

PERCEIVED GROUP COHESIVENESS AMONG PARTICIPANTS IN
REDISTRIBUTED FARMS OF CAPRICORN DISTRICT, LIMPOPO PROVINCE.

By

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To my parents Gales and Paicky, and my siblings Tsudzukani, Hundzukani, and Lemukani

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These little hands lift many of you to the top positions, but you soon forget about us
(Study participant at Marginalized Trust).

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By

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The Settlement and Land Acquisition Grant (SLAG) was implemented as part of the land reform initiative of South Africa. Through the SLAG, self-organized groups became co-owners of farmland. The purpose of this study was to explore perceived group cohesiveness among participants in redistributed SLAG farms of Capricorn District, Limpopo Province. Factors affecting group cohesiveness were also explored.

A cross-sectional research design was employed and data were collected at the farm level (n=13) and at the individual level (n=137). At the farm level, nominal data were collected on the structural characteristics of farms and the processes that led to the evolution of current farm groups. Perceived degree of support services provided was measured as an interval variable. At the individual level (n=137), perceptions were measured on the degree of satisfaction with benefits, the degree of group governance, and the degree of group cohesiveness. Group cohesiveness was measured with a Likert-type scale adapted from Carron, Widmeyer and Brawley (1985), and other scale response type measures were developed based on operational definitions.

Thematic content analysis was performed in analyzing nominal data collected through group discussions. Frequencies and measures of central tendency were used to summarize data. T-tests for the equality of means and equality of variance were performed in analyzing interval data. Causal relationships between perceived group cohesiveness and explanatory variables were identified through stepwise linear regression.

Findings from the study revealed prevalence of high turnover rates (approximately 85%) among beneficiaries in study farms. Various patterns of participation had evolved and as a result, both individual as well as group activities were performed. Differences between farms with low and high degree of satisfaction with benefits acquired from the farms, the degree of group governance, and degree of perceived cohesiveness were significant. Linear regression analysis revealed that group governance and satisfaction with benefits were significant predictors of group cohesiveness. These explanatory variables accounted for 20% of the variance.

CHAPTER 1 INTRODUCTION

Introduction

The democratic government of South Africa was elected in 1994 after centuries of internal colonialism. The apartheid regime had ruled from 1948-1994 and was abolished in 1994. During apartheid, ethnic or linguistic groups were segregated and the allocation of resources such as land was biased. The Natives Land Act of 1913 and other policies were used by the apartheid regime to perpetuate biased allocations of resources. Such laws restricted ethnic groups from progressive forms of land access (Binswanger and Deininger, 1993; White Paper on Land Policy, 1998, p. 9). Current political changes endeavor to integrate racial groups into the mainstream economy, hence, the relevance of land reform.

Subdivided into three segments (i.e., redistribution, restitution, and tenure reform) as outlined in the White Paper on Land Policy (1998, p. 9), the land reform movement sought to alter the precedents set by political policies of the past. Land redistribution in particular allocated farm land to labor tenants, farm workers, and new entrants to agriculture. Binswanger and Deininger became the proponents for a market facilitated approach toward land redistribution. Consequently, willing sellers offered land and subsequent transactions were negotiated based on market standards. Beginning in 1995, the Settlement and Land Acquisition Grant (SLAG) was instituted as a pilot program but was discontinued in 2001. This instrument enabled poor civilians to gain access to land through government grants. The selection criteria of eligible beneficiaries was in part based on an income ceiling of R1,500 per month (Borras, 2003; Deininger, 1999; White Paper on Land Policy, 1998, p. ix), whereas the total grant amount of R15,000 (US\$3,300), later increased to R16,000, was allocated to eligible beneficiaries. Thus,

group-based acquisition of land became a feasible way to allocate government grants efficiently (NDA-NDLA, 2005, p. 30).

Land redistribution was intended to allocate 30% of land by 2015 (NDA-NDLA, n.d. p. 5). It was anticipated at the onset that the policy approach might be tweaked as the implementation progressed (Lund, 1996, p. 547). Consequently, a new policy approach was adopted as of February 2000 (Cousins, 1999, p. 3), and SLAG was replaced by the Land Redistribution for Agricultural Development (LRAD). SLAG had been associated with inefficiencies such as slow delivery rate, poorly appraised and supported projects, misguided attempts at collective agriculture, and insufficient impact on the livelihoods of beneficiaries (NDA-NDLA, 2005, p. 30). Nevertheless, SLAG had delivered farmland to approximately 80% of beneficiaries (NDA-NDLA, 2005, p. 25) at the time it was discontinued. Hall (2004, preface) reported that in total, only 3.1% of the 30% target amount of land was redistributed by 2004. SLAG focused on allocating land both for settlement as well as agricultural purposes, whereas LRAD allocates land particularly to emerging commercial farmers (Hall, 2004, p 28). Hall asserted that LRAD strives to limit the size of farm groups; however, experiences differed across provinces and group-based acquisition of land had remained a viable approach to land redistribution (pp. 29-30).

Background to the Problem

Binswanger and Deininger (1993) noted that land reform programs around the world were initiated after WWII as a way to allocate farm land to peasants, whereas in Sub-Saharan Africa, such initiatives can be traced back to historical events of colonization (Griffin, Khan and Ickowitz, 2002). Presently, livelihood systems in Sub-Saharan Africa are largely dependent upon agriculture. Based on the 1998 development indicators, the World Bank (2000, p.14) reported that 67% of the population in Sub-Saharan Africa was predominantly rural, and agriculture continued to be the driving engine for economic growth (FAO, 2002, Section 1.4). The FAO also

reported that the agricultural sector provided 60% of employment in this part of the world. Interventions such as the Green Revolution had aimed to boost food production levels; however, agricultural development trends demonstrated a decline in agricultural production. Fifty-percent of the food insecure countries around the world are located in this region (FAO, 1998). Failure to achieve efficiency in food production led to chronic food insecurity status (FAO, 1998) with persistent threats of famine (Devereux and Maxwell, 2003, p. 1). To date, Sub-Saharan Africa remains a world region with widespread challenges yet to be addressed.

Nonetheless, South Africa paints a slightly different picture in comparison to other countries in Sub-Saharan Africa. At a national level, the country is food secure (van Rooyen, Kirsten, Vink and Simbi, 1996, p. 33), and is a net exporter of food products (Country Studies, 2003; FAO, 2003; Schmidt, 2005), and the infrastructure is well-developed. However, the image generally portrayed at the national level may not be true for all segments of the nation (Aliber, Kirsten, Maharajh, Nhlapo-Hlope and Nkoane, 2006; Leibbrandt, Levinsohn and McCrary, 2005, p. 1; Adato, Carter and May, 2004, p. 1; Woolard, 2002, pp. 1-3). Recent reports established that the democratic dispensation continues to be characterized by high levels of economic disparity (Aliber et al., 2006; Adato et al., 2004, p. 1).

A more recent and emerging challenge in South Africa has been the HIV/AIDS pandemic which continues to erode the social fabric in the nation (UNAIDS, 2006). The prevalence of the epidemic has brought to the attention of development practitioners that agriculture ceased to be a technical issue only (Jayne, Villarreal, Pingali and Hemrich, 2004, p. 1; FAO, 2003, p. 10). Therefore, agricultural development is confronted with complex circumstances. Although the “pro-poor” growth strategy to agricultural development has recently been adopted and begins to untangle the multiple dimensions of poverty (DFID, 2005, p. 74; Christoplos, Ambridge and

Zellweger, 2003, p.1; Holm n, 2003, p. 22), breaking the poverty trap faced by multitudes of citizens remains a challenge.

Presently, the question of agrarian reform in South Africa remains a contentious one. By 2005, agriculture's contribution to the GDP was estimated at about 3.3% and 7.2% to formal employment (GCIS, 2005, p. 125). The problem of increased rural-urban migration evokes debates that are linked to the question of whether agrarian reform should be continued as an appropriate strategy to foster rural development (Aliber et al., 2006). However, a significant proportion (47%) of the population remains in rural areas (World Bank, 2000) and engages in agricultural production (Aliber et al., 2006). Thus, interventions to bolster the rural economy are warranted.

To date, land redistribution is one of the tools that can alter the precedents set by past laws under apartheid. Such biased policies discouraged entrepreneurial production activities such as sharecropping among marginalized racial groups. Eventually, the vitality of the rural economy was disabled (Binswanger and Deininger, 1993). Binswanger and Deininger noted that food security became a matter of concern as early as 1925. Consequently, agricultural production in rural areas was limited only to subsistence production with restricted land ownership.

History of Rural Livelihood Systems in Limpopo Province

Under the new political dispensation, Limpopo Province is one of the nine provincial governments (Figure 1-1). As a new government, the province is comprised of four former Homelands or Bantustans, namely, Gazankulu, Lebowa, and Kwa-Ndebele, and the "nominal independent" Venda. According to the Natives Land Act of 1913, Homelands or Bantustans were reserves created to separate ethnic groups (Lahiff, 1997, p. vii).

There were ten Homeland territories that were concentrated over 13% of South Africa's land surface, whereas over 80% of land was owned by the white minority (van Rooyen et al.,

1996, p. 33). Only 7.9% of the land surface in Homeland territories could be used for agricultural production (Binswanger and Deininger, 1993), and access to land by households was only limited to as much as 1.3 hectares as compared to 1,570 hectares of land access by the white minority (Deininger and May, 2000, p. 5, Deininger, 1999).

Typical in Homeland territories were unfavorable economic and social conditions. Limpopo Province had become one of the impoverished provinces in the country (Lahiff, 1997, p. vii). Dimensions of poverty manifested in the province and other similar areas were typified by limited livelihood strategies (NDA, 2002, p. 25). The majority of rural dwellers derived meager production outputs, and agriculture had become a livelihood strategy that was supplemented by remittances and wages from low-skilled labor (Binswanger and Deininger, 1993). Therefore, rural dwellers had become vulnerable to food insecurity with inadequate safety nets (NDA, 2002, p. 19).

Due to urban migration of males, women had become *de facto* heads of households. Such trends caused family food production and self-reliance strategies to dwindle. To date, the ramifications of previous arrangements are far-reaching. The “duality” created by biased political policies of the past and their effects continue to be felt. This situation is exacerbated by current market policies that disregard the poorest segments of the nation (Aliber et al., 2006; Adato et al., 2004, p. 2).

Agricultural Services in Former Homelands

The agricultural sector of South Africa was built along racial lines (White Paper on Agriculture, 1995, p. 2; van Rooyen et al., 1996, p. 35) and such policies can be traced back to the early 1900s. Government policies on agriculture have not been scale-neutral; and commercial agriculture was enriched at the expense of subsistence production. Presently, the government seeks to strike a balance and mitigate the effects of economic biases on the rural poor.

Government services such as extension have not been immune to these effects and the extension service continues to struggle in an attempt to adapt to current circumstances. The legacies of the past have created the reality of the present day. Inasmuch as Homeland territories were marginalized to a great extent, extension services were also limited. Extension operated under working conditions that were not conducive to optimal performance (Machete and Mollel, 1999, p. 340). Primarily, colleges of agriculture in former Homeland territories provided training for extension officers (White Paper on Education, 1995), who then became public servants in Homeland territories. Extension officers with either high school or college diplomas provided services to clients whose interest in farming had dwindled due to off-farm employment opportunities. Furthermore, the education system in agricultural colleges was similar to that offered to vocational teachers (Douglas, 2005), and trainees were hardly prepared for real world experiences. Consequently, lack of appropriate farmer support services became the norm (White Paper on Agriculture, 1995, p. 20).

Extension services in the past did not foster a culture of collaborating with institutions such as universities, research and non-governmental organizations (Machete and Mollel, 1999, p. 343; van Rooyen et al., 1996, p. 31). Therefore, it can be anticipated that the shift toward embracing rural populations into the mainstream is yet an enormous challenge for the current extension system. It has previously been observed that extension officers in Limpopo Province needed more educational development and improved working conditions (Bruening et al., 2002). At the same time, extension continues in recent years to search for an appropriate strategy to suit diverse audiences (Duvel, 2004). Also, calls to strengthen the role of the extension service within land redistribution have been raised (Aliber, 2003; Deininger, 1999).

Tearing down the walls of methodological influences of the past is yet another challenge. The purposive transfer of skills and information (Nagel, 1997) based on technology transfer (T&T) had become the *sine qua non* of the extension framework. However, the impact achieved from years of investments in agricultural development did not yield substantial results. Hence, development practitioners began to ponder in search for new ways to address such concerns (Collinson, 2000, p. 3; Whyte, 1986, p. 1), and the Farming Systems Research and Extension approach (FSR-E) was birthed out of such efforts. According to Collinson, FSR is a methodology that helps researchers to gain a better understanding of the technology development process particularly by involving the intended end users of technology (p. 1). The FSR-E approach began to shed insights regarding the limitations of technology adoption among agrarian societies. As a result, agricultural development began to make a shift. Perhaps efforts to reinforce FSR-E in South Africa dwindled over the time (van Rooyen et al., 1996, p. 32).

Agricultural research and development (R&D) evolved from a top-down approach to being more perceptive toward the targeted end-users of technology. Participatory processes facilitate the provision of services that are user-oriented (Duvel, 1996; Graforth and Jones, 1997). In South Africa, provision of extension services has been called to embrace new approaches to service delivery (White Paper on Agriculture, 1995, p. 20).

Apart from educational services, in 2004 the government began to provide financial assistance to emerging farmers in particular. The Comprehensive Agricultural Support Program (CASP) (NDA-DLA, 2005, p. 45; NDA, 2004, p. 1) aimed to allocate 70% of the budget to infrastructure support for redistributed farms. However, skeptics have expressed that CASP may be short-lived like the Broadening Access to Agriculture Thrust initiative (BATAT) of the 1990s (Development Report, 2005, p. 74). Therefore, the impact made by CASP remains to be seen.

Background of Study Area

Limpopo Province is the only province with the numerous former Homelands consolidated under one rubric. In 1994, the province was identified as one of the poorest in the country (Limpopo Growth and Development Strategy, 2005, p. 3). Recently, the province became the fastest growing economy in the country (Limpopo Growth and Development Strategy, p. 12). Limpopo Province generated about 6.5% of the national GDP in 2002 (Statistics South Africa, 2003, p. 53). Notably, three sectors, including mining, agriculture and tourism have been identified as niche economic avenues. Mining and quarrying industries in the province account for the largest contribution (24%) to the provincial economy, whereas agriculture contributed about 3% (Statistics South Africa, 2003, p. 62).

According to the National Department of Agriculture and Statistics South Africa (2005) approximately 50% of farming in Limpopo was on a subsistence basis. Out of the six districts in the province, Vhembe had the largest proportion of households (approximately 77%) engaged in agricultural production (Provide, 2005, p. 6). Subsistence farming was commonly centered on cattle husbandry and cropping systems (FAO, 2004). Mixed crop-livestock systems are generally practiced in semi-arid zones (Tapson, 1996, p. 265). The FAO noted that mixed farming production enterprises in the province were typical. Subsistence farmers generally operated communal land with no formal ownership (Lahiff, 1997, p. xvi), whereas contiguous land parcels may have been fragmented into smaller plots.

Maize is the main crop of Limpopo Province and is generally cultivated under dryland conditions - dependent on rain (FAO, 2004). The Rural Survey of 1997 established that the majority of rural populations are engaged in agricultural practices for food production rather than for trading. However, emerging commercial farming practices are increasingly becoming common (FAO, 2004).

Spatially, the province covers 123,910 km² representing approximately 10% of the country's land surface (1 219 912 km²). The lowveld plains are vast and a range of mountains rises from the highland plateau in the south and center of the province (Britannica, n.d.). The Drakensberg mountain escarpment divides the province between low and high rainfall areas. The mixed bushveld covers a great part of the province to the west and rainfall ranges between 350-650mm, whereas the north-eastern mountain grassland has rainfall ranging from 700-1100 mm (Low and Rebelo, 1996, pp. 26-46). The mean annual rainfall in the province is estimated at 527 mm. Rainfall patterns are erratic and unimodal occurring over the summer season (October through April). The end of the rainy season also marks the beginning of dry winter months with minimal vegetation for livestock consumption. Therefore, the quality and quantity of livestock fodder fluctuates greatly.

The climate in the province is subdivided into two seasons, summer and winter. The temperatures during summer months are generally warm, and day temperatures may exceed 40°C in some parts of the province (FAO, 2004). The winters are usually mild, but temperatures may fall below 0° C. The mean minimum daily temperature in most areas lies between 18-22° C in the summer and 5-10° C in the winter.

According to the farm plans perused, study farms in Molemole Municipality and two of the farms in Polokwane (i.e., Monyamane and Lwala le Meetse) were located along the boundary between the Polokwane plateau and the lowveld. These farms were located in a mountainous area with elevations ranging between 1200m above sea level and valleys of 900m above sea level. The mean annual rainfall ranges from 600 to 800mm, and the natural vegetation occurring in this part of the province is classified as sour mixed bushveld. Study farms in Polokwane Municipality are situated in the dry highveld with average rainfall between 350-400mm. The

topography in Polokwane is flat with gentle slopes that may require soil conservation structures in case soil erosion occurs.

Researchable Problem

South Africa is undergoing a complex and formidable change at the present time. This transition coincides with change occurring throughout the world. Changes around the world are political, economic, technological, environmental and social, and continue to evolve (Chambers, 1997, p. 3). Rivera and Cary (1997) concur and assert that the 1980s marked the turning point in the provision of public services due to structural and adjustment programs (SAPs) introduced by the World Bank and International Monetary Fund (IMF). Developing countries in particular were encouraged to adopt such policy initiatives. These policies encompassed the aspects of market liberalization, privatization and decentralization (Razavi, 2005, p. ix). However, the change in the macroeconomy resulted in disruptive social consequences marked by rising levels of social inequality and marginalization (Razavi, 2005, p. 2).

In contrast to other parts of the world, SAPs were implemented to a limited scale in South Africa, and the programs were not donor initiated (van Rooyen et al., 1996, p. 1). The country witnessed the fall of the hegemonic apartheid regime, and consequently continued to socially construct itself through various policy initiatives. This transition brings with it new opportunities as well as challenges, and prevalent in this process are the throes of transformation and change.

The transformation is marked by massive policy experimentation, whereas the quest to seek pathways based on context-specific experiences is indispensable. Of particular importance, the land policy in the country continues to be tweaked and to evolve, and empirically generated evidence should continue to inform policy formulation in the area. Presently, one of the measures used to gauge the success of implementation processes is the pace at which farmland is allocated. However, inasmuch as administrative processes are crucial to ensure speedy delivery of land,

experiences beyond land acquisition have even greater ramifications. Therefore, this study explores the degree to which members of farm groups have continued their participation in the study farms, and also explores the factors influencing continued participation.

The present study suggests that despite resource endowments in redistributed farms, aspects of group processes and the extent to which members of farm groups benefit largely dictate the extent to which members of farm groups will continue their participation. This study does not intend to underscore the importance of other factors in agricultural production. Quiggin (1995) asserted that agricultural production is highly dependent upon factors that are beyond the control of the farmers and such include biological and climatic conditions. Beyond that, whether farmers can sell their produce in the market, let alone meet the quality standards required by the market is yet another factor. Byrnes (2003, p. 209) brings our attention to the importance of providing support services in order for farmers to increase production and possibly generate income. Furthermore, Aliber (2003) and Deininger (1999) pointed out the need to provide extension services in redistributed farms, and coordination between relevant government departments should be improved. Challenges facing redistributed farms cut across all spheres. Nonetheless, the interest of this study is centered on the cohesiveness of the groups in study farms.

The limitations associated with SLAG are clearly outlined (NDA-DLA, 2005, p. 30). Efforts to evaluate the performance of land redistribution to date are commendable, but there is need to conduct research that engages scholarship and promotes dialogue among scholars regarding pertinent issues on land redistribution.

Purpose of the Study

As a nation in its democratic infancy, it is questionable if South Africa will use its development programs to create a new identity. The country is undergoing a process of social

construction, whereby the integration of the rural poor into the mainstream economy remains a challenge. The country presently is experiencing a “trial and error” environment of policy changes on a massive scale. One of the most pressing issues confronting the nation is dismantling the legacies of the past by reducing the socio-economic gap between different segments of the nation. Through continued engagement, beneficiaries of land redistribution could potentially acquire socially desirable benefits.

The current LRAD is expected to speed up the delivery of land and alter land ownership patterns. It is imperative, however, to devote attention to the processes that unfold beyond land acquisition. A growing body of evidence demonstrates that beneficiaries in redistributed farms are faced with challenges and that such difficulties can be traced back to the discrepancies of policy formulation (Borrass, 2003; Deininger and May, 2000, Deininger, 1999). An understanding of how farm groups evolve over time gives a point of departure toward determining the behavioral intent of current group members to continue their participation.

Evidence of turnover in redistributed farms has been reported in previous studies (McCuster, 2004). However, there has been a temptation to assess success stories based on turnover rates (NDA-NDLA, 2005, p. 30). This study postulates that current farm groups can be viewed as a cohort that can offer insightful lessons for other redistribution programs. This study also posits that turnover rate is an inadequate assessment, rather an indication of natural processes that are inherent in the process of group development. Therefore, current farm groups may be understood on the basis of group development processes that occur over time.

This study illustrates that the formation of groups cannot be limited to a single event, but to a series of events that determine continued engagement by members in groups (Tuckman, 1965). This study further explores important features of group processes such as governance of

information and rules-in-use, satisfaction with benefits, importance of benefits acquired, to mention a few. The influence of these processes on continued their participation in farm groups is explored. This study suggests that strategic interactions among group members as well as the degree to which members of farm groups benefit are important determinants of the intent to remain in farm groups.

An area that remains largely untapped in redistributed farms is that of “groups” research. Rather than relying on speculations, group cohesiveness is a promising tool that lends itself to data gathering at various stages of group development. This exploratory study endeavors to lay the foundation and provoke scholarship in the area of ‘groups’ research and the formation of groups. Such investigations could begin to elucidate the processes that are inherent in the formation of groups.

In the grand scheme of things, efforts by the South African government to scale up production activities of the farms may not achieve much if the conditions of farms are not conducive for the performance of related farm tasks. Although the current approach to land redistribution (LRAD) discourages group-based acquisition of farm land, Hall (2004, p. 29-30) found out with a few exceptions that group sizes under LRAD were comparable with those of SLAG. Therefore, understanding perceived group cohesiveness among members of farm groups is imperative.

Research Objectives

- To describe perceptions on group development processes that led to the evolution of current farm groups and the degree of support services provided.
- To describe characteristics of individual group members, perceptions on the degree of satisfaction with benefits, the degree of group governance, and group cohesiveness.
- To describe the variance explained by specific factors on the influence of perceived group cohesiveness among group members.

Research Questions

- What are the processes that led to the evolution of current farm groups, and the degree to which support services are provided?
- What is the degree of satisfaction with benefits, degree of group governance, and group cohesiveness?
- What are the factors influencing perceived group cohesiveness?

Significance of the Study

Theoretically, redistributed farms can be classified under the rubric of common property resources (CPRs) and collective action (CA). The CPR's are described based on their characteristics of co-ownership, co-usage, open access, and subtractability (Myatt and Wallace, 2003, 2004; Theesfeld, 2004; Tuomel, 2003; Jodha, 1986; Hardin, 1968). Of particular importance, exclusion from usage in CPR's may be difficult to enforce, whereas co-usage generally leads to the depletion of CPR's. Collective action has been studied from a wide array of disciplines. However, there has been a temptation to extrapolate and generalize findings from specific contexts (Poteete and Ostrom, 2003). Attempts to study group related variables in redistributed farms has been limited. Thus, continued efforts to generate empirical evidence from such contexts are warranted.

In the case of redistributed farms, ownership is based on property rights, whereas access is limited only to those with officially recognizable status as defined for example by the CPA Act (1996). Therefore, the theory of CA has limitations in relation to redistributed farms. Research on farmers' organizations in particular has been limited and did not result in an organized body of knowledge (Byrnes, 1997, p. 211). The current study focuses on the construct of group cohesiveness.

Group cohesiveness is recognized as the most studied small group construct (Bettenhausen, 1991). Because the formation of groups is pervasive across spheres of society,

deriving a uniform definition of group cohesiveness has been a challenge (Chang and Bordia, 2001, Friedkin, 2004). Carron (1982) defined group cohesiveness as “the tendency of a group to stick together and remain united in the pursuit of its goals and objectives,” whereas Festinger (1950) defined cohesiveness as “the resultant of all forces acting on members to remain in a group.” The latter definition suggests that cohesiveness is an outcome variable. Hence, this study treats cohesiveness as an outcome variable.

Group cohesiveness is a property of the group but it is manifested at the individual level (van Berger and Koekebakker, 1959). As a result, perceptions of individual group members are measured at the individual level. However, groups generally operate under systems that are complex, adaptive and dynamic (McGrath, Arrow and Berdahl, 2000). Groups should be located within antecedent conditions that tend to influence continued participation in group activities (Friedkin, 2004). Therefore, research designs and methodologies that support exploratory studies of complex  group structures should be identified and amalgamated.

Earlier research on group cohesiveness has been faced with methodological challenges, and researchers have grappled with determining whether group cohesiveness is an antecedent or consequence (Chang and Bordia, 2001). Other methodological challenges on the construct stem from its multidimensional nature (Chang and Bordia, 2001; Dyaram and Kamalanabhan, 2005; Carron et al., 1985). This study considers group cohesiveness as a latent construct with multiple indicators (Bollen and Hoyle, 1990), and factors influencing group cohesiveness are described.

Assumptions

This study considered the individuals present on the farms at the time of the study as members of farm groups. Group members participated in the study voluntarily. This study further assumed that participation in group activities on the farms implied some degree of perceived group cohesiveness. It was assumed that participation in group activities resulted in

acquisition of benefits by group members. Furthermore, an assumption was made that farm groups were structured based on rules and regulations that govern them. The need for support services, production inputs as well as access to the market was also assumed.

Limitations of the Study

This study was conducted in Capricorn District, one of the six districts of Limpopo Province. Due to the prevalence of high turnover rates in redistributed farms, the current study treated study farms (n=13) as a population. This limits generalizability of the study findings. Also, ongoing activities on the farms included both individual as well as collective activities. Therefore, the boundary of a group is not clearly defined. Respondents participated in the study voluntarily, and participation was limited to those present on the farms at the time of the study.

The distance from the University of Limpopo where the researcher was based did not permit frequent interaction with respondents. Gaining entrance to the farms and building rapport was also a challenge for the researcher. And, the financial costs of conducting the study were great due to spatial distributions of farms.

The researcher had spent some time in the United States; therefore, slight cultural differences were anticipated. Furthermore, it was anticipated that language might be a slight obstacle because of the time of absence of the researcher from South Africa. However, review sessions held with research assistants helped to clarify the meaning and interpretation of study questions in the local language of Sepedi.

Definitions of Terms

Group cohesiveness - The tendency of a group to “stick together.”

Communal Property Associations (CPAs) - Juristic persons, who acquire, hold and manage property on the basis of a written constitution.

Beneficiaries - Individuals who received government grants and became co-owners of redistributed farmland.

Extension service - Provision of educational entitlements to farming communities by the government.

Homelands territories - Territories that were created in order to segregate ethnic groups as specified by the Natives Land Act of 1913.

LRAD - Land Redistribution for Agricultural Development. This is a market-assisted program, and beneficiaries are provided with matched grants to qualify for land acquisition. This program focuses particularly on emerging farmers.

Livelihood systems - A composite of all activities that a household can produce and reproduce.

Natives Land Act of 1913 - Laws that restricted ethnic groups from progressive forms of agricultural production. This law also resulted in the creation ethnic reserves for residential purposes.

SLAG - Settlement and Land Acquisition Grant. SLAG was facilitated through allocation of government grants to eligible households. Beneficiaries of grants were registered in the same government database kept on the housing subsidy, and beneficiaries could not benefit from both. This program is market-assisted and its focus was on access to land.

Subsistence farming - Farming for the purposes of home consumption and sale in case of surplus produce.

Summary

This chapter introduced the context of agricultural and rural development in South Africa and Limpopo Province. The basis of the land redistribution based on political policies of the past was highlighted. The purpose and significance of the study were presented and the assumptions that were made by the researcher and limitations that threatened the study were outlined. The following chapter presents the theoretical and the conceptual frameworks that underpinned the study.

