
- Management, marketing and financial consultations.
- Layout and modernising consultations.
- Research projects.

These services are delivered from the head office of the SBAB in Potchefstroom and branch offices in Johannesburg and Tembisa.

The extent of the service delivered by the SBAB appears among others in Table 2 from the number of consultation services rendered in the past year.

**Table 4**

<b>Services rendered by the division consultation services from 1 January 1993 to 31 March 1994:</b>	
Management consultations	459
Follow-up consultations	88
Office visits by clients	659
Financial statements analyzed	75
Financial submissions	19
Follow-up visits to clients	105
Visitors received	620
Advice given by letter	384
Advice given by telephone	7 978
<b>Total</b>	<b>10 387</b>

During 1994 a total number 2 018 development courses were offered. Advanced courses offered during this year number 1 521. The total number of courses presented is thus 3 539. The SBAB conducted no fewer than 42 radio interviews during 1994 and received a large number of visitors. The SBAB is also responsible for the publication of the magazine, *Entrepreneur*.

#### **2.1.8.3 Capacity programmes**

The social involvement programme (community service dimension) is based on the principle of the development of personal skills. The programmes, which are mainly managed on an agency basis, include:

- Saturday Schools in co-operation with the North-West Education Foundation (which are from time to time also supplemented by spring and winter schools)
- Teacher training
- Furthering of education in natural sciences and mathematics
- Legal aid centres established to provide free and effective legal advice to people who cannot afford legal representation
- Street Law
- Childcare and family enrichment (Educare)
- Community pharmacies
- Training of lay preachers
- Traffic safety training
- The Students' Rag Community Service which is involved in matters such as care for handicapped persons, childcare, care for elderly persons, a feeding scheme for elderly persons and programmes concerning literacy

- The "Women's Outreach Foundation Ten Programme" which gathers women in groups of ten and identify their needs and ways to address these needs. The emphasis is strongly on nutritional and family ecology.

It is important to note that the PU for CHE executes the above-mentioned management on an agency basis and does not undertake the activities itself. The extent of the social involvement programme appears, among other things, from the following:

- During the past 12 months the PU for CHE has managed programmes to the value of R4,5 million.
- In the Vaal Triangle, in Potchefstroom and in Klerksdorp respectively 500, 250 and 1 250 pupils are involved in Saturday Schools (the budget is R350 000 per year).
- At the Legal Aid Centre 235 post-graduate students are involved, and about 1 700 clients are helped annually. About 500 high school pupils of from schools in Potchefstroom (including Promosa, Ikageng and Mohadin)<sup>1</sup> are involved in the Open Project.
- At present more than 2 000 children are cared for in 35 EDUCARE centres and 100 black women have been trained as Educators. The budget amounts to R400 000 per year.
- The clinic in Promosa annually handles 4 000 requests for medicine, and the medication profiles of 1 000 inhabitants have already been stored on computer.
- The SBAB is involved in more than 10 000 consultations nation-wide.
- The Women's Outreach Foundation Ten Programme has 30 000 members and 3 000 course presenters.

Some of the above-mentioned programmes will now be discussed in more detail<sup>2</sup>:

- i) In the course of the past six or seven years the **Saturday Schools**<sup>3</sup> have grown from a modest beginning by volunteers to a comprehensive enterprise which is already spreading to other towns and cities in the area. The schools are currently offered in co-operation with the North-West Education Foundation<sup>4</sup> and reach a large number of matriculants in the region. At the Vaal Triangle 500 pupils are currently involved (while there were only 50 pupils in 1988 when the programme began). At the Potchefstroom school, 250 pupils are currently involved (at present, pupils are to some extent selected by headmasters as facilities are somewhat limited). The school at Klerksdorp is presently the biggest, with approximately 1250 pupils. In Klerksdorp there was a pass rate of 100% in the previous supplementary examination, with a dramatic improvement in symbols. In general the pass rate in this region is approximately 20% higher than the national average.

The medium of instruction in the Saturday Schools, of which the Potchefstroom leg used to be presented on the campus of the University, is English because the pupils who make use of it are taught in English. In order to involve more pupils, the Saturday Schools are now offered in Ikageng. The textbooks and syllabi of the Department of Education and Training are still used at present, and any necessary

---

<sup>1</sup> Promosa, Ikageng and Mohadin refer to townships of Potchefstroom in which people from mainly the brown, black and Indian communities respectively live.

<sup>2</sup> This part is derived from an article by Annette Combrink and Anton Kruger in **Besinning en Perspektief**. PU for CHE (Date of publication: late 1995)

<sup>3</sup> These Saturday Schools are supplemented from time to time by spring schools and winter schools which are presented additionally. Aid is also provided to matriculants who have to repeat subjects and who have to prepare for the supplementary examinations.

<sup>4</sup> The North-West Education Foundation is a non-government organization that originated from the community, and serves the former Region J. It is responsible for considerable development work in the region, especially pre-school education, literacy training and Saturday Schools. The Foundation has close links with the University, and is funded by a wide range of donors.

modification will be made in terms of new education policy and practice. Study methods are also addressed during the course because, as a result of inadequate education methods, pupils often do not develop suitable methods for self-study.

Most school subjects such as Afrikaans, English, Mathematics, Science, Biology, Geography, Economics, Business Economics, Accountancy and History are offered during these classes.

The Saturday Schools are no longer a purely voluntary enterprise, but are managed professionally with a budget of approximately R350 000 per year, received from several donors<sup>5</sup>.

- ii) The **Legal Aid Centre** was founded to render free and effective legal advice to persons who cannot afford legal representation. It is operated in co-operation with the Faculty of Law of the University, and also offers valuable practical training opportunities for senior students. It does not compete with private law practices in any way because clients are accepted only after a means test.

