

## CHAPTER 3: METHODOLOGY

### 3.1 Research Design

A multiple-phased single case study design was followed in order to explore the motivation of women participating in an IGP within the FLAGH programme. According to Yin (2009:18), the technical definition of a case study consists of two parts in which the first part defines the scope of a case study, and the second part covers the technical characteristics, including data collection and data analysis strategies. The reason therefore is that the phenomenon and the context cannot always be discernible in real life situations. Thus, a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. The case study inquiry addresses the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with the data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide the data collection and analysis (Fouché *et al.*, 2011:148). Thus this design was also applicable to examine whether the IGP (independent variable) might have an influence on the motivation (dependent variables) of participants over a period of 16 months (Fouché *et al.*, 2011:148).

Chapter One discusses motivational behaviour which can be associated with the “why” question (Jordaan & Jordaan, 2000:570). Therefore, the use of the case study research design is most appropriate for this study. Yin (2009:4) describes case studies as being relevant when the research question requires the circumstances to be clarified, for example, “how” or “why” a particular social occurrence is successful.

The IGP was examined within the specified community as a case study according to Wellington and Szczerbinski's (2007:92) guidelines. This study was divided into three phases. The first phase was a single case which was subjected over a period of 16 months. The second phase was conducted by means of a comparison between the active and non-active participants. The third phase focused on the case description drawn from field notes and in-depth interviews as a single case holistic descriptive case study.

According to Yin (2009:102), there are multiple sources of evidence to be collected within a case study, namely surveys, archival records, interviews, direct observations, physical

artefacts and any form of media. For this study, data from such sources were collected in the form of semi-structured questionnaires (survey), attendance register (archival records), in-depth interviews, field notes (direct observation), and photographs (media). These sources of evidence were collected during the three phases; they are analysed and discussed accordingly.

### **3.2 Study Location**

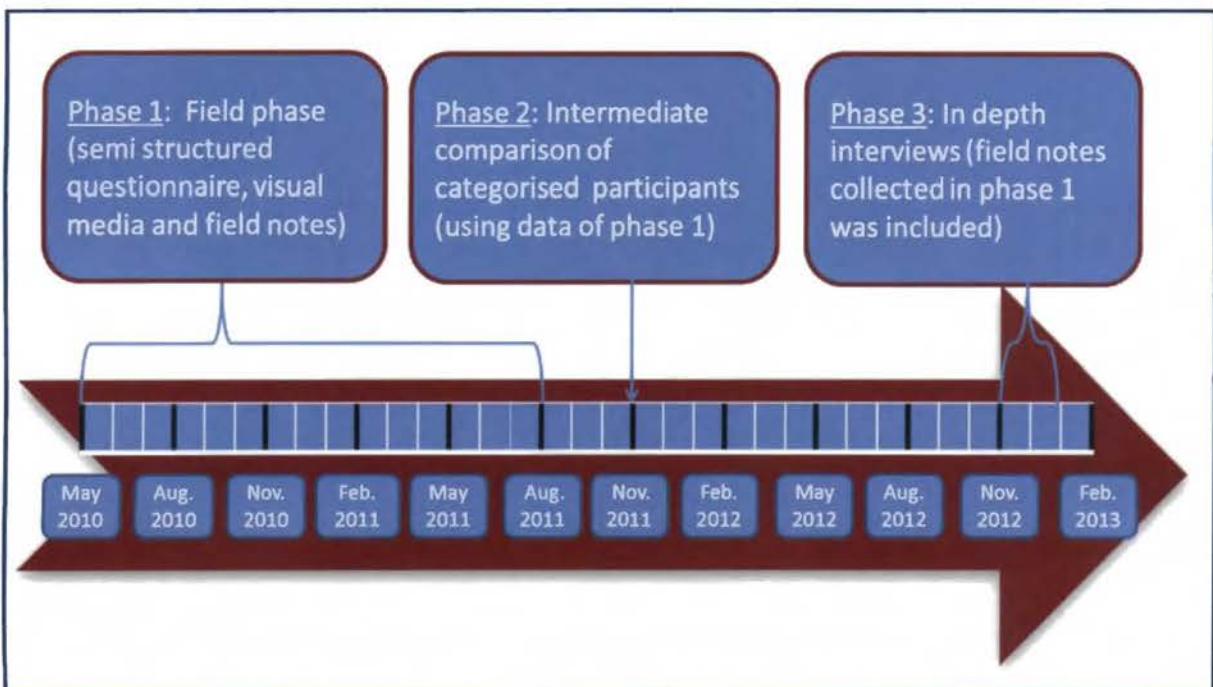
The study was conducted on a rural farm within the Vyfhoek area in Potchefstroom, NWP where an IGP had already been implemented. The IGP started under the auspices of the NWU (AUPHeR) in 2009 after a needs-assessment had been conducted in the Vyfhoek area. The poor socio-economic status of young women in the Vyfhoek area was identified as a serious need. Thus, various women in the community were invited to become involved in the IGP. Some of these women allowed the researcher to visit their homes, which were situated on a farmer's land in the Vyfhoek area. The interviews, needed to be conducted at a place with minimal noise; therefore the interviews were conducted at the NWU Potchefstroom Campus. Thus the three phases of this study were carried out at three locations, namely the site at which the IGP operate, the women's residential area in Vyfhoek, and the NWU Potchefstroom Campus.