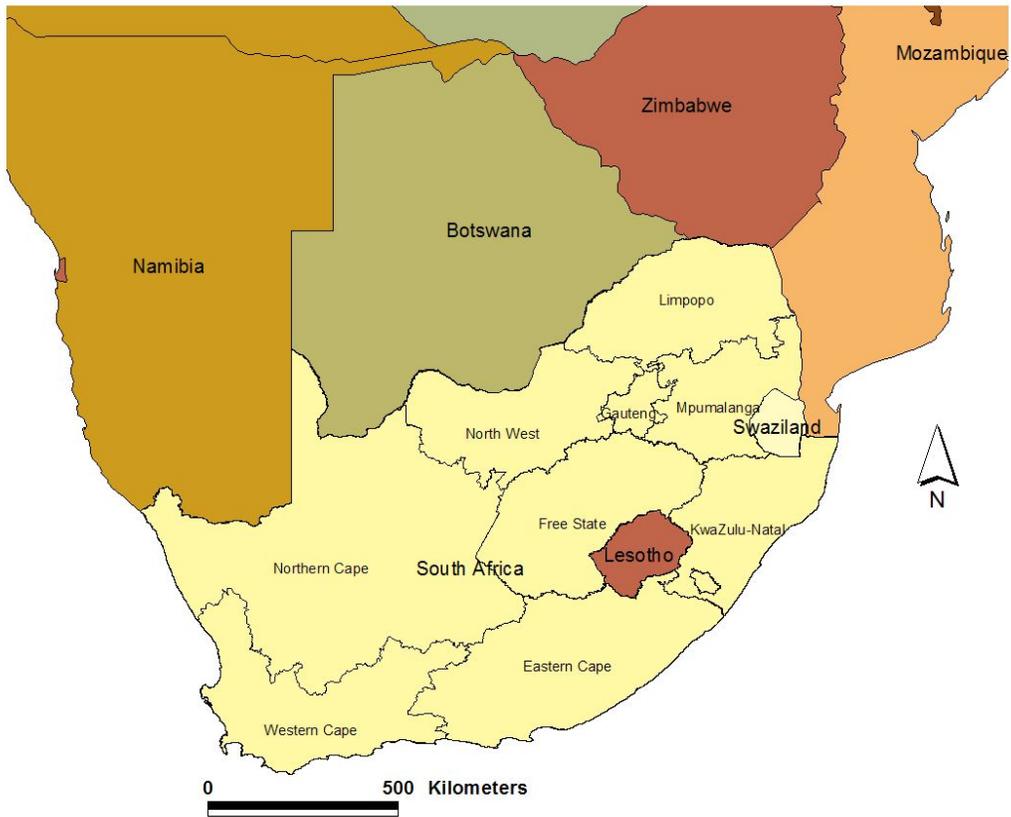


Figure 1-1 Provincial map of South Africa

CHAPTER 2 LITERATURE REVIEW

This chapter presents a review of the literature. It begins by introducing the construct of group cohesiveness. Both empirical and theoretical advancements in the study of group cohesiveness are presented. The concept of common property resources and collective action is discussed. The chapter concludes by highlighting land reform experiences.

Defining Group Cohesiveness

Groups are pervasive across contexts and they are the *sine qua non* in the study of cohesiveness. Scholarship in the study of cohesiveness, however, has been well grounded in the disciplines of sociology and social psychology (Dyaram and Kamalanabhan, 2005; Friedkin, 2004; Dion, 2000). Festinger et al. (1950) laid the groundbreaking work and championed the study of group cohesion from a sociological perspective. The work by Festinger and colleagues became prominent and continues to influence contemporary work in the area. Festinger and colleagues defined cohesiveness as “*the total forces acting on people to remain in a group*” (p. 164). This definition was centered on the degree to which a group mediates goals for its members and its resultant attractiveness to the members. According to Festinger et al., there are factors that determine whether a group lives or dies at the time a group forms. Groups are developed through membership, as well as the activities they engage in. Festinger and his colleagues saw groups in a functional way.

Therefore, groups are conceptualized in terms of their purposes to achieve some output through a process that entails engagement in the performance of tasks. However, it must be noted that membership in a group is inspired by forces such as individual needs, whereas the nature of the task determines the level of cohesiveness in any particular group. These factors are antecedent to cohesion (Carron, 1980, p. 240), and cohesion becomes relative depending on the

goals and tasks of a group (Dion, 2000). According to English, Griffith and Steelman (2004), types of tasks performed are divided into divisible and unitary tasks. English and colleagues asserted that divisible tasks have been described as those “where it is feasible to further divide the labor, and unitary tasks are those where a division of labor is not feasible.”

Enoch and McLemore (1967) built upon Festinger and others and defined cohesion as the “attraction to the group which was assumed to be comprised of intrinsic (socio-emotional) attraction and instrumental (means and source) attraction.” Therefore, two dimensions of cohesiveness notably, social and task were identified. The bidimensionality of cohesiveness is consistent with the Festinger et al. view that held that a group can be a “source” of rewards as well as “means” of rewards (Carron, 1982). Carron et al. (2004) and Carron (1982) indicated that the concept of bidimensionality is based on processes associated with the development of social relationships and processes associated with the achievement of group objectives. As a result, cohesion-as-attraction-to-group perspective was also endorsed by others such as Bakeman and Helmreich (1975).

Dion (2000) asserts that Festinger and colleagues’ perspective has been altered, though in some subtle ways. Dion claimed that the shift has been in the form of recognizing that cohesiveness is not only the precursor (i.e., field of forces) but it was discovered that cohesiveness was also consequential; thus, binding members of a group together. Therefore, forces acting on individual members were then termed “*attractions to the group*.” However, a caveat with the term “*attraction*” has been that there was a tendency to confuse it with cohesion leading to erroneous explanations (Enoch and McLemore, 1967). Carron (1982) suggested that the measure of cohesion based upon attraction failed to explain cohesiveness in situations characterized by negative effect.

Carron et al. (1985) defined cohesion as a “*dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its goals and objectives.*” It is important to note that Carron and associates located the meaning of cohesiveness within the social context of a group. Meanwhile, Mullen and Copper (1994) adapted Festinger’s (1950) definition of cohesiveness as the “*resultant of all forces acting on members to remain in a group.*” Therefore, there has been a shift to the view of cohesiveness as an outcome variable (Friedkin, 2004).

The study of cohesiveness advanced over time and Carron et al. (1985) was among others who contributed to this advancement. These authors conceptualized cohesiveness based on two predominant types of cognitions. Group integration (GI) refers to the “individual’s perceptions about the closeness, similarity, and bonding within the group as a whole.” Individual attractions (AT) to the group, represents the individual’s perceptions about personal motivations acting to retain them in the group. There are four manifestations of cohesion: group integration–task (GI-T), group integration–social (GI-S), individual attractions to the group–task (ATG-T), and individual attractions to the group–social (ATG-S). The conceptual framework of group cohesiveness is presented in Figure 2-1. The meta-analysis conducted by Dion (2000) on cohesiveness concluded that task and social dimensions were central to a multidimensional view of cohesion and that this view reflected consensus among researchers.

Conceptually, cohesiveness is a property of the group but it is *manifested at the individual level* in attractions to the group, to its members, to its tasks and goals (Carron et al., 2003; Dion, 2000; van Bergen and Koekebakker, 1959). Given their viewpoints, the work by Festinger et al. (1950) became contentious. Carron (1980, p. 235) identified two criticisms that were associated with Festinger and colleagues. One criticism was concerned with using an individual as a unit of

reference rather than the group. Another criticism is based on the complexity of operational definitions based on the term “total field of all forces.” Carron also indicated that arguments were also centered on interpersonal attraction to a group as being an inadequate measure of cohesiveness.

Critiques against Festinger and colleagues were not meant to discredit the importance of interpersonal relationships. A point of view on the role of interpersonal attraction is emphatic and has been put forward by Katz, Lazer, Arrow, and Contractor (2004). Katz and associates asserted that relationships between individuals are important but relationships to everybody else within the group are imperative because they will largely determine the flow of information and resources. Wittenbaum et al. (2004) claimed that the flow of information within a group either contributes to or inhibits group decision-making and problem-solving effectiveness. Therefore, group members should be informed in order to contribute to decision-making as well as problem-solving processes.

It has been argued that task oriented groups are likely to put more emphasis on the completion of the task than interpersonal attraction (Anderson, 1975). Shared beliefs among group members can be expected to be stronger in groups with more complex task interdependence (Carron et al., 2003). However, it has been suggested that overt behavior may not be consistent with the behavioral intent (beliefs, attitudes, etc.) of individual members (Alavi and McCormick, 2004).

Group cohesiveness has been defined from various perspectives. The following section presents group cohesiveness from the functional perspective.

The Functional Perspective of Group Cohesiveness in Task Oriented Groups

The functional perspective of groups is concerned with the purpose for which groups are formed (Wittenbaum et al., 2004). Cartwright and Zander (1968, pp. 53-56) outlined conditions

that lead to the formation of groups. Cartwright and Zander differentiated between groups that are formed deliberately, formed spontaneously, as well as those that are formed due to external designation. Groups that are formed deliberately are further subdivided to include work groups (Table 2-1). Accordingly, work groups are created to perform tasks more efficiently through the pooling and coordination of the behavior and resources of a collection of individuals. However, group formation precedes developmental stages that determine the life span of a group.

The development cycle of groups is influenced by different factors (Chang and Bordia, 2001). Tuckman (1965) identified different stages in the group development process. These stages include forming, storming, norming, and performing. According to Tuckman, groups identify the boundaries of both interpersonal and task behaviors at the forming stage, whereas storming is characterized by conflict and polarization around interpersonal issues with emotional response in the task sphere. These behaviors are symbolic of the resistance to group influence and task requirements. During norming, cohesiveness develops, as new standards evolve, and new roles are adopted, at the performing stage, the interpersonal structure becomes the tool of task activities. At the performing level, roles become flexible and functional and the group energy is channeled to the task. Structural issues are resolved at the final stage and the structure then becomes supportive of task performance. Through these stages, the group becomes a functional instrument for dealing with the task, and the group overcomes interpersonal problems (Tuckman, 1965).

Given the group development process, groups could either gain resilience or they may become “wobbly” and eventually fail. Therefore, the longevity of group life span will determine whether a group could foster an environment for viable performance to take place or not. Groups evolve, and the stage of development reached in a group will determine in large part the extent to

which members of groups continue their participation. Given the multidimensional nature of cohesiveness, the development cycle of the group tends to dictate the type of cohesiveness predominant along the continuum (Carron, 1982).

Carron (1980, p. 234) asserted that the level of cohesiveness could be low, but there cannot be “zero” cohesiveness because groups would cease to exist. Carron (1980, p. 233) defined a group as characterized by purposive interaction in goal directed and interpersonal behavior. The “culture” that evolves in a group has the potential to influence the attitudes, and the behavior, whereas the objectives of the group will dictate the kinds of activities in which members engage. Alavi and McCormick (2004) argued that cohesive groups generally encourage a positive atmosphere, free from personal squabbles, and as a result, members can benefit from the group, whereas cooperation and overall performance is improved. Conversely, Friedkin (2004) indicated that groups are cohesive when group-level conditions produce positive membership attitudes and behaviors and when group members’ interpersonal interactions operate to maintain group-level conditions.

Although Festinger and associates had championed the conceptualization of group cohesiveness based on interpersonal attraction in 1950, calls to revisit this view were made. Another divisive concept in the study of group cohesiveness is the association between cohesiveness and performance in task-oriented groups. Findings on this phenomenon have been inconclusive (Carron, 1980, p. 245). Carron et al. (2004) asserted that the association between cohesion and performance is largely based on assumptions. However, Carron and colleagues indicated that this assumption inspires the ever-increasing attempt to reveal empirical evidence, particularly in psychological disciplines. On the other hand, there seems to have been a general

consensus on the proposition that stipulated that the effect of cohesion on performance is plausible, but the opposite may not be true (Bakeman and Helmreich, 1975).

The degree of interaction required; however, by the group for successful performance has been noted previously as imperative to the cohesive-performance effect (Mullen and Copper, 1994). To a varying degree, meta-analysis revealed a positive relationship between cohesiveness and performance (Evans and Dion, 1991; Mullen and Copper, 1994). However, Dyaram and Kamalanabhan (2005) claimed that such meta-analyses were confronted with conceptual and methodological problems. As a result, the confusion concerning the relationship between cohesiveness and performance seems to have persisted.

Mullen and Copper (1994) presented that a stronger cohesiveness-performance effect in groups required a greater degree of interaction, and consequently, coordination among group members would be improved and the smooth operation of the group as a system would be enhanced. Mullen and Copper observed task cohesion as the better predictor of task performance. Group size was also found to influence the level of performance as well as cohesiveness of groups (Mullen and Copper, 1994). As a result, it was hypothesized that cohesiveness-performance relationship is stronger in smaller groups and weaker in larger groups. Bettenhausen (1991) also noted that group size is a context variable that was consistently shown to affect group processes and outcomes. On the contrary, group size was found to be inversely related to perceptions of cohesion in exercise classes (Carron and Spink, 1995). Nevertheless, Bettenhausen observed that group cohesion is a critical predictor of group behavior and is reflected through evidence that revealed that cohesiveness resulted in improved performance, increased satisfaction, and lower turnover. Evidently, cohesiveness can be antecedent in relation to task performance.

Hackman (1990, pp. 6-7) identified three dimensions that contributed to the effectiveness of groups, particularly in organizational groups. These include the degree to which group's productive output meets the standards of quantity, quality, and timeliness; the degree to which the process of carrying out work enhances the capability of members to work together interdependently in the future, and the degree to which the group's experience contributes to the development of others. In agriculture, productivity is largely determined by factors that are beyond the control of farmers and these include both climatic and biological conditions (Quiggin, 1995), whereas access to markets is an important factor. The ability of farmers to produce in a timely manner and meet the quality and quantity of the output required for the market is yet another important factor.

The functional perspective of group cohesiveness is centered on the performance of related tasks. Both theoretical and methodological considerations are presented in the following section.

Issues of Interpretation on the Study of Cohesiveness

Contradictions in the study of cohesiveness-performance relationship are theoretical in nature, and other concerns stem from measurement. Chang and Bordia (2001) asserted that attempts to study the cohesion-performance alliance could not establish a systematic relationship. In contrast, recent studies based on meta-analyses (Evans and Dion, 1991; Dion, 2000; Mullen and Copper, 1994) supported a hypothesis that a relationship exists between cohesiveness and performance. These studies also revealed that the interface between cohesiveness and performance was due to the commitment to the task cohesion rather than to interpersonal attraction. A caveat with the meta-analyses is that they should be interpreted with great care because neither of the studies went beyond central tendency to establish the relationship between cohesiveness and performance (Chang and Bordia, 2001). Therefore, although meta-analyses have been instrumental, more attention should be devoted toward standardization of procedures.

Small group research has been criticized for over reliance on the positivist epistemology (McGrath et al., 2000), whereas cohesiveness has been studied largely through experimental designs and correlational studies. It has been observed that experimental studies tend to yield weaker cohesiveness-performance effect, whereas correlational studies conducted under natural settings yield better results (Mullen and Copper, 1994). Mullen and Copper assert that weak results from experiments may be attributed to the removal of the impact of performance on cohesiveness in the cohesiveness-performance effect. Mullen and Copper further claimed that the correlational stance attempts to determine the direction of the influence, whereas the conditions under which experiments are conducted make this approach artificial by controlling for cohesiveness and gauging changes in subsequent performance.

Reasons for the lack of consistency in the study of the association between cohesiveness and performance can be attributed to the pervasive nature of groups. Hackman (1990, p. 3) suggested that the omnipresence of groups is actually problematic in the study of groups. Most recently, Chang and Bordia (2001) concurred by indicating that the cohesiveness-performance phenomenon is generally studied in contexts that are highly variable. Landers and Luschen (1974) identified the degree of interaction required by the demands of the task. Thus, the lack of consensus in the task-performance association could be attributed to the “task” dimension of cohesiveness. This dimension appears to be obfuscated by the failure to differentiate between co-acting and interacting groups. Interaction refers to the interdependence of group members, i.e., combining skills of individual members through an interdependent action. On the other hand, co-acting refers to a summation of individual contributions; therefore low interdependence may not be satisfied (Landers and Luschen, 1974).

Other views pointed out that the lack of coherence in the study of cohesiveness may be traced back to its roots - group dynamics (Poole, Hollingshead, McGrath, Moreland, and Rohrbaugh, 2004). Poole et al. asserted that students of group dynamics have grappled to fill the gap for a long time. Poole and colleagues further indicated that the disconnect between students of groups across disciplines is an area that needs to be addressed. The proliferation of definitions of cohesiveness causes concern in relation to measurement (Chang and Bordia, 2001; Friedkin, 2004). Bettenhausen (1991) also noted that students of cohesiveness are faced with the difficulty of defining, operationalizing, measuring, and experimentally manipulating cohesiveness. Most importantly, from a functional perspective, groups are manifested in various contexts and are influenced by different factors. Therefore, operational definitions of variables within specific contexts should become an important part of the study. Despite the disenchantment expressed by many students of cohesiveness, many have tended to agree on the multidimensionality of cohesion. Therefore, this consensus has given a point of departure toward a common definition and measurement (Chang and Bordia, 2001). On the contrary, Friedkin (2004) claimed that the multidimensional approach to cohesiveness did not address the problem of integrating the individual and group level at which cohesiveness has been defined. Furthermore, Friedkin asserted that the confusion has been indicative of the complexity involved in reciprocally linked individual-level and group-level phenomenon.

Another area of contention in the study of cohesion-performance has been the precedence set by Festinger et al. (1950). Festinger and colleagues aggregated individual data in order to derive a group measure. Carron (1982) noted that the use of the average (mean) may not be reliable, whereas the mode and the median may be better measures of central tendency under specific circumstances. Carron further highlighted that the mean lacks resilience, and may be

misleading because two groups could have the same mean, yet groups may be different. Recent studies (Burke et al., 2005; Dion, 2000) proposed other mechanisms that can ease the tension in this regard. Data aggregation is considered acceptable when there is variation *within* groups as well as *between* groups (analysis of variance-ANOVA). The current study compares the mean (T-test) to determine the difference between cases of low and high degree of cohesiveness, therefore, variability is maintained. The standard deviation is also used in this study as a measure of variability.

Studying the cohesiveness-performance relationship has also been restrained by the inability to employ longitudinal study designs (Carron, 1982). Carron asserts it was difficult to identify with confidence the level of relationship to be referred to as “strong” because no research design can take that into account because of the difficulty in representing initial experiences of groups. The current study describes initial experiences of farm groups through group discussions and by identifying emerging themes. Data reduction procedures have also been deemed undesirable because the practice discards cases that display low levels of cohesiveness (Carron et al., 2003). Carron and colleagues disputed this practice and argue that it tends to increase the likelihood of committing Type II error.

The preceding sections discussed the theoretical basis of group cohesiveness. Contributions made to the study of this construct over the time and the discrepancies were identified. The following discusses the concept of common property resources.

Common Property Resources within a Broad Spectrum

Extensive research has been conducted in the area of common property resources (CPR's) and collective action (CA). Agrawal (2001) acknowledged that students from various disciplines of scholarship contribute to the burgeoning literature, and the fields of study include but are not limited to anthropology, economics, environment, political science, and rural sociology, among

others. Therefore, theoretical simulations on the phenomenon cut across many fields of inquiry. The diversity of scholarship in this area is also reflective of the wide range of CPR's. However, Poteete and Ostrom (2003, p. 14) observed that students in the area tend to extrapolate and attempt to generalize findings.

Historically, CPR's have been categorized into two subdivisions, those that are naturally evolving as well as those that are man-made (Tuomel, 2003; Jodha, 1986). Generally, natural CPR's are differentiated based on their characteristic of subtractability and where exclusion may be difficult to enforce (Myatt and Wallace, 2003, 2004). Subtractability is based on resources becoming depleted from usage by a great number of individuals without effective property right regimes. Therefore, natural CPR's tend to operate on the notion of "open access" and exclusive property rights do not exist (Hardin, 1968). Co-users of natural resources could derive some benefits from the use of such resources. And benefits that accrue to co-users might be in the form of either income or any other personal gain. Based on this quality of CPR's, natural resources can be referred to as common pool resources.

In reference to man-made CPR's, Quiggin (1995) proposed that CPR's such as agricultural cooperatives may be seen as a means to capture economies of scale. A salient characteristic of man-made CPR's has been the prominence of property ownership, thereby having made them inaccessible to certain segments of the population. Efficiency based on agricultural production is an important element in CPR's. Further, benefits accrued to individual members according to portions of individual contributions. Byrnes (1997, p. 211) noted that farmers' organizations often have help create demand for and the supply of agricultural support institutions that effectively improved technology utilization in small farmer agricultural production.

Byrnes asserted that research on farmers' organizations has not resulted in an organized body of knowledge (p. 211). And the emphasis on the access of production inputs may be misleading. Quiggin is among the few scholars who recognized that agricultural production is highly dependent upon other factors. Quiggin further observed that elements of production (land, labor and capital) determine, in large part, the probability of whether an output can be derived. Volatile market prices as well as climatic conditions introduce a great deal of uncertainty in agricultural production. These factors form part of the system that is beyond the control of the farmers. Thus, these factors add yet another dimension to the formal theory of CA.

Given limited literature on collective action organized around agricultural production, there has been a need to derive empirical evidence. Efforts to reinforce collective action in CPR's organized around agricultural production were short-lived (Ostrom and Gardner, 1993; Griffin et al., 2002). According to Quiggin (1995), systems that were based on common ownership of property were not widespread, whereas other forms of common property resources included land tenure reforms as well as irrigation schemes. Irrigation schemes in particular did not achieve positive impact due to tendencies to discourage subsistence agricultural production among agrarian communities (Ostrom and Gardner, 1993).

It must be noted that external forces tended to dictate the extent to which co-users and co-owners can exploit CPR's. Particularly for naturally evolving resources, the monolithic role of the state in managing such resources was devolved to local users (Agrawal, 2005, p. 29; Meizen-Dick, Raju and Gulati, 2000). Consequently, local CPR's were governed through rules that were derived locally (McCay and Jentoft, 1998). However, Meizen-Dick et al. (2000) cautioned that care should be exercised to not assume that users of resources are keen in providing management responsibilities.

In this section, the context within which common property resources are manifested has been highlighted. However, extensive research is concentrated on common property resources that are naturally evolving. Hence, literature in the ensuing section focuses on collective action in relation to naturally evolving resources.

The Concept of Collective Action

Collective action is based on the notion of group formation. One of the most important characteristics of group formation is that individuals will become involved in groups for various reasons (Poteete and Ostrom, 2003, p. 14). Either voluntarily or involuntarily, people subscribe their membership to various organizations. In the case of CA under the current study, it is apparent that farms are made possible through pro-land redistribution policies.

However, CA based on conscious decision-making may involve developing institutions, mobilizing resources, coordination of activities, as well as sharing of information (Poteete and Ostrom, 2003, p. 14). Therefore, the diverse nature of CA determines benefits that accrue, whereas group size also determines the proportion allocated to individual members.

Sugden (1984) claimed that any collection of individuals can count as a group. Oliver (1993) disputed this claim by declaring that this “statement is indistinct and empty.” Oliver indicated that there is a natural tendency for people with shared interests to act together in pursuit of interests. According to Etzion (1996), people tend to engage in collective action either based on self-interests or social norms. Self-interests may be based on the notion of “public good” derived from the resource, and multiple users may be able to use the resource simultaneously (Sugden, 1984). Myatt and Wallace (2003) asserted that it is tempting to think that subscription to a particular group implies participation in collective activities, which would in turn determine the degree to which output can be derived. However, Sugden (1984) argued that it cannot be assumed that collective benefits will evolve automatically, even though group members may

have all the necessary tools to help them achieve likely benefits. Veraghesse and Ostrom (2001) concurred and argued that neither group membership nor group size will ensure the success of a given project or task as is claimed by some authors.

McCarthy et al. (1998) and Quiggin (1995) demonstrated the characteristics of CA organized around resources that combined both private and common ownership of property. According to Quiggin, some examples have included irrigation systems, watering private cropland, jointly owned agricultural machinery harvesting private crops or privately owned cattle grazing on common land.

Nonetheless, it is generally acknowledged that defining CA on the basis of actions producing a collective good (Olson, 1965) was seminal. Hardin (1968) elaborated on Olson's theory by indicating that a collective good is a "benefit which cannot be withheld from other members." Another follow up by Myatt and Wallace (2003, 2004) indicated that a collective good is "non-excludable if all individuals are free to consume it, once it has been provided."

Although Olson's work is commendable, Olson has been criticized for appearing contradictory by claiming that contributions made by individuals may not be noticeable in a larger group. On the one hand, Hardin (1968) is disputed for confusing the tragedies of "open access" with that of the "commons" (Oliver, 1993; McCay and Jentoft, 1998; Theesfeld, 2004). Theesfeld (2004) claimed that Hardin's expression of the "tragedy of the commons" denoted the degradation of resources that are subtractable.

Other scholars of CA found Hardin's criticisms undesirable and considered such criticisms problematic (McCay and Jentoft, 1998). McCay and Jentoft asserted that although Hardin's model may be deficient, it provided useful insights and it was a useful analytic tool. McCay and Jentoft further indicated that rigorous, empirically-based comparative analysis could help counter

the criticism. In addition, detractors should take into account that one of the important characteristics of theory is “*falsifiability*.” Therefore, theories evolve.

It is generally acknowledged; however, that considerable progress has been made in the study of CA. Even so, the study of CA was confronted with methodological challenges. Thus, calls were made to rethink the theoretical foundations for the analysis of common property resources (Veraghesse and Ostrom, 2001). It has been observed that progress made in the study of CA seemed to be diverging and even competing at times (Chwe, 1999). Chwe submitted that an emphasis has been on the influence of social structure, whereas the other studies tended to focus on the incentives for individual participation. Oliver (1993) suggested that most researchers have generally studied social and organizational processes that make action possible, whereas little has been done on *causation*. Quiggin (1995) concurred and asserted that much of the theoretical as well as empirical evidence on collective action was based on “game theoretic simulations.” Therefore, it was apparent that current speculative abstractions tend to restrict the generalizability of the concept (Veraghesse and Ostrom, 2001; Poteete and Ostrom, 2003).

McCay and Jentoft (1998) claimed that inquiry in the study of CA has ignored a wide variety of properties that may be encompassed by the term. On other hand, Poteete and Ostrom (2003) asserted that attempts to synthesize findings from multiple studies have been faced with challenges of evaluating analytical similarities and differences among different types of collective action. Therefore, the varied context within which CA was manifested poses a challenge.

Stocker (2004) asserted that Ostrom is probably the only scholar who championed CA. However, Stocker critiqued Ostrom for overemphasis on individual behavior as shaped by the rules in use. Stocker argued that the use of rational choice theory by Ostrom is deemed

undesirable. Stocker advocates for the cultural institutional theory that embodies a more socialized understanding of human behavior. Further, Agrawal (2001) called for a broader view of common pool resources than just mere design principles. Agrawal argued in favor of factors that condition the environment. It was observed that an environment can either facilitate or constrain an organization, therefore creating incentives or disincentives for people to work together (Theesfeld, 2004; Randhir and Lee, 1995).

This section has illustrated trends in the study of CA. The theoretical origin of the phenomenon has been highlighted, and inconsistencies in the formal theory were apparent. The following section highlights factors that affect collective action.

Factors Affecting Collective Action

Previous research on CA and CPR's has largely focused on factors determining emergence of collective action and its resilience (Knox and Meinzen-Dick, 2001). Knox and Meinzen-Dick identified factors that are believed to shape CA in large part and notably, these included but were not limited to, the importance of CPR's to local livelihood systems, group heterogeneity, the ability to organize and the capacity to manage resources, the investment needed to make resources productive, as well as the support of external stakeholders in facilitating collective action. Other scholars have also identified conditions that evoke and sustain collective action.

Dayton-Johnson (2000) indicated that the characteristics as well as the performance of the group can influence collective action. Social heterogeneity could lower a cooperative effort, and this could be in the form of economic inequality, social inequality, ethnic or religious differences, among others (Myatt and Wallace, 2004). Myatt and Wallace asserted that "when users are asymmetrical, their identities matter." Similarly, CA could be weakened in circumstances where members are expected to contribute in one direction or the other (Aggarwal, 2000; Baland and Platteau, 1999), whereas problems pertaining to opportunistic

behavior may be prevalent (Baland and Platteau, 1997). Baland and Platteau (1999) disputed Olson's (1965) assertion by illustrating that inequality did not favor the creation of public goods. On the contrary, Campbell, Mandondo, Nemarundwe and Sithole (2001) observed that differences in social class and ethnicity can make consensus building and norm enforcement difficult. Such difficulties came from the assumed problems of distrust and the lack of mutual understanding (Veraghesse and Ostrom, 2001).

There has been no apparent consensus on the question of heterogeneity in CA. Baland and Platteau (1999) claimed that role of inequality among users is debatable, and also the relationship between the distribution of wealth and outside opportunities has been ambiguous. Despite the lack of consistency on the study of social inequality, it has been argued that the conditions under which certain types of heterogeneity undermine or enhance collective action have remained largely unknown (Veraghesse and Ostrom, 2001). Furthermore, clarity is lacking as to whether the attributes of a given group of users affect the likelihood of collective action, or whether, given those attributes, users devise institutional mechanisms to reduce costs and enhance cooperation.

Bardhan (2000) suggested that theoretically, the relationship between heterogeneity and successful collective action has been a complex one. Bardhan indicated that there has been tendency among students of CA to confuse inequality with group size. Therefore, inequality has been largely obfuscated in many field studies and findings have been misleading.

Nonetheless, Olson (1965) argued that membership in a large group reduces benefits to individuals members, whereas the likelihood to free-ride on the cooperative efforts of others increases. Furthermore, group size may have also been instrumental at the 'input' stage (Myatt and Wallace, 2004). Other scholars observed that groups are more likely to succeed when there

is positive correlation between the cost of contribution and the benefit acquired (Myatt and Wallace, 2004; Dayton-Johnson, 2000; Olson, 1965).