235 post-graduate students are at present involved in the activities. Each student must supply two hours of service per week. The work is done under the supervision of a full-time director. The complete spectrum of legal work is involved, from appearances for clients in criminal matters, to Labour Law, Mercantile Law, Leasing Law and Consumer Law. About 1 700 clients are helped annually and the services of the Centre already have wide acceptance and credibility in the community.

The manner in which the students are involved has a dual purpose: firstly students are trained much more directly and made more aware of common legal problems and clients profit from the service rendered.

- iii) **Street Law** was established to create a legal awareness and culture and consequently to attempt to decrease violence in the country. At present more than 550 high school pupils from all population groups of schools in Potchefstroom, Promosa, Ikageng and Mohadin are already involved in the project.

Approximately 25 law students handle the project.

Usually a Street Law co-ordinator (LLB graduate) will administer the activities. Senior students then act as study leaders who present workshops to pupils after they have been trained in that manner themselves. The study leaders organize court visits for pupils, and practical legal problems which might emerge are researched and solved by the study leaders. In the presentation a student text with cartoons is used, as well as case histories, role play, moot courts and discussion groups.

The most important contribution is that people are informed on the law which touches their everyday existence, so that the programme is both informative and preventive in nature.

- iv) The **Nyologang Educare Project** was established to solve one of the most crucial problems in the education system in the country. Nyologang is a Tswana word which approximately means "to move forward vertically", which has the symbolic meaning that children will rise to a better life. In the education here, the emphasis is on the importance of Christian values.

The project was developed through the Department of Biblical Studies of the PU for CHE, which expanded the contacts so that it is now an independent project. The Community Outreach Trust was established to administer the project.

More than 2 000 children are at present cared for in 35 EDUCARE centres. Approximately 100 black women have already been trained as EDUCARERS (30 of these from Soweto).

---

<sup>5</sup> The donors often include foreign embassies.



As part of the project, nutrition investigations have been done, and the finding was that there was a degree of malnutrition present in the children in Ikageng. This information was used by other people involved in other projects.

The eventual aim is to establish a system of day-care centres where 6 to 10 children can be cared for at the house of a trained EDUCARER. This programme is offered in the spirit of the policy that it is better to train trainers who can in turn train further, than to do the work with a restricted number of children. The same policy is followed in other programmes.

The programme is sponsored by external donors, and the budget amounts to R400 000 per year.

- v) **The Students' Rag Community Service (SRCS)** is an organisation which has already functioned for a long time, which is already well-known in the community, and which has built a good reputation over the years and has a lot of credibility in the city and even in the surrounding areas. The SRCS is the executive arm of the student Rag endeavour. There is a permanent office on campus with a salaried project leader/organizer in service of the SRCS. The wide variety of programmes is on the one hand offered to help the people in the community, and on the other hand to sensitize students and to train them to be of service.

The programmes vary from literacy courses to ballet classes and eisteddfods on the one hand, with special emphasis on an environment conservation project which is annually presented to 500 farm-school pupils, to more conventional service-rendering on the other hand. It includes the following projects and programmes:

An after-care centre housing 100 children has been established in Promosa. This project has the advantage that the children no longer sit around unproductively after school. The project has already been almost entirely taken over by the community itself - which falls within the central philosophy of handing over projects to the societies in which the necessary skills have been developed.

At the Abraham Kriel Children's Home three projects are offered, namely the training of the Children's Home choir which is handled by students and which gives performances in town, a revue group which is coached and has proved to be very successful, and camps which are offered twice a year to give the children a chance to relax outside the routine world of the Home, and also to have interaction with the students.

On the more institutional level help is provided in decorating nursery schools and in manufacturing and making available educational aids in co-operation with Nyologang in Promosa and in Ikageng. Residences "adopt a school", and the students then work for particular nursery schools, which ensures much personal involvement by students and guarantees that the aim of the enterprise, namely training in service-rendering, is realized.

At the Amelia Centre, the Witrand Care and Rehabilitation Centre and at the E.S. Le Grange school a variety of programmes are offered for handicapped people to promote their development. Especially at Amelia and E.S Le Grange programmes are offered and excursions arranged which provide much enjoyment to the inhabitants and which offer students valuable learning opportunities.

The SRCS provides direct aid to elderly persons in Promosa through the soup kitchen/feeding plan operated at the Community Centre, where food donated by shops is used to help needy elderly persons.

An exceptional project is the Clinic operated by a registered pharmacist and pharmacy students and which is available twice a week in Promosa. About 4 000 requests for medicine are handled annually, and medication profiles of approximately 1 000 inhabitants have already been stored on computer.

The distribution of the medication is controlled by the Department of Pharmacy Practice of the PU for CHE. The cost for this project amounts to R77 500 per year, and it is funded by pharmaceutical companies that also donate medicine. The medicine is made available at R1,00 per item.

The SRCS also offers sports coaching courses and recreation projects aimed at the development of sport in schools. The students presenting the courses have qualifications in Human Movement Science. About 50 teachers per year are reached by means of different courses.

- vi) The **training of trainers** is a project which has been received very favourably. Approximately half a million people are annually trained at training organisations by a large group of trainers in a variety of fields of expertise. By the nature of their work these trainers influence the lives of the people trained by them to a great extent.

Research undertaken by the Faculty of Education has indicated that a large need exists for the more structured training of trainers. Most trainers enter the labour market directly after school and are generally appointed on the basis of their subject expertise as trainers without necessarily having adequate trainer skills.

In co-operation with the Boskop Training Centre the University has developed a series of certificate courses to counter this deficiency. The content of the courses includes, among other things, human relations, education skills, use of aids, basic principles, labour law, trade unions and service contracts. Training takes place at the University and at the Boskop Training Centre outside town.

