CHAPTER FIVE: CONTEXTUALISING AGRICULTURAL DEVELOPMENT PLANNING IN THE NORTH WEST PROVINCE OF SOUTH AFRICA

5.1 Introduction:

In this section, the focus shifts to the rural community of the North West province, the eventual beneficiaries of this study. Before the actual impact assessment, a broad historical perspective is established, to illustrate the evolving livelihoods of the farming community of the province. The role of agriculture in the historical Tswana communities and its development through the past century is described. Specific attention is given to the involvement of support services and strategies, as the aim is to improve these. A physical description and a socio-economic profile of the province and its people are also provided. The current agricultural scenario completes this chapter.

5.2 Physical and biological description of the Province:

During 1994 Bophuthatswana was incorporated into the RSA. Although a small part of Bophuthatswana now forms part of the Free State, most of the erstwhile state, together with the erstwhile Western Transvaal, became the North West Province, situated in the north-western corner of South Africa, where it borders Botswana. It also borders the Limpopo province to the north, Gauteng to the east, the Free State to the east and south and the Northern Cape to the south. It is situated between 24 38' 10" S and 26 27' 17 S latitude and 22 37' 44" E and 28 57'20" E longitude. Spatially it is a medium-sized province, covering 118 710 km^2 (11.8 million hectares), or 9.7% of the total surface area of the RSA.

Although roughly 3.6 million people reside in the province (on par with the Western Cape), it has a relatively small population, with less than 9% of the country's total. The high population growth rate of 3.2% is slowing, due to higher child survival rates, increased female participation in labour and particularly the Aids pandemic. It has however, the second highest growth rate of the country. Urbanisation is high in the Klerksdorp, Potchefstroom and Mafikeng areas with roughly 48% of the population being urban. The province is relatively uniform in terrain, as the topography is mostly flat in the western and central parts, and rolling in the east, with altitudes ranging between 800 and 1100 metres (Anon., 1997; DBSA, 1999).

The climate is typical of a dry steppe with warm to hot summers and cool, sunny winters. Average mid-summer maximum temperatures vary from the high twenties to low thirties (degrees Celsius) while the minimum at this time of year usually varies in the high teens. During winter the minimum temperatures usually range around zero C with frost, rising to around 20 C. Temperatures can be extreme with minus 8 C and plus 40 C being encountered on occasion. The province is semi-arid with declining rainfall from

east to west. Winds are predominantly from the North West. Wind erosion is a significant environmental issue, as wind often damages young plants through 'sand blasting' (Stilwell, 1985). Rainfall occurs primarily during summer (October to April) and ranges from 400mm p.a. in the far west to 700 mm in the far east (Stacey; 1992; Worth, 1994; Anon., 1998b). Three rainfall bands can be distinguished: 700 to 600mm/a in the east, between 600 and 500mm/a in the central parts and 500-400mm/a in the west. Serious droughts occur every 9-10 years on average. Seasonal droughts are a regular occurrence in cropping areas. Areas suitable for irrigation are limited to the Vaal River, the Taung Scheme, and the Hartebeespoort, Krokodilpoort and Vaalkop dams. The total area under irrigation is roughly 116 000 ha (Anon., 1998b). Substantial groundwater is found in the dolomite belt that runs east- west through the central parts (DBSA, 1999).

Large parts of the province are ploughed, although more than 80% of the province is primarily suitable for extensive grazing (Stacey, 1992; DBSA, 1999). Arable land with an effective depth in excess of 450 mm covers roughly 1.2 million ha, or 10.3% of the province. The majority of soils have a low clay percentage and are subject to wind erosion. The main crop, maize, is predominantly grown on deep soils. Sunflower is favoured where the clay percentage is higher. About a third of the country's maize is produced in the province (Anon., 1998a). The main cropping area is in the central parts. In the east sunflower dominates, where soils allow. Other crops include sorghum, wheat, cotton and dry beans (Anon., 1998b). Kalahari Thornveld and shrub Bushveld cover approximately half of the province (in the west). The eastern parts are a blend of mixed sour Bushveld, Bankenveld and Cymbopogon/Themeda veld with the last-mentioned dominating the southern region. The potential grazing capacity varies between 4 and 18ha/ large stock unit, but often the actual grazing capacity is lower due to overgrazing (Anon., 1998b).

Although no official demarcation into agro-ecological zones is available for the province, three obvious zones that closely mirror the three administrative regions can be distinguished (see figure 5.2.1). More than a third of the province lies in the drier western area where Kalahari Thornveld with red, sandy pedal soils dominating. Rainfall is generally below 500 mm p.a. and the area is almost exclusively suitable for grazing, although isolated crop production does take place; viz. groundnut production in parts of the Vryburg region. Districts included are Vryburg, Ganeysa, Kudumane and Taung. The central region predominantly has plinthic catena soils, mostly deep, red and suitable for crops and pastures. Districts included are Molopo, Madikwe, Ditsobotla, Marico, Lichtenburg, Lehurutshe, Delareyville, Schweizer-Reneke, Christiana, Bloemhof, Wolmaransstad, Klerksdorp, Potchefstroom, Ventersdorp and Coligny. In general this area receives between 500 and 600 mm of rain annually. Some districts can be described as marginal for crop production, but mixed farming is practiced in all districts. The Eastern region is undulating with a larger variety of soil types. In many cases soil conditions inhibit cropping potential. Rainfall is generally above 600mm p.a. and the area includes the Swartruggens, Koster, Rustenburg, Bafokeng, Odi, Mankwe, Marico, Moretele and Brits districts. A variety of agricultural enterprises take place, depending on soil type, but clay soils dominate. Defining regions only climatically is however increasingly recognised as being simplistic and not particularly precise (Tapson, 1996) and a scientific elaboration is needed.

Figure5.2.1:


Predominant Agricultural activities
(Municipal boundaries per district in the NWP)
300 mm
400 mm
500 mm
600 mm
700 mm
Molopo
Kagisano
Naledi
Mosohaweng Municipality
Setla-Kgobi
Mafikeng Local
Zeerust Local
Moses Kotane Municipality
Moretele Local
Local Municipality of Madibeng
Rustenburg
Kgetleng River Municipality
Ditsobotla
Ventersdorp)
Tswaing Municipality
Potchefstroom
Klerksdorp
Maquassi Hills
Schweizer-Reneke
Greater Taung
Lekwa-Teemane Municipality
N
S
E
W
Key
Rainfall Zone
Municipality boundary ship
Irrigation
Livestock and cropping
Extensive livestock
North West Province
Private Bag X804
Potchefstroom
Tel No
Ref no.
Predominant
Approved

5.3 A historical perspective (until 1994)

5.3.1 Social, cultural and political dimensions.

The Batswana (Tswanas) were part of a larger Sotho grouping that migrated from the great lakes in central Africa from 1400 to 1600 AD and at the turn of the century occupied what is today Botswana and western parts of South Africa (Stacey, 1992). The first contact between the Batswana and Europeans came from missionaries in 1801 and by 1850 frequent interaction took place (Worth, 1994). Prior to 1840 the Batswana settled in large communities housing 5000 to 10 000 people, involved in subsistence farming and hunting (Stacey, 1992; Worth, 1994; Karodia, 1994). Settlement patterns were fluid with internal strife and external threat often leading to migration. Agriculture has for many generations, been a part of Batswana society and influenced by cultural and traditional values. A definite class differentiation historically existed within Tswana communities (Bundy, 1979), and is still evident today.

Through a series of British enactments, the land of the Batswana was colonised as British Bechuanaland, was later given to the Cape Colony and eventually became part of the Republic of SA. During the early part of the last century reserves for the Batswana were established in these parts. The boundaries were entrenched by the 1913 Natives Land Act. Various laws removed independence, and the right of real government over own affairs (Molatlhwa, 1976). The socio-political history of the country and especially the crippling effect the apartheid system had on African communities and small-scale agriculture, was described in chapter two: as part of the Apartheid system, independent states were created for the black population throughout the country. In Bophuthatswana this process involved tribal authorities in a process of constitutional development that led to the Tswana Legislative Counsel in 1971, self-governing status in 1972 and independence in 1977, with the creation of the Republic of Bophuthatswana. The President and his cabinet held executive power. The parliament was known as the National Assembly and was elected on a constituency basis. Bophuthatswana covered just over 44 000 square kilometres, sharing a common border of almost 3000 kilometres with SA and one of 260 kilometres with Botswana. Its independence was generally not recognised internationally and was based on a patriarchal approach with heavy reliance on SA for fiscal aid and employment (Karodia, 1994).

The political situation changed dramatically during the early nineties. This was initiated with the coming to power of the then state president, F.W. de Klerk in SA. As part of extensive democratisation processes political prisoners were freed (amongst them Nelson Mandela), organisations such as the ANC were disbanned and many processes to reverse discriminatory legislation took place. Bophuthatswana was incorporated into SA in a revolutionary manner during March and April 1994: demands that it should, as the other previously independent states, be incorporated in SA and that its citizens take part in the first general elections planned for April that year were rejected by the local government. This led to civil service strikes and clashes with police. Marches and petitions took place daily and the tense situation escalated when a right wing organisation (AWB) invaded the capital on the 11th of March 1994. The government of Bophuthatswana requested them to leave, which they eventually did, after some loss of life. A South

African delegation met President Mangope and demanded that he step down, which he refused. He was subsequently removed from power by decree (Karodia, 1994). After the elections the North West province was proclaimed comprising large parts of Bophuthatswana and Western Transvaal. A provincial government was established.