However, what remained concealed in this debate was identifying the point where the relationship between group size and benefits can be detected along the continuum of CA. In order to gain insights on the procession of CA, longitudinal study designs are warranted. Other questions that remained outstanding in relation to group size are concerned with the role of social networking, moral values, norms of trust and reciprocity, and relative proclivity toward altruism versus self-interest, to mention a few (Knox and Meinzen-Dick, 2001). Nonetheless, Knox and Meinzen-Dick hypothesized that previous experiences in collective action from other settings such as credit and savings groups are likely to contribute toward CA.

The conventional concept of CA has been criticized for its failure to adequately explain conditions in settings where collective actors create and sustain agreements to avoid serious problems of over-appropriation (Veraghesse and Ostrom, 2001). Another limitation of the concept has been the failure to predict the conditions under which ownership will improve outcomes. Conducting a study in redistributed farms was yet an attempt to illuminate such concerns. In addition, recent theoretical advancements have begun to elucidate some of the conditions that are conducive to local self-organization (Ostrom, 2000).

Of particular importance, CA has not been a unitary phenomenon (Campbell et al., 2001). In addition, the events that are subsumed under the term “collective action” are complex and diverse to allow simple generalizations about its causes, effects, or dynamics (Bardhan, 2000). Campbell et al. further asserted that given lack of congruence between the literature and the realities on the ground, much of the literature has had limited applicability to on-going research and development on community-based or common property systems. Lack of consistency has

made the design of new empirical studies to advance the body of knowledge quite difficult (Poteete and Ostrom, 2003). Therefore, standardization and developing valid and reliable research instruments in the study of CA should be the main focus for future studies.

This section presented ongoing debates on the factors that affect collective action. It is the general consensus that advancements on the phenomenon have been inconclusive. The following section highlights land reform experiences of the past.

Land Reform Experiences

Land reform has generally been implemented in order to level out inequalities with regard to land ownership patterns. Thus, the program has been socio-political in nature (Binswanger and Deininger, 1993; Griffin, et al., 2002), with the same theme applied to the current land reform of South Africa. Other countries in Sub-Saharan Africa that have implemented land reform programs in the past include Kenya, Namibia, Zimbabwe, Algeria, Morocco, Ethiopia (Griffin, et al., 2002). According to Griffin and colleagues, a commonality between these countries except Ethiopia was that colonial governments had displaced African tenure systems that were based on communal rights.

Although the dawn of land reform was witnessed following WWII (Binswanger and Deininger, 1993), after years of economic conservatism, renewed interest in the development agenda stirred (Borass, 2006; Griffin et al., 2002). Griffin and colleagues noted that despite the types of land tenure reform such as private titling or collective action, implemented in Sub-Saharan Africa, successes have been limited. Western forms of land titling were deemed undesirable because land sales could not be performed under communal systems.

However, positive experiences were reported from Iran, East Punjab, Eastern India, China, Taiwan, Korea, Japan, Bolivia, and Ethiopia where land was transferred to tenants, unlike experiences from Latin America, Algeria, Eastern and Southern Africa that did not achieve

efficiency (Biswanger and Deininger, 1993). Biswanger and Deininger noted that there were examples from countries such as East Germany, Peru, Chile, Mozambique, Algeria, where farms were converted from commercial into state farms. Furthermore, farms acquired collectively tended to degenerate over time and the capital stock deteriorated.

According to Griffin et al. (2002) one of the purposes of land reform is to dismantle the system of labor controls and reduce monopolistic power of large landowners. This hypothesis was based on the premise that redistribution of land will lead to a more equitable distribution of productive wealth. However, previous experiences illustrated that the policy approach toward land reform was neither static nor rigid. Biswanger and Deininger (1993) became the proponents for a shift from state-led land reform to a redistributive land reform, which is based on market standards. However, Borass (2003) asserted that this recommendation was heavily contested by various stakeholders within policy formulation circles.

The market-oriented approach to land redistribution has been a recent policy recommendation proposed by the World Bank, and has been implemented in Brazil, Colombia and South Africa. Borass (2006) reported that land redistribution in the Philippines was marked by discrepancies that discredited it from being considered a redistributive land reform program. Nonetheless, analysis of empirical evidence pointed out that land redistribution has been associated with some shortcomings (Borass, 2003). Borass noted that the pro-market stance toward land redistribution is demand-driven as opposed to the state-led stance, which is solely supply-driven. Examples on state-led land reform programs have been cited from countries such as Japan, South Korea, and Taiwan (Griffin et al., 2002). Although the Latin American experiences were somewhat improved and modeled after Asian programs (McCarthy, de Janvry, Sadoulet, 1998), land was expropriated in Mexico, Bolivia and Cuba (Griffin et al., 2002).

Griffin and colleagues asserted that experiences from Latin America suggest that land reform is likely to succeed when it is enshrined in the rural development strategy. Although strides have been taken toward providing financial support through comprehensive agricultural programs (CASP), the lack of support services in redistributed farms of South Africa has previously been echoed (Aliber, 2003; Borass, 2003; Deininger and May, 2000; Deininger, 1999).

This section has given an overview of former types of land reform as well as the emerging redistributive reform. Varied experiences can be attributed to differences in policy approaches adapted in respective countries. Collective forms of land reform can be located within the conceptual framework of collective action as well as the theoretical framework of group cohesiveness.

Summary

This chapter highlighted the literature and the theoretical frameworks within which redistributed farms are embedded. A common denominator between collective action (CA) and group cohesiveness has been that they are both grounded within group dynamics and the formation of groups. Thus, groups are central to the study of CA and group cohesiveness. What is striking in the study of these phenomena are the complications of designing empirical studies that can yield consistent results. The review demonstrated that the challenges in studying these areas can be traced back to their origins - i.e., group dynamics. The fact that groups are pervasive in various spheres of society makes standardization more of a challenge. Students of collective action as well as group cohesiveness have grappled with conceptual as well as methodological challenges. Group cohesiveness has made remarkable empirical advancements toward theory building. In contrast, more work is needed to develop collective action into a reliable (Ostrom, 1991, p.7) and valid concept. Extensive studies in CA are generally descriptive in nature, unlike

the study of group cohesiveness, which is generally rigorous by using both experimental and correlational designs.

Collective action can be categorized as descriptive in nature, whereas group cohesiveness is generally explanatory. Therefore, as alluded to prior, group cohesiveness has more potential to contribute toward theory building than does collective action.

Table 2-1 Types of groups formed deliberately (Adapted from Cartwright and Zander, 1968)

Type of group	Definition
Work groups	Perform tasks efficiently through the pooling and coordination of the behavioral and resources of a collection of individuals.
Problem-solving groups	Designed on the basis that a solution will be attained more efficiently when a collection of people work on the problem than when work is performed independently
Social-action groups	Formed out of a desire to exert influence in society
Mediating groups	Created to coordinate activities of other groups, distribute resources among them, and reconcile conflict of interest.
Legislative groups	Created to develop rules, regulations, laws, or policies that govern behavior
Client groups	The performance of services is more effective or efficient if the clients are treated as groups rather than as individuals.

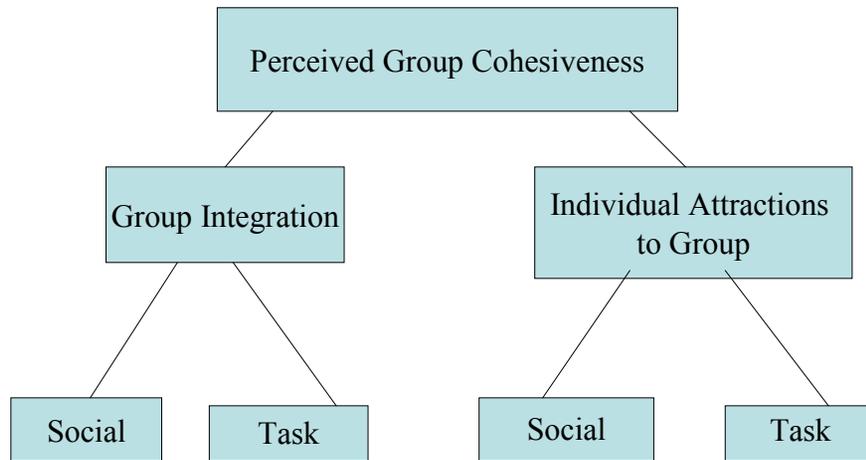


Figure 2-1 Conceptual model of group cohesiveness (Carron et al., 1985, reproduced with permission)

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to explore the degree of perceived group cohesiveness in redistributed farms as well as the factors influencing group cohesiveness. A Likert-type scale was used to measure perceived group cohesiveness. Factors influencing perceived group cohesiveness were measured by using indices, and questionnaires were developed and utilized to obtain factual data. This chapter outlines the research design that guided the measurement procedures employed.

Research Design

A cross-sectional research design was employed in this study. Cross-sectional research design permits data collection at a single point in time (Ary, Jacobs and Razavieh, 2002, p. 379; Rubin and Babbie, 1997, p. 112). Rubin and Babbie asserted that cross-sectional design is correlational in nature, whereas Ary et al. referred to this design as *causal comparative* because it attempts to establish cause-and-effect relationships between independent variables and dependent variables.

The *causal comparative* design does not permit either randomization or manipulation of the independent variables. Another limitation associated with this design has to do with the difficulty in the establishment of causation. Ary and associates warned against mistakenly attributing causation between two variables, referred to as *post hoc fallacy* (p. 337). *Spurious* relationships were also a concern in this design. Agresti and Finlay (1997, p. 365) defined *spurious* associations as those that disappear between variables when a third variable is controlled for.

Ary et al. (2002, p. 337) and Agresti and Finlay outlined three conditions that must be met in order to satisfy causality, and the conditions ensue hereunder (p. 357):

- A statistical relationship between independent variables and dependent variables should be established.
- Independent variables should precede the dependent variables in time.
- Alternate explanations should be eliminated.

Bivariate correlations were used to determine relationships between variables, though bivariate correlations are simple and tend to have limited validity (Rubin and Babbie, 1997, p. 306). Rubin and Babbie asserted that cross-sectional design can control for alternative variables through multivariate statistical procedures. Regression analysis was used in this study to detect covariation between variables.

A caveat regarding redistributed farms is that there may be an array of other factors influencing the outcome variable, and this study measured a limited number of factors as explanatory variables. This posed a threat to internal validity of the findings. Suffice it to say that the explanatory variables explored in the current study may only be a part of the factors that influence group cohesiveness on the farms. Group cohesiveness was treated as the dependent (outcome) variable and this was a self-reported measure.

Structural characteristics of farms were described at the farm level (n=13). Nominal data were gathered in order to determine historical events that led to the evolution of current farm groups. The profile of current farm groups was also assessed by collecting nominal level data including demographics, duration of membership as well as positions held within groups by individual group members (n=137). Factors influencing perceived group cohesiveness were measured in the form of the degree of satisfaction with benefits acquired from farms, and the degree of group governance and these were treated as the independent variables of interest. Addressing validity and reliability formed an important part of the study.

Establishing causation in previous studies of perceived group cohesiveness has been a daunting challenge. Given the cyclical nature of group cohesiveness, it has been difficult to determine whether group cohesiveness was antecedent or a consequence. Thus perceived group cohesiveness has an ambiguous nature. According to Carron (1982), antecedent variables can largely affect whether group cohesiveness can be manifested. Nevertheless, group cohesiveness was considered as an outcome variable in this study.

Addressing Validity and Reliability

Zeller and Carmines (1980) asserted that the concepts of validity and reliability are key to the notion of measurement in social sciences. This process entails identifying theoretically meaningful measures. Zeller and Carmines indicated that this process seeks to bridge the gap between theoretically deduced measures and empirical evidence.

Validity is deemed the most important consideration in developing and evaluating measuring instruments (Ary et al., 2002, p. 242). Generally, validity is defined as the “extent to which an instrument measures what it intends to measure.” Validity of measuring instruments includes content, face, construct, and criterion (Rubin and Babbie, 1997, pp. 177-179). Construct and content validity were a threat to this study. Construct validity is concerned with interrelationships among multiple measures, whereas content validity relates to the range of meanings within a concept. Both construct and content validity were addressed by adapting a standardized instrument for measuring group cohesiveness. Also, other instruments used in the study were carefully constructed. Procedures followed in the development of instruments are discussed in later sections.

Internal and external validity of the study were addressed in relation to the measurement procedure. Internal validity addresses if measures contribute consistently to the theoretical measures of concepts or if they gauge something else (Merriam, 1995; Zeller and Carmines,

1980). External validity is concerned with the question if measures will behave in the same way with similar theoretical concepts in terms of direction and strength as well as consistency of relationships. Given the research design employed in this study, internal validity was threatened because of the difficulty in establishing causation. However, the design can potentially “tease out” convincing evidence for causation (Ary et al., 2002, p. 336) if it is configured to control for other variables.

Other forms of internal validity that were a threat to the study included history, coverage, and mortality. The history aspect was concerned with events that occurred during the course of the study and that had the potential to confound results (Ary, et al., 2002, p. 282; Cook and Campbell, 1979, p. 50). Some of the study farms had government financial assistance at the time the study was conducted. Other events also included distributing income among group participants on the farms, and the income being accumulated over a long period of time. The study experienced mortality because some group participants had discontinued their participation from the farms during the course of the study. Consequently, two of the study farms had only two participants remaining.

External validity is divided into ecological and population validity. Ecological validity is concerned with whether findings can be observed under different settings of the domain, whereas population validity refers to whether findings can be attained with other subjects of the population (Ary, et al., 2002, p. 298). In this study, external validity was limited because the study was based on population. However, the study employed measures that were theoretically sound. Furthermore, it is worth noting that the study has been exploratory in nature and has the potential to contribute to the expansion of research in similar settings of land redistribution.

Findings from this study cannot be generalized to other farms, but research in the area can be extended to other farms in the province and beyond.

In terms of reliability, Ary et al. (p. 250) asserted that the concept can be distinguished from validity based on measurement error (i.e., random and systematic error). According to Ary and colleagues, random error pertains to error that occurs by chance, and this error could either overestimate or underestimate individual scores and may be difficult to detect. Reliability of a study is concerned with the effect of random errors on the consistency of the scores obtained. Reliability is determined by how consistently the instrument measures the phenomenon under study. Pre-testing was performed in order to address aspects of both reliability and validity. Details on pre-testing are discussed later in the chapter.

Reliability appears in the form of internal consistency as well as external consistency. Internal consistency refers to the extent to which measures are consistent; whereas external consistency is confirmed when similar results will be observed when a study is replicated (Zeller and Carmines, 1980). Ary et al. (2002) asserted that reliability is not concerned with the meaning and interpretation of the scores because that is a validity question (p. 267).

Generally, it is acknowledged that reliability is essential but not a sufficient condition for validity to occur due to reasons that pertain to systematic or non-random error (Ary et al., 2002, p. 251; Rubin and Babbie, 1997, p. 184; Zeller and Carmines, 1980). These authors declared that valid factors are those that contain true score variance. According to Downing (2003), research instruments can be validated either by confirming or denying the hypotheses predicted from a theory based on constructs.

Random error poses a greater threat and tends to reduce the validity of a study (Ary et al., 2002, p. 267; Rubin and Babbie, 1997, p. 168; Zeller and Carmines, 1980). It is a general

consensus that random error is hard to estimate, detect or eliminate by statistical tools only, but it requires theoretical insights that would boost the predictive power in the research design.

Statistical analysis should try to reject a false null hypothesis (Type II error). Rossi, Lipsey, and Freeman (2004) asserted that Type II error is more difficult to control because it requires configuring the research design so that it has adequate statistical power. Rossi and colleagues defined statistical power as “the probability that an estimate of the independent variable will be statistically significant when it represents a real effect” (p. 309).

Social desirability and acquiescence are sources of systematic error and these were a threat to the study. Social desirability refers to the tendency by study subjects to provide responses that may be more acceptable rather than responses that participants would give under neutral conditions (Matthew, Baker, and Spillers, 2003). Bryman (2004, p. 127) and DeVillis (2003) asserted that study participants tend to agree or disagree consistently with a set of questions and this pattern is referred to as acquiescence. Acquiescence is prevalent with scale response type questions and social desirability is likely to occur with interview type questions (Matthew et al., 2003).

Given the manner in which groups under study had evolved, social desirability was expected to be a threat because it was assumed that group members had developed a “sense of belonging” and wanted to be loyal to their groups. During data collection, social desirability was apparent when responses were used to camouflage the dynamics within the groups, particularly by members of leadership. However, informal conversations were used to corroborate responses. Individual respondents brought forth additional information and this resulted in lengthy question-and-answer sequences, but additional information created room for probing. However, this often resulted in respondent fatigue and data collection schedules were marked for potential

respondent fatigue. The following section introduces the procedure that was followed when selecting study participants.

Population and Sampling Procedure

A nation wide database on redistributed farms was obtained from the Human Sciences Research Council in Pretoria. From this list, a total of 77 farms were identified as those that were redistributed under the Settlement and Land Acquisition Grant (SLAG) across the six districts of Limpopo Province. Of 77 farms in the province, 29 were allocated in Capricorn District and these were considered as the sampling frame. Capricorn District is comprised of two municipalities (Polokwane and Molemole). During sampling, an actual inventory of the farms was conducted by physically visiting farms. Discussions were also held with extension officers about the availability and accessibility of farms. After these exercises, only thirteen farms were identified as operational, and the rest (16 farms) had collapsed and were shut down. As a result, study farms (n=13) were treated as a population of surviving farms. Garson (2006) noted that nonrandom sampling can be appropriate in exploratory studies or where it is the only alternative. Five of the study farms were located in Polokwane, and eight study farms were located in Molemole Municipality. See Figures 3-1 and 3-2 for the location of the study farms in the provinces as well as their distribution across the two municipalities.

The number of participants in the study farms was dependent upon the size of the group at the time of the study. From the 13 farms, data were collected from 137 respondents. Participation in the study by respondents was voluntary as required by the Institutional Review Board. A protocol was submitted to UFIRB for approval prior to pre-testing (UFIRB #2006-U-0436). Revisions based on pre-testing were resubmitted electronically to UFIRB and data collection was resumed upon approval. A copy of the approved protocol is attached in Appendix A.

Research Instruments

Data collection was conducted both at the farm level (n=13) and at the individual level (n=137). A farm inventory tool was used as well as group interviews to collect data at the farm level. The degree of perceived group cohesiveness and explanatory factors were measured at the individual level. Therefore, measurement was performed at different levels (i.e., interval, ordinal, and nominal). Data collection instruments utilized are discussed in detail below.

Group environment questionnaire (GEQ)

Carron et al. (1985) developed the group environment questionnaire (GEQ) as a measure for perceived group cohesiveness, and this instrument was adapted in this study. The (GEQ) is a 9-point Likert-type scale consisting of 18 items (rating scale from 1= strongly disagree to 9= strongly agree). Perceived group cohesiveness was measured as an outcome variable, and the larger the score, the stronger the perception. Group cohesiveness is multidimensional, and the dimensions are evaluated through various indices. Notably, the four dimensions of group cohesiveness include group integration-task (GI-T); group integration-social (GI-S), individual attractions to group-task (ATG-T), and individual attractions to group-social (ATG-S). Individual indices are comprised by multiple items; thus, group cohesiveness is a complex composite latent variable. Sommer and Sommer (2002) and DeVellis (2003) asserted that multiple items are a good way to increase the reliability of scales. Cronbach's Alpha coefficients for the four constructs are reported in Table 3.1 and these range from moderate to high (.64 to .76).

Carron et al. (1985) proposed that the social aspect of group cohesiveness relates to the general orientation toward developing and maintaining social relationships within a group, whereas task aspects relate to achieving goals and objectives. Group cohesiveness is generally viewed through forces that cause individual group members to remain and continue their

participation in a group. The operational definition of individual attractions to group-task (ATG-T) is based on the perceived functionality of groups (farms) by individual members. Therefore, farms were considered as entities that are “source and means” for achieving desirable outcomes or benefits. Individual attraction to the group-social (ATG-S) is associated with interpersonal interactions among members of groups. Characteristics of individual members such as age, sex, level of education, to mention a few were treated as antecedent variables.

At the group level, group integration represents perceptions concerning the group in its entirety and the factors influencing continued existence of the group. The degree to which individual members of groups are involved in both task and social aspects determines their continued participation in the groups.

Post hoc reliability analysis was performed and scale items were selected for further analysis. Details on post hoc reliability analysis are presented later in this chapter. GEQ was administered in the local language of Sepedi. Unlike the traditional approach of the self-administered instrument, the GEQ was administered one-on-one. Minor changes in the GEQ were made. For example, a term such as “team” was replaced by “group,” and work place by “farm”. Instruments used in the study are attached in Appendix C.

Questionnaires and indices

Questionnaires were developed and used to obtain factual and straightforward data. Data were gathered on the structural characteristics of the farms (n=13). Farms were characterized in terms of the number of group members remaining, ongoing activities, and the degree to which support services were provided. Other scale response format measures were developed to collect data at the individual level and were used in conjunction with GEQ.

Nominal data were collected on the demographics of individual group members. Explanatory factors included perceived degree of group governance and degree of satisfaction

with benefits. The degree of group governance was measured in terms of the flow of information through decision making, problem solving, record keeping practices, as well as the adherence to the rules used to allocate benefits to ensure equitable distribution. The degree to which individual group members in farm groups were satisfied with benefits was measured in terms of the importance of benefits, satisfaction with benefits, as well as the degree to which benefits acquired improved the standard of living for group members.

Explanatory variables were measured using scale response type format questions rated from 1 (strongly disagree) to 5 (strongly agree), 1 (few) to 5 (too many), 1 (not important) to 5 (very important), 1 (not satisfied at all) to 5 (completely satisfied), 1 (much lower) to 5 (much higher), 1 (not very useful) to 4 (very useful), 1 (never) to 5 (always). The higher the score, the stronger the perception on the item. Individual items on the measures were also subjected to post hoc reliability analysis. Details on reliability analysis are presented later in the chapter.

Explanatory variables were formulated based on the literature and multiple items were used to construct instruments. During instrument development, questions were evaluated through a consultative process. Peer review sessions were conducted and questions were evaluated based on interpretation and meaning. Questions were then selected based on discussions during peer reviews. Reviews were also conducted with experts. Prior to pre-testing, peer reviewers and experts involved were both graduate students and professors from the University of Florida.

Questions were eliminated based on their lack of importance, and some were added during review sessions. Peer review sessions identified culturally sensitive questions and questions were rephrased with appropriate wording. The question format was also evaluated in terms of post data collection processes such as coding and data entry. Follow-up questions were formulated to ensure internal consistency of measurements. Questions were retained based on clarity and

relevance to the concept under consideration. Leading questions were either eliminated or rephrased. Other considerations were based on the wording order, spelling errors and typographical errors.

During pre-testing, review sessions were continued and questions were evaluated based either on the difficulty to ask or simplicity to answer. Addressing validity and reliability was challenged at multiple stages of the study, and statistical analyses formed the latter part of the process. Given the inverse relationship between reliability and precision, addressing reliability was more important than addressing precision. However, the measures of perceived group cohesiveness included both positive and negative items and, thus, addressed precision to a certain extent. Negative scale items were reverse coded during data analysis.

Discussion guide for group interviews

Nominal data were collected through group interviews. Group interviews were used to determine the experiences that led to the evolution of current farm groups. Detailed information was collected on the processes by which current farm groups had evolved, particularly in terms of production activities as well as governance. Interviews were important given that group cohesiveness is cyclical and can vary depending on the phase in group development. Probing was used as a follow up technique during discussions.

Selection of participants for group interviews was left to group members, and this method allowed rapport within the research setting to emerge. The number of participants was largely determined by the size of the groups in study farms. The ability to participate in group interviews was also determined by ongoing tasks at the time the interviews were scheduled. However, member checking was conducted, and informal conversations were used to corroborate data collected from the group participants who were involved in group interviews. Other informal

discussions were held with extension officers and these were used as strategically to increase the understanding of the farms.

Although the number of participants varied from one farm to another, a focus group interview approach was used to conduct group interviews. The researcher moderated discussions and proceedings were recorded with an audio tape with prior permission granted by the participants. According the Berg (2004, p. 123), the role of a moderator is to elicit information from the participants on the subject of interest. The moderator facilitates group discussions (Wilkinson, 2004, p. 178). Transcriptions were performed and data were open coded for thematic analysis.

Topics in the discussion guide were developed through a consultative process and these are included in Appendix C. Revisions were made based on the contributions from peers as well as from experts. The decision to conduct group interviews was made after pre-testing. Peer reviewers and experts included graduate students and professors at the University of Limpopo, South Africa. Topics in the discussion guide were further clarified for meaning and interpretation.

Pre-testing research instruments

Pre-testing was performed for the purposes of addressing construct validity and two farms were used for this exercise. Pre-testing is deemed an appropriate measure to reduce the likelihood of systematic error. Rubin and Babbie (1997) proposed that systematic error is explained by the disconnect between data collected and the theoretical concept under consideration (p. 161). Sommer and Sommer (2002) asserted that pre-testing of research instruments also helps in identifying difficult and ambiguous terms. Addressing reliability and validity of the measurements aided in reducing the likelihood of errors.

During pre-testing, it was difficult to administer and score the 9-point Likert-type scale. As a result, a decision was made to collapse the 9-point scale into 5-points. Shapcott, Carron, Burke, Bradshaw and Estabrooks (2006) adapted measures of cohesiveness as a 5-point scale. Furthermore, Emons, Sijtsma and Meijer (2007) observed small differences between dichotomous and polytomous scale items. Given the prevalence of low levels of literacy among respondents, a step ladder with 5 steps was used to illustrate the 5-point scale to the respondents.

Research assistants were recruited from the University of Limpopo and were trained prior to pre-testing. Instruments were further reviewed and revised based on discussions during training sessions. Research assistants were encouraged to practice question-and-answer style during training sessions. The exercise was performed in the local vernacular of Sepedi. Review sessions were also scheduled after pre-testing visits to the farms, and further revisions were made based on the follow up discussions with research assistants. Research assistants were encouraged to make journal entries during pre-testing and their notes were also discussed after pre-testing.

Collins (2003) indicated that a research process entails data collection through an instrument by the enumerator. Therefore, results observed from a study either derives from the instrument or are due to the effect of the enumerator. Given this consideration, fewer research assistants were retained for further data collection.

Data Collection

This study was conducted between June 2006 and December 2006. Following pre-testing, data collection was conducted in three phases. Initial visits to the farms were made to establish contact and introduce the study as well as present the consent documents (a requirement by UFIRB). Group participants were allowed some time to discuss granting permission for the study to be conducted on their farms. Telephone calls as well as visits were conducted to inquire if permission had been granted, and data collection was only commenced after permission was

granted. In the case where contact details were accessed, leaders of farms were initially contacted by telephone and the purpose of the study was explained to them. The leaders at times shared the information with other group members and in such cases permission was granted on the day of the first visit. In such instances, leaders also gave consent for collecting farm inventory data on the first visit.

In other instances, farm level data were collected during subsequent visits and mainly leaders of farms generally participated during this stage (n=13). Group interviews were conducted during the second phase. The third phase of the study entailed data collection at the individual level (n=137). Likert-type scale and other scale response type format measures were used. Interview techniques were blended during data collection at the individual level. Pointed questions and probing were used to follow up on the latent meaning of specific responses. Worster and Abrams (2005) found that pointed questions and probing were useful for revisiting questions that were either not adequately answered or for following up on interesting points. Therefore open-ended type responses were also obtained concurrently with data collected at the individual level.

More background information on the farms was attained by reviewing documents such as business plans, constitutions, and the deed of trusts. Informal discussions were also held with extension officers from the Limpopo Department of Agriculture. Getting an outside perspective through informal conversations was useful and provided a broader understanding of the dynamics of the farms.

Unstructured observations were also conducted throughout the study. However, performing observations was a challenge prior to establishing rapport with individuals on the farms. Informal conversations were held with members of groups either during task performance

on the farms or outside of the farms. The content of the conversations was noted; however, such statements were handled with caution and were mainly used to corroborate other responses, and to render general information about the farms. Conducting group interviews prior to data collection at the individual level was important because it gave the basis for evaluating individual responses. A journal was kept by the researcher and informal conversations were recorded. The journal was updated after each visit to the farms.

Social exchange theory was utilized for the purposes of establishing rapport with members of farm groups. This theory is based on exchanges as tokens of appreciation between the parties involved in a research study. Dillman (2000, p. 14) asserted there are many ways in which perceived costs for participating in a research study could be reduced. Light refreshments were sometimes offered to participants, and pictures taken during farms visits were printed and taken to the farms during subsequent visits. Whenever possible, the researcher lent a helping hand during task performance and this enhanced rapport prior to data collecting at the individual level.

Data Analysis

Various methods facilitated data collection. As a result, data were collected at various levels of measurement - interval, ordinal, and nominal. Statistical Package for Social Sciences® software (SPSS) was utilized in analyzing data. Descriptive statistics were used to assess measures of central tendency as well as the distribution of data. Missing data of less than 5% were not imputed (Norušis, 2003, p. 273).

Multiple measures on perceptions were summated and scores were computed for individual respondents. Only items that were retained through reliability analysis were used to compute summated scores. T-test for the equality of means and for the equality of variance was performed. Regression analysis was used to determine causation between perceived group cohesiveness and explanatory variables. The risk of committing a Type II error was minimized

by retaining cases with low cohesiveness. Carron et al. (2003) observed that discarding cases with low levels of cohesiveness tends to weaken statistical power. Nominal data were transcribed and open coding was used to identify emerging themes (Kossak, 2005).