- vii) The explicit purpose of the **Women's Outreach Foundation "Ten" Programme** can be summarized as follows:

The focus of the programme is on the underprivileged communities. The idea is to identify each individual's particular needs and then to address these needs. A safety net is then created in the community.

The programme is located in the department of Nutrition and Family Ecology<sup>6</sup>. The structure of the programme operates in such a way that ten women are brought together for a session during which needs are identified, prioritised and then handled according to a programme developed especially, during a minimum of ten consecutive meetings.

Every woman is then responsible for identifying ten other women and to repeat the programme with them (something of the idea of the training of trainers). In that manner a cascade effect is obtained and large numbers of women are potentially helped.

Ten main themes are treated, and it is done in such a manner that illiterate women, and women who cannot speak Afrikaans or English, can also benefit from it. Course material has been developed and is still being developed to help empower women to get more control of their lives.

The themes are the following:

- Sanitation and hygiene
- Health care
- Child-care
- Nutrition
- Housing
- Energy utilization
- Family life
- Clothing
- Development of the woman in terms of productivity, work ethics, training, etc.
- Finance.

---

<sup>6</sup> The former Department of Home Economics.

As far as numbers are concerned, 30 000 members were envisaged, which means that there must be 3 000 course presenters. The programme, which was launched here, will be also extended to other cities and towns in the RSA and is managed in conjunction with five other universities in order eventually also to spread to the neighbouring states.

viii) **Teachers' Training**

Where the programmes that have thus far been established, are concerned more directly with social upliftment and empowerment, there are also programmes with a more direct academic contribution. These programmes are especially aimed at eliminating historical inequalities and to help students and potential students to obtain training which would otherwise perhaps not be available to them.

The first of these programmes is a *teacher training programme*, which was initially only aimed at training quality teachers, through which the shortage in especially Mathematics and Science Teachers could be eased, but which has in the meantime also involved other subjects. The programme, presented after hours and in English, has aroused vast interest. In the first year of the course (1993) 71 students enrolled and in the second year there were so many applications that students had to be screened. 140 students were admitted to the course.

Admission to the course is based on a lower standard than normally required for university entrance, but because mostly (but not exclusively) adult students are involved, who already have some or other after-school qualification, the formal requirements were lowered. The students are exceptionally motivated and the attendance and pass rates are very satisfactory. At the end of the course a Higher Education Diploma (Secondary) is awarded to successful candidates. It is an acknowledged education qualification which can also result in promotion for the candidate. At present the project is still financed by donors until it can be structured fully as part of the University's formal education programme.

- ix) **The Higher Education Diploma in Technology** is the first course of its kind in South Africa and was developed by the PU for CHE in co-operation with the ORT-STEP Institute in Israel. The purpose of the course is to train teachers in technology, and sophisticated equipment and apparatus are used.
- x) **The Unit for the Furthering of Education in Natural Science (UFENS/EBONS)** is aimed at furthering education in this key subject. A large number of fields of study at Technikons and Universities require Natural Science as admission to the field of study. Only approximately 30% of all black matriculants take Science as a matric subject, and even for those who take it, it is heavy going because the facilities for practical work and well-trained teachers are generally lacking.

As a result of the harmful consequences such a situation can have on the country (shortage in technicians, technologists, high level personpower), it is realised that aids must be developed in the short-term to support and better equip teachers and pupils. These aids must relate to existing structures and programmes and must be of immediate practical value.

The unit undertakes the following programmes in support of the above-mentioned objectives:

"User-friendly" books are compiled and made available at a very reasonable cost. Courses are often offered for pupils and teachers, and teachers who experience problems are also given advice on a regular basis. With the help of sponsors the Unit can establish and equip study centres away from the University campus and train personnel to man the centres.

A Science Garden where interesting experiments are demonstrated has been established by the Unit and are maintained by them. The Unit is also closely involved with the Western Transvaal as well as the national EXPO. The Unit offers science weeks, and personnel of the Unit work intensively on the academic front to stay up to date with events in the field of study.

The following has already been achieved:

- An agreement was made with NASCHEM to upgrade Science teachers with a Further Diploma in Education (R500 000 per year for three years).
  - Application was made to develop the staff responsible for in-service training of Mathematics and Science teachers.
  - In co-operation with the North-West Department of Education, the University of the North-West, the in-service training centre (NWIEC) at Mmabatho and the ORT-STEP Institute training schemes for Science and Technology teachers in the Province are being worked on.
  - In the past UFENS has launched several small actions to improve black education.
  - Since its founding in 1986, UFENS has offered courses lasting from a single day to a week for black Science teachers. Approximately 100 teachers have profited from this.
  - From 1991 to 1993 UFENS members were involved in Saturday Schools for black matriculants. The purpose with the Saturday Schools was to prepare for pupils the matric examination.
  - Written aids were developed and made available to black teachers and pupils at approximately cost price. These aids are currently used countrywide.
- xi) **Formal academic support programmes** offered in different faculties are also made possible by outside funding. These programmes mainly focus on disadvantaged students with potential and ability but whose formal academic achievements as such do not qualify them to be admitted unconditionally to the mainstream courses.

As a result of the fact that these programmes require additional support and the fact that these students do not have the money to study, outside financing and bursaries are very important.

Apart from the academic support component (tutorials, slow stream, study method guidance) these programmes also include support with regard to life skills such as socialisation, management of money matters, time management and communication skills (language and writing skills).