5.3.2 Agriculture's historic position

Until the later half of the 20th century, men did not work the land. Cropping was the domain of women, who cultivated maize, cowpeas, sorghum, melons, pumpkins, sweet reed (sweet sorghum) and beans. Men worked with the large animals and hunted. The arrival of missionaries led to men being taught methods of farming. Cattle featured prominently in the culture and the economy. They were kept at a cattle post and primarily used for milk and slaughtered for special occasions. Hired help or young sons of the family would tend the animals. Many of the traditional taboos surrounding cattle, (especially concerning women not being involved, lobola, etc.) have changed during recent times. A shift towards commercial utilisation of livestock (primarily as source of cash-saving) has been adopted, while certain traditional uses, such as slaughter for funerals or weddings, continue (Karodia, 1994; Worth, 1994).

Land was held communally and land rights were socio-politically determined with membership of a kinship group or tribe, qualifying these rights. The chief allocated arable and residential rights, the most individual rights, to specific households (Stacey *et. al.*, 1994). Land acquisition was seen as the right of every married male. Land rarely has economic value and was not owned, but the user was given permission to utilise it (Molatlhwa, 1976). The formal establishment of Bophuthatswana did not have a major influence on tenurial patterns and communal arrangements persist in many areas. The introduction of commercial development projects and more significantly, leasing of land mitigated this. Sharecropping became an important means of utilising land and resulted in small-scale household production to often give way to some form of commercial agriculture, with some control over land and capital (Stacey *et. al.*, 1994). According to Agricor's 1988/89 annual report, tribal land comprised roughly 11.2% of total agricultural land in Bophuthatswana. Government owned almost 770 000 ha or roughly 19.2 % of land. Trust land comprised roughly 2.5 million hectares (63%) of all land, and private land 273 000 hectares (6.8%).

The position of agriculture changed significantly as the mining industry developed. Large numbers of particularly Tswana men migrated to the mines for labour contracts, or to white owned farms. This was caused to some extent by the homeland's limited land availability and the semi-arid environment. New boundaries resulting from the various acts promulgated as part of the political 'Apartheid' system also prevented traditional migration in search of grazing and agricultural opportunities. The availability of cash wages, creating opportunities to establish independent households also played a role in changing the role of agriculture to a more supplementary position. The different types of tax (hut tax, road tax, dog tax) also contributed to migration to obtain income (Stacey *et. al.*, 1994). However, better farmers were still able to sell produce to white traders, as the growing population created an increase in the demand for food, fuel and labour (Bundy, 1979).

Although overgrazing, droughts and diseases affected all farmers, protective measures introduced after 1913 were allocated almost exclusively to white farmers. The extension of infrastructure to African areas was also neglected. The Land Bank and most co-operatives did not provide credit for black farmers who were further undermined by the Land Acts of 1913 and 1936. The Land Act prohibited land purchasing and had an impact on the types of tenurial relations that could be practised. Poor levels of support as well as the fact that homelands in effect became labour reserves mitigated the situation (Stacey *et. al.*, 1994). Huge areas of grazing were no longer accessible, placing severe limitations on cattle holding. The Native Trust and Development Act of 1936 caused further extensive migration into the reserves and viable enterprises became more difficult. For farming households to be economically successful sharecropping and labour tenancy became a means. New tenancy arrangements were developed and wage labour increased (Stacey *et. al.*, 1994).

Technological transformation also impacted on agriculture's position. The single-shear plough used from the early 1900s was by 1919 replaced by a double-shear plough. By the 1940s, some farmers used tractors and fertiliser. Entrepreneurial behaviour developed as tractor owners hired out services to other farmers (Worth, 1994). Since the 1940s population pressure became more pronounced as the population growth rate increased and control over human movement was tightened. During the 1960s many people were resettled in the homelands with the result that the existing reciprocity and sense of community was undermined. Large numbers of new households, often with very limited agricultural resources and thus no basis for reciprocity, developed, causing much fewer cohesive communities than traditionally existed (Stacey *et. al.*, 1994; Worth, 1994).

During the past 30 years employment of permanent and especially seasonal labour by homeland farmers increased markedly. Most small-scale farmers today employ wage labour, particularly in more intensive cropping areas. A transition from family to wage labour is evident. The trend is that men do permanent work, while women comprise up to two thirds of the seasonal work force. Cash or serve-in-kind remuneration is paid (Stacey *et. al.*, 1994). Extensive sharecropping developed - in some cases at a subsistence level but in others at a commercial level. Sharecropping entails tenancy where land is leased and rent paid to the tenant, normally as a proportion of output. This practice became common under a variety of contractual forms: It varies from a tenant with access to capital that rents land from any number of land right holders, to many poor tenants renting services from a wealthy landowner. A relationship evolves between those with access to capital and those with access to land (Stacey *et. al.*, 1994). This practice, as used in Ditsobotla is elaborated upon in the next chapter.

5.3.3 Agricultural support in Bophuthatswana

Support for black farmers in the area, although limited, was initiated during 1929 with the Native Agricultural and Lands Branch of the Department of Native Affairs, which had a limited budget and responsibilities and thus a limited impact. A greater focus on agricultural viability took place as a result of the Tomlinson Commission of 1955, whose aim it was "to help the Bantu to develop an efficient and self-supporting peasant farmer class in their own areas". This was based upon the transfer of modern

technology and resources, access to land and commercial marketing. Due to a lack of political will, most of the Commission's most important recommendations were never implemented, although their value is recognised today. These entailed establishing "middle class", viable farmers through comprehensive farmer support facilitating access to increased land, markets, credit and extension (Van Rooyen, 2000) as described in chapter two. Forced relocation and tightening of influx control led to dramatic increases in land pressure in the 1960s and 1970s, contributing to the lack of implementation of the Tomlinson Commission's recommendations (Stacey *et. al.*, 1994).

During 1976, the Department of Agriculture of Bophuthatswana, as the main thrust of its development activities, began establishing projects aimed primarily at food production. Projects entailed groups of farmers, linked to a co-operative. Emphasis was placed on commercial production with mechanisation and modern cultivation practices. Farmers received support with finance, training, technical aspects and management. Participating farmers had access to production inputs and markets (Bembridge *et. al*, 1982). Elements of the Tomlinson Commission's recommendations can be seen in this approach. The Taung Irrigation Scheme and the Sheila Dryland Cropping Scheme were the first of these projects initiated. Production for the market was propagated on these 'estates' with development according to sophisticated technical programmes, under expatriate management (Stacey *et. al.*, 1994; Worth, 1994).

The Department of Agriculture in Bophuthatswana, responsible for agricultural support, was augmented by six parastatals of which the Agricultural Development Corporation of Bophuthatswana (Agricor) was the largest in terms of budget and activity (Karodia, 1994; Worth, 1994). Established in 1978 it was to facilitate agricultural development and bring the state to self-sufficiency. It fell under the jurisdiction of the Ministry of Economic Affairs, but interestingly, had direct access to the President. Services included assistance to co-operatives, marketing and loan provision. The corporation was divided into three divisions, production, marketing and administration (Bembridge, *et. al.,* 1982; Worth, 1994). Agricor was established with two main goals; food production and human development. In theory the approach was in two phases; rapid establishment of viable production units, to be followed by community development. Development was measured in terms of technological advancement and production: the number of tractors in operation, hybrid seed and fertiliser bought and production achieved. Agricor merged an existing co-operative movement with large-scale, capital-intensive project development (Worth, 1994).

The mainstay of agricultural development therefore was the projects, of which Agricor inherited several already in operation. As described in chapter two, these projects were based on a technocratic approach with the main focus on maximum production on centrally managed, capital intensive, 'disciplined' farmer settlements. Agricor mainly provided services regarding infrastructure and credit (Beuster, 1980; Karodia, 1994; Worth, 1994). Modern cultivation and plant protection methods were applied, but generally not adopted to the degree that farmers were enabled to use them independently (Worth, 1994). If this approach is evaluated using the design criteria identified in this study, deficiencies in participation, co-ordination and social sustainability are obvious. Projects expanded until 1984 when 2500 farmers were supported in cultivating 50 000 hectares (Annual Agricor reports).

This marked an orientation towards classes of commercial farmers and wage labourers and led to increased sharecropping (Stacey *et. al.*, 1994).