Reliability of Measuring Instruments

Group cohesiveness is a multidimensional construct and was measured using a multidimensional Likert-type scale (Carron et al., 1985). Schafer and Graham (2002) asserted that many latent variables cannot be measured reliably by a single item. Scales are typically created and multiple items are averaged (Clason and Dormody, 1994). Other scale response type items were developed as measures of degree of satisfaction with benefits, the degree of group governance, and degree of satisfaction with support services (n =137). The degree to which support services were provided was measured at the farm level (n =13).

Post hoc reliability analysis was performed to determine Alpha coefficients for individual indices on the Likert-type scale and other scale response type measures (Tables 3-2 to 3-8). Items used in data analysis were selected through Alpha as well as inter-item correlation coefficients. Only the items that were retained are reported in the results. Further iterations were performed until the highest Alpha coefficient level was obtained and inter-item correlation coefficients were relatively consistent internally. As a result, items on the GEQ that were less consistent with other items were deleted. This practice was also performed by Chang and Bordia (2001). For the measures of group cohesiveness, deletion of items was performed at the level of the indices – individual attractions to group-social (IATG-S), individual attractions to group-task (IATG-T), group integration-task (GI-T), and group integration-social (GI-S).

Indices of group cohesiveness had low to moderate reliability coefficients (.51 - .65). However, the overall Alpha coefficient for group cohesiveness was .66. Scales with good measures are expected to yield Alpha coefficients above .80 (Norušis, 2003, p. 438), but a

coefficient of .60 is acceptable for exploratory studies (Garson, 2007). Emons et al. (2007) cautioned that short measuring instruments (less 20 items) tend to have higher probability of measurement error. Emons and colleagues recommended that short tests be combined with other measures in order to increase reliability. Burke et al. (2005) observed Alpha coefficients on the GEQ ranging from .47 to .74. In this study, post hoc overall reliability analysis yielded an Alpha coefficient of .82. The overall Alpha coefficient computed after pre-testing yielded an Alpha coefficient of .76. Final reliability coefficients for respective indices are presented in Appendix B.

Individual measures on the degree of satisfaction with support services had very low reliability coefficients (see Appendix B). As a result, such items are reported as individual measures. Missing data of less than 5% were treated as non responses (Norusis, 2003, p. 273) when computing reliability coefficients.

Summary

This chapter presented the procedures that facilitated the collection of relevant data. A cross-sectional design underpinned this study. Pre-testing of research instruments was performed prior to data collection and revisions were made based on the outcomes of the exercise. The population of the study as well as the sampling procedure were highlighted.

Data collection instruments and instrument development procedures were discussed. Methods of data analysis were explained. Post hoc reliability analysis was presented and selection of items was based on the Alpha coefficients and inter-item total correlation.

Table 3-1 Cronbach's Alpha coefficients for individual indices on the group environment questionnaire

Construct	Alpha coefficient
Individual attractions to group-Task	.75
Individual attractions to group-Social	.64
Group integration-Task	.70
Group integration-Social	.76

Cronbach's Alpha levels adapted from Carron *et al.* (1985, used with permission). Alpha coefficients were derived from a sample size of 247.

Table 3-2 Reliability analysis on the degree of provision of support services

Item	<i>n</i>	Alpha if item deleted
Frequency of farm visits	13	.26
Provision of information	13	.38
Provision of advice	13	.43
Access to finances	13	.67
Access to machinery	13	.54
Accessibility of service providers	13	.64

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .91. Nonresponses were treated as missing data when computing Alpha.

Table 3-3 Reliability analysis on the degree of satisfaction with benefits

Item	<i>n</i>	Alpha if item deleted
Importance of benefits	129	.52
Satisfaction with benefits	129	.52
Improved living standard for self	129	.48
Social classes represented	129	.70
Improved living standard for others	129	.58
Group importance	129	.54

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .70. Nonresponses were treated as missing data when computing Alpha.

Table 3-4 Reliability analysis on the degree of group governance

Item	<i>n</i>	Alpha if item deleted
Involvement in decision-making	131	.83
Involvement in problem-solving	131	.82
Record keeping on expenditures	131	.81
Record keeping on sales	131	.81
Record keeping on all records	131	.81
Benefit allocation rules	131	.84
Equitable distribution of benefits	131	.85

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .84. Nonresponses were treated as missing data when computing Alpha.

Table 3-5 Reliability analysis on individual items of individual attractions to the group-social

Item	<i>n</i>	Alpha if item deleted
I do not enjoy being part of the social activities of this group*	135	.49
I am not going to miss the members of this group when I leave*	135	.25
Some of my best friends are in this group	135	.45
I enjoy other activities more than group activities	135	.51
For me, this group is one of the most important social group to which I belong	135	.37

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .57. Nonresponses were treated as missing data when computing Alpha.

*Items were reverse coded.

Table 3-6 Reliability analysis on individual items of individual attractions to the group-task

Item	<i>n</i>	Alpha if item deleted
I am not happy with the amount of time I spend working in this group*	135	.40
I am unhappy with the group's level of desire to succeed*	135	.35
This group does not give me enough opportunities to improve my personal performance*	135	.52
I do not like style of work in this group*	135	.33

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .52. Nonresponses were treated as missing data when computing Alpha.

*Items were reverse coded.

Table 3-7 Reliability analysis on group integration-task

Item	<i>n</i>	Alpha if item deleted
Our group is united in trying to reach its goals for performance	135	.19
We all take responsibility for any poor performance/mistakes by our group	135	.42
Our group members have conflicting aspirations for the group's performance	135	.51
If members of our groups have problems during work, everyone wants to help them so we can continue working everyone in group helps	135	.41
Members of group do not communicate freely about each person's responsibilities within the group*	135	.42

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Final Alpha coefficient for the index is .51. Nonresponses were treated as missing data when computing Alpha.

*Items were reverse coded.

Table 3-8 Reliability analysis on individual items of group integration-social

Item	<i>n</i>	Alpha if item deleted
Members of our group would not work on their own rather than as a group*	135	.49
Our group members socialize together	135	.33
Our group would like to spend time together off work	135	.11
Members of our group stick together after work	135	.26

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients.

Final coefficient for the index is .65. Nonresponses were treated as missing data when computing Alpha.

*Item was reverse coded.

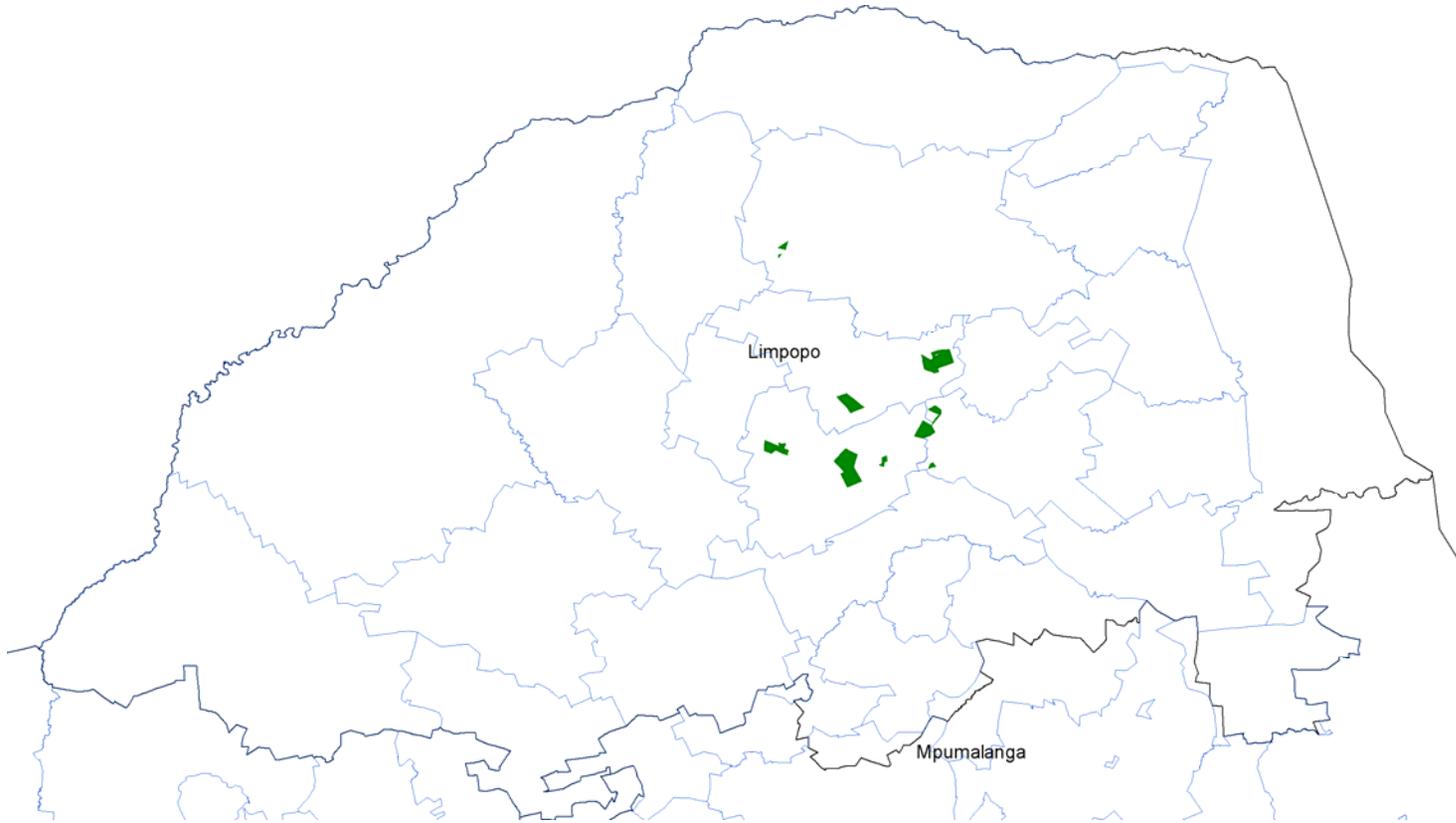


Figure 3-1 Location of study farms in Limpopo Province

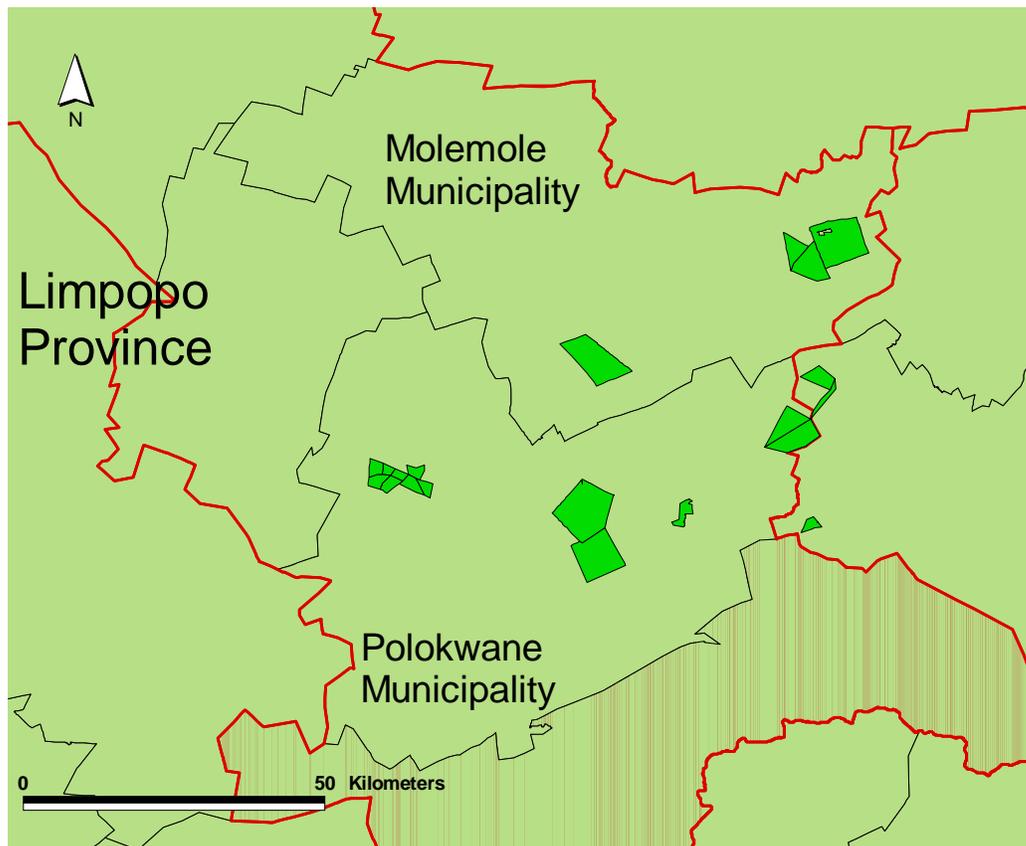


Figure 3-2 Distribution of study farms between the two municipalities

CHAPTER 4 RESULTS

The previous chapter presented research design and methodology that facilitated data collection. Instruments used in the study were presented. At the farm level (n=13), nominal data were collected on the structural characteristics of study farms. At the individual level (n=137), perceptions of group participants were measured on the degree of satisfaction with benefits, the degree of group governance, and the degree of group cohesiveness. Demographics and other nominal data were also collected at the individual level (n=137). Scale response type format responses were summated and scores were computed. T-tests were performed for the equality of means and variance. Other nominal data were open-coded and themes were identified. Linear regression analysis was used to identify causal relationships between perceived group cohesiveness and the explanatory variables.

Profile of Study Farms

The Genesis of Study Farms

Although land redistribution was a country-wide program, reasons for launching claims for the farms under study varied. Therefore, current patterns of membership in the groups under study were indicative of earlier processes that triggered interest in launching land claims. Farms such as Lwala le Meetse, Monyamane, Makamotshe already had ongoing collaborative relations with previous farm owners. Such collaborations included renting out grazing land to livestock owners in the villages nearby, and employing villagers as wage laborers on those farms. Thusanang and Makamotshe had beneficiaries who had been employees and tenants prior to redistribution, whereas the beneficiaries of Mabo 3 and 6 farms had been evicted from the farms and established village settlements near the farms. These villagers launched land claims at the time the redistribution program was instituted.

Fanang diatla, Lehlabile, and Thusanang used to be owned by the same owner and the employees at that time were encouraged to launch claims. Most of the beneficiaries at Marginalized, Watervaal, and Marobala came from the same village – Marobala village. However, these farms were registered as stand-alone entities. Beneficiaries who were entirely new to the farms (i.e., Marobala and Makamotshe) were registered together with those who had been employees of the previous owners. In both farms, all group members remaining are those who had been on the farms as employees, except for one beneficiary in each farm who had come under land redistribution.

Characteristics of Study Farms

Study farms were registered either as trusts or communal property associations (CPAs). Nine of the study farms were trusts, and four were CPAs (Table 4-1). Trust farms were led by boards of trustees, whereas CPAs were led by steering committees. Trust farms were registered with the “deeds office” of South Africa, and were subject to relatively stringent legal procedures as compared to CPA farms. According to the deeds of trusts reviewed, the board of trustees was registered as the legal owner of the trust, whereas CPA farms were administered by the Department of Land Affairs.

Study farms occupied land area of 15,686 hectares, and a total of 1,784 individuals were registered as rightful beneficiaries. Group size based on the number of registered beneficiaries in study farms ranged from 37 to 398 (Table 4-1). At the time of the study, approximately 267 individuals had remained in farm groups based on farm records, representing approximately 15% of the total beneficiaries that were initially registered. Approximately 85% of the beneficiaries had discontinued their participation. According to the farm records reviewed, approximately 45% of the registered beneficiaries actually moved to occupy the farms after settlement (Table 4-1), whereas 55% never turned up to participate in farm group activities. However, Table 4-1

shows that 65% of those who turned up after settlement had discontinued their participation from the farms at the time of the study. In this regard, the turnover rate included beneficiaries who never moved to occupy farms after settlement, as well as those who left the farms at some point.

Income Generating Activities and Remuneration of Farm Labor

Income-generating activities varied on respective farms (Table 4-2), and farms had adopted various strategies for remunerating farm labor. Farms mainly keeping livestock (Lwala le Meetse, Monyamane and Marginalized) sold cattle at least once a year. Makamotshe had fruit trees and remunerated work performed at the end of the marketing season in December, whereas Fanang diatla awaited income from sales in order to remunerate work already performed. Depending on the income generated from sand mining, laborers at Maboi 3 were remunerated on a monthly basis. At Mahlamba ndlovu, employees were remunerated monthly and beneficiaries periodically received in-kind benefits such as maize, periodically. Therefore, distribution of benefits and remuneration for farm labor was generally differentiated according to group position and the rules-in-use varied. Farms renting out grazing land did not have any other ongoing activities due to shortage of water and power supply for an extended period of time. Power cuts were often due to outstanding debt and the theft of power supply equipment.

Ongoing activities ranged from individual to group-based activities. Some of the farms did not permit performance of individual activities, whereas other farms combined both individual and collective activities. On farms that permitted performance of individual activities, parcels of land were demarcated. In Maboi 3 and 6, passive beneficiaries cultivated individual plots of land and were not involved in group activities. Such patterns of land use were sources of tension and conflict among beneficiaries. Remaining group members in Maboi 6 and Lehlabile performed solely individual activities, whereas Thusanang had no income due to failure to maintain citrus fruit trees. According to Table 4-2, the scale of production activities had declined as compared

with the activities that were performed at the early stages of farm occupation. Other constraints that limited production activities included:

- Broken equipment and machinery.
- Limited access to farm inputs.
- Limited access to the market.
- Inefficient allocation of resources.
- Limited access financial assistance.
- Land bank debt.
- Limited follow up with government programs.

Demographic Characteristics of Members of Current Farm Groups

Fifty-five percent of the respondents were female, and forty-five percent were male (Table 4-3). The age range of respondents was between slightly under 30 years to 60 years or more. Farms with the highest proportions of older respondents (i.e. 51-60 years or more) included Marginalized (100%), Monyamane (88%), Makgofe (83%), Lwala le meetse, and Maboi 6 with 60%, respectively. Low levels of literacy were apparent among respondents (69% had no primary education), and only 7% of the respondents had either high school education or post-high school education.

Prior to their engagement on the farms, fifty-six percent of the respondents (56%) had worked in the industry, and mainly male respondents performed such jobs (Table 4-4). Industry jobs included working on commercial farms, building and construction, and mining. Professional job positions most commonly included teaching. Other informal jobs included ownership of small businesses and housekeeping, and these were performed predominantly by female respondents (63%).

Household composition for the respondents included children (85%) as dependents, and 13% of the respondents still lived with parents (Table 4-5). Particularly respondents over 60

years as well as those with children below the age of 14 years (72%) earned government welfare grants as their source of income (Table 4-6).

Respondents in farm groups generally came from either the same village or tribal authority (80%), and the majority (89%) of the respondents were of the Pedi ethnicity, 5% were Vhenda, and 4% were Tsonga. The other 2% of respondents were from other ethnic groups such as Ndebele and Tswana. Positions held by respondents within farm groups are presented below.

Group Positions and Membership Duration

Respondents occupied various positions in farm groups (Table 4-7). Regular beneficiaries constituted 48% of the membership in current farm groups, whereas 27% were hired as laborers. Twenty-six percent of the respondents occupied leadership positions, and 19% were proxy beneficiaries. Members of groups also included respondents who had previously worked on the farms as employees (32%) for the former farm owners. Twenty-one percent of the former employees were not registered as rightful beneficiaries in current farm groups. Nonetheless, former employees (39%) also served as members of leadership. Former employees had become part of the groups either as proxy beneficiaries (27%) or hired laborers (46%). Farms with the highest proportions of respondents who were former employees include Makamotshe (93%), Marobala (75%), and Mabo 3 (68%). One-third of the chairperson's positions were held by females. Both male and female respondents constituted 50% representation in farm committees.

Although the majority of the respondents (92%) had been in the groups for two years or more, some respondents had become part of farm groups later. All members of leadership as well as most of the regular beneficiaries (98%) had been in farm groups for at least two years. Similarly, former employees (32%) had been in the groups for at least two years or more, and one-fourth (25%) were relatively new to the groups (i.e. less than six months). One-third of proxy beneficiaries had been in the groups for less than two years. Group members who had

joined farm groups for less than a year were predominately women (75%). Furthermore, the majority (75%) of proxy beneficiaries were females and a moderate proportion (44%) of the employees were women.

The number of days individual members spent on the farms each week was in part contingent upon ongoing production activities. Fifty-eight percent of the respondents spent between 5-7 days on the farms, whereas 24% spent 3-4 days and 18% spent only 1-2 days (Table 4-8). However, some of the respondents whose farms had little or no activities also spent five or more days on the farms. Therefore, amount of time spent on the farm was largely determined by the ability to commute to the home village.

Respondents whose home villages were distant from the farms (36%) stayed on the farms overnight, whereas those whose village dwellings were in close proximity to farms commuted on a daily basis (74%). A high proportion of the respondents (71%) visited home villages on a weekly basis. There was an overlap between respondents who visited home villages either daily or weekly. Female respondents (61%) visited home villages weekly, while 62% of males visited home once a month. Invariably, farms had rules and regulations regarding home visits as well as contribution toward farm tasks. The ensuing sections present results on the study objectives.

Objective One

Describe Perceptions on Group Development Processes that Led to the Evolution of Current Farm Groups, and Degree of Support Services Provided

Structures of Governance in Farm Groups

Themes that emerged on processes that led to the evolution of study groups are presented in Figure 4-1. Members of leadership in respective farms were elected during land transfer processes. During group interviews, participants indicated that leadership was elected based on the capacity to represent claimants in various forums. Leaders were elected for their relative

competencies and had become signatories on behalf of the claimants. Although current farm groups had the provision to reelect members of leadership, only three of the study farms (i.e., Monyamane, Lwala le Meetse, and Mahlamba ndlovu) had reelected committee members based on specified guidelines. Trust farms in particular had not been able to officially change leadership due to legal procedures associated with the entities. As a result, trust farms operated under interim leadership.

Seven of the study farms did not have functional committees, and four of the farms did not have meeting schedules. For those farms that held meetings, the meetings were held anywhere from weekly to once a month. Farms without committees had the least number of group members (2-6 members). The remaining group participants had become committee members by default. Farm managers were at times co-opted to oversee farm activities. Four of the study farms had managers and these managers were also responsible for establishing and maintaining contacts with various service providers.

Interim leadership was established due to high turnover rates among members of leadership. Participants in group interviews attributed turnover to the prevalence of corruption among members of leadership. Abuse of power, poor management of resources, lack of transparency, and poor communication led to economic bankruptcy and disruption of group governance that had been in place. Consequently, some of the members of groups discontinued their participation in farm groups.

Additionally, participants indicated that there were power struggles between beneficiaries who had been on the farms as employees of the previous owners and those who came through the land redistribution program. Other reasons that were raised during interviews as influencing discontinued participation in farm groups included family responsibilities especially by women,

other employment opportunities, old age, as well as health problems and death. Because the initial group processes had been disrupted, it was apparent that current farm groups did not operate under the framework as it had been anticipated. Hence, various forms of land use patterns, participation in group activities, as well as membership have since evolved. The following section presents such results.

Patterns of Membership, Land Use and Participation in Group Activities

Figure 4-2 illustrates themes that emerged based on the various forms of land use, group membership, and participation in current farm groups. Production activities were centered on various enterprises, both agricultural and non-agricultural. Tasks were performed either individually or by farm groups, and surrogate labor was at times used to perform tasks on behalf of the group. Individual activities can be differentiated between those that were performed based on consensus according to the rules of the group and those that overrode rules used in farm groups. Group participants also included those participating on a part-time. Patterns of participation, membership in current farm groups, and land use are summarized below.

- Group members participating in group activities on full time basis.
- Group members participating in group activities on part-time basis.
- Proxy group members participating in group activities.
- Hired/surrogate group members participating in group activities.
- Members performing exclusively individual activities.

Support Services Provided in Study Farms

Six of the farms received government assistance for purchasing equipment and machinery, as well as other supplies such as vehicles. The extent to which assistance was provided varied depending on the grant amount remaining after land transfers. Other farms had acquired grants from other sponsors – for example, Lehlabile, Thusanang, and Fanang diatla received a common grant and had chicken houses built. Makgofo also built chicken houses through a grant acquired

from the Department of Health and Welfare. However, access to the market was a challenge for most of the farms, and produce was generally sold at the farm gate.

Other forms of support services on the farms were in the form of strategic partnerships. Strategic partners provided assistance and paid off electricity bills and had the power reinstated in Marobala, Lehlabile and Fanang diatla. However, respondents indicated that some of the strategic partnerships resulted in conflict because the parties involved did not always honor the terms of agreement. Other service providers on the farms included academic as well as research agencies.

Measures of central tendency on the degree to which support services were provided are presented in Table 4-9. The mean for all the items was 3.00 and standard deviation ranged from 1.47 to 1.73. Responses on individual items were averaged and summated scores were computed. According to Norušis (2003, p. 469), scores can be subdivided into those that are below and those that are above the median and the same principle was performed by using the mean. As a result, the grand mean ($M= 9.00$) was used as a cut-off point to divide the measures into categories of low and high degree of support provided. The minimum and maximum scores were 3 and 15. As noted in Table 4-10, testing for the equality of the mean ($t= -6.13, p< .000$) was significant but not for the equality of variance ($F= 2.52, p =.14$). The following section presents results on data collected at the individual level.

Objective Two

Describe Perceptions on the Degree of Satisfaction with Benefits, Degree of Group Governance, and Degree of Group Cohesiveness

Perceived Degree of Satisfaction with Benefits in Study Farms

A high proportion (88%) of the respondents earned income from the farms, and 64% benefited in the form of food, and 42% benefited through various educational programs. Only

34% of the respondents earned benefits in the form of firewood, grazing land for livestock, and individual cropping land. Apart from other support services provided, adult basic literacy education program (ABET) was offered at Makgofe, Lwala le Meetse, and Maboi 3.

Measures of central tendency are presented in Table 4-11. Although farm groups and benefits acquired were deemed important ($M= 3.98$), the living standards for respondents ($M =2.89$) as well as that for other group members had remained the same ($M= 3.01$). Respondents were neither satisfied nor dissatisfied with benefits ($M = 3.21$). For all items, the standard deviation ranged from .81 to 1.21. The minimum and maximum scores were 5 and 24. The range was 19.

Individual items were averaged and summated scores were computed. The grand mean ($M= 16.60$) was used to subdivide categories of low and high degree of satisfaction with benefits. As denoted in Table 4-12, the tests for the equality of variance ($F= 5.54, p <.05$) and equality of means ($t= -16.02, p <.000$) for the degree of satisfaction with benefits was significant.

Table 4-13 presents frequency distribution of individual scores between low and high degree of satisfaction with benefits in respective farms. Farms with high proportions of scores below the mean (i.e. low degree of satisfaction with benefits) included Marobala (100%), Marginalized (85%), Makamotshe (67%), Maboi 3 (55%), Monyamane (52%), Makgofe (50%). And the farms with high proportions of scores above the mean (i.e. high degree of satisfaction with benefits) include Fanang diatla (78%), Watervaal (75%), Lwala le Meetse (85%), Mahlamba ndlovu (73%), and Maboi 6 (80%).

Perceived Degree of Group Governance in Study Farms

In Table 4-14, measures of central tendency illustrate strong perceptions on all items of this index. Respondents were involved in both decision-making ($M= 4.04$) and problem-solving ($M= 4.04$) processes, and various records were kept at all times ($M= 4.21$). Benefits were

distributed equitably among group members ($M= 4.20$) and the rules used for allocating benefits to group members were followed ($M= 4.37$). However, the standard deviation was wider for some items than others and these ranged from 1.13 to 1.32. Farms with limited production activities at the time of the study (Makgofo and Marobala) had moderate proportions of respondents who disagreed with the items on recordkeeping. Some of the respondents in Maboi 6 (60%), Fanang diatla (44%), Mahlamba ndlovu (40%), Makgofo (33%), and Maboi 3 (27%), were not always involved in decision-making processes. The minimum and maximum scores ranged were 6 and 35, and the range was 29.

Individual items were averaged and summated scores were computed. Testing for equality of means ($M=29.79$, $t= -8.86$, $p <.000$) and the equality of variance ($F= 59.45$, $p <.000$) on the degree of group governance was significant (Table 4-15). As denoted in Table 4-16, frequency distribution of individual scores in farms with the highest proportions below the mean (i.e. low degree of group governance) include Maboi 6 (100%), Maboi 3 (55%), Mahlamba ndlovu (67%). And those above the mean (i.e., high degree of group governance) included Marginalized (100%), Lwala le meetse (90%), Watervaal (75%), Makgofo (67%), and Makamotshe (73%) and Monyamane (64%), Marobala (60%), Fanang diatla (55%).

Perceived Degree of Group Cohesiveness in Study Farms

Group cohesiveness is a multidimensional construct and both the task and social cohesiveness are considered through two major perspectives – i.e., task and social cohesion (Carron et al., 1985). The two perspectives are: individual attractions to the group and group integration. The degree of perceived group cohesiveness was measured through the indices on *individual attractions to group-social* (ATG-S), *individual attractions to group-task* (ATG-T), *group integration-task* (GI-T), and *group integration-social* (GI-S). Results on individual indices are presented below.