Examples of such programmes include the OPIPUK (Support Programme in Engineering at the PUK) of the Faculty of Engineering, which involves that students spread their first year of study over two years (about 30 students per year are accepted and they receive bursaries which cover all costs). Another programme is that of the Faculty of Natural Sciences, which admits students who do have exemption but whose symbols in the number subjects are inadequate. They are accepted in the courses conditionally on condition that they improve their knowledge of mathematics and natural science to such a degree in the bridging year that they can obtain admission to B.Sc. study after the year. There is a tremendous demand for the course and more than 150 applications are received annually, of which 40 are approved.

Further support is currently offered in other Faculties, particularly in the Faculty of Arts, to help students. One example of this is the mentor programme and further assistance is provided through computer-assisted education in several places and on several levels.

The donors' community sees their involvement in social projects as follows:

In the North-West Province the PU for CHE is the only body which can fulfil all three the functions of maintenance, support and development.

Donors also expect that all the programmes launched by the University must have a bearing on the University's core tasks of education and research. Creative programmes which comply with these requirements and at the same time satisfy the need of donors to be involved must thus be developed continually. The challenge is also situated in taking care that the product as well as the process complies with the requirements of the donor. Donors also increasingly specify the projects with which they would like to be linked.

The budget for social involvement programmes for 1995 amounts to R4 464 661 in total and is reproduced in detail in Table 5:

**Table 5**

**Budget for Social Involvement Programmes**

Programme	Year - 1995
UFENS	R 191 000
Higher Education Diploma (Secondary)	100 000
Literacy Programme	143 000
OPIPUK Programme	1 078 000
NW-EDP	185 000
PAA	100 000
Nyologang Educare	764 754
North-West Education Foundation	45 000
SENRIO	200 000
CTSE	15 000
Saturday Schools	103 850
Legal Aid Centre	804 364
Winter schools	199 120
Street Law	159 290
Music Workshop	5 990
Community Pharmacies (Various courses)	31 930
Nutrition Programmes	102 000
Nursing Course for Home Care	20 000
Students' Rag Community Service	7 000
Women's Outreach Foundation	52 381
"Ten" Programme	5 000
Promosa Clinic	1 000
Total	R4 464 661

By way of perspective

Combrink and Kruger (1995)<sup>7</sup> state that service-rendering inside the framework of the university, thus displays a very particular character. The emphasis is increasingly on the issue of capacity-building rather than handouts, so that the old saying that one should rather teach a man to fish than give him a fish, is strongly realized within the philosophy underlying the service aspects of the University. This point of departure is also emphasized by the fact that the University does not have the power to provide financial assistance - the expertise of the staff is rather mustered to allow the providing of service. The service motive of the University is thus supported by the Christian world view and the accompanying inner drive to service-rendering in people, and it is realized in a unique fashion within what is characteristic to a university, within the framework of the University.

<sup>7</sup> Cf. Combrink and Kruger *op cit.*

### **2.1.9 Research on the RDP**

If the RDP is to succeed, a number of its dimensions will have to be addressed by way of research (cf. Coetzee, 1995:5-10). Some of the dimensions are discussed below.

#### **Human development**

Several potential dangers are involved in the application of the human development approach. Government can play too large a part and it can become charity rather than empowerment. Development must be approached as capacity-building, the promotion of new forms of human security, survival strategies for truly poor communities, and local forms of self-development. The question is: How can communities be enabled to articulate their own needs and formulate strategies for self-development?

#### **Basic needs**

The RDP identified a long list of basic needs. The question is, however, whether all the needs can be addressed satisfactorily and within a short period of time and with restricted available funds (Van Zyl, 1994). The five most important basic needs were already identified in the seventies: drinking-water, sewerage, nutrition, shelter, health and education. It must also be determined which basic needs will have the maximum economic effect.

#### **Restructuring the economy**

The above-mentioned discussion has indicated that the economy is characterized by several structural economic problems. It means that the economy will have to be made freer and more efficient to decrease the limitations on economic growth and export performance. South Africa will also have to develop new competitive advantages. The RDP cannot be approached successfully without a high level of ongoing economic growth and a growth pattern which is more labour intensive.

#### **Measuring growth and human development**

South Africa's problems of development clearly requires a balancing of economic growth and investment in human development. This means that both aims must be promoted in the RDP. Given the competitive demands on the treasury, it can be done only through a reallocation of money with regard to different government portfolios if government wants to prevent an escalation of state debt.

#### **Promoting sustainable development**

The debate of the past decade has clearly indicated that conservation of the environment and natural resources is a boundary condition for long-term sustainable development. It is evident that the RDP White Paper makes reference to the environment, while the foundational document of the RDP (38-41) does refer to it. It is clear that air-pollution, acid rain, rapid urbanisation and expansion of squatter communities hold a threat for the environment in the urban context, while population pressure and overgrazing practices in the rural areas have caused considerable damage to South Africa's natural resources.

#### **Technology and development**

South Africa's economic development makes a dual demand on technology development: i) High-level technology development to keep South Africa internationally competitive and to develop new competitive advantages; and ii) appropriate forms of technology which will contribute in addressing issues of development and which will in particular make a contribution in creating job opportunities. It can be expected that the demand for the latter forms of technology in South Africa will be the most prominent in the near future.

#### **The role of government in development**

The RDP White Paper indicates a substantial role for government in the execution of this programme. In fact, the question can be asked whether such an approach will support actual human development or whether it will not perhaps promote the priorities of politicians rather than those of the poor people and communities. The themes which will have to be examined further are decentralisation and small-scale development.

## **The time horizon of the RDP**

Finally it must be stated that an altogether too close a time horizon has been linked to the RDP. 1999 is generally referred to as a kind of target date. It ought to be evident, however, that South Africa will have to make a long-term socio-economic transition which may last between 20-30 years. It is therefore imperative that realistic short, medium and long-term objectives be identified in the RDP.