### **3.3 Sampling**

A population is defined as an entire group of individuals that is potentially accessible to be observed and which also have similar characteristics (Leboea, 2003:59). The women involved in the IGP were potentially available for observation and possess certain common characteristics. It is not achievable to obtain the participation of all the members of the population in a particular study (Leboea, 2003:60). Hence, the behavioural or social scientist has to rely on a sample from the population. Therefore, the women of the IGP constituted a relatively small subgroup of the population. Owing to the nature of the project the participants were required to attend three times a week. Various women attended the IGP on the said required days but some attended sporadically while some attended regularly. Thus the population was purposefully selected and because the group was conveniently available it was purposive availability selection of the population (Wellington & Szczerbinski, 2007:66; Wilson & MacLean, 2011:166). The inclusion criteria for the study stipulated that the participants must be jobless women who participate in the IGP of the Vyfhoek farm and could speak Afrikaans or English. Translators were available if the participants and the researcher could not understand each other.

### 3.4 Phases of the study

The study consisted of three phases which took place over a period of 32 months (May 2010 – December 2012). Figure 5 displays a timeline of how these three phases unfolded as well as the methods used during each phase. The semi-structured questionnaires were developed by the researcher with help from the statistical services at the NWU. The questionnaire consisted of two sections whereby section A included structured questions regarding socio-demographic and household information and section B consisted of a combination of structured, likert-scale and open-ended questions regarding information about the motivation and participation of the participants who attend the IGP. The questionnaire was developed with the aim to mostly explore the question of why participants attend the project and why not.



**Figure 5: Timeline containing a division of the three phases and methods employed**

#### 3.4.1 Phase one (Field phase)

**Method:** A single case study was conducted, consisting of repetitive semi-structured questionnaires that was completed every third month over a period of 16 months (May 2010 – August 2011). This was done to examine the participation of women in the IGP.

Data collection: A semi-structured questionnaire with structured and open ended questions (Delpont & Roestenburg, 2011:196,198) was used to gather data amongst the women of the IGP. Nine women visited the IGP regularly according to the project manager; thus the researcher always had nine questionnaires available in the specified week in which the surveys were conducted. A pilot study was conducted with any of the women who attended the IGP on a specific day to determine if they understood the questionnaire (Wilson & MacLean, 2011:586). After it was confirmed that the questionnaire had been understood, it was used in the repetitive face-to-face survey sessions that were completed every third month with each of the women present at the IGP over a period of 16 months (May 2010 – August 2011) (Wilson & MacLean, 2011:586). Six sessions were completed on the first Wednesday of the specific month: May 2010, August 2010, November 2010, February 2011, May 2011, and August 2011. A session included the semi-structured questionnaire as well as photographs for reliability of the houses of the women, who had attended the IGP on that day, with their permission and completed consent forms.

Data analysis: A descriptive analysis as indicated by Wellington & Szczerbinski (2007:119) was applied by describing the frequencies of the structured questions and to examine the frequency distribution of the data gathered over the said period. The open-ended questions were analysed using coded themes as described by Wellington & Szczerbinski (2007:108). The photos were printed in colour and analysed by tabulating all the visible information in terms of the content of surveys during the period of 16 months so as to confirm the validity of the data in the questionnaires. All the gathered data by the completion of phase one illustrated a clear distinction between those women who participated regularly and those who participated irregularly, thus situating them in two distinctive categories.