Individual attractions to group-social

Of the five items comprising this index, only three were retained (Table 4-17). The range of the mean for these items represented moderate to strong perceptions (M= 3.39 to 4.05). The standard deviation ranged from 1.02 to 1.29.

Individual attractions to group-task

Only one item was deleted from this index. The mean for all items represented stronger perceptions (M= 3.72 to 4.05), and the standard deviation ranged from 1.12 to 1.17 (Table 4-18). Sixty percent of the respondents at Maboi 6 agreed with the item “I am unhappy with my group’s level of desire to succeed.”

Group integration-task

Only one item was deleted from this index and Table 4-19 presents central tendency on the items that were retained. The mean for the items revealed close to strong perceptions on these items ranging from 3.74 to 3.94. The standard deviation ranged from 1.12 to 1.19. Farms with the least proportions of respondents who agreed with the item “our group is united in trying to reach its goals for performance” included Makgofe (50%), Marginalized (43%), Mahlamba ndlovu (34%), Maboi 6 (20%) and this item had a wider standard deviation as compared to the others (SD= 1.39).

Group integration–social

Of the four items of this index, two were retained. The mean for the two items ranged from 3.25 and 3.39, and the mean represented moderate perceptions on these items. The standard deviation was 1.20 and 1.30 (Table 4-20).

Summated scores on perceived group cohesiveness

Items on the individual indices of perceived group cohesiveness were averaged and summated scores were computed. The minimum and maximum scores were 24 and 60, and the

range was 36. In Table 4-21, the tests for the equality of the means ($M= 44.91$, $t= -15.45$, $p< .000$) was significant, whereas equality of variance ($F= 3.19$, $p= .07$) was approaching significance. Frequencies of individual summated scores in respective farms are presented in Table 4-22. Farms with high proportion of summated scores below the mean (i.e. low degree of group cohesiveness) included Watervaal (75%), Maboi 6 (80%), and Mahlamba ndlovu (60%). Farms with high proportion of summated scores above the median (i.e. high degree of group cohesiveness) include Makamotshe (80%), Marginalized (71%), Lwala le Meetse (70%), Marobala (60%), Monyamane (56%), Maboi 3 (55%), Fanang diatla (55%), and Makgofo (50%).

Objective Three

Describe the Variance Explained by Degree of Satisfaction with Benefits, and Degree of Group Governance on Degree of Perceived Group Cohesiveness

Correlations between Variables

Correlation coefficients with a negative sign are indicative of inverse linear relationships between variables – i.e. when one increase, the other decreases and the opposite is true for positive relationships, and correlation coefficients of zero represent non linear relationships. In Table 4-23, correlation coefficients ranged between low to moderate ($r= .10$ to $.43$). Group cohesiveness had a low to moderate and significant relationships with degree of benefit ($r= .22$) and degree of group governance ($r= .43$). Degree of group governance had a low and significant relationship with degree of satisfaction with benefits ($r= .18$).

Regression Analysis

Explanatory variables utilized in the regression analysis include degree of satisfaction with benefits, and degree of group governance. In Table 4-24, regression analysis on perceived group cohesiveness was significant ($F= 17.45$, $p<.000$). The degree of group governance ($t= 5.16$, $p< .000$) was a significant predictor, and degree of satisfaction with benefits ($t= 1.89$, $p=.06$) was

approaching significance. The multiple correlation (R) from the model is .45. The variance explained by the model was low ($R^2 = .20$), and the adjusted proportion reduction in error was also low ($R^2 = .19$).

Multicollinearity was assessed through the tolerance values as well as the variance inflation factor (VIF). Tolerance values were close to 1; therefore, there were no linear relationships among explanatory variables according to Norušis (2003, p. 273). Also, the variation inflation factor (VIF) values were at least 1. Therefore, explanatory variables were not highly correlated with each other.

Summary

Nominal data were described both at the farm ($n=13$) and the individual level ($n= 137$). Measures of central tendency were used to summarize individual measures on the scale response type format items. Variation between low and high degree of perceptions were explored by using T-test for the equality of means and variance. Linear regression was used to explore the relationship between explanatory variables and the response variable. Open coding was used to identify themes from other nominal data. Findings of this study are discussed in the following chapter, and recommendations and conclusions are also presented.

Table 4-1 Characteristics of study farms - legal entities, land size, registered beneficiaries, initial group sizes, and current group sizes

Farm name	Entity	Land size (ha)	n of registered beneficiaries	n of initial ¹ group size	%	n current group size	%
Mahlamba ndlovu	CPA	2240	398	300	75	72	24
Maboi 3	Trust	4073	300	62	21	44	71
Monyamane	CPA	2320	201	50	25	30	60
Maboi 6	Trust	1565	180	90	50	5	5
Marginalized	Trust	1210	137	30	22	15	50
Lwala le Meetse	CPA	1655	126	110	87	51	46
Makamotshe	Trust	1392	121	52	43	19	37
Marobala	CPA	232	88	25	28	6	24
Watervaal	Trust	324	59	17	29	8	47
Fanang diatla	Trust	617	49	12	51	9	25
Thusanang	Trust	85	45	9	20	2	22
Lehlabile	Trust	59	43	18	42	7	39
Makgofe	Trust	15	137	15	41	5	33

Note. Proportion of initial group size is computed based on the number of registered beneficiaries, and current group size is based on initial group. Current group sizes may include both beneficiaries and non-beneficiaries.

¹= Group size at farm occupation.

Table 4-2 Income generating activities in study farms

Farm	Initial activities	Current activity
Marginalized	Livestock, crops	Cattle sales
Lwala le Meetse	Livestock, vegetables	Cattle sales
Makamotshe	Livestock, fruit, guesthouse	Guava, avocado, and cattle sales, guesthouse
Maboi 3	Livestock, vegetables	Cattle sales & Sand mining
Fanang diatla	Vegetables, chicken	Vegetables
Marobala	Livestock, fruit, vegetables	Sand mining & strategic partners
Thusanang	Chickens, fruit	None
Monyamane	Livestock, crops	Livestock
Mahlamba ndlovu	Livestock, chicken, crops	Livestock, chicken, crops
Makgofe	Chicken, crops	Renting out grazing land
Watervaal	Chicken, crops	Renting out grazing land
Maboi 6	Livestock, crops	None
Lehlabile	Chicken, fruit	Strategic partner

Note. Current activities may not include initial activities.

Table 4-3 Age and level of education among respondents

Demographic		<i>f</i>	%
Sex	Female	76	55
	Male	61	45
Age	51-60 years or more	82	60
	31-50 years	40	29
	30 years or less	13	10
Education	No primary	95	69
	No high school	32	23
	High school or more	10	7

Note. Nonresponses were treated as missing data when computing frequencies.

Table 4-4 Other jobs held by individual members in farm groups

Job	<i>f</i>	%
Industry	77	56
Other	55	40
Professional	4	3

Note. Nonresponses were treated as missing data when computing frequencies.

Table 4-5 Household composition for individual members in farm groups

Household member	<i>f</i>	%
Children	117	85
Spouse	34	25
Parents	18	13

Note. Composition may overlap. Nonresponses were treated as missing data when computing frequencies.

Table 4-6 Other sources of income for individual members in farm groups

Source	<i>f</i>	%
Government grant	99	72
Other sources	45	33
Remittances	27	20

Note. Income sources may overlap. Nonresponses were treated as missing data when computing frequencies.

Table 4-7 Group positions held by individual members in farm groups

Group position	<i>f</i>	%
Regular beneficiaries	65	47
Committee members	36	26
Employees	36	26
Proxy beneficiaries	26	19

Note. Group positions may overlap. Nonresponses were treated as missing data when computing frequencies.

Table 4-8 Days spent on the farm each week by individual respondents

Days spent on farm	<i>f</i>	%
5-7 days	79	58
3-4 days	32	23
1-2 days	24	17

Note. Nonresponses were treated as missing data when computing frequencies.

Table 4-9 Summary of items on the degree of support services provided

Item	<i>n</i>	<i>M</i>	<i>SD</i>
Frequency of farm visits	13	3.00	1.47
Provision of information	13	3.00	1.73
Provision of advice	13	3.00	1.73

Note. Rating scale: 1= Never to 5= Always. *M*= Mean, *SD*= Standard deviation.

Table 4-10 Effect of low and high degree of perceived provision of support services in study farms

Item	<i>f</i>	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>p</i>
Low degree of support	8	2.21	.89	.31	.000
High degree of support	5	4.20	.69	.31	

f= Frequency, *M*= Mean, *SD*= Standard deviation, *SE*= Standard error.

Table 4-11 Summary of responses on degree of satisfaction with benefits

Item	<i>n</i>	<i>M</i>	<i>SD</i>
Importance of benefits	137	3.98	1.13
Satisfaction with benefits	137	3.21	1.21
Improved living standard for self	136	2.89	1.13
Improved living standard for others	131	3.01	.81
Group importance	137	3.68	1.21

Note. Rating scale: 1= Very few to 5= Too many, 1= Not satisfied to 5= Completely satisfied, 1= Much lower to 5= Much higher, 1= Not important at all to 5= Very important. Nonresponses were treated as missing data when computing descriptive statistics. *M*= Mean, *SD*= Standard deviation.

Table 4-12 Effect of low and high degree of perceived satisfaction with benefits

Item	<i>f</i>	%	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>p</i>
Low degree of satisfaction with benefits	61	45	13.18	2.63	.33	.000
High degree of satisfaction with benefits	76	55	19.35	1.86	.21	

Note. *f*= Frequency, *M*= Mean, *SD*= Standard deviation, *SE*= Standard error.

Table 4-13 Frequencies between low and high degree of perceived satisfaction with benefits in respective farms

Farm	Degree of satisfaction with benefits			
	Low		High	
	<i>f</i>	%	<i>f</i>	%
Marobala	5	100	0	0
Marginalized	6	86	1	14
Makamotshe	10	67	5	33
Maboi 3	12	55	45	27
Monyamane	13	52	12	48
Makgofe	3	50	3	50
Thusanang	1	50	1	50
Mahlamba ndlovu	4	27	11	73
Watervaal	1	25	3	75
Fanang diatla	2	22	7	78
Maboi 6	1	20	4	80
Lwala le meetse	3	15	17	85
Lehlabile	0	0	2	100

Note. Frequencies are based on the number of respondents per farm. Nonresponses were treated as missing data when computing summated scores.

Table 4-14 Summary of responses on degree of perceived group governance

Item	<i>n</i>	<i>M</i>	<i>SD</i>
Involvement in decision-making	137	4.04	1.32
Involvement in problem-solving	137	4.31	1.17
Record keeping on expenditures	136	4.41	1.14
Record keeping on sales	137	4.41	1.13
Record keeping on all records	137	4.21	1.30
Benefit allocation rules	132	4.37	1.13
Equitable distribution of benefits	137	4.20	1.23

Note. Rating scale: 1= Never to 5= Always and 1=Strongly disagree to 5= Strongly agree. Nonresponses were treated as missing data when computing summated scores. *M*= Mean, *SD*= Standard deviation.

Table 4-15 Effect of low and high degree of perceived degree of group governance

Item	<i>f</i>	%	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>p</i>
Low degree of group governance	48	35	22.91	6.01	.86	.000
High degree of group governance	89	65	33.50	1.69	.17	

Note. Statistics are computed only on items retained during reliability analysis. *f*= Frequency, *M*= Mean, *SD*= Standard deviation, *SE*= Standard error.

Table 4-16 Frequencies between low and high degree of perceived group governance in respective farms

Farm	Degree of perceived group governance			
	Low		High	
	<i>f</i>	%	<i>f</i>	%
Maboi 6	5	100	0	0
Mahlamba ndlovu	10	67	5	33
Maboi 3	12	55	10	45
Monyamane	9	46	16	64
Marobala	2	40	3	60
Makgofe	2	33	4	67
Makamotshe	4	27	11	73
Fanang diatla	1	11	8	89
Lwala le meetse	2	10	18	90
Marginalized	0	0	7	100
Thusanang	0	0	2	100
Lehlabile	0	0	2	100

Note. Frequencies are based on the number of respondents per farm. Nonresponses were treated as missing data when computing frequencies.

Table 4-17 Summary of responses on individual items of individual attractions to the group-social

Item	<i>n</i>	<i>M</i>	<i>SD</i>
I do not enjoy being part of the social activities of this group*	137	3.39	1.29
I am not going to miss the members of this group when I leave*	137	4.05	1.27
For me, this group is one of the most important social group to which I belong	137	4.02	1.02

Note. Rating scale: 1=Strongly disagree to 5= Strongly agree. *M*= Mean, *SD*= Standard deviation.

*Item reverse coded.

Table 4-18 Summary of responses on individual items of individual attractions to the group-task

Item	<i>n</i>	<i>M</i>	<i>SD</i>
I am not happy with the amount of time I spend working in this group*	137	3.94	1.14
I am unhappy with the group's level of desire to succeed*	137	4.05	1.12
I do not like style of work in this group*	137	3.72	1.17

Note. Rating scale: 1=Strongly disagree to 5= Strongly agree. *M*= Mean, *SD*= Standard deviation.

*Items were reverse coded.

Table 4-19 Summary of responses on group integration-task

Item	<i>n</i>	<i>M</i>	<i>SD</i>
Our group is united in trying to reach its goals for performance	137	3.75	1.39
We all take responsibility for any poor performance/mistakes by our group	137	3.74	1.19
If members of our groups have problems during work, everyone wants to help them so we can continue working everyone in group helps	137	3.94	1.12
Members of group do not communicate freely about each person's responsibilities within the group*	137	3.83	1.19

Note. Rating scale: 1=Strongly disagree to 5= Strongly agree. *M*= Mean, *SD*= Standard deviation.

*Item was reverse coded.

Table 4-20 Summary of responses on individual items of group integration-social

Item	<i>n</i>	<i>M</i>	<i>SD</i>
Our group would like to spend time together off work	135	3.39	1.20
Members of our group do not stick together after work*	135	3.25	1.30

Note. Rating scale: 1= Strongly disagree to 5= Strongly agree. Nonresponses were treated as missing data when computing mean scores. *M*= Mean, *SD*= Standard deviation.

*Item was reverse coded.

Table 4-21 Effect of low and high on the degree perceived group cohesiveness

Item	<i>f</i>	%	<i>M</i>	<i>SD</i>	<i>SE</i>	<i>p</i>
Low perceived group cohesiveness	59	43	38.77	4.71	.61	.000
High perceived group cohesiveness	78	57	49.56	3.45	.39	

Note. *f*= Frequency, *M*= Mean, *SD*= Standard deviation, *SE*= Standard error.

Table 4-22 Frequencies between low and high degree of perceived group cohesiveness in respective farms

Farm	Degree of perceived group cohesiveness			
	Low		High	
	<i>f</i>	%	<i>f</i>	%
Maboi 6	4	80	1	20
Watervaal	3	75	1	25
Mahlamba ndlovu	9	60	6	40
Makgofe	3	50	3	50
Lehlabile	1	50	1	50
Maboi 3	10	45	13	55
Fanang diatla	4	45	5	55
Monyamane	12	44	13	56
Marobala	2	40	3	60
Lwala le meetse	6	30	14	70
Marginalized	2	29	5	71
Makamotshe	3	20	12	80
Thusanang	0	0	2	100

Note. Items are summated for perceived group cohesiveness. Nonresponses were treated as missing data when computing frequencies.

Table 4-23 Correlations between variables

Variable	1	2	3	4	5
1. Sex	-				
2. Education	.06				
3. Age	.06	-.40**			
4. Benefits	.11	.32**	-.23**		
5. Governance	-.09	.11	-.08	.18*	
6. Group cohesiveness	-.08	.09	-.02	.22**	.43**

Note. * Correlation is significant at .05 level (two-tailed)

** Significant at .01 level (two-tailed)

Table 4-24 Regression analysis on perceived group cohesiveness

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Constant	27.82	3.07		8.99	.000
Degree of group governance	.42	.08	.40	5.16	.000*
Degree of satisfaction with benefits	.26	.13	.14	1.89	.06**

Note. * Correlation is significant at .05 level (two-tailed)

** Significant at .01 level (two-tailed).

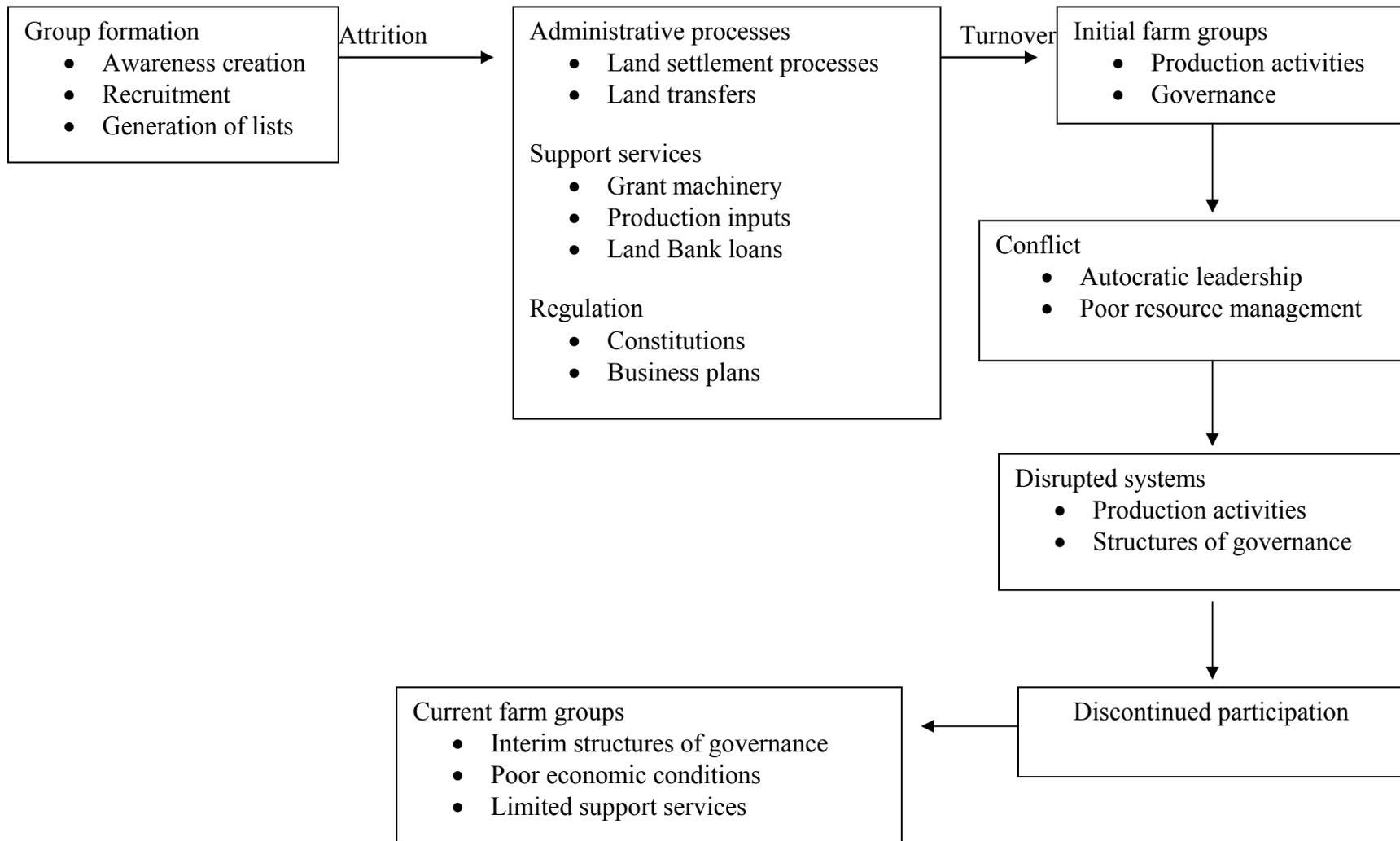


Figure 4-1 Group development processes that led to the evolution of current groups within the study farms

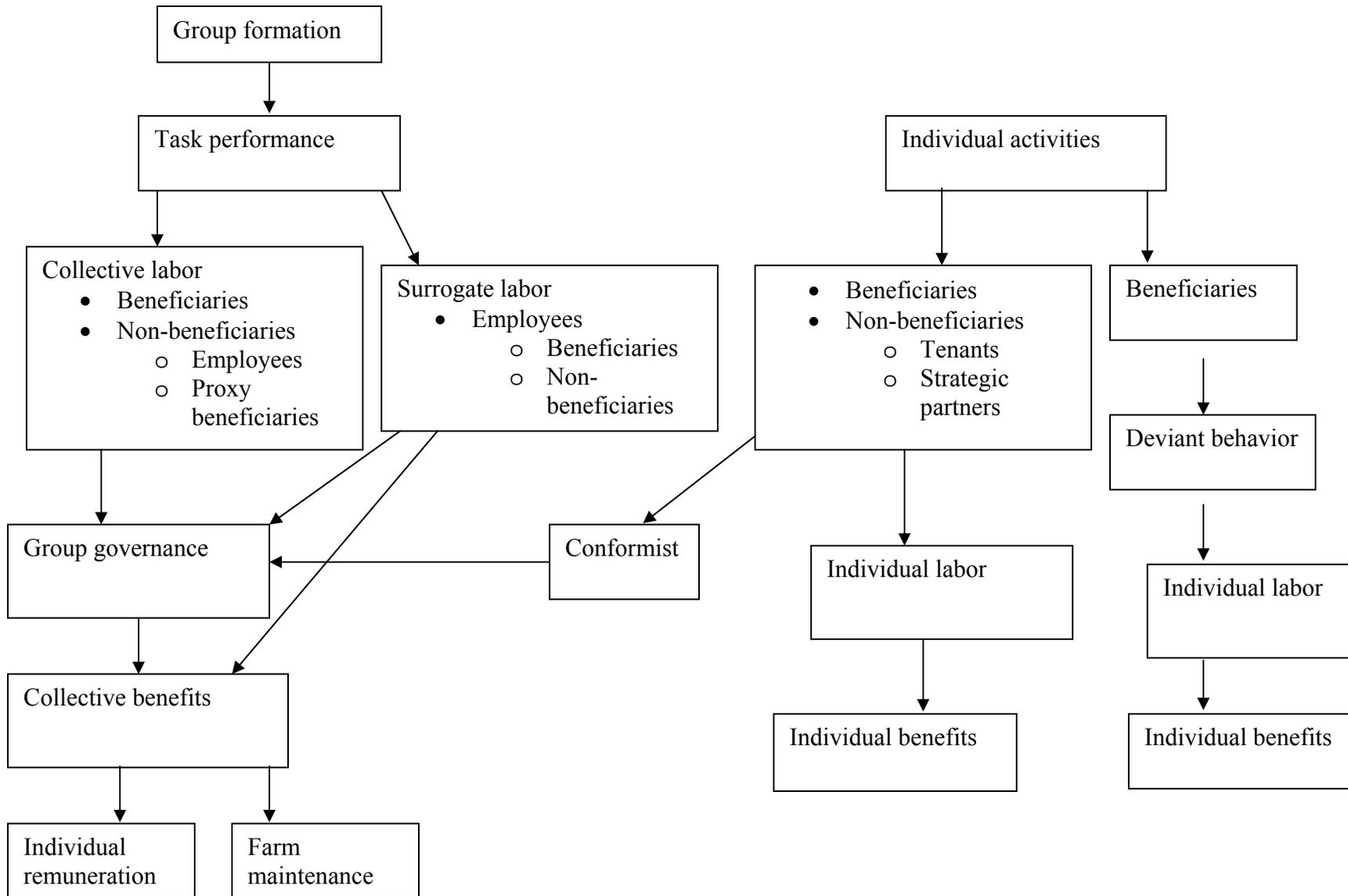


Figure 4-2 Patterns of land use and participation in study farms

CHAPTER 5 DISCUSSION OF RESULTS

This chapter explores the findings of the study as outlined in the previous chapter. The purpose of this study was to explore the degree of perceived group cohesiveness as well as the factors affecting group cohesiveness. The objectives of this study were (a) to describe perceptions of group development processes that led to the evolution of current farm groups, and the degree of support services provided (b) to describe perceptions of individual group members on the degree of satisfaction with benefits, the degree of group governance and the degree of perceived group cohesiveness, and (c) to describe the variance explained by the predictor variables on perceived group cohesiveness.

Structural Characteristics of Farms

Membership vs. Participation in Group Activities

Findings from the study revealed the prevalence of high turnover rates in study farms (Table 4-1). Turnover was attributed to various causes. It was apparent that official status gained by beneficiaries through membership in redistributed farms did not guarantee participation in group activities. In some of the farms, the proportion of beneficiaries who moved to occupy farms was as low as 20%. Borrás (2003) noted that only 18% of the redistributed farms in Brazil continued to be operated by beneficiaries. Participation in group activities in the study farms can only be limited to those who had actually moved to occupy farms and perform production activities, whereas those who never showed up are referred to as passive beneficiaries. Therefore, defining current groups transcends recognition based on official status, and requires actual participation in farm groups. Furthermore, nominal membership also refers to those beneficiaries who discontinued their participation on the farms. Carron (1980, p. 233) defined a group as characterized by purposive interaction in goal directed and interpersonal behavior, likewise

McGrath et al. (2000) defined groups as structured entities that emerge from the purposive, interdependent actions of individuals.

According to Borass (2003), socio-economic status was used as the criterion for selecting beneficiaries eligible for land redistribution in South Africa. However, findings from this study revealed that recruitment and membership was based on open access and self-selection. One of the features of market-led redistribution is that the actual request for land settlement is a prerogative of the eligible beneficiaries. In order to achieve the required group size, interested individuals had to recruit others and in that manner, membership was obtained through generated lists. In contrast, formation of groups in redistributed farms of Colombia was reinforced through pre-existing groups that were based on coincidence rather than on similarity of interest (Deininger, 1999).

Passive beneficiaries in the study farms included beneficiaries who were employed elsewhere. Such beneficiaries held employment as civil servants and others served in other sectors of the industry. Other passive beneficiaries were the elderly and could not participate in farm activities. Women with family responsibilities could not move to the farms that were located far from village dwellings. Other beneficiaries had left farms for other employment opportunities. This finding concurs with McCuster (2004) who observed that beneficiaries in redistributed farms in Limpopo Province tend to discontinue their participation from the farms in search for other livelihood strategies.

Nonetheless, group interviews revealed that widespread dissemination of information as well as raising awareness during settlement processes was not achieved. This was especially true among beneficiaries who came from different villages or tribal authorities. Communication channels were not clearly identified, and prolonged administrative procedures prior to land

settlement led to member attrition. Failure to achieve widespread dissemination of information also resulted in failure to register certain segments of the target audience. These findings suggest that the ability for individuals to gain official status as registered beneficiaries was in part contingent upon the dissemination of information about the program, thus prolonged administrative processes led to member attrition prior to land occupation.

Some of the individuals who had been on the farms as employees for the previous owners were left unregistered. This practice overlooked the guidelines stipulated by the White Paper on Land Policy (1997, p. 9). Farms that combined individuals who had been on the farms either as former employees or tenants and new entrants experienced a challenge in building rapport. Conflict was rampant because of the temptation by the new entrants to treat those who had been on the farms previously in a subordinate manner. Similar instances were also observed in Brazil (Borras, 2003).

Study farms with group participants who had been on the farms as employees of former owners include, Makamotshe (93%), Marobala (75%), and Maboï 3 (68%). It is worth noting that current farm groups are comprised of both registered beneficiaries and non-beneficiaries (Table 4-7). According to the legal framework of the farms, non-beneficiaries remain out of status, except for proxy beneficiaries who represent passive beneficiaries. Zimmerman (2000) cautioned for exercising care when selecting eligible beneficiaries in order for land redistribution to be inclusive. Figure 4-1 gives an approximate schematic representation in chronological order of the events that led to the evolution of current farm groups.

The study revealed that non-beneficiaries in current farm groups also served in leadership positions. Evidently, current groups have been redefined over time through processes of negotiation and bargaining. It has been apparent that membership in current groups has been

legitimized through participation in group activities for both beneficiaries and non-beneficiaries. Therefore, membership as well as participation in current groups has transcended formal recognition and groups have evolved and developed as defined by those involved.

Patterns of participation in current groups were indicative of the manner in which farm groups have evolved. The patterns based on participation in group activities as well as farm property use rights were apparent. Findings revealed that the boundaries with regard to participation in group activities as well as land use rights had been redefined. In some of the farms, both group-oriented use of land as well as individualized usage had been intertwined (Figure 4-2). Passive beneficiaries tended to perform exclusively individual activities, and these included seasonal maize cropping systems as well as access to grazing land for livestock. Therefore, property ownership and land use rights evolved to include collective as well as individual performance of tasks. McCarthy et al. (1998) emphasized that collective action includes resources that combine both private and common ownership of property. McGrath et al. (2000) asserted that as groups form, people, and their intentions, and resources become organized into a coordinated network of relations and the group is bound as a social entity. According to McGrath et al., groups eventually learn from their experience and adapt to events occurring in their embedding contexts, thus, groups are not static but evolve.