## **2.2 Higher education in perspective**

It is generally accepted that higher education is on the verge of major changes, and although differences between countries do occur, the following motive forces which will lead to change are indicated.

The growing demand for higher education places national education systems under immense pressure, and the fear is often expressed that it will not be possible to maintain quality higher education.

Ironically the pressure for increased access to higher education coincides with a merciless rise in its cost. Both the institutions of higher education and the students find it difficult to cope with the endless escalation of expenses. Neither can governments provide in the growing demand for more funds for higher education. The offering of cost-effective higher education has become a huge challenge. Probably the most challenging development of recent years has been the increased demands made on the student as learner. The expectations of the community, employers, parents, etc. are that the student must be developed as an independent and life-long learner. In this regard learning is differentiated on particularly three levels, namely:

- the accumulation of information and knowledge,
- the development of skills, and
- cognitive development.

The appeal made on universities is that graduating students must be able to demonstrate the product of their preparation in terms of the three levels of learning. It will particularly emerge in their ability to solve problems, to communicate, to co-operate with others and to lead.

The rapid progress made in the development of the more recent information technology in the past years, finally constitutes both an aid and a motive in higher education. Although the promise held by technology as aid for education has not actually resulted in large improvements, there are indications that the international networks, powerful computers and interactive software together with telecommunications are now ready to make possible huge changes in education and particularly higher education. Especially the possibility of distance education or open systems of learning can contribute in facilitating access to higher education and in reducing costs. The effect on the learning activity is still not significant. Together these forces promise to change higher education.

A further important development was recently formulated as follows:

*"Regional and global trade agreements, in combination with the internationalization of licensure, certification and accreditation, are quickly emerging as powerful means to professional mobility. Traditional, nationalistic modes of quality assurance, including institutional and programmatic accreditation will inevitably give way to global forms of public protection and educational quality, beginning with professional education. Countries which have not established educational systems based on rigorous standards of literally "world class" quality further risk the replacement of their professional labor force by those who have anticipated global mobility and have fine-tuned their quality assurance systems accordingly" (Peace Lenn, 1995:209).*

## **2.3 Role of information technology in higher education**

### **2.3.1 Possibilities of information technology**

There is a trend to overrate the possibilities of technology for education. There is ample research which indicates that technology has still not actually had a large impact on the improvement of the productivity of university education or the improvement of students'

learning attempts (Ehrmann, 1995:20-27). Although technology has made huge progress in the past years, the cost attached to it, especially the more sophisticated products like good multimedia programmes, is still very high.

However, in Table 6 it is indicated that it can be applied with effect in the four separate dimensions of interaction if more recent technology is implemented in the right way (Ehrmann, 1994:24).

In spite of the advantages that can accrue from the correct application of technology in education, the increased demand for higher education cannot be fulfilled by simply attempting to expand conventional and institution-based learning systems.

**Table 6: More recent technology in the field of education**

Technology improving student participation with regard to the following aspects:	Older technology	Newer technology
<b>Real-time discussion</b> Functions like brain-storming and coaching are included here	Seminar room with a round table and blackboard Campus with residences (makes it easy to run into people)	Audio-discussion Audio-graphic discussion One-way real-time video with audio-feedback; two-way video "Chat" and other real-time ways
<b>Non real-time discussion</b> Function: deliberated discussion and other exchanging of ideas implying a time-lapse between action and reaction	Campus with residences (easier to exchange homework) Mail, ordinary or fast-mail	Fax E-mail and computer discussion Video-tape (e.g. of student performance and criticism of lecturer)
<b>Learning by doing</b> Function is to teach graduate skills by practising the skills in a creative fashion, with the tools and requirements similar to those which will be used later	Typewriter Library (reference) Laboratory Studio Intern programmes	Computer for designing, composing, simulating and analyzing experimental results Use true to-life-video from a foreign country to study its language and culture Real-time use of distant libraries, computer assisted research tools and data
<b>Direct education</b> Functions include explanation and demonstration	Lecture hall Slides projector Textbook	Live and recorded videos Computer-assisted learning and exercises



## **2.3.2 Distance education**

### **2.3.2.1 General**

Economic and socio-cultural changes as well as the growing demand for education and training in the context of a life-long learning approach exerts pressure on post-secondary education and training to make possible alterations on an immense scale. More attention is also devoted to continued education, "second-chance education" and training in industrial context.

A notion which has won a lot of ground, is that self-directed learning can also be expanded very successfully by means of open learning systems (like distance education). The reasons for this are largely the following (Organization for Economic Co-operation and Development, 1994:4-5):

Firstly, it is hoped that large-scale self-learning programmes in open learning systems will lead to smaller expenditure for post-secondary education and training.

Secondly, the status of the non-traditional learner is changing, since more success is achieved with open and more adaptable learning systems (like distance education).

The third reason is of an educational nature, because as a result of the diversity of the students, their constraints of time and place, distance learning institutions have sought to innovate in pedagogical terms. The essence of distance learning courses is that they have been conceived, devised and produced to support self-instruction".

The quality of the education is a fourth reason, because in the conventional face-to-face education situation larger numbers of students have made interaction between lecturer and student increasingly less possible.

In contrast to this the more recent technological aids (cf. also Table 6) in distance education increasingly create possibilities for students to interact more effectively with good educational programmes and the accompanying "tutoring arrangements".

In the fifth place, the advanced information and communicative technology has begun to transform distance education in open learning systems.

*"Through networks, each user/learner has access to various sources of information as well as specialized discussion forums on different subjects. In this way, students involved in the same course can communicate between themselves, share problems and solutions, and form a virtual classroom together while being in different places and at different times".*

However, the application of information technology in distance education has also led to some of the successful applications not being transferred to the face-to-face training. In this way the distinction between the two approaches started to fade in favour of the open learning system concept.