In 1981 the Agricultural Bank of Bophuthatswana was established. By 1985, 95% of farmers utilised a credit facility, with two thirds of this credit originating from Agribank and another 20% from primary co-operatives. Eighty percent of farmers had no real understanding of their credit status at any given time. Between 1981 and 1990, Agribank advanced R322 million to farmers and wrote off in excess of R3.2 million in debts. Due to the drought from 1985 to 1988, Agricor rescheduled an additional R64 million for repayment over 20 years at no interest. Of the credit advanced between 1981 and 1990, R195.8 million (60.8 per cent) was recovered from farmers, R64.7 million (20.1 per cent) was written off and R61.5 million (19.1 per cent) remained outstanding (Agribank, 1981-1990). Agricor management of the projects entailed two accounts: an operational account for the expenses of Agricor at the projects and a development account, which was for the incurred cost for infrastructure and other fixed assets. All personnel and employees were paid from the operational account. Agricor owed loans to the government. It was carried over at 5% interest p.a. No other movement took place in the accounts during the 1980s. Debt write-offs were apparently done with ease, as in 1992 when in total R36 million was written off.

Agricor re-oriented its development approach during 1988 through "Temisano", based on integrated rural development. This was to address community development and recognise human development. It incorporated four facets, viz. production; community development; training; and secondary industries, which became agro-business (Worth, 1994). The typical modus operandi was to identify an area, do an economic feasibility study, negotiate the broad concept with the potential participants, secure finance, establish a cooperative and provide management. If the design criteria developed in this study are considered, certain flaws are clear. Especially commonality of objectives, social sustainability, equity, cost saving and reconciling technology with social realities was largely ignored. However, the main problem experienced was limited participation (Agricor Annual Reports).

By 1989, according to the chairman's annual report, Agricor was no longer a purely agricultural organisation, but one with a holistic approach to rural development. The organisation's budget for salaries was R18.8 million for 1989, with 11 district offices and 43 service centres staffed. By 1990 the 'new' dispensation, introduced in 1988 and involving an enlarged brief, allowed a development budget of R23.4 million and an operational budget of R56.6 million. A total of 78 service centres were in operation to facilitate the work of community development and extension staff. According to the annual reports, Agricor was now optimally staffed. There is little evidence of research in technology appropriate to small-scale farmers, while much evidence indicates the preference for a "high-tech" approach to farming (Bembridge *et. al.*, 1982; Bembridge, 1988). According to Promitz (1992), Agricor have had a "travel and visit" approach mixed with a programme approach. Looking at the expenditure patterns, it is evident that one of the implied aims of agricultural development was the establishment of a middle-class group of commercial farmers. Subsistence farming was given little support with no record of funds being expended on this sector prior to 1988. However, agriculture was considered the foundation of the economy and the basis for rural development (Bembridge, 1986c; Worth, 1994).

A 1988 report by the Department of Agriculture stated that the standard and quality of agricultural extension was unsatisfactory: supervisors had insufficient control over field staff and no systematic planning occurred. Deficiencies in quality of staff, technical support, communication, administration and management were experienced (Bembridge, 1988). During the early nineties, it was established that approximately 90% of extensionists in Agricor's service, had no formal extension training (Karodia, 1994). The majority completed a basic agricultural diploma at the Taung college of Agriculture. It was partially due to this assessment that the reorganisation of the agricultural services was carried out (Worth, 1994). Agricor underwent many changes in approach since its inception in 1978 (Karodia, 1994; Worth, 1994; Agricor reports, '87-90), as the shift to 'Temisano' illustrates. In time a significant percentage of staff became disillusioned with the continuously changing approach and became de-motivated (Karodia, 1994).

In a study done in several districts, farmers were found to be frustrated with agricultural programmes with no apparent impact (Worth, 1994). Project farmers in the Sheila ward indicated that in most cases, the Agricor-managed co-operative farmed for them. Frequently they were not consulted on purchases, budgets or the status of their accounts (personal communications: J Mashau; F Thlomelang, 1997). Decisions were often imposed on participants (Worth, 1994). Authors such as Karodia (1994) and Worth (1994) were often critical of development initiatives. They maintained that inappropriate and constantly shifting objectives and strategies; planning for, and not with farmers as well as the lack of effective monitoring hampered efforts. This is in clear contradiction with the design criteria developed in this study that emphasise co-ordination, complementary objectives and participation. When measuring development, the success indicators used varied. Politicians and technocrats aimed for tangible results such as tons per hectare, gross margins and debt repayment, while farmers were interested in food and income (Worth, 1994). Development seemed to constitute *ad hoc* responding to short-term political need while no broad system for monitoring was evident. Lack of management control was cited as a major contributor to the failure of the extension service (Worth, 1994; Anon., 1995). When Agricor was dismantled after the 1994 elections, it was headed for a crisis. Among the signs were expansion of the organisation and expenses and decreased productivity (Allen, 1985; Karodia, 1994, Worth, 1994).

Although agricultural development philosophy and strategies in the support services of the erstwhile Bophuthatswana were generally constructive, political pressure shifted the intended holistic focus towards production, with limited attention to human capital development. No coherent agricultural policy was ever formulated for the former Bophuthatswana (Karodia, 1994; Worth, 1994; Low, 1995). The Bophuthatswana and South African governments were interested in making independence from the SA economy tangible. The rationale was to be able to claim that the 'nation' was self-sufficient in food production. Development was equated with large-scale mechanised farming (Francis, 1998), leading to a technocratic approach aimed at maximum production. Sound development principles gave way to a paternalistic approach. Pressure was created with target yields, leading to high input costs. By 1985, maize produced at the projects was 'exported' to SA, in keeping with the political agenda of portraying a successful, independent country. However, during the early 1990s it was established that agriculture in Bophuthatswana consisted mainly of non-market production (Worth, 1994). The involvement of South African institutions at the projects, indicates that empowerment of

project participants was limited. To an extent Bophuthatswana remained dependent on SA, as economically, viability and independence was not achieved (Francis, 1999).

5.3.4 Bophuthatswana's agricultural potential

The agricultural potential of Bophuthatswana was the subject of numerous studies (Worth, 1994). It was found that even if agriculture was fully developed, rural unemployment would still occur (Beuster, 1981), signifying the need for non-agricultural options. During 1983 it was established that if all arable land in Bophuthatswana was utilised effectively, production could substantially improve (Roodt, 1983). Ten years later agriculture still operated largely in the non-market sector, where most of the production was utilised by the farmer and his family (Worth, 1994). Roughly 40% of the population owned less than 10 head of livestock and regularly planted a crop. Only 30% owned more than 10 head of cattle and planted regularly (Bosman *et. al.*, 1991). The farming community was roughly divided into a resource poor, landless and unskilled majority and an established, empowered minority, with an emerging sector developing between these extremes (Anon., 1997). Empirical data on farming activity was scarce, but expert opinion concluded that 15 to 20 % of the population derived some form of cash income from agriculture (personal communication, Mr. J Baird: Agricor. 1995). Roughly 60% of the rural population used land for agriculture and most ruralites with access to land, planted some maize (Worth, 1994). According to the Urban Foundation (1988), most families received remittances from migrants resident in urban centres. Between 60 and 80 % of the population's gross income came from remittances. Roughly 66% of rural dwellers used land for a portion of their subsistence needs. The subsistence sector was only 28% self-sufficient and other sources of income (remittances, pensions) were used for food purchases (Anon., 1998a).

Table 5.3.1: Crop area cultivated during 1988/89 for Bophuthatswana (Annual report, Agricor):

	Total ha	Maize	Wheat	Sorghum	S'flower	G'nuts	Cotton	Dry bean
Bop '88/'89	65144	49396	465	1475	10840	1105	547	1316

Crop production was a key part of the Bophuthatswana economy (Table 5.3.1). On average, during 1983 to 1993, field crops contributed 49% to the country's gross agricultural income (Anon., 1998a). Crops produced under irrigation include potatoes, wheat, tobacco, vegetables and cut flowers. Yields varied according to soil type and rainfall and cultivation took place in areas considered marginal for production.

5.4 Socio-economic profile

Socio-economic reconstruction and development is a major challenge in the province today, but various inhibiting factors inhibit progress. The DBSA reports that the average population density during 1996 was 30.7 persons per square kilometre, varying from 194 people/km^2 in the urban east to 5 persons/ km^2 in the sparsely populated west. North West has a relatively small population in comparison with most other provinces as revealed by 1996 census figures. Of the 3.6 million people, around 1.7 million are female and 1.6 million are male.

Table 5.4.1: Number of people in the North West province in 1996, in relation to SA (DBSA, 1999)

	Total ('000)			*Males* ('000)			*Females* ('000)			*Location* ('000)	
	0-14	15-64	65+	0-14	15-64	65+	0-14	15-64	65+	Urban	Rural
N-West	**1231**	**1807**	**1397**	**611**	**914**	**607**	**620**	**893**	**790**	**916**	**2262**
SA	**14070**	**22161**	**1706**	**7063**	**10760**	**697**	**7007**	**1400**	**1008**	**18511**	**19427**

The province has a young population with 40.4% of the population younger than 15 years of age and another 26% between 15 and 29. The results of the latest census represent the population as on 10 October 1996. Women usually outnumber men in predominantly rural areas with poor economic prospects. This can especially be seen in the very young (0-14) and very old (65+) age groups, in the province. Men outnumber women where employment in mining, agriculture or industry exists.