English et al. (2004) differentiated between unitary and divisible task performance in groups. The current study illustrated that the fragmentation of tasks into individual and collective arrangements was not feasible. Performance of individual activities tended to interfere with group activities. Furthermore, tendencies of inappropriate access to uncontrolled grazing as well as harvesting of firewood could lead to the depletion of the natural resource base. Such behavioral patterns were sources of conflict among land users. Passive beneficiaries particularly

tended to deviate from the rules-in-use, therefore, disrupting governance structures. Details on structures of governance are presented hereunder.

Evolution of Governance in Study Farms

Agrawal (2005, p. 3) indicated that governments have attempted in the past to incorporate co-users of common property resources into the wider net of political relations, and new forms of regulation in communities were created. Agrawal further asserted that governments had introduced new technologies in the form of decentralized and increased participation by co-users in the management of common property resources (p. 7). In the case of redistributed farms, production resources were allocated in the form of farmland, and the government sought to create employment opportunities and contribute toward livelihood systems of indigent segments of the nation. As an innovation, redistributed farms were created as new entities that exposed farm groups to new forms of agricultural production. By using external service providers, the government provided rules and regulations to govern redistributed farms.

According to the deeds of trusts reviewed in some of the trust farms, the boards of trustees were registered as legal owners of farm property. Trust farms were guided by a legal framework that did not permit flexibility as opposed to CPA farms. The need for farm plans and other codified documents such as constitutions were additional pre-requisites of land redistribution (Deininger and May, 2000, p. 13; Lund, 1996, p. 551). External service providers were contracted through a 9% planning grant that was built into the overall budgets allocated for respective farms by the government.

Invariably across farms, constitutions and business plans were meant to regulate the nature of both agricultural as well as group processes beyond land settlement. Evidence from the study farms points out that the creation of legal entities particularly in the form of trust farms resulted in skewed distribution of power among group participants. As a result, conflict was prevalent

within farm groups, and this led to the disruption of tasks performed as well as in the governance of the groups. A respondent said, “*we no longer use the constitution because it causes us to fight among ourselves.*” McGrath et al. (2000) asserted that the rules guiding collective action depend on initial conditions, subsequent situational factors as well as external conditions.

Poor management of farm resources as well as corruption among members of leadership resulted in disrupted group processes in study farms. In addition, poor governance and economic performance led to discontinued participation by some of the group participants. Similar observations were made in Colombia where groups of beneficiaries did not have the capacity to resolve internal conflict and could not achieve common goals, and such problems led to the disruption of group structures (Deininger, 1999).

In this study, turnover by members of initial farm groups further resulted in consequences that were deemed undesirable. Discontinued participation particularly by members of leadership whose names had been endorsed in official documents tended to constrain remaining group members. A study respondent said, “*....there is nothing we can do because we are requested to show the deed of trust in various places we consult for assistance.*” Currently, the legal framework of the farms does not permit deregistration of nominal beneficiaries without consent. During June 2006, the Department of Agriculture made attempts to deregister passive beneficiaries, but such were unsuccessful. A respondent said, “*....it is not for the department to deregister beneficiaries but to provide support.*” The legal procedures that are prescribed for deregistration of passive beneficiaries present a daunting challenge. According to Cartwright and Zander (1968, pp. 53-56), different stages mark the manner in which groups evolve. Carron (1982) maintained that the early stages of group development may be confronted with resolving problems relating to social cohesion much more so than at the later stages of group development.

Furthermore, Agrawal (2005) noted that governmental forms of governance for managing common property resources had often failed to achieve sustainability. As a result, users of such resources tended to develop rules and provided governance structures that were locally derived. However, the effectiveness of such rules in relation to the broader social context has been unclear (p.19). The present study revealed that members of current groups tend to co-develop rules and regulations. Thus, current farm groups evolved and the structures of governance have been reinvented for the purposes of internal use.

The bulk of production inefficiencies experienced on the farms can be traced back to poor governance on the farms. It was apparent that those in leadership positions had become opportunistic and exploited other beneficiaries who seemed to occupy almost a subordinate position. Bettenhausen (1991) declared that establishing and maintaining cooperative work and group norms is essential to effective group performance. Furthermore, Tuckman (1965) illustrated that groups evolve over time, and new group-generated norms may be established in order to ensure that the group continues to exist.

Income Generating Activities in Study Farms

Although, some of the farms had received support either in the form of loans from the Land Bank or the government to purchase machinery, it was evident that the scale of production activities had declined from their origins based on current production activities (Table 4-2). An earlier study revealed that redistributed farms in Limpopo Province and those from the Western Cape generated revenues that were relatively higher in comparison to other provinces (Deininger and May, 2000, p. 13). Interestingly, McCuster (2004) studied CPAs in Limpopo Province and observed little intensification of land use as well as inadequate performance of farm activities. McCuster acknowledged that the study had probably not allowed adequate time in order for evidence on the economic progress of the farms to emerge.

A challenge facing current groups has been managing limited income generally accrued over long periods of time. Group members shared income and little or none was saved for purchasing farm inputs. One respondent said, *“it is difficult to expand the scale of production because income is used mostly for salaries and not inputs.”* Some farms were faced with the challenge of restarting production after a lapse in activity. Examples of such farms include Makgofe, Watervaal, Lehlabile, and Thusanang. One beneficiary said, *“we are just starting from the scratch in this manner.”* Given such evidence, farms had not been able to perform activities as stipulated according to the business plans developed for respective farms. Similarly, farm plans developed for redistributed farms in Brazil and Colombia were not used for purposes they had been intended (Borras, 2003).

Six of the study farms had acquired debt, and three of these farms paid premiums periodically, whereas the other three could not afford to pay back the loans in any manner. Deininger and May (2000, p. 16) warned about protecting beneficiaries of redistributed farms from bankrupt white farmers who some times encouraged beneficiaries to incur debt. Such evidence was raised during group interviews in some of the study farms. Group participants in such farms indicated that they had been summoned, and the farms could possibly be sold by the Land Bank. Bank loans were generally acquired by members of leadership who had discontinued their participation; yet the members in current groups had to settle the outstanding debt. Furthermore, some of the farms had lost their equipment to lenders who confiscated equipment as collateral against the debt.

Provision of Support Services

Three of the study farms did not receive support services at the time of the study, whereas six of the study farms received support services from academic as well as research agencies. These agencies provided technical support in areas such as animal husbandry and marketing.

Tompi Seleka College of Agriculture continued to provide support in some of the farms, and the University of Limpopo was contracted by the Department of Land Affairs to provide entry level training to beneficiaries.

Support services were provided periodically ($M= 3.00$) and services were at times provided on a project basis. The sustainability of support services offered on a project basis may be prone to being questioned. It is questionable whether such an approach fosters an environment of learning through reinforcement of educational opportunities. Members of current groups rarely attended meetings where educational information was shared ($M= 1.88$, $n= 137$). This finding concurs with Aliber (2003) and Aliber et al. (2006) concerning the limited provision of extension services. McCuster (2004) also reported limited training offered to CPA farms. Furthermore, service providers who drafted farm plans did not have the responsibility to provide support for the long term (Deininger, 1999). In addition, the need to coordinate the provision of post-settlement support was observed.

Support services provided by the government on the farms did not necessarily involve extension services. For example, Makgofe built chicken houses from a grant provided by the Department of Health and Welfare, and group members received food parcels from this department at the time of the study because the farm could not provide sustenance. The Department of Health and Welfare also provided other services such as bookkeeping. Services provided varied between farms. It was noted that the provision of support services outside of the Department of Land Affairs tends to be an obstacle to providing effective support services in redistributed farms (Deininger, 1999).

Only the Maboi 3 farm had received the Comprehensive Support for Agricultural Programs (CASAP) to improve the farm infrastructure, whereas Maboi 6 could not access the

CASP grant due to the lack of collective effort. Mahlamba ndlovu was allocated the remainder of the settlement grant to improve infrastructure and purchase additional farm machinery. All of the study farms within the jurisdiction of Polokwane Municipality had applied for grants, whereas the farms in Molemole only became aware of the existence of said grants during this study. This was indicative of the discrepancy regarding dissemination of information between the two municipalities.

Strategic partnerships were another way for the farms to mobilize resources from individuals with access to capital. However, these should be evaluated on a case-by-case basis. One respondent stated, “*we don't want a wealthy person to come and take advantage of us.*” One of the issues tabled for discussion at the Polokwane SLAG Farmers' Cooperative meeting (11-07-2006) was the concern about strategic partners who had taken over some redistributed farms, and beneficiaries had lost access to such farms. Therefore, arrangements based on strategic partnerships had the potential either to enhance or hamper task performance in study farms.

Testing for the equality of means was significant ($t = -6.16, p < .000$). Five of the study farms from Molemole Municipality had a low degree of support services, whereas four of the farms with a high degree of support were under the jurisdiction of Polokwane Municipality. Therefore, the perceived degree to which support services were provided was higher on study farms that were located closer to the provincial headquarters than those that were farther away.

In spite of the findings that support services were only provided occasionally, respondents were satisfied with support services ($M = 3.60, n = 137$). Although respondents rarely attended meetings where educational information was shared ($M = 1.88$), information was shared among group members at all times ($M = 4.44$). Wittenbaum et al. (2004) asserted that the flow of information within a group could either contribute or inhibit group decision-making and the

effectiveness of problem-solving processes. Conscious decision-making in collective action in part involves sharing of information (Poteete and Ostrom, 2003, p. 14).

This section presented earlier experiences in study farms and the themes identified through content analysis were discussed. The following section discusses results from the data collected at the individual level (n=137).

Describing Current Farm Groups

Composition of Groups

Involving women in land redistribution was one of the pre-requisites of land redistribution as was stipulated by the White Paper on Land Policy (1998, p. ix). In addition to the female beneficiaries, other women had become part of current farm groups either as proxy beneficiaries (73%) or employees (44%). Furthermore, group members who had joined farm groups for less than a year at the time of the study were predominantly women (75%). Thus, women did not always possess official status in farm groups. McCuster (2004) observed a high proportion of women in CPA farms in Limpopo Province.

The majority (69%) of current group members were at least 51 years of age or older. Social welfare grants were provided to women at 60 years of age, whereas males received grants at the age of 65. Depending on sex, respondents in this age range (i.e. 60 - 65) earned government grants. Furthermore, respondents with children below the age of 13 years also received child welfare grants. Although the majority of the respondents (85%) had dependent children, it was common for respondents to live with grandchildren, and also unemployed adult children. Another important source of income was remittances. Elderly respondents with live-in grandchildren received remittances from the parents of said grandchildren who had migrated in search of employment. Although skepticism was expressed against the provision of welfare

grants in South Africa (Aliber et al., 2006), it was observed that welfare grants provided to the elderly were an important source of income among the indigent (May, 2000, p. 25).

Household composition generally included extended family members. Male respondents in particular had spouses who received welfare grants because women received grants earlier than men, and in some cases both spouses received social welfare grants. When asked to differentiate between group members based on socio-economic status, respondents identified either receiving remittances or receiving government grants by both spouses as indicators of being relatively better-off.

Livelihood strategies of the respondents were characterized by low levels of literacy as indicative of the kinds of jobs performed in the past. Industry jobs included farm work, building and construction, and mining, with men mainly having performed such jobs. Women performed other informal jobs such as housekeeping, sales persons in retail stores as well as being entrepreneurs. A limited number of respondents performed professional jobs such as teaching, nursing, whereas some of the younger respondents had post high school education but were unemployed at the time of the study.

Current farm groups were comprised mostly of the elderly, and a similar observation was made by McCuster (2004). Therefore, the predominance of the elderly among respondents may be a potential threat to the longevity of the current groups. Bettenhausen (1991) noted that group processes and outcomes are affected by the degree to which group members are similar or bring unique qualities to the group. Resources that are deemed necessary in a group may include knowledge, skills, abilities, or tools that the individual members bring to the group (Carron, 1980, p. 209). Therefore, the prevalence of low literacy levels in study farms may not foster a synergistic environment. However, another school of thought suggested that the belief about

one's ability to successfully execute a given task does not depend on skills, but on the judgment (efficacy) of what one can accomplish with the skills (Bandura, 1986, p. 391).

Are Members of Current Farm Groups Satisfied with Benefits?

Scholarship on task-oriented groups is based on the the ability to derive likely benefits by the members. Similarly, Thorp, Stewart and Heyer (2005) claimed that group formation among the indigent has great potential for enabling the members to reach their goals. However, Stocker (2004) argued that the outcomes of a given project may not be as important as the values embodied in the project. Myatt and Wallace (2003) postulated that it is tempting to think that subscription to a particular group implies participation in collective activities leading to achievement of likely benefits. Yet, Veraghesse and Ostrom (2001) argued that neither group membership nor group size will ensure the success of a given project or task. Experiences from redistributed farms are in line with the assertion made by Sugden (1984). Sugden declared that there is no guarantee that likely benefits will be achieved from collective action, even though access to all necessary tools required may be guaranteed. McCuster (2004) observed that lack of productive use of farmland in CPA farms led to limited acquisition of benefits and discontinued participation on farms as members searched for alternative livelihood strategies.

In this study, the benefits that were acquired by respondents as well as by the groups were deemed important. However, the living standards of group participants had not improved ($M=2.89$). Therefore, the contribution made by the farms to the livelihoods among the respondents was not apparent. A respondent stated, "*the farm sustains us when we produce and sell, so our past successes give us hope.*" This was indicative of satisfaction with benefits not necessarily based on the condition of the farms at the time of the study, but previous achievements were sometimes considered and used as the basis for reflection by some respondents. Participants who had worked as employees for the previous owners often indicated that they were willing to

persevere because it was possible to derive a living out of the farms as evidenced by their previous employers.

Testing for the equality of the mean ($M= 16.60$, $t= -16.02$, $p< .000$) and variance ($F= 5.54$, $p< .05$) on the degree of satisfaction with benefits was significant (Table 4-12). Farms with high proportions of individual scores (Table 4-13) below the mean (i.e., low degree of satisfaction with benefits) were characterized in terms of sporadic sale of farm produce and remuneration, limited income generating activities, and lack of capital reserves. Income was also generated by non-agricultural activities such as sand mining from the rivers running through some of the farms. The farms in the low degree of satisfaction with benefits category include Marobala (100%), Marginalized (86%), Makamotshe (67%), Maboï 3 (55%), and Monyamane (52%).

Farms with high proportions of individual scores above the mean were characterized by deriving benefits through various mechanisms and these included both individual and group-based activities. Farms that practiced group-based activities were differentiated in terms of ongoing production activities, presence of surrogate labor working on behalf of farm groups, and benefits accrued to both employees and other beneficiaries through a monthly salary. Group participants made contributions in some of the farms toward the salaries of the employees. Deininger and May (2000, p. 15) found that farms with beneficiaries making cash contributions had higher revenues as opposed to those without any contribution. In addition, some of the respondents performed exclusively individual activities. Thus, benefits accrued to individuals. Performance of individual activities was indicative of an emerging aspect on land use rights. Both individual and group-based activities were combined in some of the farms.

Although not a common practice, some of the group participants, mainly beneficiaries, with other employment commitments preferred paying for their working days rather than being

physically present and contributing toward task performance. This practice guaranteed acquisition of benefits for such participants. This practice has raised concerns in relation to the definition of groups based on interaction. Such patterns potentially distort the structure, thus boundaries of the groups become ambiguous. Farms that constituted the high degree of satisfaction with benefits category include Lwala le Meetse (85%), Maboi 6 (80%), Fanang diatla (78%), Watervaal (75%), Mahlamba ndlovu (73%).

The manner in which benefits were derived in study farms varied. The interface between group activities as well as individual activities revealed patterns of land use rights, property ownership, and participation in group activities. However, the manner in which individual tasks were performed either deviated or conformed to the rules of the groups. Performing individual activities tended to lower cooperative effort, and individual activities performed in conjunction with collective activities resulted in conflict in some of the farms.

The Degree of Perceived Group Governance in Current Farm Groups

Study findings demonstrated that current farm groups have evolved as reflected by patterns of membership, participation as well as land use rights that were different from the initial arrangements. Farms can be divided into those with group activities only, as well as those with a combination of both individual and group activities. Members of current farm groups provided collective labor in group activities, whereas individual activities were performed by beneficiaries who either obeyed or ignored from the rules of the groups.

Measures of central tendency demonstrated strong perceptions with regard to group governance. However, possible differences were detected by testing for equality of means ($M=29.79$, $t=-15.55$, $p<.000$) and variance ($F=59.45$, $p<.000$) and the difference between low and high degree of group governance was significant (Table 4-15). Farms with high proportions of summated scores representing low degree of group governance include Maboi 6 (100%),

Mahlamba ndlovu (67%), Maboi 3 (55%). These farms can be differentiated in terms of presence of individual activities, heterogeneity in terms of socio-economic status, limited cooperative effort, and part-time participation by members of leadership. It was observed that heterogeneity resulted in asymmetrical access to resources in some of the farms. Previous studies on collective action observed that social heterogeneity can lower cooperative effort (Dayton-Johnson, 2000; Myatt and Wallace, 2004).

Nominal beneficiaries tended to demarcate land parcels to cultivate seasonal crops and such deviant behavior resulted in conflict between those remaining on the farms. Social heterogeneity also resulted in conflict among those who remained on the farms. In addition to using farm property against the rules and regulations of the farms, nominal beneficiaries vandalized farm property at times. Therefore, farms were confronted with challenges that were both internal and external.

Within the groups, non-beneficiaries were not always involved in decision-making processes and this variability is apparent given the wider standard deviation on the item (SD = 1.32). However, respondents were more likely to be involved in problem-solving than decision-making (SD= 1.17). Respondents who were not always involved in decision-making processes expressed that the farm leadership requested their opinions on matters only when said leaders appeared to be in trouble. Wittenbaum et al. (2004) claimed that the flow of information within a group either contributes or inhibits group decision-making and problem-solving effectiveness. On the other hand, Katz et al. (2004) asserted that interpersonal relationships among group members will largely determine the flow of information and resources.

In this study, variability in remunerating farm labor was symbolic of instances where non-beneficiaries were generally remunerated only for the labor performed, whereas other in-kind

benefits such as quantities of maize were allocated only to beneficiaries. Such tendencies were raised as concerns by non-beneficiaries in the groups. Respondents indicated skepticism about leadership behavior. During individual interviews, illiterate respondents in particular raised concerns regarding their inability to proofread written reports and other records for verification. Such suspicions led to reduced trust in the leadership.

Other concerns that were raised about members of leadership were the tendencies to participate on a part-time basis, whereas other group participants were present at the farms on a full-time basis. At times, members of leadership participating on a part-time basis were in charge of the allocation of farm resources and were perceived as a hindrance to progress by those present on a full-time basis. Members of leadership participating on a part-time basis promoted tendencies that “relaxed” the rules guiding the allocation of benefits in order to adjust for their limited contribution toward farm related activities. Therefore, part-time participation, particularly by members of leadership, had its own limitations. Such tendencies were a source of conflict among group members.

Other farms experienced conflict due to opportunistic behaviors among group participants. Opportunistic behaviors were in the form of loafing, which was prevalent in farm groups that were attempting to resume production activities. Other participants in farms with low cooperative effort were in the early stages of re-organizing themselves in order to initiate collective activities. Forms of deviant behaviors were apparent among group members as well as non-group members. Such behaviors included overriding the rules for tenancy for grazing livestock, and unlawfully using farm machinery to perform individual activities. Conflict of interests between allocating resources for individual activities and collective tasks was apparent.

Farms with high proportions of individual scores representing high degree of group governance (Table 4-16) include Marginalized (100%), Lwala le Meetse (90%), Fanang diatla (89%), Watervaal (75%), Makamotshe (73%), Makgofe (67%), Monyamane (64%), Marobala (60%). These farms were characterized by contributions toward farm expenses, increased group activities, and limited deviant behavior. On such farms, deviant or forms of opportunistic behaviors were penalized and rules and regulation were developed within the groups. Penalties such as substituting or paying for any missed day of work by group participants were imposed. Furthermore, group members were required to satisfy any past dues, including monthly contributions, before benefits were distributed.

Other rules that were exercised in the study farms included a differentiated rate of remuneration for beneficiaries and non-beneficiaries. Although non-beneficiaries were prioritized for remuneration, beneficiaries were generally remunerated at a higher rate than non-beneficiaries. For non-beneficiaries, duration of membership in the group was used at times to determine the rate of remuneration. Therefore, involvement in group activities did not always guarantee equitable distribution of benefits.

The Degree of Perceived Group Cohesiveness

Larger scores on the scale represented stronger perceptions of cohesiveness among group members. Carron et al. (2003) noted that cohesiveness is a positive group property and individuals who retain their membership in a group are unlikely to consistently use all options of the scale. Carron and associates further asserted that participants who perceived their group negatively were likely to disengage from the group.

The standard deviation demonstrated evidence that responses for some of the items were more dispersed around the mean than others. Testing for the equality of means ($M= 47.79$, $t= -15.45$, $p< .000$) was significant, and the equality of variance ($F= 1.53$, $p< .07$) was approaching

significance (Table 4-21). Hardy, Eys and Carron (2005) proposed that the presence of cohesion as an assumption of shared beliefs does not imply that all members of a group perceive cohesion in the same positive light. Hardy and colleagues further asserted that strong perceptions of cohesiveness might reduce the perceived cost of participation in successful groups rather than in unsuccessful groups.

Shared beliefs among group members can be expected to be stronger in groups with more complex task interdependence (Carron et al., 2003). However, it has been suggested that overt behavior may not be consistent with the behavioral intent (perception, beliefs and attitudes) of individual members (Alavi and McCormick, 2004). Alavi and McCormick observed that cohesive groups generally encourage a positive atmosphere which is free from personal squabbles, members benefit from the group, and cooperation and overall performance is improved.

It is worth noting that low cohesiveness (Table 4-22) can be attributed to differences based on performance of individual activities in study farms. Apart from co-ownership of property in one of the farms, there was virtually no collective effort overall. The same applied to the farms with limited production activities at the time the study was conducted. Therefore, fragmentation of activities in some of the farms was practiced. The use of surrogate labor to perform activities on behalf of the group reduced interaction among group participants.

In some instances, beneficiaries contributing little or no direct labor toward the activities of the farm also earned benefits. Therefore, the structure of the groups was not robust and the conceptualization of groups in this regard was distorted. Other beneficiaries who had remained on the farms performed individual activities only. The study revealed that the presence of individuals may not be the only factor necessary for continued engagement, but overt behavioral

practices should be taken into consideration. McGrath et al. (2000) argued that groups are complex, adaptive and dynamic systems, and the systems develop and change over time. Farms with high frequency distribution of individual scores below the mean (i.e. low degree of group cohesiveness) include Watervaal (75%), Maboi 6 (80%), and Mahlamba ndlovu (60%).

It must be noted that farms with high proportions of scores representing high degree of perceived cohesiveness were not without the challenges facing farms with low cohesiveness, but challenges were experienced to a limited extent. A concern that was expressed by some participants in relation to leadership behavior was lack of transparency on finances. Farms did not always have a system of reinvesting income made from enterprises such as cattle husbandry. As a result, group members were at times left with little or no activities to perform except for a few herders who were hired and stayed on the farms on a full time basis. Farms also experienced shortages with the water and power supply at the time of the study and this limited the ability to perform production activities. A respondent stated, “*we persevere because we have a vision and we will continue to participate.*”

Some of the farms operated under a system of clear guidelines and failure to adhere to rules led to penalties. Friedkin (2004) asserted that groups are cohesive when group-level conditions produce positive membership attitudes and behaviors, and interpersonal interactions operate to maintain group-level conditions. Similarly, Tuckman (1965) pointed out that groups evolve over time, and cohesiveness is developed when group members come to accept the group and the idiosyncrasies of other members. Tuckman further asserted that the group becomes an entity by virtue of its acceptance by members, their desire to maintain and continue, as well as the establishment of new group-generated norms to ensure the group’s existence. The farms with high proportion of scores representing high degree of group cohesiveness include Makamotshe

(80%), Marginalized (71%), Lwala le Meetse (70%), Marobala (60%), Monyamane (56%), Maboi 3 (55%), Fanang diatla (55%), and Makgofe (50%).

Farm groups comprising of members who had been on the farms as employees prior to land redistribution had continued their engagement on the farms and continued to reside on the farm premises included Makamotshe (93%), Marobala (75%), and Maboi 3 (68%). In addition, Lwala le Meetse and Monyamane also had collaborations with the previous owners prior to land redistribution. All of these farms also consisted of a considerable number of kinships and some of them had joined farm groups as employees.

Other farms showed moderate degrees of either of low or high cohesiveness. However, farms that may be categorized as success stories under current circumstances are lumped together under a high degree of cohesiveness. It has been expressed that high cohesiveness may be counterproductive to the effectiveness of the group (Evans and Dion, 1991). In contrast, other scholars argued that high levels of cohesiveness may be desirable in that these levels facilitate better task performance and reduced conflict in the group (Hardy et al., 2005). Hardy and colleagues also observed that increasing social cohesion could lead to the formation of cliques or social circles within the group. A reason for employing surrogate labor in the case of the study farms with larger groups was to ensure accountability. Therefore, the notion of “groups within groups” in this study was at times utilized as a mechanism that facilitates task performance.

Factors Influencing Perceived Group Cohesiveness

Regression analysis on perceived group cohesiveness (Table 4-24) was significant ($F=15.21, p<.000$). Group governance ($t=4.68, p<.000$) was a significant predictor of group cohesiveness, whereas the satisfaction with benefits was close to significance ($t=1.89, p=.06$). The multiple correlation (R) from the model was .45, and the model had low predictive power ($R^2=.20$).

The degree of perceived group cohesiveness is symbolic of intentions by members of groups to remain. However, the possibility that intentions by group members to remain in their groups will be influenced by governance and degree satisfaction with benefits cannot be overlooked. Knox and Meizen-Dick (2001) pointed out that the factors that affect the resilience of collective action include among other things, the importance of participation in relation to livelihood systems, the ability to organize and the capacity to manage resources as well as the investment needed to make resources productive. Therefore, the ability by group participants to generate benefits that contribute toward their livelihoods as well as group processes in regard to governance will potentially determine the degree of cohesiveness of study farms.

Summary

The economic viability of study farms was hindered due to poor management of resources and disrupted group structures that led to high turnover rates. As result, various patterns of participation in study farms had emerged. Continued participation in study farms did not guarantee access to adequate support services. The contribution toward the livelihoods of those remaining in current farm groups was not apparent. Governance within current farm groups was developed through naturalistic processes. However, interferences either by the actions of passive beneficiaries or opportunistic behaviors resulted in complex group structures whose boundaries had become ambiguous. A statistical difference was detected between farms of low and high cohesiveness. Regression analysis revealed that group governance and satisfaction with benefits were both important factors. Conclusions and recommendations are presented in the following chapter.

CHAPTER 6 CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Conclusions

Group Membership

Most of the respondents in the current groups had reached the pension age range (60 for women and 65 for men), and the livelihoods of these respondents depended on government welfare grants. Low levels of literacy were prevalent.

Members of current groups included both beneficiaries and non-beneficiaries. Non-beneficiaries did not possess an official status, and these included proxy beneficiaries as well as employees. In some of the farm groups, there was an overlap between the positions held by both beneficiaries and non-beneficiaries. Both beneficiaries and non-beneficiaries were employed as farm wage laborers. Farm employees were differentiated between those who participated in the overall performance of group activities as well as those who provided surrogate labor. As a result, interaction among group participants can be defined in terms of group positions occupied in respective groups. Moreover, current groups can be characterized by the notion of “groups within groups.”

Objective One

Describe Perceptions on Group Development Processes that Led to the Evolution of Current Farm Groups, and the Degree of Support Services Provided

Structural Characteristics of Study Farms

It was apparent that the structural characteristics of farms did not create an enabling environment for collective task performance. Due to disrupted group processes, other forms of land use and participation in group activities had evolved. Disruptions in farm groups were indicative of group development processes that had occurred over time. Initial membership in farm groups was based on official status and membership did not guarantee continued

participation in group activities. Approximately 85% of the registered beneficiaries were no longer part of current farm groups. However, turnover can be pinpointed to various stages of group development. Current farm groups can be differentiated from lists generated during recruitment prior to land settlement. Only those beneficiaries who actually moved to occupy farms after settlement had become part of farm groups, and the rate of turnover can only be estimated based on such individuals. It is also important to note that the proportion of those remaining on the farms is approximate given various patterns of participation and land use.

Current conditions on the farms can be traced back to specific events that occurred over time. Particularly in trust farms, legal entities resulted in asymmetric distribution of power between the leadership and other members of groups. As a result, poor farm management, and corrupt leadership behavior resulted in the disruption of group processes (i.e. governance and task performance).

Production Activities

Invariably, the scale of production activities on the farms had declined over time. Income generating activities varied in respective farms, and various strategies for remunerating farm labor were utilized. Farms with income generating activities earned benefits (generally monetary) sporadically.

Provision of Support Services

The provision of support services on the farms was somewhat pluralistic in nature. Although some of the farms had received government support in the form of machinery and other kinds of inputs, there was an apparent lack of continuity in the provision of support services. Research institutions and other government departments occasionally provided support services. However, the project approach may not be sustainable. Lack of follow-up with government programs had created a sense of distrust of government officials by respondents.

Moreover, there was an apparent lack of coordination between government departments providing support services on the farms.