### **2.3.2.2 South Africa**

In the build-up to the change of government in 1994 and the establishment of new education policies, emphasis was continually laid strongly on the application of "open learning" or the open learning system approach to promote education in South Africa.

In the executive summary of the report of the South African Institute for Distance Education on "Open learning and distance education in South Africa, January to April 1994" it is stated that:

*"Open learning is treated as the generic policy for the national and provincial education systems and distance education as essential to achieving it.*

*We recommend:*

*That, in giving effect to the proposals for open learning outlined in the Policy Framework, the ANC commits itself to what, for South Africa, will be an entirely new approach to distance education - in the way it is conceived, provided and managed, in the categories of people who will benefit from it, and in the roles of residential institutions.*

*That open learning approaches and distance education principles and practices be adopted as key policy instruments for increasing access, achieving redress, and reaching the priorities set out in the Policy Framework and in proposals for reconstruction and development.*

*That criteria of open learning inform the policies and practices of all agencies engaged in education and training, especially the proposed South African Qualifications Authority (SAQA).*

*That this report be used by the Government of National Unity as the basis for public consultation with stakeholders, particularly education and training institutions, with a view to establishing the principles, objectives and approaches that will characterize open learning and distance education in South Africa" (Open learning:xx-xxi).*

The Report recommends that, after thorough examination and reorganisation, the institutions should attune themselves to offering distance education according to another model based on other principles. On account of the increase in the number of students who have a need for this type of training, "there is an urgent need for the Government to plan for the increase in distance education capacity and to include residential as well as distance institutions in its development plans" (Open learning:xxiii).

The result of all these negotiations emerges clearly from the formulation of the viewpoint on open education and the characteristics of it indicated by the quote from the White Paper on Education which has already been discussed.

The one matter which must be emphasized strongly, however, is the important role which learning centres fulfil in the open learning systems approach. Without a system of learning centres, within reach of the learners, it remains correspondence-training.

The planning and design of suitable **study material** also remain an essential requirement for successful open education. In conjunction with this the best use must be made of the possibilities of technology to utilise **interactivity** in open learning situations as effectively as possible. In this regard a discussion forum, arranged by the FRD, requested a working group to compile an estimate of necessary developments. They did this in a draft document entitled "Vision document on technology infrastructure to support learning, June 1995". In this it is recommended that "*The challenge for South Africa in this regard*" is;

- *the development of an interactive, cost-effective, multi-media technology infrastructure to support learning, which will provide access to information, education, training and other electronic support services for the people of the country;*
- *a national effort for all our academic institutions and software producers in the public and private sectors to develop the required high quality software and interactive courseware" (FRD Document:3).*

From these recommendations it can, in the first place, be deduced that the technological infrastructure for the comfortable delivery of training programmes on the basis of distance education is not in place. In fact, monopolistic conditions exist which are not conducive to private initiative. Secondly, the cost for the development of software and interactive multi-media software is so high that it can only succeed if done on a co-operative basis between educational institutions and manufacturers of software. Before the substantial possibilities of open learning systems can be realised, a large quantity of development work, especially in the form of private initiatives, will have to be executed. The PU for CHE is already working on this and is prepared to become involved in open learning on a large scale.

## **2.4 Culture**

### **2.4.1 Future cultural character of the PU for CHE**

Historically the PU for CHE originated and grew from the Afrikaans cultural community. Although this dimension of its character was not established statutorily, it was an Afrikaans university in the true sense of the word. The numbers of white English-speaking students were so low that they had no substantial influence on the dominant Afrikaans character of the University. Under these conditions an important change has occurred in the past decade,

however. The admission of post-graduate black students in 1972, and more specifically full-time black students in 1983 was the beginning of a process which started to change the exclusively Afrikaans character of the University.

The total number of students of the University increased by 1 341 from 8 815 in 1990 to 10 156 in 1995, which means an average annual growth of 2.42%. That growth is, however, mainly due to the increase in black student numbers which increased from 277 in 1990 (3.14% of the total) to 2 035 in 1995 (20.03% of the total) and to 2 322 (22.86%) if the brown and Indian students are included. In fact, the total number of white students has decreased from 8 414 in 1990 (95.45% of the total) to 7 834 in 1995 (77.15% of the total). The latter decrease was caused by a decrease in white student numbers on the Vaal Triangle Campus from 1 713 in 1990 (95.75% of the Vaal Triangle total) to 1 112 in 1995 (56.73% of the total). On the Potchefstroom Campus the black students increased from 3.20% in 1990 to 14.68% in 1995 and 17.98% if the brown and Indian students are included.

This growth rate of the black students on the Potchefstroom Campus still increases: 13.64% in 1990; 23.11% in 1991; 39.71% in 1992; 45.99% in 1993; 46.55% in 1994 and 47.10% in 1995. On the Vaal Triangle Campus it decreased from a climax in 1992 (85.19%) to 39.67% in 1995. It is still not clear how long these growth rates will be maintained, but even if they continue on lower levels, it is clear that the growth of the University is seated in the black student numbers and that, with the decrease in white students, the ratio will still change in favour of a larger number of black students.

This growing multi-culturality of the student corps is acknowledged by the University and managed accordingly. In its meeting of 23 June 1994 Council laid down policy guidelines for the handling of the cultural diversity on the campus. In that policy document the Afrikaans character of the PU for CHE is fully recognized with the intention to maintain it. The "increasing religious and cultural variety of interests on the campus" is also acknowledged, which has particular implications for matters such as religious meetings, social structures, behavioural patterns, conventions, customs and symbols. Management was also requested to manage the University in such a way that it leads towards an "orderly settling of the cultural variety of interests". Emphasis was laid on the fact that it must be done on the basis of common values and on the community character of the University as an academic institution.