Roughly half (49.8%) of the province's population is functionally urbanised, including people in semi-urban areas. More than 91% of the population is African, while the Asian population constitutes 0.3%, Coloureds 1.4% and Whites 6.6% of the total. Roughly 80% of the population speak Tswana as home language, with Afrikaans at 9%. Approximately 4.3% of the province's people have tertiary qualifications, around 13% have completed high school and 31% have had some secondary education, while roughly 8% have completed a primary education. Among people aged 20 years and above, almost 22% have had no schooling at all. Water is available to 20.3% of the population in the form of water piped to their dwelling. Another 7.7% have water on site while the most-used source of water supply is the communal tap, which is used by 36.4%, while 35.6% of the population has to find water in other ways, such as springs, rivers or wells. People in the province rely heavily on public telephones. Almost 42% use a public telephone and only 17% have telephones in their dwellings or cellular phones.

The human development index (HDI) suggested by the United Nations uses people's life expectancy, school enrolment, adult literacy etc., as indication of capacities, while income indicators are used to indicate opportunity. The rationale for using such indicators is that freedom to choose and ability to act on choices measure the level of human development. The HDI for SA was calculated at 0.68 out of a possible 1, with that of North West on 0.54, on par with Zimbabwe. This is mirrored in the per capita income level of roughly R5000 for 1994, the 3rd lowest of all provinces and lower than the country's average of R8418. Translated this entails that 30% of households in the province can be described as poor. Social pensions amounting to R800 million were being paid per month during 1995 (DBSA, 1999).

Table 5.4.2: Social and Physical Indicators of the North West province (DBSA, 1999)

Indicators	North West	South Africa
Area (km^2)	118 710	1 223 814
Population '93 (000)	3.65 million (3.2% p.a.)	40 million (2.7% p.a.)
Density (person/km^2)	30.7	35.3
Functional urbanisation (%)	49.8	57.9
Literacy rate, 1991 (%)	70.1	82.8
Labour force '95 (000)	1.15 million	14.36 million
Unemployment rate	32.8	29.3
Personal Income/capita (R)	5000	8418
Real GDP per capita (R)	3911	5745
Dependency ratio (no of people)	2.1	2.0
Life expectancy	59.9	63.2
Human development index	0.54	0.71
Hospital beds/1000 people, '92	3.91	3.93
Pupil-teacher ratio, 1993	24	32

Human development levels in the province show severe spatial and racial disparities: Infant mortality rates are 7 times higher in the black population than in the white population, with black infant mortality at 43 per 1000 live births. Poverty is acute in rural areas (Anon., 1995). While the national life expectancy is 63.2 that of the province is just under 60. This gives an indication of access to health services, nutritional status, violence and sanitation. Indicators of human development, including literacy, life expectancy, labour absorption capacity, income, education and health services are referred to in table 5.4.2. Regarding health indicators, the province score is below the average of the country and services are described as inadequate. A shortage of medical officials is evident with 746 practitioners serving its 3.6 million population during 1995. This is a rate of 0.2 per 1000 while the national average is 0.5.

Regarding water and sanitation the province caters for between half and two thirds of its population. In North West 34% of all roads are paved (Anon., 1995). During 1999 it was calculated that in the order of R98 million p.a. was required to maintain roads in North West while the budget was less than R60 million (Anon., 1999). An indication of access to education is given by the literacy rate, which stands at 70% in the province. This rate is the lowest of all provinces but the teacher to pupil ratio of 1 to 24 is better than the national average. However, school attendance does not compare favourably as 13.7% of 6-14 year olds did not attend school in 1991. The percentage of women in managerial and professional categories is 59%, the highest in the country (Anon., 1995).

The province has a relatively small economy. The economic sectors with the highest contribution to employment are agriculture, mining and services. The largest sectors in order of size are mining, community and social services, commerce, manufacturing and agriculture with shares ranging from 40.5 to 9% of GDP. As stated, the province hosts 9.3% of the country's labour force, but it provides formal employment for less than a proportionate number of workers. Almost 68% of total employment is provided in the mentioned sectors, with agriculture providing 13.9%. Mining also has a dominant

role in the economy. This concentration renders the economy vulnerable to fluctuations in international price and demand. Given that mining employed a quarter of the labour force in 1991, a decline in the sector's activities could cause a dramatic increase in unemployment (Anon., 1995).

Of the total labour force, 22.2% has no formal education, while 34.5% have a primary level education at most. North West's share in the country's GDP decreased from 7.6 % in 1980 to 5.6 % in 1994, mainly due to a sharp decline in agriculture's contribution from 14 to 8.3 % of the national value (Anon., 1995). The provincial economy grew at an average annual rate of 1.1% during this period. Primary sectors (agriculture and mining) lost ground as contributors to the GDP. Although the province appears to possess comparative advantages in production of agricultural and mining products, the economy became more diverse.

Income distribution is uneven and varies significantly between urban and rural populations, race groups and magisterial districts. A percentage of 44.3 of urban and 70.5% of rural households earn less than R10 000 p.a., according to a statistical macro-economical review of the DBSA (Anon., 1995). An earlier evaluation (Pieterse, 1984), states that 53% of all households in Bophuthatswana, earned less than R2000 p.a. with 19% earning over R4000 per annum. The average income in North West is also relatively low, if compared with provinces such as Gauteng and the Western Cape, while welfare, remittances and other income sources contribute significantly to household income (table 5.4.3).

Table 5.4.3: Structures of rural incomes for some provinces with percentages of various income sources (McDonald & Piesse, 1999):

	Percentage of total income						
	Mean direct income (R)	Wages	Profits & Investments	Pensions	Welfare	Remittances	Other
Gauteng	54 277 (1)	54.2	37.2	7.2	1.2	0.2	12.9
West. Cape	41 649 (2)	36.3	60.9	0.7	1.8	0.3	13.9
North West	24 502 (3)	32.6	54.4	0.9	7.3	4.9	24.7
Kwazulu Natal	22 112 (5)	55.5	26.7	2.1	10.4	5.2	26.2
East. Cape	15 082 (9)	44.1	26.4	1.6	18.3	9.7	16.6
SA mean	21 052	51.2%	33.0%	2.2%	8.8%	4.8%	21.1%

In the 1999 budget speech it was revealed that the unemployment rate of 32.8% in the province is set to rise to 43% by 2001 (Anon., 1999). However, if economic growth of 5% is achieved, unemployment could decrease to 30%. According to the budget speech, 57% of the province's population live in poverty (almost double the 30% mentioned earlier) and regarding income inequality, the Gini coefficient of 0.67 is amongst the most unequal in the world. A decline in employment in commercial agriculture is expected, with intensified mechanisation as farmers become more globally focused (Anon., 1999). Agriculture has a vital role to play in transformation and development, as it is the basis of the economy of the province. Development of agriculture is linked to growth, food security etc. Seen in the light of high unemployment, developing a growing agricultural industry will have a significant influence on employment and development. The urgency of appropriate support models such as the project approach is clear.

5.5 Recent agricultural policy, support systems and performance

5.5.1 Policy and services development

After the first democratic elections during April 1994, the structure of institutional agricultural support services in the newly proclaimed North West Province changed drastically. These changes were influenced by national initiatives to deregulate and liberalise the agricultural sector, as discussed in chapter two. A provincial Department of Agriculture with delegated powers was initiated. Of the 27 magisterial districts in North West, 11 originate from Bophuthatswana, constituting almost four million of the 11 million hectares, or 33.4% (Anon., 1997). The two major organisations, Agricor and the Highveld Region of the previous national Department of Agriculture merged in a drawn out process into one public organisation: the provincial Department of Agriculture, which after the next elections of 1998, became the Department of Agriculture, Conservation and Environment (NWDACE).

The province is divided into three regions with regional Field Services Directorates and its extension personnel, supported by Technical Support Services (Research), based at Potchefstroom. Departmental headquarters are based in Mafikeng. Several supporting institutes were developed, such as the Directorate of Planning and Information and the Kgora institute that focuses on development of small-scale enterprises, etc. Other major players in the province include the ARC, with the Grain Crop Institute, also active in collaboration projects with the Department. The major cooperatives, North and South West Cooperatives (NWC and SWC), the North West Agricultural Union (NWAU), the National African Farmer's Union (NAFU), GrainSA and other NGOs are also involved in the agricultural sector.

During 1997 a policy and a set of goals were determined in which the Department envisaged prosperous farmers who would contribute to the welfare and economic growth of the province, in a sustainable manner. The policy formulation process included workshops held with stakeholders throughout the province. According to compilers, it was informed and legitimate since it is based on the constitution, other policies and legislation strategies. In this policy extension service's impact was seen as limited. Accountability to clients and in-service training were seen as priorities (Anon., 1997). Social support programmes, particularly with regard to household food security received attention. The promotion of co-operative action between stakeholders was dealt with in detail. The need to promote agribusiness and encourage capacity building was highlighted. Marketing objectives dealt with the provision of market information and the promotion of marketing through the broadening of access to resources, skills and facilities (Anon., 1997; Anon., 1998b). The focus on linkages, human capital development and access to resources and services, supports the hypothesis of this study, that integration and quantification of diversity must be dealt with.