Strategic partners provided assistance to rejuvenate some of the farms that had collapsed. However, such arrangements did not always yield positive results and should be evaluated on a case-by-case basis.

Objective Two

Describe Perceptions on the Satisfaction with Benefits, Group Governance, and Group Cohesiveness

Satisfaction with Benefits

Benefits earned on the farms were perceived as important. However, the living standards of group participants had not improved. A statistical difference on the degree of satisfaction with benefits was apparent. Farms with high proportions of low scores on the degree of satisfaction with benefits were characterized by lack of limited economic activities, and sporadic remuneration generally earned after a long cycle of production and marketing. Farms with high degree of satisfaction with benefits performed income generating activities and regularly sent produce to the market. Performance of individual activities on such farms was at times permitted.

The degree of satisfaction with benefits can be differentiated based on the mechanisms through which benefits were derived – i.e. individual as well as collective performance of tasks. Benefits were further differentiated according to group position. Employees were remunerated for the labor performed, whereas other benefits accrued to other group participants based on their official recognition as beneficiaries.

Although the study included only those who were present on the farms, contribution toward group activities was not always limited to physical presence and interaction among group participants. Such patterns of participation reflected the complexity of group structures. As a

result, it was difficult to define the boundaries and conceptualize groups given such patterns of participation.

Group Governance

It was apparent that current farm groups had evolved to establish conditions that facilitated emergence of strong perceptions regarding group governance. The difference between farms with low and high degrees of group governance was significant. Groups in low governance farms did not always involve all group participants in decision-making, and not all benefits were allocated to all group participants. This was particularly true for the farms with non-beneficiaries. Performance of individual activities encouraged tendencies to override rules-in-use, and this finding was made it difficult to treat group governance as a matter of internal processes.

Therefore, governance in current groups was not limited to the dynamics inherent within groups, but was also confounded by the interferences due to land use patterns. As a result, governance on the farms transcended participation in group activities, but included aspects of land use rights, and thereby created group structures with boundaries that have been difficult to define. This finding is in line with McGrath et al. (2000) who asserted that groups might have unclear boundaries that distinguish and connect them to the members as well as the specific context.

Group Cohesiveness

A difference was observed between low and high degrees of perceived group cohesiveness. However, care was exercised in examining the low degree of cohesiveness scores. This practice is endorsed by the fact that behavioral intent may not be translated into overt behavior. Furthermore, a low degree of cohesiveness can be indicative of the characteristics of farms and these are presented below:

- Group members performing individual activities.
- Group members having limited interactions.
- Individual and collective activities interfacing.
- Passive beneficiaries performing individual activities.
- Social heterogeneity leading to low cooperative effort.

Farms associated with a low degree of perceived group cohesiveness were characterized by indicators that neither encouraged continued performance of farm tasks nor interaction between group members. Such farms lacked mechanisms to advance collective oriented task performance. Such indicators posed a challenge to the conceptualization of groups in this study. Furthermore, indicators that emerged out of farms of low cohesiveness revealed specific areas that could be targeted for support services.

Farms with higher scores of group cohesiveness were characterized in terms of:

- Past history of work relationships and tenancy on the farm creating group identity.
- Kinships leading to participation in groups.
- Evidence of previous achievements resulting in motivation.

Indicators characterizing farms with a high degree of cohesiveness were indicative of the manner in which farm groups had evolved over time. Farms with group members who had been employees of the previous farm owners had remained. Past history of group members may transcend work related experiences, but also can be traced back to the attachment to the farms developing from generations of workers who resided on the farm premises. Other groups were comprised of family relations and thus, had a high degree of perceived cohesiveness. Other non-farm related indicators also included membership in a common group prior to participation in farm groups. Farms groups with high cohesiveness also had non-beneficiaries as part of the groups. Furthermore, indicators characterizing high cohesion farms are in part key factors that could guide future redistributive programs. These findings do not assume that high cohesion farms were not faced with the constraints that were observed on low cohesion farms. However,

indicators in high cohesion farms may be considered as possible guides to structure future redistributions.

Caution should be taken when differentiating study farms based on either low or high degrees of cohesiveness. Possible biases in the form of social desirability and acquiescence must be considered. It is possible that non-beneficiaries, in particular participating in group activities may have contributed to social desirability. Groups on study farms had emerged out of naturalistic processes of group development, and it was possible for participants to create a false impression about their groups. Furthermore, study groups represented a cohort that is possibly different from other redistributed farms. Therefore, generalizability of the study findings is limited.

Objective Three

Describe the Variance Explained by Satisfaction with Benefits and Group Governance on Group Cohesiveness

The behavioral intent of group members to remain in their groups has a futuristic orientation. However, according to the study findings, the degree to which group members are likely to remain in the groups was influenced by group governance and to a certain degree, satisfaction with benefits. Therefore, the two aspects of group processes cannot be isolated, though their contributions may vary. Governance in current groups has been confronted with challenges due to patterns of participation and land use. Although evidence pointed out that rules had emerged and were developed to facilitate governance in current groups, limited flexibility regarding the legal entities may have been an impediment to progressive group processes. Interference by nominal beneficiaries seemed to be detrimental toward internal group processes, and performance of individual activities was disruptive to management of resources.

Redistributed farms are mainly task-oriented, and the governance of groups is intertwined with task performance. Therefore, failure to address governance and advance production activities may lead to “zero” cohesiveness (i.e., groups may cease to exist). However, the predictive power of these factors on perceived group cohesiveness was low. This observation can be attributed to overemphasis on internal dynamics in regard to group processes, and the failure to account for other intervening variables such as deviant behavior and patterns of participation. This limits internal validity of the study. Nevertheless, these findings necessitate the need to develop context-specific operational variables in future studies. Furthermore, statistical analysis was used to determine causal relationships between specific factors and group cohesiveness. The statistical aspect of the study does not intend to override the practical significance of the study. Hence, it is acknowledged that other factors such as demographics are important.

Moreover, negative items on the group environment questionnaire (GEQ) were difficult to interpret and this problem was observed by others. Such a concern led to the development of revisions on the instrument by Estabrooks and Carron (2000). Although such difficulties were encountered in circumstances where the instrument was self-administered, negative items were challenging to pose as questions during the question-and-answer process and these challenge persisted during data entry and analysis.

Nevertheless, the study addressed construct validity by adapting an instrument that had been standardized (i.e. GEQ), and the deletion of items from the instrument due to low inter-item correlation coefficients further improved internal consistency. An Alpha coefficient of .66 was an acceptable level for an exploratory study. Therefore, the measures employed in this study were reliable. This study paves the way for further explorations of small group research in other redistributed farms.

Implications

It can be deduced from the study findings that the implications of the study are far reaching. South Africa is a nation in its democratic infancy and the issue regarding the ability of the nation to socially construct itself remains a daunting one. Although the goals of land redistribution are multi-pronged (White Paper on Land Policy, 1998, pp. 26-28), findings from the study demonstrate that social inclusion may not be easy to achieve. If land redistribution is aimed at making productive resources accessible, then it is desirable for the beneficiaries to remain on the farms. Current study farms were characterized by high turnover rates, and the impact toward the livelihoods of group participants remaining on the farms was not apparent. Therefore, continued participation on the farms has not provided incentives for those remaining. The importance of land redistribution in South Africa cannot be underestimated. However, it is apparent by a large margin that land redistribution has not achieved the desirable level of impact. It appears that South Africa is “reinventing the wheel” with regard to the implementation of land reform. It has previously been reported that successes have been limited in Sub-Saharan Africa and other parts of the world (Borass, 2003; Griffin et al., 2002).

The study included farms that were settled under SLAG. The thirteen study farms were a population of the surviving farms in Capricorn District, and the other sixteen were shutdown for reasons that may not be easy to unearth due to limited documentation. Two of the farms were not included in the study because only one beneficiary on each of the farms had remained. Other patterns of individual occupation of farms that were meant for groups were also observed on the farms near the study farms. Therefore, redistributed farms should be monitored and evaluated in order to mitigate opportunistic behaviors by self-selected elites who tend to occupy farms in solitude.

It can be argued that SLAG was discredited due to its inadequacies. However, massive resources were invested in the program and that must be considered. In addition, current redistributions are also characterized by group-based acquisition of farmland (Hall, 2004, p.29-39). A point worth noting is that turnover in group settings is inevitable because it is natural for groups to develop in a manner that would cause some of the members to disengage as it was shown by Tuckman (1965). Formation of groups is not a short-term objective for reasons that are associated with naturalistic processes of group development. This observation does not intend to endorse over-reliance on turnover as an indicator of successes and failures. Instead, the current conditions on the farms raise implications that go beyond the context of the farms. An intriguing question emanating from these study findings is whether land redistribution is an effective tool for addressing issues related to rural development.

Another question that remains unanswered within policy-making circles is whether it is worthwhile to invest public resources on the few participants who remain on the farms. Although not to a desirable extent, beneficiaries as well as non-beneficiaries have continued their participation on the farms. The lack of flexibility regarding the current framework may potentially discourage continued participation for group participants who remain out of status. Furthermore, passive beneficiaries whose sole interest is to perform individual activities are a threat to group-oriented task performance. The need to develop mechanisms that would protect group participants cannot be overemphasized. It may not be surprising to learn that the manner in which study farms turned out to be was not anticipated.

However, it must be realized that members remaining in current farm groups represent those who are committed to continue their participation. There is a need to retain younger participants in farm groups given the predominance of older participants. This can only be

achieved if incentives are made to attract younger participants. Therefore, future studies should investigate the forces of attraction among participants in redistributed farms and beyond. And future redistributions could be structured around such study recommendations.

The lessons of land redistribution are crucial to the development of future land policy. The effectiveness of land redistribution will yield limited outcomes if farms cannot be operated profitably by the beneficiaries. Therefore, there is a need to view land redistribution from a collectivist perspective. This approach should be viewed as a process that occurs along a continuum. Failure on one of the links will result in failure in the entire chain. Implementation processes as well as the outcomes should be embraced by the nation as a whole, rather than placing blame on those responsible for facilitation (i.e., Departments of Land Affairs and Agriculture).

Land redistribution was designed to relieve some of the social challenges facing the nation yet evidence points to the deficiencies associated with the program. Future studies relating to food security and the possibility of a decline in food production trends in the country since the institution of land redistribution would be intriguing. It is also questionable if land redistribution displaces poor civilians from their livelihood strategies such as farm labor. If beneficiaries of redistributed farms do not remain on their farms, how is the country going to provide for such beneficiaries? These are complicated questions. However, they have long-term implications for social cohesion in the nation. Furthermore, a question that may need careful consideration is whether or not South Africa has a coherent rural development strategy?

It is acknowledged that the generalizability of this study is limited. However, insights generated from this study are sound. Failure to address challenges facing current farm groups allocated under SLAG may result in similar trends in future redistributions. This necessitates a

comparative analysis of LRAD as well as SLAG farms. Exploring perceived group cohesiveness should be extended to LRAD farms as well as other groups organized around agricultural production.

Other conceptual frameworks such as the theory of reasoned action (TRA) and the theory of planned behavior (TPB) as well as technology acceptance model (TAM) offer potential tools to widen the understanding of other aspects of redistributed farms. Self-efficacy among participants in redistributed farms can be explored to determine the confidence level needed to successfully perform activities on the farms. These theoretical constructs are applicable and can also be explored with the administrators of land redistribution given the set target of allocating 30% of farmland by 2014.

Recommendations

Future Research

1. Patterns of collective action should be differentiated from group formation based on task performance. The conceptual framework of groups in redistributed farms should be clarified.
2. Operational definitions of group cohesiveness that are specific to the context of redistributed farms should be developed.
3. Given the cyclical nature of group cohesiveness, a longitudinal study design should be employed. Causation may be easier to detect with such a design.
4. Other factors that influence perceived group cohesiveness should be explored based on operational definitions and standardized measures should be developed.
5. Probability sampling techniques should be employed in order to increase the generalizability of future study findings.
6. Research should focus on developing indicators of the economic as well as environmental sustainability of redistributed farms.
7. Although there was no evidence of economic progress in most of the study farms, the influence of group cohesiveness on performance should be explored in future research.

Practitioners

1. Support services on redistributed farms are warranted, and extension services should be strengthened. The study revealed specific areas that can be targeted for support and these included:
 - a. Access to the market.
 - b. Management of farms.
 - c. Leadership in farm groups.
 - d. Ownership of property and legal rights.
2. A separate division designated to the support of redistributed farms within government departments should be established in order to ensure accountability. The study revealed that remaining group members did not have reliable contacts within government departments.
3. Coordination of support services provided either by research and academic institutions or government departments is essential.

Policy

1. The emphasis on access to land by land redistribution should be differentiated from the creation of task-oriented groups. Formation of groups may not be a short-term objective. Legalization of farm groups should be performed at later stages of group development and this might prove to be an effective censoring mechanism.
2. In the case of future land redistributions, beneficiaries should be given an opportunity to opt either for group formation or for individual activities as their basis of operation.
3. Beneficiaries should be given an opportunity to renew their status periodically and failure to do so should result in loss of status. The legal frameworks should be made flexible in order to accommodate group participants joining groups at later stages.
4. Beneficiaries should be provided with assistance in the development and adaptation of rules and regulations, and assistance should be offered in farm management.
5. Non-beneficiaries in current groups should be awarded official and secure status in the same way as rightful beneficiaries.
6. Robust mechanisms to protect remaining group members particularly from nominal beneficiaries should be implemented.

Summary

Findings from the study illustrated that the land redistribution program has achieved less success than had been anticipated. Study farms operated under marginal conditions and high

turnover rates were prevalent. Such findings hold implications for the country in its endeavor to integrate civilians in the wider socio-political context. Although manifested at the micro-level, implications from the study raise questions that relate to the ability of the country to foster social cohesion in the long-term.

APPENDIX A
IRB APPROVAL NOTICE



Institutional Review Board

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PO Box 112250
Gainesville, FL 32611-2250
Phone: (352) 392-0433
Fax: (352) 392-2433
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September 25, 2006

MEMORANDUM

To: Tirhani Prudence Manganyi
PO Box 110540
Campus

From: Ira S. Fischler, Ph.D., Chair *ISF*
University of Florida Institutional Review Board 02

Subject: UFIRB Protocol #2006-U-0436
Group Cohesiveness in Redistributed Farms of Limpopo Providence, South Africa

Funding: The National Research Foundation of South Africa, and Oppenheimer Memorial Trust of South Africa

The request, received September 15, 2006 to revise the above referenced protocol has been reviewed and approved. Approval of this study runs through May 8, 2007.

Any further revisions to this protocol, **including the need to increase the number of participants authorized** must be reviewed by the Board prior to implementation.

IF:dl

[revised data collection instruments, sample size, added co-advisor to protocol as one who see data.]

An Equal Opportunity Institution

INFORMED CONSENT

Protocol Title:

Group Cohesiveness in redistributed farms of Limpopo Province, South Africa

My name is Tirhani Manganyi. I am a student from the University of Florida studying agricultural education. I am currently working with the Center for Rural Community Empowerment (CRCE) at the University of Limpopo particularly. I would like to spend some time visiting with you and talking to you about the way in which you're organized and operate as a group and learn about your groups in some detail. The purpose of this study is to learn about issues of group processes and group effectiveness.

Thank you for granting me the permission to become involved this study. I would like to talk to your group leader and ask him/her some questions about how big the group is and if there are people who provide support to the group in any shape or form. Answering my questions will be an indication that you've agreed to participate in the study voluntarily. Most importantly, granting me the permission to work with you as a group means that I'll return to the farm and ask some more questions to individual group members. Your participation in this study is voluntary and I wish to notify you that there'll be no tangible benefit by being involved in this study. You are free not to answer any questions at any time and there won't be any penalty for refraining. Answering the questions will take at the most an hour. I'll be happy to answer some questions from you concerning the study. Each time I visit to the farm for the purposes of data collection, I'll leave one copy of this consent document for you records and I'll also take a signed copy for my records.

All your answers will be treated with confidentiality. Only specific individuals will handle the information that you provide. Research assistants will help me enter the data into the computer and Mr Thierry Lassalle from the University of Limpopo will provide advice on data analysis. Also, data will be shared with my University of Florida academic advisor Dr Nick Place and co-advisor Dr Sandra Russo through email. Any information provided by individual group members will not be shared with other group members, as well as leaders of the groups. There are no risks associated with participating in this study for individual participants and your identity will be kept confidential to the extent provided by law.

Results from this study will be made available to the group and the University of the Limpopo will also have a copy. Also, results from the study will be made available to the public in the form of a dissertation. In case you like to get in touch with me, my email address is tpmang@ufl.edu. And my address at University of Limpopo is School of agricultural and environmental sciences; Center for Rural Community Empowerment, University of Limpopo; P/Bag 1106; Sovenga, 0727; Tel. 015-268-4907 and Fax. 015-269-3212. Also, Mr Thierry Lassalle can be contacted at the same address of the University of Limpopo in case of any questions or concerns. If you have any questions about your legal status as a participant in this study, you may contact UFIRB Office, Box 112250, University of Florida, Gainesville, FL, 32611-2250, USA; Tel. 091-352-392-0433 and email address irb2@ufl.edu.

Agreement:

By answering the questions, I agree to participate in the study voluntarily

Participant _____ Date _____

Principal Investigator _____ Date _____

Approved by
University of Florida
Institutional Review Board 02
Protocol # 2006-U-0436 (Revised 9/15/2006)
For Use Through 05/08/2007

APPENDIX B
CRONBACHS ALPHA COEFFICIENTS

Reliability Statistics on support services provided (n=13)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.912	.914	3

Reliability Statistics on Satisfaction with Benefits (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.707	.705	5

Reliability Statistics on Group Governance (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.848	.850	7

Reliability Statistics on Perceived Group Cohesiveness (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.668	.670	12

Reliability Statistics Individual Attractions to Group-Social (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.576	.573	3

Reliability Statistics Individual Attractions to Group-Task (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.524	.524	3

Reliability Statistics Group Integration-Task (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.510	.502	4

Reliability Statistics Group Integration-Social (n=137)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.657	.659	2

Reliability analysis on degree of satisfaction with support services

Item	n	Alpha if item deleted
Our group is satisfied with the support services provided	136	.28
I have attended meetings recently	136	.22
The information we obtain from meeting/tour is useful	114	.37
Our group shares information obtained from meetings/tours	134	.23
Our group expands production with proceeds from sales	137	.32

Note. Reliability coefficients were computed through Cronbach's Alpha and inter-item total correlation coefficients. Nonresponses were treated as missing data when computing Alpha. Items are reported as individual measures.

APPENDIX C
INSTRUMENTATION

**Questionnaire Schedule to be administered to the leaders of
Questionnaire No. 01**

Schedule # _____ *Date and Time* _____

Name of Farm: _____

Name of Respondent: _____ *Sex* *M / F*

1. I would like to begin to ask you about whether this farm is a Trust or a CPA?
(Specify) _____

2. Is this farm restituted or redistributed? _____

3. What leadership position do you occupy in this group, are you a (Check appropriate box)
 1. Chairperson
 2. Secretary
 3. Farm Manager
 4. Treasurer
 5. Other (Specify) _____

4. Are there any committee members who left the farm? Yes _____ No _____

5. If YES, were you part of the former committee? Yes _____ No _____

6. How many beneficiaries are presently on the farm? _____

7. How many are: (Specify number)
 1. *Males* _____
 2. *Females* _____

8. Are there beneficiaries who never showed up at the farm? Yes _____ No _____

9. Are there beneficiaries who sent their next of kin to the farm?
Yes _____ No _____

10. Are there beneficiaries who sent employees to the farm? Yes _____ No _____

11. If **YES**, then who's responsible for their remuneration? Explain _____

12. Are there any part time beneficiaries in the group? Yes _____ No _____

13. If **YES**, how many part-time beneficiaries are: (Specify number)

1. *Males* _____

2. *Females* _____

14. Are there any passive beneficiaries on the group? Yes _____ No _____

15. Do passive beneficiaries return during peak times of work to work as wage laborers? Yes _____ No _____

16. Are there employees in the group? Yes _____ No _____

17. If **YES**, how many are:

1. *Males* _____

2. *Females* _____

18. What is the criterion for allocating benefits between employees and beneficiaries? Explain _____

19. How many people are in the committee? Check that apply

1. *No committee*
2. *1-2*
3. *3-4*
4. *5-6*
5. *6-7*
6. *> 8*

20. How many of the committee members are:

Men _____ *Women* _____

21. Is the chairperson of the group male or female? Male____ Female____

22. How many committee members are outside members? (Specify) _____

23. How often does the committee meet?

1. *No meeting schedule*
2. *Weekly or more frequently*
3. *Biweekly (every two weeks)*
4. *Monthly*
5. *Bimonthly (every two months)*
6. *Less than 6 times a year*
7. *Other (Specify) _____*

24. Has the committee been reelected so far? Yes____ No____

25. If **YES/NO**, what are the reasons for reelections? Explain _____

26. How often does the group meet?

1. *No meeting schedule*
2. *Weekly or more frequently*
3. *Biweekly (every two weeks)*
4. *Monthly*
5. *Bimonthly (every two months)*
6. *Less than 6 times a year*
7. *Other (Specify) _____*

Point of direction: The enumerator will pause and remind the participant once more that he/she is participating in the study voluntarily and it is his/her right to stop or withdraw some of your answers

27. Which organization(s) is the farm affiliated to? List all

- 1.
- 2.
- 3.
- 4.
- 5.

28. Is any of the beneficiaries on the farm holding any leadership position in such organization(s)? Yes___ No___

29. Who represents the farm in such organizations? Specify current portfolio

1. Chairperson
2. Secretary
3. Farm Manager
4. Treasurer
5. Other (Specify) _____

30. Is there a strategic partner on the farm? Yes___ No___

31. If **YES**, how have you benefited from this partnership? Explain _____

32. Which organization(s) provide support services to the farm? Check all that apply

1. *None*
2. *Ministry of agriculture*
3. *Land Affairs*
4. *Land Bank*
5. *Professionals university*
6. *Cooperative*
7. *NGO*
8. *Ministry of health*
9. *Ministry of labor*
10. *Farmers from other farms*
11. *Other (Specify) _____*

33. What kinds of services do service providers provide? List all according to service provider

Service provider	Type of service provided

--	--

34. Rank the three most important services provided to the farm (1 being the highest and 3 the least)

- 1.
- 2.
- 3.

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

In the **NEXT SIX** questions, Indicate on a scale of 1- 5 how often do: (Write appropriate number)

1. *Never*
2. *Rarely*
3. *Sometimes*
4. *Often*
5. *Always*

35. Service providers visit the group _____

36. Service provides information to the group _____

37. Service providers provide advice to the group _____

38. Service providers provide finances to group _____

39. Group accesses implements and other equipment _____

40. Group members contact service providers to seek information or advise _____

41. Are you aware of the program called either CASP or Mafisa?

Yes ____ No ____

42. If **YES**, how have you benefited from these programs? Explain _____

43. Is the farm recommended for revitalization? Yes ____ No ____

44. Have you got a Land Bank loan on the farm? Yes____ No____
45. Are you able to service the loan? Yes____ No____
46. What is the most common means of contact between service providers and the group? Check all that apply
1. Telephone
 2. Cell phone
 3. Visits to farm
 4. Visits to service provider's office
 5. Other (Specify) _____
47. Is there a telephone on the farm? Yes_____ No_____
48. How far is the nearest office of the **most important** service provider located? Check number according to importance of service provider
1. 10 -50Km
 1. 50-100 Km
 2. 100-150Km
 3. 150-200Km
 4. >200Km
49. What is the name of the nearest town to the farm? _____
50. How far is the nearest town from the farm? Check appropriate box
1. <50Km
 2. 50-100 Km
 3. 100-150Km
 4. 150-200Km
 5. >200Km
51. Where do you purchase farm inputs (Seeds, fertilizers, pesticides, etc)? Check all that apply
1. Cooperative
 2. Extension agents buys for the group
 3. Department of agriculture purchases inputs
 4. Rental car delivers inputs
 5. Don't know
 6. Other (Specify) _____
52. How far is the market where you purchase farm inputs? Check appropriate box

1. <50Km
2. 50-100 Km
3. 100-150Km
4. 150-200Km
5. >200Km

53. What time of the year do you sell produce? Specify according to commodity

Name of commodity	Name of Market	Time of sale

54. How is produce transported to the market? Check all that apply

1. *Vendors/pick up trucks come by*
2. *Extension agent(s) takes produce to market*
3. *Transport agency*
4. *Other (Specify) _____*

55. What kinds of machineries or equipment are there on the farm? Specify number

1. *Tractors* _____
2. *Ploughs* _____
3. *Trailer* _____
4. *Water pump* _____
5. *Electricity transformer* _____
6. *Other (Specify) _____*

56. Are there any machineries or equipments that are broken down?

Yes _____ No _____

57. Did the group purchase implements with the grant? Yes _____ No _____

58. What is your source of water?

1. *Borehole*

2. *River basin*
3. *Other (Specify)* _____

59. Are there beneficiaries keeping their cattle on the farm?

Yes _____ No _____

60. What other individual activities do beneficiaries do on the farm? Specify

- 1.
- 2.
- 3.
- 4.
- 5.

61. Do beneficiaries with individual activities bring their own equipment or use those of the farm? Specify _____

62. What are rules for using farm equipment for individual activities?

Yes _____ No _____

63. Do you rent out land for livestock grazing? Yes _____ No _____

64. Do tenants bring along their own employees to the farm?

Yes _____ No _____

65. If **YES**, how do tenant(s) pay for the service? Explain _____

66. How many villages are represented on the farm? Specify _____

67. Is any of the chiefs represented villages one of the beneficiaries?

Yes _____ No _____

68. Does the farm have any relations with the traditional authority (TA)?

Yes _____ No _____

69. If **YES**, what kinds of services does the TA provide? _____

70. Is there a counter claim against this farm?

Yes _____ No _____

71. If **YES**, what incidences of conflict resulted due to the counter claim? List all incidences

1.

2.

3.

4.

Also, enumerator will remind the participant once more that he/she is participating in the study on voluntary basis and there'll be no tangible benefit that will accrue to the participant

And, the participant will be advised that he/she can withdraw any of the responses that he/she provided, but otherwise the information will be kept confidentially

To conclude, the enumerator will thank the respondent for her/his participation and ask her/him if she/he have questions for the enumerator

**Discussion guide for Group Interviews
Schedule No. 02**

I started off by explaining the IRB protocol to the participants and remind them that their participation is voluntary. Permission was sought from the participants concerning the use of an audio tape.

1. I then reminded the participants about the number of registered beneficiaries and to find out how were there on the farm (this information was obtained from national data base on land reform)
2. How were group members contacted or how did you get to know about this group? Who played what role of forming the group as well as liaise with the Department of Land Affairs? In what other ways have group members contributed to the formation of this group?
3. So, I would like to ask about the process that led to the selection of the committee
 - what criterion was used for selecting individuals to occupy respective portfolios
 - What was the mandate of leaders and the time frame for occupying the office?
 - What other responsibilities did the initial leader have outside the farm?
4. After settlement of the farm, when did the farm become operational?
 - What kinds of activities did you start off with when you started working on the farm?
 - How did you manage to acquire capital (money, machinery) that was needed to kick-start any activities on the farm?
 - What kind of participation was expected from the members and how did it occur?

The moderator reminded the participant once more that they were participating in the study on voluntary basis and there'll be no tangible benefit that will accrue to them And, the participant were advised that they could withdraw any of the responses that they had provided, but otherwise the information would be kept confidentially

5. What kind of enterprises are currently there on the farm? How has the group expanded production on the farm?
 - Have you carried on with the same enterprises since the beginning? If not, why not?
 - What enterprises are relatively new on the farm?
 - Has proceeds from sales enabled you to expand your production?
 - Is access to finance relatively easier now than the time when you started?
 - When did you employ workers? What was the motive for employing workers?

- How do you remunerate people's work? Beneficiaries? Please specify any changes that occurred over time
6. What are the rules that you are currently using in the groups? Do you still use the same ones that you started with?
 - If YES, explain how this was decided
 - If NO, explain reasons why
 - Are there by-laws in the group? How are these used? And how were these rules-in-use developed – when did you start using the rules
 7. There are now so many of you remaining on the farm – when did you start noticing that other group members were disengaging?
 - What would you say were the reasons for their disengagement?
 - Would you cite any specific events that led to disengagement? Please specify occurrences associated with discontinuance
 8. What would you say are the reasons that led you (group members), remaining on the farm to date not to disengage?
 9. What are your perceptions about passive members of the group?
 - Do you still regard these as part of the group?
 - If YES/NO, what are the reasons?
 - Do you think passive members have the right to use land for any purpose (cropping, livestock keeping)?
 10. Are there any group members present who once disengaged and returned back?
 - Why did you decide to return to the group?
 11. What can you tell me about the current members of the group – in terms of group functioning or rather group culture?
 - What is your opinion concerning your membership in this group?
 - How do you see yourselves as a group, five years from now?