One of the most important fields in which multi-culturalism manifests itself, is that of language. The language policy which was developed within this framework, departs from the view that the PU for CHE is a Christian university which wants to be of service to a wider community than the Afrikaans-speaking one. Although Afrikaans is the operational language as well as the medium of instruction in which the full-time undergraduate programmes are offered, ever larger provision is made for non-Afrikaans speaking persons' needs, as will be discussed in the next section.

The University's approach to the multicultural reality of the student composition of the University is not to keep its cultural identity exclusively Afrikaans as a result of changing language and culture realities. Its unity is not in the first place to be found in a particular cultural identity, but in its Christian foundation. A university and science have a supra-national and universal nature which is undermined if it is forced into a particular culture. What is thus envisaged is that the PU for CHE as an Afrikaans university will manage the cultural requirements which are typical of the South African community in a balanced but also distinguishing manner. In view of the role that the medium of instruction of Afrikaans plays on the Potchefstroom Campus for full-time students, it can be expected that the core cultural character of the PU for CHE will in this case typically be that of the Afrikaans-speaking community. It has already been stated in internal negotiations at the University indicating that it will not be possible for the University to present classes on a double-medium or parallel-medium basis to full-time students at the Potchefstroom Campus. For that the relative size of the personnel corps of the PU for CHE is too small and the influence on the subject-scientific development of the academic staff is too extensive. In contrast it can be expected that the use of English in the after-hours and distance education programmes at Potchefstroom and programmes at the Vaal Triangle Campus will be extended progressively in the direction of English.

However, to manage multi-culturalism is demanding. The typical tendency with the dominant group is to accommodate other groups formally only, while persevering in attitudes and

perceptions of dominance. On the other hand minority groups have the tendency to sabotage accommodation throughout non-participation and bias. True multi-cultural accommodation consequently makes substantial demands on the University as well as to each member of staff and student associated with it. The ethos of democratisation which is currently being established at the University might favour the balanced and transparent managing of this shift in the cultural character of the PU for CHE.

#### 2.4.2 Language policy of the PU for CHE

The language policy of the PU for CHE is currently entrenched in section 25(3) of the Private Act (Private Act of the PU for CHE, Act No. 80 of 1993) which reads as follows:

*"The medium of instruction of the University is Afrikaans: Provided that other languages may be employed for education where it is necessary for efficient education in the opinion of Senate."*

In this regard the Council of the PU for CHE launched a thorough investigation into the application of this principle in which the language policy is grounded. The essential manifestations of this investigation are the following:

- Although the University is an Afrikaans language institution for higher education, it also wishes to serve more widely than only for Afrikaans-speaking people and then in as far as its infrastructure and finances allow.
- The University support the notion that it is a fundamental right of communities to receive education in the language of their choice. In this regard the full-time programme at the **Potchefstroom Campus** provides higher education for students from the Afrikaans-speaking community. It is anticipated that the University will maintain this practice in future as long as a substantial section of the Afrikaans-speaking community supports the University in this respect. Simultaneously the University will accommodate those students with difficulties in expressing themselves in Afrikaans according to the provisions made for them, as stated below.
- In view of the extent of the need which exists within the geographic area covered by the **Vaal Triangle Campus** of the University and in view of the number of students who already have the need for tertiary training which is specifically presented by the University and who cannot speak Afrikaans or speak it well, course units and/or curriculums for certificates, diplomas and degrees are presented on a parallel basis in Afrikaans and English, or both Afrikaans and English are used in the same class. In order to be able to manage this matter in view of the particular demands it makes on the University's staff, finances and infrastructure, a model of flexi-education has also been established there.
- The maintaining of Afrikaans as primary language of instruction at the **Potchefstroom Campus** does involve the problem that it limits accessibility for non-Afrikaans speaking students. The Council of the University, however, addressed this problem in a practical manner while it is kept in mind that such students do have access to the Vaal Triangle Campus of the University. For this reason, without affecting the language rights of the majority of students at this campus of the University, the language policy is applied as follows:
  - 1) All undergraduate and taught postgraduate education at the Potchefstroom Campus is in Afrikaans, but the answering of any paper or assignment may also be done in English. Test and examination papers are also compiled in English upon request. Mini-dissertations, dissertations and theses can be written in Afrikaans or English with consideration of the applicable regulations with the added condition that it can also be written in another language should Senate approve it for particular reasons.
  - 2) Furthermore, Senate can approve the presentation of any course unit, certificate, diploma or degree in English on an after-hours basis. At this stage Senate has already approved the following English after-hours programmes as staffing, finances and other infrastructure allowed:
- the Higher Education Diploma (Secondary) which is presented mainly to underqualified teachers of black schools. A large number of teachers are enrolled for this training.

- After-hours offerings in the Faculty of Law for B.Juris and B.Proc degrees.
- After-hours offering for the degree Baccalaureus Business Administration (BBA).
- Postgraduate education in Theology (Th.B-degree) is presented parallel in Afrikaans and English.

The point of departure is that this education will be of the same high quality as the full-time offerings. In this regard it must be pointed out that the BBA-degree is currently the only degree of the PU for CHE which was planned and is presented fully in co-operation with an international university (California State University (DH), USA).

- 3) A course in Communication Afrikaans is presented on the Potchefstroom Campus in order to empower students to manage Afrikaans.

The results of the application of this language policy are the following:

- (1) It is estimated that approximately 20% of the undergraduate students of the PU for CHE will study fully in English in 1996.
- (2) The course in Communication Afrikaans was initially poorly supported but is currently utilised very well by a variety of students.
- (3) Lecturers support the application of the language policy but draw attention to the time pressure which makes it increasingly difficult to give attention to personal academic development.
- (4) Some students exploit the application of the language policy to ignite crises on the campus. It can be expected that this matter will become increasingly topical in future.