The role of the established sector with regard to food security, job creation and economic growth was acknowledged. With regard to the developing sector, research was to use indigenous and existing technology as point of departure while FSR was seen as a vehicle to understand and study farming systems (Anon., 1997; Anon., 1998a). According to an in depth analysis, research priorities in the

province include land care and livestock management, plant protection, on-farm value adding and marketing (Catling, 1998a). A land care programme to facilitate integrated, sustainable utilisation of resources in communal areas became a priority in the province. It was stated that thinly stretching resources across various objectives would have a low success rate and would be wasteful. A concentrated effort on high priority objectives was proposed (Anon., 1998a). Facilitating participation in projects and decision-making to enable farmers to take control and responsibility was seen as priority (Anon., 1997: Anon., 1998a). Key issues to be resolved according to a five-year plan were the promotion of sustainability, resolving structural constraints, improving support and providing of basic needs. Activities highlighted were restructuring and reviving extension and research to engage the emerging sector. To establish and build the capacity of agricultural co-operatives as vehicles of development was also highlighted. During 1998 a proposed client register was to be established and a survey of natural resources undertaken. The establishment of regional co-ordination forums was also seen as a priority (Anon., 1998b).

Regarding the various development projects inherited by the previous dispensation, most were terminated. Because of a lack of management skills, the viability of these projects decreased, as did participation. Some projects that continued became a financial burden to the NWDACE. Another type of project has been initiated since the late nineties: Development-oriented projects are facilitated through various public and private support services and large amounts are spent, often with limited preparation, the main reason being that political pressure to show progress has not decreased since the Homelands era. Although some form of assistance is warranted, a commitment by potential participants should be provided (De Beer, 1999). Some prerequisites are crucial to enhance commitment. Individual responsibility and accountability in particular must be enforced (Van Rooyen & Nene, 1996). Prerequisites that can be isolated include demand driven projects and selection of groups on specific criteria; i.e. attitude, aptitude, experience. This points towards the need for a structured, revived project approach.

Since 1999 the NWDACE focused on accelerating sustainable and integrated rural development as part of an attack on poverty. It envisages an equitable and sustainable sector, enhancing livelihoods throughout the province. Its mission is to provide services towards sustainable natural resource use that supports a competitive and equitable sector. In this regard it fully endorses the national strategic objectives of equitable access and participation, improved competitiveness and profitability and sustainable resource use and management and the NWDACE subsequently accepted these principles during 2002 (Anon, 2002). To a large extent, provincial agricultural policy links up with national agricultural policy, but a somewhat more focused approach is used to deal with the priorities typical of the province.

The challenge in the largely rural North West province with a poverty rate of over 50% is to effectively manage the sustainable use and development of the natural resource base. This resource constitutes a major competitive advantage as it underpins the 2 largest economic sectors, mining and agriculture, as well as the highest growth sector, tourism. The main problem; low profitability and competitiveness constrain participation. A major opportunity for the poor to participate in the economy therefore lies in the use of natural resources. Specific interventions and incentives are to be provided to remove barriers to entry

by those previously disadvantaged. In this respect some specific strategic objectives include (Anon., 2002):

To contribute to household food security initiatives
To facilitate and implement land reform projects
To facilitate access to affordable services
To create awareness of the opportunities in the sector
To enhance competitiveness by facilitating infrastructure development and input costs reduction
To develop and transfer competitive and appropriate technology
To engage in human resource development
To facilitate the development of accessible markets
To enhance profitability by facilitating the dissemination of information

The Department participates in the Integrated Development Programme (IDP) processes of local municipalities and is represented in all the IDP forums to ensure that departmental programmes form part of the IDPs. Furthermore, the Department plays a key role in the Integrated Sustainable Rural Development Programme driven by local municipalities (Anon., 2002).

5.5.2 Agricultural performance

Of the total area of the North West province, 81.1 % is agricultural land. Based purely on land potential, the contribution of agriculture in the North West could be enhanced. Almost a third (28.3%) is potentially arable, while 56.8% is grazing land and 6.4% is used for conservation. During 1993 roughly 7500 commercial farming units covered approximately 6.1 million hectares and just more than 9000 commercial farmers employed 125 000 workers. Animal husbandry with a contribution of R1 262 million and field crops with R530 million were major enterprises (Anon., 1999). Crop production has shown a distinct reduction in recent years (as have the number of commercial farmers) due to economic viability problems. However, next to mining, agriculture remains the most important economic sector in the province with a 5.6% contribution to GDP and a 17% contribution to employment. Farm income in the 1995/96 season was R2650 million while maize planted totalled 1.26 million ha on which 3.15 million tons at an average of 2.5t/ha was produced. A total of 66 000 tons of groundnuts at 0.89t/ha and 269 000t of sunflower at 1.1t/ha was produced in the same period. In 1995 cattle numbers totalled 1.18 million, goat numbers 87000 and sheep numbers 477000. More than 50% of livestock owners (23% of all households) owned one to five heads of cattle (Anon., 1999).

It is estimated that 85% of rural households practice a form of animal husbandry, but only 4% are full time farmers. Only 0.3% is estimated to own more than 50 cattle. Grazing land is estimated at 7.2 million ha. Grazing capacity gradually decreases from 4 ha/LSU to almost 20 ha/LSU in the dry west (Beuster, 1985; Anon., 1997), but the average carrying capacity of 10 ha/large stock unit, provides for 720 000 head of cattle (Anon., 1998b). The actual number of cattle is estimated at 1.5 million, evidence of overstocking, compromising the sustainability of the livestock industry (Anon., 1998b).

Developing areas lack financial services and cattle are often used as investment to save capital (Anon., 1998b). Adding to the high cattle numbers, 0.8 million sheep, 0.5 million goats and 0.17 million pigs are found. North West produced 20% of national feedlot output with 250 000 head of cattle annually (Anon., 1997). The province provided 14.7% of the national income from field crops, 0.8% of national income from horticultural crops and 5.3% of the national income from livestock during the late nineties (Anon., 1998b). The agriculture and conservation sectors remain important to the provincial economy contributing 13% of total gross domestic product and 19% of formal employment early in the 21st century (Anon., 2002).

The province is served by two agricultural companies (North-West and South-West Co-operative), both of which underwent structural change during the deregulation process. Numerous primary co-operatives in the developing areas are largely inactive and although some interaction with the two major organisations is developing, a vacuum has developed with regard to support to the developing sector (Anon., 1997). According to the a study done by the Agricultural Union of the province (Agri-North West) during 2001, agriculture and specifically the roughly 6500 remaining commercial farmers were responsible for 43% of the province's GNP while 160 000 direct jobs are involved. Apart from food production, agriculture also provides a tax base, foreign exchange, and welfare, and is an important custodian of natural resources.

During 1999, indications were that a significant number of farmers could go bankrupt after the serious drought. Through the mediation of Agri-North West and the NWDACE, an application for drought relief assistance was developed. After a screening process, 278 commercial and 1 523 emerging farmers qualified for support and a proposal with this recommendation was presented to government. The estimated cost for this support scheme was just over R10 million, but no action was taken. Given the fact that these farmers were identified through the action of Departmental officials that tried to involve all those agriculturally active, it could be argued that the 1500 farmers that qualified, represent the largest portion of the commercially oriented emerging farmers in the province.

As in 1983, expert opinion during the late 1990s was that the agricultural sector in the province did not contribute according to potential towards economic growth and in fact showed a negative growth rate since 1988 (Anon., 1998a). Outputs were primarily aimed at the manufacturing sector and food, beverage and tobacco sub-industries were dominant. Positively, exports from the province were substantially higher. Promoting agriculture should have a stimulating effect throughout the economy and is an obvious vehicle for rural development. Agricultural investment results in the highest ratio of employment to output of all sectors (Anon., 1998a). It is estimated that present production levels in communal areas are at 16% of the potential, illustrating significant growth possibilities.

The effect of deregulation and globalisation also impacted on the agricultural sector of North West. Although meat and grain products are more expensive in most developed countries, due to the subsidisation of their markets, these countries can efficiently export to SA, undermining local producers. Input costs remain a major concern. As can be seen from prices in table 5.5.1 and the enterprise costs and yields needed to cover costs in table 5.5.2, the effect of the "price squeeze" is significant.

Table 5.5.1: Expected prices for major crops of North West, with given yields for the 2000/2001 season (Conradie, 2001).

Maize		Sunflower		Groundnuts	
Yield (t/ha)	Price (R/ton)	Yield (t/ha)	Price (R/ton)	Yield (t/ha)	Price (R/ton)
1.93	876	0.97	1 647	0.63	3 111
2.25	751	1.00	1 558	0.80	2 418
2.50	686	1.20	1 315	1.00	1 960
2.75	633	1.40	1 141	1.20	1 654
3.0	588	1.60	1 011	1.40	1 436
3.25	551	1.80	910	1.60	1 288

Table 5.5.2: Enterprise costs and yields required to cover costs in North West, for 2000/2001 (Conradie, 2001).