To conclude, the moderator thanked the participants for their time and participants were asked they if she/he had questions for the moderator

Questionnaire Schedule to accompany Likert Scale (GEQ)
Questionnaire No. 03

Schedule # _____ *Date and Time* _____

Name of Enumerator _____

Name of Farm: _____

Name of Respondent: _____ *Sex* *M / F*

2. So, I would like to begin by asking you about the position you occupying on this group (Check that apply)

1. Chairperson
2. Secretary
3. Treasurer
4. Regular member
5. Employee
6. Other (Specify) _____

3. How long have you been part of this group? Check that apply

1. 3 – 6 months
2. 6 – 12 months
3. 12 – 18 months
4. 18 – 24 months
5. More than 2 years

4. So, what kind of a job you had right before you became a beneficiary on the farm?
Did you work as a:

1. Government official
2. Farm worker
3. Worked at a retail store
4. Housekeeper
5. Other (Specify) _____

5. What other jobs did do before you joined this group? (List them below)

- 1.
- 2.
- 3.
- 4.

5.

6. Are you part of any other group except for this one? If YES, List all

1.

2.

3.

4.

5.

7. What was the aim of the group(s)? List according to the order specified in 3

1.

2.

3.

4.

5.

8. What position did you hold in the group? Specify name of group and position held

1. Chairperson

2. Secretary

3. Treasurer

4. Regular member

5. Other (Specify) _____

9. How many days do you currently spend on the farm each week?

1. 1 – 2 days

2. 3 – 4 days

3. 5 – 6 days

4. 7 days

10. Do you currently live on the farm? Yes ___ No ___

11. If **YES**, do you live in the farm house? Yes ___ No ___

12. How often do you commute/visit your home village? Check that apply

1. *Every day*
2. *Once a week*
3. *More than once a week*
4. *Once every two weeks*
5. *Once a month*
6. *Less than once month*

13. Are there rules for visiting home on the farm? Yes___ No___

14. If you are one of the beneficiaries, are you one of the employees of the former owners?

Yes___No___

15. If **YES**, have your responsibility changed since the past? Yes___No___

16. If **YES**, please explain the type of change _____

17. How has being part of this group benefited you? Check all that apply

1. Food for the home
2. Cash income
3. Learning new farming techniques
4. Meeting new people
5. Other (Specify) _____

18. Rank the most important benefits acquired through membership in this group
(With 1 being the highest and 3 the least)

- 1.
- 2.
- 3.

19. How important are the benefits that you acquire from membership in the group?
Check appropriate box

1. *Not important at all*
2. *Somewhat important*
3. *Fairly important*

4. *Important*
5. *Very important*

20. How satisfied are you with the benefits acquired due to membership in the group?
Check appropriate box

1. *Not satisfied all*
2. *Dissatisfied*
3. *Neither satisfied nor dissatisfied*
4. *Satisfied*
5. *Completely satisfied*

21. What are the other sources of income in your household? Check all that apply

1. Remittances
2. Child support grant
3. Support grant for the elderly
4. Health support grant
5. Pension fund from former employment
6. Other (Specify) _____

22. How old are the dependents in your household? Check all that apply

1. 0 – 15 years
2. 15 - 30
3. 30 – 45
4. 45 – 60
5. 60 – 75
6. Other (Specify) _____

23. How are you related with the dependants? Check all that apply

1. Children
2. Grandchildren
3. Aging mother/father-in-law
4. Other (Specify) _____

Point direction for the enumerator: In order to help the respondent comprehend the next couple of question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

24. On a scale 1-5, how would you rank your standard of living now as compared to the time you joined this group? Check appropriate box

- 1. *Much lower*
- 2. *Slightly lower*
- 3. *About the same*
- 4. *Higher*
- 5. *Much higher*

25. How many people in this group do you think come from the same wealth level (Indicate appropriate number) _____

- 1. *Very few*
- 2. *Few*
- 3. *About the same*
- 4. *Many*
- 5. *Too many*

26. On a scale 1-5, how would you rank the standard of living for other people in this group now as compared to the time you joined this group? (Indicate appropriate number) _____

- 1. *Much lower*
- 2. *Slightly lower*
- 3. *About the same*
- 4. *Higher*
- 5. *Much higher*

27. How can you describe the richest person in your group? List at least **THREE** Descriptive possessions

Rich	Poor

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

28. On a scale 1-5, how important is being part of this group to you?

1. *Not important at all*
2. *Somewhat important*
3. *Fairly important*
4. *Important*
5. *Very important*

On a scale of 1- 9, how do you feel about the following statements

(1= *Strongly disagree* and 9= *Strongly agree*). Check the most appropriate number

	Strongly Disagree	Disagree	Neither Agree/ disagree	Agree	Strongly Agree
Individual Attractions to the group-Social	1	2	3	4	5
I do not enjoy being part of the social activities of this group					
I am not going to miss the members of this group when I leave					
Some of my best friends are on this group					
I enjoy other activities more than team activities					
For me, this group is one of the most important social groups to which I belong					

29. How many people in this group are your: (Write appropriate number below)

1. None
2. 1
3. 1-2
4. 2-3
5. >3

a. Relatives

b. Neighbors from home _____

c. Friends from home _____

d. Friends that established on the farm _____

30. Do you have either relatives or friends in farms nearby? Please specify _____

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with NINE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

31. On a scale of 1- 9, how do you feel about the following statements (1= *Strongly disagree* and 9= *Strongly agree*). Check the most appropriate number

	Strongly Disagree	Disagree	Neither Agree/ disagree	Agree	Strongly Agree
Individual Attractions to the Group- Task	1	2	3	4	5
I am not happy with the amount of time I spend working in this group					
I am unhappy with my group's level of desire to succeed					
This group does not give me enough opportunities to improve my personal performance					
I do not like the style of work in this group					
I am not happy with the amount of time I spend working in this group					

Point direction for the enumerator: In order to help the respondent comprehend the next question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

32. On a scale of 1-5, how satisfied are you with the support services provided to the farm? Check appropriate box

1. *Not satisfied all*
2. *Dissatisfied*
3. *Neither satisfied nor dissatisfied*
4. *Satisfied*
5. *Completely satisfied*

33. In the past 2 years, how many times did you attend a meeting/tour where relevant information was available? Check appropriate box

1. *None*
2. *Once*
3. *Twice*
4. *Three or more*

34. On a scale of 1-4, how useful was the information gained from meeting/tour

Check appropriate box

1. *Not very useful*
2. *Somewhat useful*
3. *Quite useful*
4. *Very useful*

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

In the next ***COUPLE*** of questions, indicate on a scale of 1-5, how often does the group perform to the following (Write appropriate number)

1. *Never*
2. *Rarely*
3. *Sometimes*
4. *Often*

5. *Always*

- 35. Share information gained from meetings/tours _____
- 36. Keep records on expenditures _____
- 37. Keep records on sales of produce _____
- 38. Keep records on all the things you do _____
- 39. The group sticks to the rules for allocating benefits _____
- 40. Group members participate in decision-making _____
- 41. Group members participate in problem-solving _____

In the **NEXT** question, Indicate on a scale of 1-5, how do you feel about the following statements (Write appropriate number)

- 1. *Strongly disagree*
- 2. *Disagree*
- 3. *Neither agree nor disagree*
- 4. *Agree*
- 5. *Strongly agree*

- 42. Benefits from group are the same for all members _____
- 43. The group expands production with proceeds from sales _____
- 44. What level of education did you complete?

- 1. < Grade 7
- 2. < Grade 12
- 3. Grade 12
- 4. > Grade 12
- 5. Other (Specify) _____

45. If I may ask you, based on the following categories what is your age. Check the relevant box

- 1. <30 years
- 2. 31 – 40 years
- 3. 41 – 50 years
- 4. 51 – 60 years
- 5. > 60 years

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with FIVE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

46. On a scale of 1- 9, how do you feel about the following statements (1= *Strongly disagree* and 9= *Strongly agree*). Check the most appropriate number

	Strongly Disagree	Disagree	Neither Agree/ disagree	Agree	Strongly Agree
Group Integration-Task	1	2	3	4	5
Our group is united in trying to reach its goals for performance					
We all take responsibility for any poor performance/ mistakes by our group					
Our group members have conflicting aspirations for the group's performance					
If members of our group have problems during work, everyone wants to help them so we can continue working					
Members of our group do not communicate freely about each person's responsibilities within the group					

47. What is the name of the village where you come from? (Specify name)

48. What ethnic group do you come from? Check that apply

1. *Bapedi*
2. *BaVhenda*
3. *BaTsonga*
4. *Other (Specify)* _____

Point of direction for the enumerator: In order to help the respondent comprehend the question(s), a step ladder with NINE steps will be drawn either on paper or the ground and will be used as a visual cue for the participant

49. On a scale of 1- 9, how do you feel about the following statements (1= *Strongly disagree* and 9= *Strongly agree*). Check the most appropriate number

	Strongly Disagree	Disagree	Neither Agree/ disagree	Agree	Strongly Agree
Group Integration-Social	1	2	3	4	5
Members of our group would rather work on their own than work as a group					
Our group members rarely socialize together					
Our group would like to spend time together off work					
Members of our group do not stick together after work					

To conclude, the enumerator will thank the respondent for her/his participation and ask her/him if she/he have questions for the enumerator

Reflection Statement after Pre-Testing

At conception, redistributed farms of South Africa were modeled to represent systems that are typical in commercial farming. It was believed that such idealized systems could operate under highly mechanized conditions and that the farms could contribute a great deal towards the livelihood systems of beneficiaries through large scale operations. It was also believed that the farms could have positive externalities by creating economic opportunities for unemployed rural dwellers. Of particular importance, redistributed farms were setup in the form of collective ownership of farm land, thereby creating common property resources owned by groups of beneficiaries.

However, it became apparent at the onset that models of redistributed farms were rarely known to the target audience (subsistence farmers and rural dwellers). Therefore, the government then moved to encourage new co-owners (group members) of land to adopt business plans and constitutions that were drafted by service providers (consultants). This points our attention to the very fact that the government characterized redistributed farms in a very precedented manner. The government seems to have made assumptions with regards to the manner in which farms could be operated. Also, the government seems to have believed that group ownership of land will yield similar results as ‘former owners’ who generally owned land as family enterprises. Therefore, it remains important to investigate the extent to which the idealized systems have been operationalized with respect to both governance and functionality. This study attempts to investigate ‘actual’ experiences of beneficiaries remaining on the farms.

This study argues that ideal farming conditions could not be operationalized and that beneficiaries operate under farming conditions that were not ideal in terms of farm capital as well as group governance. Without ideal farming conditions it can be argued that beneficiaries of

redistributed farms have moved to 'reinvent' the farm systems. With that said, groups in redistributed farms could be faced with the challenge of maneuvering and forging ways in which they could operationalize the farms with minimal resources. Therefore, this study seeks to investigate the availability of physical resources on the farms as well as the outcomes from production activities. This would determine the extent to which benefits due to group membership contribute to livelihood systems of individual members.

When groups were first set up, membership to the groups was based on 'open access', whereas the size of the groups was directly equivalent to the cost of any particular farm willingly offered in the land market. However, high turn over rate is probably indicative of poor economic returns on the farms. On the other hand, it can be argued that beneficiaries remaining respective groups have specific characteristics that enable them to become farmers of this type. And this warrants investigative measures. It is therefore necessary to ponder questions that relate to the socio-economic characteristics of the group members remaining on the farms.

This study argues that the quality of support services provided on the farms is part of the production equation and the degree of satisfaction with services provided determines the extent to which production operations could be effected. In addition, the presence of outside support will determine whether farms acquire necessary farm capital, therefore effecting production activities and benefits acquired from farm thereof. However, inasmuch as it is imperative to acquire farm capital in order to engage in farm activities, access to the market as well as meeting the market requirements for good quality produce, is yet another dimension that determines the extent to which farms can be viewed as a 'source' and a 'means' of acquiring desired benefits by individual group members.

On the other hand, it can be argued that service providers further influence the manner in which the groups function to a certain extent. Through the use of the prescribed constitutions and business plans, the nature of group decision-making as well as problem-solving processes is confounded. Therefore, it can be argued that the presence of service providers bring another power dynamic into the groups, be it in terms of either constitutions, business plans, or any kind of farm capital that could be provided. Therefore, the nature of group dynamics inherent in the groups is a function of both internal as well as external forces. The presence of external influence will also determine the extent to which individual members are recognized and included in various activities of the farm.

Group cohesiveness is defined as the “tendency for a group to stick together” (Carron *et al.*, 1985). Therefore, it is crucial to determine perceptions of individual group members to determine the extent to which current group members are likely to remain on the farms. Although group cohesiveness is centered on functionality as well as the governance of the groups, reasons for sticking together will determine whether the farms contribute to the livelihoods of individual members and the extent to which individual members are recognized (the inclusiveness) within respective groups.

On the other hand, it can be argued that current group members evolved over time to develop “group culture”. However, given the cyclical nature of group cohesiveness, it is important to trace the history of the groups to determine apparent trends in group membership and the reasons thereof. This would in turn identify specific events in respective groups as evidence of either continuance or discontinuance in the groups. A timeline will then be used to determine the history of the farms.

Before Pretest Review Session: Instruments were Revised based on:

- repeated questions
- clarify meaning of questions
- clarify scalar-response format questions
- identify incomplete questions
- identify irrelevant guidelines/correct
- correct misstated instructions
- translate English terms into the vernacular – Sepedi – direct translations may not work
- revise question numbering
- Reverse code scalar-response questions
- Deleted question on whether members have been part of other groups in the past
- Questions were judged based on the conceptual framework underpinning the study

Post-pretest revisions

- Re-look at quality of support services
 - instead of using information over and over again, use support services and ask them to specify the kinds of support
- take out the question on who provides support for individual interviews but leave that for leaders because it is repeated on both questionnaires
- if there's any support, then ask individuals, how satisfactory are the services
- take the question on ranking of support services to the questionnaire for leaders –
- another question to add in the Questionnaire for leaders is whether group uses constitution or by-laws – leave this for the timeline
- for individuals, ask if they have dependents at home and relative age, the relationship
- delete the question on what kind of information was shared during meeting, but ask how useful was the information
- delete question on how likely does group use rules for allocating benefits
- move benefits same for all members from likelihood to strongly agree or disagree
- I had to add an item on ethnicity on individual questionnaires and
- access to the market
- this study will not obtain a representative sample but some cases that can situations in the farms
- I had to add a question on whether the farm was under a counter claim or not
 - Counter claim implies that the ministry of land affairs allows another group/community to launch a claim towards that same farm (i.e. a farm already claimed)
- The question on possessions that are symbolic of wealth, ask it in terms of “**within the group**” not any place else
- The question on ethnicity, ask it in terms of: among the ethnic groups represented in this group, which one is the most dominant, followed by which one?
- Delete how do members commute to farm/village – it's a redundant question
- Add a question on how important are the benefits and

- How satisfied are members with benefits
- I deleted questions on People in this group get along well, There is a lot of cooperation in this group, Our group has many conflicts, - they seem to repeat GEQ
- Deleted the question on the main current farming activity – moved it to the timeline
- Added degree to which group members participate in decision-making and
- Group members participate in problem-solving

Conducting Research in Limpopo Province: Excitements, Frustrations and Lessons Drawn

Conducting research is often idealized as a process that can be formulated before hand and prior to heading for the field. The researcher should be in a position to identify and clarify constructs and all variables of interest in the study. This prepares the researcher to be in a position to bridge the gap between theoretical constructs and real life experiences based on the data collected (Rubie and Babbie, 1993). Actually, this forms the basis of conducting research and all other processes should be centered on this same point.

However, the dynamics as well as the context within which research is conducted may make it difficult to plan according ahead of time. The dynamics of conducting fieldwork may vary from one setting to the other. Data collection instruments may not always be useful under certain circumstances. And because of such reasons, the researcher should be prepared to make observations and make changes accordingly. And that's the reason why pre-testing exercises are imperative. Pre-testing helps one to identify research instruments that are most effective under certain circumstances.

Making an entry in the research setting

My experiences in this regard were not always as exciting. Gaining entrance to the farms was not an easy undertaking. Entry to the farms included aspects of establishing contacts with government officials who are working with the same farms. Officials either provided telephone contacts for the farms or they took me to the farms and sometimes gave directions. Identifying farms started through conversations with extension agents and they would indicate which farm they thought was viable and were still operational, and those that were shut down. And extension agents would express their approval based on which farm would be best for the research. This in itself, proved to be misleading in the end. Extension agents have a track record of the farms but they did not know what was actually going on the farms at that moment because they spend a

long time without visiting the farms. There isn't much of provision of extension services on the farms and as a result, extension agents were not always aware of the progress made on the farms. Therefore, it was also beneficial for me not to establish contact with district extension agents but most of contacts were limited to only one the extension officers whose responsibility was to work with redistributed farms.

The chairperson of Molemole farmers' Association also helped to me to visit other farms. And he expressed his preference for farms that were operational as compared to those that he regarded as shut down. A couple of farms that I visited with him were shut down but some of them weren't. But I had to insist and went to the farm and prove that for myself. And they also give you a picture that may be misleading at the end of the day. And I ended up including two more farms in my study that my contact persons regarded as non-operational. I came to discover later that the farms mainly operated with funds from the outside either through strategic partnerships that were established.

The other aspect of entering the farms was on approaching beneficiaries on the farms and introducing the study. Other farms made it easier to approach them and introduce the study to them whereas others weren't. The leaders of the farms became the contact persons on the farms. And such persons become an intermediate contact between the other beneficiaries and the researcher. After introducing myself to the contact person on the farm, I left behind consent letters and asked them to share the information with other beneficiaries. The consent letter was translated and so both versions including English were given to beneficiaries. I would then either return to the farm or make a phone call in order to find out if beneficiaries consent that I go ahead with my study.

Other leaders on the farms were open to the study and made it easier to continue with the study. Something interesting is the manner in which leaders of the farms would involve other beneficiaries during my visits. Other leaders would encourage beneficiaries to speak up during meetings with everyone and beneficiaries would express their concerns and also ask questions. The most common question beneficiaries would ask was ‘how will we benefit from your study’? On the one hand, beneficiaries expressed concerns about the many people who go to the farms and make lots of promises yet nothing follows through. Based on that, I had to be frank with the beneficiaries and tell them that I have got no tangible benefit for them and that I was a student and not representing any organization whatsoever. I told them that land redistribution is a program that the government continues to implement and that they continuously seek ideas as to how they could possibly tweak the program. I made it known to them that the results of my study will be presented to them as well as the government. But the government has an absolute prerogative to consider the results.

In general, tension on the farms looms large when you first arrive and people definitely look at you as a stranger. As the researcher, I had the responsibility to make myself known and to indicate that I did not have any intentions to make any promises except for expressing that I was a student and all I needed was to learn from their experiences. And because I didn’t panic, beneficiaries told me that they would let me conduct my research because I opened up with them and did tell them that I was a student. One old lady in one of the farms said “*our little hands lift up many of you to top professional possessions, but you forget about us as soon as you reach there.*” And such words are indicative of the exploitation that these people experienced in the past. However, such scenarios can be interpreted either way. On the side of government officials or any service providers collaborating with the government don’t have control over bureaucratic

processes. As a result, various assignments are not translated into actual program implementation in the end. Another explanation can be that government employs different service providers to handle certain aspects of a program. At the end it is possible to find that a number of service providers were involved in one program and accountability may be a difficult task to perform.

Therefore, many programs initiated by the government fall through the cracks and that disappointed beneficiaries and they reacted by “closing up their world.” I had to watch out as the researcher because beneficiaries tried to bargain with me by playing a guilt trip, which may be well justified. But this obviously weighed down on me. But this was one of the challenges I encountered and I had to decide to give these people room to express their concerns and be frank. At the end, I appreciated the level of political consciousness by group participants because it showed that they’re concerned about their lives and they would definitely not be on the farms if they had something better to do. But the farms meant life to them and it is their responsibility to make clear to anyone going there that they mean business and are left to fend for themselves.

On the other side, no matter how much I explained to leaders of the farms about my intentions to eventually conduct both group and individual interviews, the leaders had assumed that I would not return to talk to other participants since it took me at least two weeks or more to return to each farm depending on the appointment schedule I had with individual farms.. By interviewing leaders of the farms first didn’t not only allow me to better understand the farms but it also gave me a chance to draw closer to the rest of the beneficiaries without being seen like I was invading their space. It had taken me some time to eventually connect with the rest of the group participants.

Leaders who were not confident about their leadership positions felt somewhat threatened by the time I conducted individual interviews. One leader on one of the farms once told me that

he would lock me out of the farm if I had plans to return and I came to realize later that their most recent meeting on that farm did not give a good image of the leadership. It was this leader's defense mechanism to keep me away from other people by threatening to keep me out because he knew that I would soon find out should I had continued to talk to the others. But the same leader was very welcoming when I made my first visit to seek permission to conduct the study. He even told me that I wouldn't leave without collecting any information since I'd made such a long trip to visit with them. The leader eventually asked the other beneficiaries to excuse us after they'd consented that I can continue with the study and I went ahead and administered the questionnaire for leaders.

Beneficiaries on one farm fought at the time I arrived to request them to grant me permission to conduct the study on the farm. The fight broke up and everyone disowned their assumed positions. But just before I departed, I came to realize that the chairperson didn't want to accept the consent document because he could neither read nor write and that seemed to intimidate him. He finally accepted the document he said that the document can only read him. I later came to learn that people may have different ways to communicate information to you. But my immediate reaction was I wasn't ready to deal with something like that and thought I probably will not return to the farm anymore. I called the farm after a couple of weeks and the chairperson told me that I was welcome to conduct my study. This taught me that not all people will receive me in the same way – some were more open and some were not, depending on the nature of group dynamics at that time. Also, I came to learn that I only had to do what I was there for and didn't have to pay any attention to anything else – like squabbles in the group.

Some of the leaders became somewhat withdrawn with time because they realized that I was beginning to learn about how they conducted themselves. For example, I visited this one

farm several times after I called and asked for an appointment and also confirmed the appointment but I could not find the leader whenever I went to the farm until I decided to go ahead and conduct the group interviews. That was another way that other people used to sabotage my research. I was more appreciative at the end because I even had much more information about this leader that I wasn't aware of. And the leader showed disapproval of my prerogative the next time I went to the farm. But at the end, I knew I wasn't there to make friends with anyone and also aware that the individual participants had to consent in order for me to conduct the study and any beneficiary had the right to deny me their consent, so I went ahead and did my work. But I couldn't access the business plan for that particular farm because of the same reasons. And this is yet another reason I was important for me to connect with everyone else who were not in leadership positions because I was able to proceed with my study despite other people. Some of the leaders on the farms can go to the extent of lying especially during informal conversations, but the conversation that I had with other participants as well as the extension agent in the Department of Agriculture helped me pick up on those false impressions.

Individual interviews

Beneficiaries did not always reveal specific information about each other during individual interviews. For example, I realized in about three interviews that some of the participants had defects such as hearing impairment, and probably learning disabilities. This was frustrating during the interviews since I didn't know what was going on. This was in itself a limitation to the study because I didn't have confidence in such responses, I wondered whether they understood me or not. This could be an overstatement but for example, a leader on one of the farms asked me to sign up the consent form on his behalf and somehow his responses were generally off track. And this was something tricky to deal with because I had to pose the question

again after listening to his response and this led to lengthy interviews for such a respondent. It was also evident that some beneficiaries felt intimidated by the questions and probably felt they couldn't answer the questions. But part of the explanation could be because respondents did not always pay attention to the question and they would tell me "what I wanted to hear." This meant that as a researcher with the best interest in the interview, I had to listen very carefully and follow the interview in order to be able counter question when they mention a contradictory statement.

Beneficiaries would often at times raise other issues separate from what I was asking them about and some of these issues were important and interesting. As a result, I was caught up between administering the questionnaire and listening to their stories, and this resulted in lengthy interviews. However, some beneficiaries would take advantage of your time to raise their own concerns based on selfish reasons. So, the entire process starting when I first entered the farms and all the information I gathered during the process became handy during times like these. Giving rides to beneficiaries was another participant observation strategy I used and this gave me a chance to ask about some issues that were 'sensitive'. However, participants at times took advantage of me and caused me to deviate from my trips, particularly on the way to the farms and I would end up spending a lot of time trying to reach the farm, and I never reached the farm on one of the days.

As a result, my time at the farms was reduced and the only way I could mitigate that was to tell them that it was too costly for me to go out to the farms and not accomplish my work for the day. Because participants would even go to the extent of attending to other things as soon as they reach the farm and forget about my interests was frustrating. Visitors on the farms included people from various governmental agencies as well as financial institutions. It was after such

experiences that I came to learn establishing contact with the rest of the participants was important. Other wise I was at times left by myself and I basically had no one to talk to when the contact person (i.e. the leader) gets busy with other things.

Withdrawing of the study

The process of establishing rapport with the beneficiaries took quite some time and it was so based on reasons that were well founded. Beneficiaries on the farms always had people who came around to conduct their work and also made promises, but such promises never followed through. On the other hand, leaders on the farms were generally the contact persons and the other participants probably did not expect anyone to talk to them since most people talked to the contact person. And so this took me some time to eventually be in talking terms with the rest of the participants. I would walk over to their work setting when I got to the farm and greet them and talk about anything. And eventually I was able to take pictures and this proved to be the most effective way to connect with them and I took the pictures back to the farms in my subsequent visits. This was a good ice breaker. And the participants started seeing me as someone who was there to socialize and do something with them, no matter how little it was. Another strategy I used was to buy participants little tokens such as bread and juice when I went to the farms.

I would make it a point that I begin by greeting them whenever I visit the farm depending on their work setting. And building the rapport made it easier for me to conduct individual interviews because beneficiaries were at ease and they would also ask me to interview them. However, the withdrawing study seemed pre-mature (I think I was beginning to enjoy myself on the farms). This was either a good or not a very good thing. The more I become comfortable, I

saw myself beginning to involve in the issues on the farm and took sides. This was a signal that it was time for to withdraw the study.

Also, I went to the farms to bid them goodbye at the end. But the timing wasn't very good since it was close to Christmas and most people had started going home and so I couldn't find most of the participants by the time I left. I was disappointed because I had promised the participants that I would inform them when I was leaving.

Another thing that made me feel like the withdrawal was premature was because participants kept on playing a guilt trip on me by saying that I would also disappear in the same way as others did. But I later came to realize that the participants had forgotten that I was only there for some time and that I would leave by the end of the year. And I could sense their disappointment but I had to leave. This left me in a dilemma that made me think "it wasn't my intention to disappoint them." But the reality was that the time and money allocated for the field work can only go so far.

This also brought me as a researcher to a point when I started to think how much data was enough. But for the sake of avoiding a biased view and becoming too involved with the affairs in the groups, it was safe for me to withdraw the study.

Methodological considerations

The situation on the farms had forced me to make to consider making some adjustments particularly on the data collection instruments. Sampling had become a challenge since only 13 farms were identified, so all of the 13 farms were included in the study. Also, farms with less than 10 participants were included. Participants on the farms were interviewed depending on their availability. Beneficiaries responsible for tasks such as herding cattle were not easy to get hold of because they woke up early in the morning and went into the woods and can be anywhere

within a 4000 ha farm, for example. I came to realize that participants had various responsibilities and conducting observations at a task setting with all the beneficiaries was not going to be possible.

Group interviews were not always possible to conduct with the minimum number of people required in a focus groups interviews setting. For example, participants had to finish packing guava fruit for shipping by the end of the day and the participants couldn't leave their tasks to attend to my study. But even though they knew that they had a load to ship out on that day, participants they couldn't advice me to come on another day. Given the economic implications of traveling to the farms, I had to conduct group interviews with fewer participants even in farms with large enough groups at times. And the same happened in case other visitors came around or participants had other commitments. They wouldn't devote adequate time to me even with scheduled appointments. This meant that I had to return to the farms on another day.

Group interviews were quite informative and I came to understand the histories of the farms. However, inasmuch as group interviews were appropriate for understanding farms better, it was not always possible for beneficiaries to open up about certain occurrences since the perpetrators were also part of the interviews. One of the beneficiaries advised me to use another mechanism to better learn about the farm history. This was a farm with a guesthouse that was open o anyone as along as they paid, so I went and stayed at the guesthouse for a couple of nights. This gave me sometime away from the university and I could reflect on my work. I also used this time to engage in informal conversations and a whole lot of issues surfaced.

Using participant observation as one of the strategies for data collection accommodated extra information that I noted at later stages. Each visit to the farms yielded new information that I had not heard about before, and so the stories continued to unfold. I paid informal visits to the

farms whenever I was in other farms nearby and such visits enabled me to drop by the farms and visit with the participants at the time they were relaxed during the lunch hour. This at times meant visiting with the participants who mainly resided on the farms while others had left for the day. This was again a good chance to talk about various issues they wouldn't normally talk about in the presence of others.

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BIOGRAPHICAL SKETCH

Tirhani Prudence Manganyi was born in 1976 in rural village in the north east of Limpopo Province, South Africa. Tirhani grew up in the family of six with her parents and three siblings. She attended and completed primary school in 1989 at Nhlengani Primary School. She proceeded to Kheto Nxumayo where she completed high school education in 1994. At the University of the Limpopo (the then University of the North), Tirhani obtained a bachelor's degree in agricultural management, honors degree in animal production and a master's degree in agricultural extension. In August 2003, Tirhani started her Ph.D. studies at the University of Florida after she was awarded a Fulbright Scholarship. Growing up in one of the poorest province in South Africa, Tirhani understands the importance of agriculture's contribution toward rural livelihood systems. Thus, Tirhani's interest in agriculture will greatly contribute toward solving problems facing rural farming communities in South Africa.