#### 3.4.2 Phase two (Intermediate comparison of categorised participants)

Method: The second phase was based on the gathered data of the first phase with the focus falling on a comparison between the two distinctive categories (active and non-active participants). The field notes of the first phase also served as evidence for this phase.

Data collection: The same data, collected from the semi-structured questionnaires with constructed and open ended questions in phase one, were used. The field notes taken in phase one throughout the period of the said 16 months concerning the differences between the active and non-active participants, were also used as supporting information and evidence.

Data analysis: Descriptive and inferential numeric analysis were used to analyse the structured questions. The open ended questions were analysed utilising coded themes (Wellington & Szczerbinski, 2007:108). The data of phase one concerning the two categories of the purposive sample of the available women were used to name the two groups as active participants (those who participated more than once a week) and non-active participants (those who participated less than once a month). These two groups were compared and discussed in order to determine if there are any differences in the characteristics and motivation levels regarding the participation in the IGP. Subsequently, the active participants were further interviewed in depth in phase three.

### 3.4.3 Phase three (In-depth Interviews)

Method: The method includes a descriptive case study with a single case approach in which the active participants are studied holistically. After the period of sixteen months, in-depth interviews were conducted with each of the four active participants individually.

Data collection: Individual interviews were conducted in Setswana at the NWU Potchefstroom campus office environment using a voice recorder. Five questions were asked in English and explained in Setswana, to which the participants responded to the questions in Setswana. The five questions asked was: "*tell me about your experience of being part of the Thusanang project*"; "*what made you want to be part of the project*"; "*what is your view about the project*"; "*to what extent did the project influence your life*?" and "*what would have made it easier for you to participate in the project*". Field notes furthermore served as supporting information and evidence.

Data analysis: The in-depth interviews were transcribed and translated into English by professional transcribers and translators. Transcription of the interviews was used as a necessary step to facilitate interpretation (Schurink *et al.*, 2011:408). The transcripts together with the observable field notes were analysed using thematic coding; these are discussed according to the linear-analytic structure. According to Wilson & MacLean's (2011:551) guidance, emerging themes were evaluated by the researcher as well as two co-evaluators, who are experts within the field, according to their points of view. Hence, the results were used to reach a consensus regarding the data that were gathered in phase three.

### **3.5 Ethical Considerations**

Guidelines compiled by Wellington and Szczerbinski (2007:68, 69) were followed to gain access to the houses of the active participants and to avoid upsetting them or to transgress any ethical standards. After explaining the study to the participants, written consent was obtained for each survey (Wellington & Szczerbinski, 2007:63). The written consent included an agreement between the researcher and the participants to allow the researcher to take photographs of their houses every third month from May 2010 to August 2011. None of these participating women were disadvantaged through the research process and they had the right to refuse to continue their participation in the survey. This study forms part of a larger study which had already obtained ethical approval (01M04). The data were used confidentially and for the purposes of the study only. No names were revealed and the data will be destroyed after being kept safely for seven years.

### **3.6 Validity and Reliability**

The validity of the data was ensured by applying a combination of prolonged and persistent fieldwork and multi-method strategies. In prolonged and persistent fieldwork, participant observation by means of photographs and semi-structured, face to face questionnaires were administered in natural settings so as to reflect the lived experiences of the participants. The lengthy data collection period afforded opportunities for interim data analyses, preliminary comparisons, and confirmation of the findings, which refined ideas and ensured the match between evidence-based categories and participant reality. The multi-method strategy permitted triangulation of the data across the inquiry techniques. Different strategies yielded different insights into the topic of interest and increased the credibility of the findings (McMillan & Schumacher, 2010:331). The repetition of the questionnaires (every third month), which contained structured and open ended questions, contributed to their reliability. The researcher also enjoyed a trust-relationship with the active participants who participated in the IGP; this could be attributed to the role of the researcher as the project facilitator, which enabled the researcher to work with them for more than a year. The questionnaire with structured and open ended questions was developed with the assistance of the Statistical Consultation Services at the NWU.