	Total enterprise costs	Yield to cover cost (expected yield)
Maize	R1690	2.7t/ha (2.5-3)
Sunflower	R1598	1.04 (.8-1.2)
Groundnuts	R1960	0.95 (1-1.5)

Extensive evidence suggests that the unacceptable levels of debt will give rise to increasing bankruptcies – as many as 20% of farmers in the province are currently at risk (personal communication, W Auret, NWC, 2002). The reasons given by agricultural companies include (in order of importance) the "price squeeze", high debt and poor financial management. Since 1998 59% more loans were dismissed in the province. The number of clients acted against rose by 63% while the amount in question rose by 255%. The amount loaned rose by 99%, implying that more producers are now dependent on credit. Although climatic conditions play a role, the uneven playing field in the international economy, the `price squeeze´ and crime also contribute. Looking at a 25% debt relation (in reality the figure is closer to 32%); a cash flow budget indicates that a production of 5% above the average would be enough to make a profit. However, at a 50% debt rate, even yields 10% above mean production would not be sufficient for a profit (Conradie, 2001).

The 'cost/price/profitability squeeze' also relates to the developing sector, as enterprise costs are also the concern of the small-scale farmer, whose agricultural enterprises form part of livelihood strategies. Without these enterprises food security is in jeopardy and a heavier burden on welfare resources could result. The low number of small-scale farmers that actually planted in the province during the 2000/2001 season bears testimony to the squeeze. At Sheila, where roughly 200 land right holders could potentially plant, only 15 farmers planted during that season, the main reason being lack of credit. Innovations to lower costs as established by Vink (2000) in the commercial sector are also relevant in the small scale sector: using fewer inputs, planting only higher potential lands, more intensive production etc. Some small-scale farmers mix seed harvested from various maize cultivars, and plant a selected portion, retaining vigour and (apparently) obtaining good yields, circumventing a significant input cost, seed. The agricultural scenario is simplistically summarised in a problem tree (Figure 5. 2. 2).

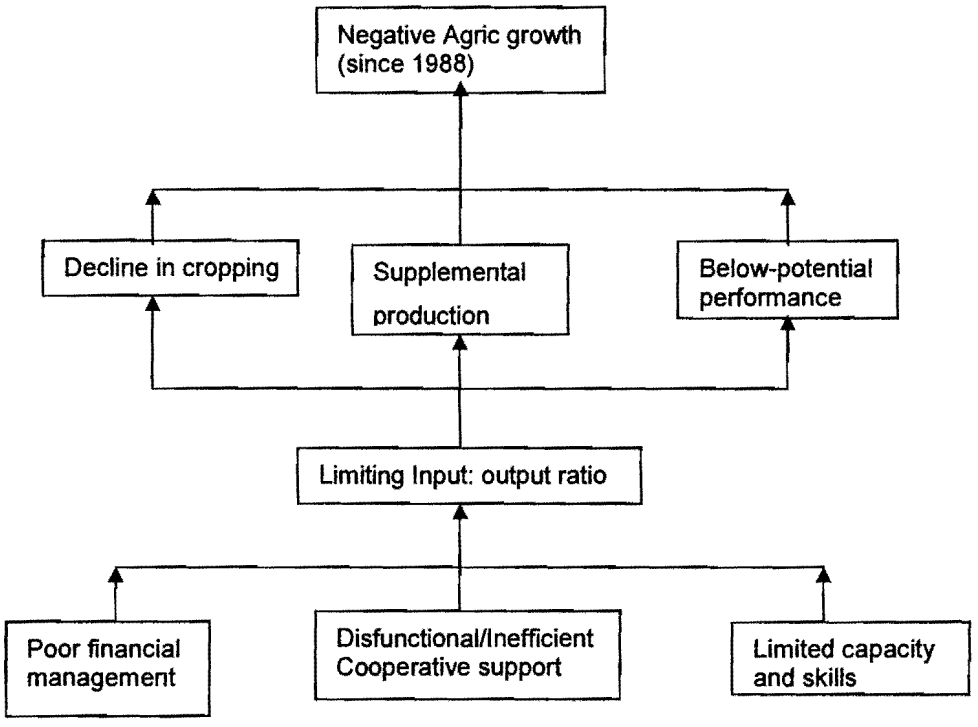

Figure 5.2.2: A problem tree description of agricultural constraints in North West.

5.6 Descriptions and classification of Northwest's farmers

The importance of categorising farmers in order to focus support according to needs received extensive attention in chapter two. Consequently a typological categorisation is proposed in the methodology. Farmer categories in the province should facilitate sound support, as argued comprehensively (Low, 1986b; Eckert & Williams; 1995; Laurent, *et. al.*, 1999; Perret, *et. al.*, 2001). This will be extensively dealt with in the case study, as reported in the next chapter. It will, however, be worthwhile to quantify the economic and political focus in the province and to reconcile this with groups previously identified and described in the province.

The NWDACE policy deals extensively with the question of the client. A significant shift towards the previously disadvantaged is obvious, but as argued, the developing sector is not a homogeneous group and should not be treated thus. Policy during the initiation of the NWDACE identified three levels of categorisation as point of departure; viz. the established, developing and subsistence sector (Anon., 1998b). Although these broad farmer categories are recognised, these are not homogeneous and sub-division is warranted to ensure a focussed, effective approach to support. Targeting support measures such as credit, investment grants, etc. can then be facilitated.

Although a detailed farmer typology with several types will be developed in the case study, previous categorisation efforts deserve mention. According to the Departments position paper on agriculture (Anon., 1998b), rural households can be categorised into four groups, in terms of resource access and commercial orientation: Resource poor households with no land comprise about 31% of the rural population. Small holders operating below subsistence level without selling any produce comprise 56%. This second group fits the description of a subsistence level. Progressive farmers that adopt some technology and sell some produce and or livestock comprise about 13% of the population. They represent the developing sector. Market oriented commercial farmers, the established sector, comprise about 0.2% of the population. This classification neatly fits the described classification of Bembridge (1988) and those of scientists (Karodia, 1994; May, 1996; Eckert, 1996) described earlier. In table 6.5.1 a summarised version of categorisation efforts for the province's agricultural population is provided.

Table 5.6.1: A description of the agricultural population of the North West province.

Model source	Description	Categories	Reference
Conventional thinking	Commercial & developing sector	6000 full time, large scale farmers with an established enterprise + 50 000 part-time, small-scale farmers, with a degree of success	Popular press
1996 Provincial policy:	Three levels of support:	Established developing and subsistence sector	Anon., 1998b
1998 Position paper	Four groups based on resource access & commercial orientation	Resource poor , landless households - 31% Small holders not selling - 56% Progressive farmers some selling – 12.8% Market oriented farmers, 0.2%	Anon., 1998b, supported in classifications by Bembridge (1988); Karodia, 1994; May, 1996; Eckert, 1996

The commercial sector consists of roughly 6000 mostly full time, relatively large scale farmers with an established enterprise (personal communication; W Auret, Agri-North West, 2002). Previous policies proposed that it should receive mainly legislative and administrative support (Anon., 1998b). However, the impact of this sector on the broad economy, linkages, and employment creation warrants more substantial support. This is recognised in recent national and provincial agricultural policy (Anon., 2001b; Anon., 2002). It must be accepted that not all ruralites have the aptitude and attitude to be successful farmers. Commercial enterprises are effective labour markets, providing a safety net and opportunity for such people. The established sector is also responsible for stable food production and is a valuable asset to the provincial economy. However, in general this sector is articulate and can obtain support with relative ease, making it less depended on public support services (Bembridge, 1988).

The developing sector consists of farmers who have shown a degree of success and understanding of agriculture. They have access to land and other resources and are committing these towards production. This group comprises roughly 60 000 households of which roughly 10% have serious potential to become commercial, if the reasoning discussed in chapter 2.4.2 is followed. Roughly 50% of the population of the province is rural; entailing 1.85 million people or at an average household size of six, 308 300 households. On average, 20% of the rural population is actively interested in agriculture, consisting of roughly 61 700 households in North-West, of which 10% (6000 households) could potentially be commercial. These farmers should be an important target group for support. From another angle: in North West, 20% of the rural population does not practice agriculture (62 000 households), while 185 000 (60%) practice only limited agriculture. Roughly 56 000 (18%) have experience and show signs of commercialism and 6200 (2%) are commercial. Ten percent of the 56 000 with potential, again calculates to a figure of roughly 6000 households, who should be the main target.

In many cases an improvement in access to inputs, skills, credit and markets could have an extensive positive impact for this target group. A convincing argument can be made for particular focus on this group, given their potential as well as the budgetary realities of the Department. Limited resources force support services to focus on areas where production increases stimulating the economy is most likely. Serious, committed farmers must be a focus group, even if the majority of them are part-time farmers (Eckert & Williams; 1995). The progressive farmer, who owns and operates his farm, which can bear the risk of innovation and provide jobs to resource poor farmers as well as generating a surplus for the market must be resurrected. This group is a positive force in getting agriculture moving (Eicher, 1988; Stevens & Jabara, 1988). Adapted technology is required for this group as are other forms of support to increase efficiency and production (Bembridge, 1988). Public interest should emphasise the activation of linkages and multipliers and in so doing, stimulating development. Stimulating efficient input and output markets and marketing policies is also vital for this group (Van Rooyen & Machete, 1991).