With this application of the language policy the PU for CHE attempts, within the boundaries of what is feasible, to act in an accommodating manner. The indications are that the limits of feasibility will make it necessary for all students who want to enrol for programmes presented in Afrikaans to provide proof of language proficiency.

On the other hand, it is essential also to be able to handle English on a higher level within the national and international context in such a way that compulsory fluent **bilinguality** for all students will probably have to be considered seriously by Senate.

### **2.4.3 Cultural activities on the Potchefstroom Campus**

#### **2.4.3.1 Objectives**

The University strives to expand and promote cultural activities optimally, so that its students in the first place, but also its staff and the community of the region can share in it.

An important part of the mandate is the responsibility of the Department of Culture, which forms an integral part of the University with its line of responsibility to the Students' Bureau. Further the Department is in direct "partnership" with the Central Students' Council, its committees and councils and is thus an important catalyst for organized student life on campus.

From the nature of its activities and its duties, e.g. managing the Auditorium and related venues, the Department is also involved in community service for the broader community.

The broad objectives of the Department can briefly be summarized under the following six main points:

- to expand cultural activities as integral part of student life and to put these in the right perspective in student life;
- to encourage and support the cultural involvement in the training of balanced students; and to uphold, initiate and expand a fundamentally sound and balanced cultural life for its students and staff;
- to specifically address the broad spectrum of artistic and cultural needs of its students, seeing the diversity of the University's student corps;

- to make available and to advertise the cultural activities and the particular facilities available to the community, to encourage participation, support and patronage, the cultural welfare of the University can be promoted in this way;
- to make widely available its knowledge of and experience in art and cultural affairs (also to the state and local government), especially in the province in which the University is situated;
- to establish international liaison in the field of art and culture so that the University does not function in isolation.

#### **2.4.3.2 Activities of the Department of Culture of the University**

Advice and assistance are provided to 20 different student cultural societies of the SRC.

Besides advice and assistance, a significant part of the organisational work of the Alabama Student Company, the Potchefstroom University Choir, the PU Serenaders and the Drum Majorettes is done in this Department. Approximately 200 students annually participate in the activities of these groups, introducing the variety of student talent to the public nation-wide.

##### **The following facilities are managed**

- Auditorium. Potchefstroom is the cultural centre of the North-West Province, and the Auditorium is the heart of the Performing Arts. With an average of 260 events and visits by nearly 160 000 people per year, the importance of this facility cannot be underestimated. It demands a management function of the Department of Culture similar to that of a professional theatre.
- Other facilities of the University such as the Totius Hall, Heimat Hall and the Alumni Hall are used for a wide variety of functions and are managed by the Department.
- Electronic Sound Studio. One of the most modern sound studios in the province is part of this Department. The services of this studio are not only available to the students, but also of the community where underprivileged artists also have access to professional advice and service.
- Camping-sites. The control, development and management of the two university camping sites, namely Nooitgedacht and Oosthuizen site, are done by the Department of Culture.

Assessment and award of nearly 250 culture bursaries are handled annually.

#### **2.4.3.3 Special projects**

The annual presentation of an Art Movie Festival in co-operation with Ster Kinekor. An average of 30 unique films are screened and discussed as art medium annually.

The head office and secretariat of the National Transnet-Kuesta choir community are situated at the Department.

An annual prestige Standard Bank Talent Competition in which most genres of the performing and creative arts are represented and in which participation from all the cultural groups on the campus is obtained (nearly 250 competitors) is presented.

Aid is offered with the presentation of courses in the field of art and culture, for example, the ATKV Revue course and an Introductory course in Technical Theatre Management.

Ikusa, an International cultural exchange programme, is managed by the Department where help is given with the organisation of foreign culture groups who visit the RSA. Annually between three and five groups are provided with service including choirs and bands. This forms an important component of the Department's international exchange programme. International presentations in the Auditorium for the community, such as the groups "Smokie" and "Bad Boys Blue", form an important component of this.

The Department annually organizes and conducts a number of productions at the National Arts Festival in Grahamstown. The University's artists are often praised highly.

#### **2.4.3.4 Art and culture in the North-West**

The Department is at present heavily involved in the process through which the new arts and culture policy for the North-West Province is determined. Its staff are also members of the Interim Council for Art and Culture of the province.

### **2.5 Sport**

Sport is a cultural product and therefore an integral part of student life. Sport is, however, also a matter of competition and therefore good performances, at a high level of competition, are striven for.

Distinction is made between competitive and recreational sport.

On the PUK thirty types of sports are offered. 1260 students take part in competitive sport, 1576 take part in residence sport and 2700 in recreational sport. 77 coaches are used to handle the thirty types of sports. In 1994 26 Pukke participated in national sports teams, while 217 students obtained Western Transvaal colours in the respective sports. The staff of the Sports Bureau have all been included in Western Transvaal managements - two serve in SASSU management and three in National managements. All the Sports Officials also serve in SASSU managements in the North-West Province.

Sport at the University is offered in an integrated fashion in terms of race, but in the community ongoing sports courses are offered in co-operation with the Dept. of Sports Development. Last year 2 300 people were involved in these courses. The facilities of the University are used for all these courses. The Sports Bureau has already offered courses in the respective sports since 1992. Eight courses in soccer, 46 in netball, eight in softball, 41 in athletics, 11 in tennis, 21 in cricket, 16 in rugby and seven in karate have already been offered. Last year the Sports Bureau also offered a Sports Management Course for 63 black teachers.