The third sector although consisting of subsistence type farmers cannot be neglected, mainly because of food security and welfare implications. Support should be available to people who show interest in agriculture. A major provision is that no handouts should be provided. Farmers must show

commitment by a contribution of sort. Packaged development programmes with high replication value, which can be repeated in many areas, should be available at request. These should be simple, acceptable and easily reproducible. In general, skills in this sector are limited but some farmers will be able to improve production, although it is not expected that a large proportion will be successful, due to a lack of ability or interest (Van Rooyen, 1983). Despite limited assets, managerial capacity and physical stamina (Bembridge, 1988), this group will benefit indirectly from improvement in the structural situation and success in the community. The NWDACE has a limited mandate regarding inactive ruralites, but has a social responsibility towards the provision of minimum basic needs. As infrastructure and support improves, the quality of rural life generally should improve, also affecting the landless. Programmes should focus on elimination of constraints and addressing basic needs, in order to improve the livelihood of this large rural grouping (Van Rooyen, 1983). Capacity building is crucial. All those that by necessity practice some form of agriculture should not necessarily always continue to do so, and other alternatives should evolve. A project approach that deals with economic diversity in an agricultural community is the ideal vehicle to practically provide support to resources and services, based on the type of support required by a particular homogeneous rural grouping.

5.7 Focusing on the Ditsobotla projects

Following on the description of rural life in the North West Province, the focus becomes ever finer and now shifts towards the location of the actual field study, in a description of the district in which the project took place.

5.7.1 Physical description: Ditsobotla

Ditsobotla is a predominantly rural district that covers roughly 240 000 ha of which almost 203 000 ha is used for agriculture. Roughly half of Ditsobotla is formed from the former reserves Setlagoli and Kunana, with long-settled communities. The rest of the district is made up of land acquired from white farmers by the South African Native Trust, after the 1936 Land Act. Some of the settlements were formed out of communities that were forcibly removed from 'black spots' in the Transvaal from the late 1940s onwards (Francis, 1998).

The area is relatively flat with no mountains or hills. No permanent surface water is evident but underground water resources are fairly reliable (Stacey, 1992). Winds are predominantly northerly. The average annual rainfall varies between 500 and 600 mm. A high variation occurs, a major factor to be considered in determining yield potential and practices. Distribution within the season also fluctuates extensively. Soils are mostly sandy loams of the forms Avalon, Bainsvlei, Clovelly, Glencoe, and Hutton, ideal for crop production. Key temperatures prevailing in the agro-ecological zone are as follows: The mean day temperature during December is 23.1 and the night temperature 17.5 degrees Celsius. During June the corresponding figures are 19 and 4.4 degrees Celsius (Bembridge *et. al.*, 1982).

The district contains the wards of Sheila, Gannalaagte, Mareetsane and Lotlhakane. In the Sheila ward where the study will focus, nine villages are found. These are Sheila, Verdwaal (1&2), Springbokpan, Matile (1&2), Schoongesicht, Welverdient and Bodibe. Farmers in the villages of Sheila, Verdwaal and Springbokpan were participants in the extensive consultation process.

The total population of Ditsobotla during 1999 was approximately 194 000, with an urban component of 16.3% and a HDI of 0.41, which is much lower than the HDI for SA (calculated at 0.71) and even that of the North West province on 0.54. The population is highly stratified, with income and assets distribution skewed by class, gender, ethnic identity and date of arrival (table 5.7.1). This stratification is bound up with inequalities of voice and power. Attempts to tackle rural poverty need to address these diversities (Francis, 1998).

The male component of Ditsobotla comprises 47.6% and the female component 52.4%. Of the total population 14650 people have a primary school education, 10 420 a secondary school education and 663 a tertiary qualification diploma while 63 obtained a degree.

Table 5.7.1: Occupational breakdown for the Ditsobotla district (www.statssa.org.za)

Occupation	Number of people
Professionals	2690
Mining industry	530
Manufacturing	1525
Managerial/Administrative	67
Clerical/Sales	1158
Transport/Communication	1132
Services	4000
Agricultural industry	2352
Unskilled labour	6004
Unspecified	18 600
Total (officially employed)	35 850

While large numbers of people in Ditsobotla lack land, jobs, and decent housing, there are also successful farmers producing extensively. Many people have access to land, but lease it out. The district was also the site of one of the largest agricultural programmes in Africa; the Ditsobotla dryland projects (Francis, 1998). During June 1999, there were 1451 male and 474 female farmers in Ditsobotla (less than 10% of the total population), of which 61.2% had a limited education up to std. 5. In terms of livestock, the Ditsobotla district had 38600 head of cattle, 36700 sheep, 29700 goats, 2200 pigs, 1500 donkeys and 1050 horses for a total of almost 110 000 animals. Roughly 35% or 71 000 hectare is suitable for dryland cultivation while the rest comprises overgrazed veld. It is a fairly homogeneous cropping area, mainly used for summer crops such as maize, sunflower and on a smaller scale, groundnuts.

5.7.2 History of the Ditsobotla projects

The Sheila area was acquired from white farmers in terms of the 1936 land act, settled between 1936 and 1944 and planned under the 'Betterment' scheme in the early 1950s. People were allocated house and garden plots in defined wards, as well as arable allotments. Grazing areas were fenced off, boreholes developed and a number of schools were built. Gradually tractors replaced oxen as the source of draught power. Local government consisted of a headman, sub-headmen and councillors for the various wards, under the jurisdiction of the Bantu Affairs Commissioner. These tribal authorities with a headman appointed by the President were eventually replaced with a regional authority. This body handled land allocation, tribal and legal disputes (Bembridge *et. al.*, 1982).

The first pilot project of Bophuthatswana's Department of Agriculture was initiated at what was known as Sheila, comprising three wards and 3500 ha of arable soil, of which 1700 ha was being utilised poorly, with yields of less than a ton/ha. At this stage mechanisation was numerically inadequate and in poor condition (Bembridge *et. al.*, 1982). The Sheila project commenced during 1976/77 with a contractor system. The objectives of the project held in improved utilisation of land, selection and training of contractors, increased efficiency and the formation of primary co-operatives. In the long

term the aim was development of the district's agricultural potential and improved living standards (Bembridge *et. al.*, 1982).

The commercial co-operative in the region, Noordwes Cooperative (NWC), together with agribusiness concerns, became heavily and profitably involved in input provision to the project. The Cooperative collaborated with the Bophuthatswana government through Agricor: It was approached to assist departmental extension with management and financing of the project. The total investment of the Cooperative during the first season was roughly R460 000. Less formally, some white farmers organised open days on their farms for 'informal extension' with black farmers (Francis, 1998). Officially 196 farmers were involved in the initial project, but 31 contractors did most of the farming. Contractors were allocated an average of 130 ha to work, including their own. Inputs were supplied by NWC on a credit basis and channelled through the primary co-operative. Services included tractors, parts, fertiliser etc. Lands were cultivated as a unit while cost division and profits were calculated in the extension office. Loans for inputs were made through the Cooperative. Contractors received loans for tractors, equipment and fuel. Springbokpan joined in the project in 1979/80. Sheila primary co-operative (including the villages Sheila, Verdwaal and Springbokpan) was established in 1981/'82 with roughly 400 participating farmers of which 19 were contractors for mechanisation (Bembridge, *et. al.*, 1982). This study will focus on the initial Sheila project.

Following a successful first season, the Department of Agriculture in Bophuthatswana decided to expand the project on similar lines to farms comprising the much larger Mooifontein project, with management through the Corporation for Economic Development (CED). The projects expanded rapidly during the early 1980s and eventually comprised the northern half of the Ditsobotla district (Bembridge *et. al.*, 1982). National pride in the fact that Bophuthatswana was self-sufficient was evident during the late 1970s, as Ditsobotla produced 23% of domestic consumption.

During the 1980/'81 season Sheila produced maize with a value of R9.5 million. The farmers involved, shared a profit of R3 million. In total, 6511 ha was involved and almost 10 000 tons of maize with an average production of 1.54 t/ha was produced (Bembridge *et. al.*, 1982). By 1985 project management was relegated to Agricor. Loans worth R6.6 million were granted. Membership of the primary co-operative was open and it also provided a retail service. On 31 March 1984 Agricor employed loan capital to the total value of R28.55 million in Ditsobotla of which R5.42 million was spent at Sheila. Fixed assets of R4.1 million, project debtors of R15.84 million and net current assets of 4.83 million totalled R24.76 million. However, changes of debt recovery were described as very slim. During this season a net direct benefit of R120.11/ha was achieved at Sheila. Given a yield of 2t/ha, a net profit for the 15 ha plot of R1108 was envisaged, if debt was written off (Stilwell, 1985). At this time a 'good' harvest entailed ± 2.2t/ha and a net farm income/ha of R250 (Stilwell, 1985).

The majority of farmers expressed satisfaction with the project in evaluations conducted during the early eighties (Bembridge, *et. al.*, 1982). Advantages as perceived by farmers included the availability of mechanisation, credit and management 'doing everything'. Holdings increased significantly in size while yields and returns per farm improved. This resulted in more food, clean water, improved housing

and income, healthier children and thus a higher quality of life. The added expenditure focused, in order of importance on house improvements, furniture, education, vehicles and clothing.
Community members not involved in the project (non-participants) felt that they learnt better practices from the project, but also recognised that participants were mostly passive. Most non-participants perceived a favourable project impact through increased knowledge and financial spillovers. While tribal farmers would have liked to participate in the project, more commercially-inclined farmers in the district were not interested, reasoning that they had tractors and implements and were better off making their own decisions. Most non-participants were however members of the primary Cooperatives at Sheila or Mooifontein but perceived that they got less attention from extension since the project started. Traditional leaders felt that their position was threatened by modernisation in general, but were ambivalent about the project in particular. While they welcomed the improved living standards resulting from the projects, they also associated a perceived increase in poor family relations and criminality with the project, as an indirect impact. Other non-participants such as teachers and traders felt that indirect project impacts were mainly positive (Bembridge *et. al.*, 1982).

5.7.3 Infrastructure

During 1979 the Ditsobotla district had 52 villages with two hospitals, 3 clinics, eight post offices and 73 schools and 21 primary co-operatives. An extensive road system linked settlements spread randomly through the district, but no central arterial road given easy access to all parts existed, restricting movement of quantities of goods. Many roads were incapable of carrying heavy loads (Potgieter, 1980).

During 1996, 35 150 houses existed in Ditsobotla, of which 3210 had been electrified, 2180 had water in the house, 1106 had water on site, 16437 had a communal tap and 15 396 used other means. Only 2208 had full waterborne sanitation, 528 used a septic tank, 414 a bucket and 31990 a pit latrine or other system. Ditsobotla had 2 hospitals and 17 clinics, 13 general practitioners, 29 nurses, 1 dentist and 2 pharmacists.

In general, infrastructure in the area today is relatively fair for a rural district. Water supplies are derived from wells and boreholes and are relatively accessible although isolated shortages sometimes occur during wintertime. More than half the watering points are open to contamination. In terms of water, a standard determined by the Department of Water Affairs and Forestry is standpipes at 200 metre radii. In Ditsobotla, 140 000 people do not have access to this standard. Only 528 households in Ditsobotla have sanitation in the form of septic tanks (Anon., 1999b). The electricity network is mostly restricted to the major township, public service buildings and the more affluent in the village community. A number of small post offices are scattered through the district. The only mining industry is an opencast limestone mine near Itsoseng and some small brick making undertakings. One commercial bank is available in Itsoseng. The villages are neat with the majority of the houses built from bricks, with corrugated iron roofs. Primary schools in the area are functioning and a secondary school is available in the town, Itsoseng. In many cases inhabitants, especially farmers do have some form of transport in the form of trucks, cars or animal drawn carts. Personal disposable income in the

district rose from 122.8 million to 165.7 million from 1985 to 1990 (Anon., 1995; Anon., 1997; Anon., 1999b).

In an extensive participatory exercise throughout the central districts of North West (Anon., 1999b), development priorities were determined in various community workshops. The key priorities are infrastructural services, specifically water, electrification and roads. The first ten requirements in order of priority were; water, education, roads, land, emergency services, electricity, housing, post and telecommunication, job creation and transport. Literacy was the 15th priority and agriculture was 17th.

5.7.4 Tenure

Two types of tenure system exist in the area. The majority of land is so called trust land and effectively belongs to the government, but is managed by the local authorities. A small portion of the land is tribal or communal land where the traditional authority also determines land allocation. These units differ in size and in general are smaller than 15 ha each. The status of a farmer in the community and his relationship with the chief can influence the size of the plot he is allowed to work. Subdivision is common as the land of a father is often divided between sons. In both the trust and communal situation, farmers do not have real property rights on the land, insofar as they could use it as collateral for credit. In practice there is little actual difference in land rights between communal and trust land.

Land ownership in Ditsobotla today is unequal and class-structure is evident. Sharecropping is common, also involving neighbouring white farmers. Stacey (1992) estimated that two thirds of the Ditsobotla and Molopo districts were sharecropped. Large-scale land distribution seems unlikely and will probably be driven by market forces. The increasing rural-urban wage differential cause decreases in land use, enhanced by the shift away from the security value of land. This, coupled with capital scarcity and low returns to traditional farming enterprises, limits the possibilities for increases in commercial farming. Improved access to services will have a positive influence, as will tenurial adaptation (Francis, 1999).

Previous attempts to establish a smallholder farmers group were relatively unsuccessful. The tension between landholders that do not utilise their land and non-landholders that want access to land is also problematic. The key to a successful group of small-scale farmers will be effective pooling arrangements and co-operation with agribusiness. Contract farming is likely to become increasingly common and has significant potential, provided that equitable arrangements between the stakeholders (producers, buyers) can be achieved. However the importance of multiple livelihoods must be recognised and encouraged, as agriculture is not the solution for all (Francis, 1999). The elements required in this description again point towards integration, as inherent in the project approach.

5.7.5 Agricultural activities

In an intensive field study, Potgieter (1980), established that 16% of the population of Ditsobotla was economically active. The district's annual turnover was in excess of R40 million. Unemployment was

51%. Almost 30% of the population were literate. Public sector contribution to agro-industries to the extent of 90% of all contributions, illustrate that government's involvement in development was intense (Cuthbert, 1993). Cultivation was intensive with 35 000 ha of maize and 2900 ha of sunflower. Cuthbert (1993) reported livestock numbers of 165 000 and 37 000 poultry. Approximately 26 000 ha was used in projects while 30 000 ha was state land. Ditsobotla produced 23 000 tons of grain during 1978/79 (Worth, 1980). Constraints identified were the sub optimal land use system, extensive migration and the projects effectively separating many people from their land. In terms of agricultural livelihoods, the district is estimated to provide for 2600 full time and 2500 part-time farmers. Only one in four of those economically active in the district could therefore be agriculturally active within its borders (Anon., 1998b).

Cattle played a role in the project area with 13% of participants even indicating that they preferred livestock to crop farming. The average farmer had 4.6 head of cattle, 2.2 sheep, 0.9 goat, 0.3 donkey, 10.5 poultry and roughly five livestock units in total. These figures indicate a 25% drop in livestock since the initiation of the project, which is insufficient given the significant reduction in available grazing. Calf mortality of 20% and an average milk yield of three litres per cow per day further illustrate this. Malnutrition was the main cause for high mortality and low reproduction. No grazing management existed. There was little prospect of increased cattle off-take on an individual basis.

Many farmers utilise land as an important means of generating income, by marketing at least part of their produce. Several variations of leasing land developed during the past decade (Stacey *et. al.*, 1994), partly as a result of the increase in rural-urban wage differentials, causing a decrease in land use by households with members that have a high opportunity cost attached to their time (Low, 1984). This resulted in more available land and expanded sharecropping as tenants lease more land from those who do not wish, or cannot utilise land (Stacey, 1994; Francis, 1999). This is a continuing and growing shift away from the security value of land and social custom.

This sharecropping can be described as a form of land hiring with the payment most often being bags of maize. Sharecropping has a long history in the area and was first documented as taking place between white settlers and local black farmers. Sharecropping agreements usually take place between consenting parties. Where a big demand for land exists, the land right holder is in a better position to bargain. The bargaining power of the land lessee is inversely related to the economic status of the landowner: The more desperate the owner, the more chance for a 'cheap deal' for the lessee. In most cases the agreement is verbal with disputes supposedly settled by the chief.

Sharecropping is an option for land right holders to gain income from land that otherwise would have been unused. Reasons for not planting themselves vary from lack of interest to lack of capital and access to inputs. Land lessees are commercially inclined and willing to take risks. They are mostly full-time farmers with the means of production (Schmidt, 1989). Some landowners with limited resources engage in an ordinary lease agreement where they are compensated for the right to utilise their land. However, depending on the resources available, various types of arrangements occur. Some landowners finance all inputs, except mechanical cultivation practices. In these cases the

owner has more bargaining power and can negotiate a favourable agreement. This is elaborated upon later on in the following chapter.

The described transformation towards commercialisation, although slow, has profound consequences for the communities involved (Stacey *et. al.*, 1994) as it leads to the creation of a commercial farmer class as well as groups of wage labourers and land right holders who lease out land. The commercial class, who developed their enterprises through investment, does not necessarily have links with either the tribal or political structures, but they exert a large measure of political influence. A consequence is less equitable distribution of land. During phases of recession and unemployment these farmer's positions are strengthened, with labour becoming more available. Drought also consolidated their hold on the land, as capital became scarce and smaller farmers with fewer assets were unable to withstand the financial pressure and larger farmers were in a better position to obtain loans (Stacey *et. al.*, 1994; Francis, 1999).

If the previously used assumption that 20% of the rural population countrywide is interested in agriculture is extrapolated to the North West province, interesting results are found: Half of the North West population is rural; some 1.9 million people or 317 000 households. If only a fifth of them are actively involved in agriculture, this constitutes 63 300 households. If the argument is concluded, it means that roughly 6400 households have the potential to be commercial – to some extent. For Ditsobotla with a population of 194 000 (of which 16.3% is urbanised), this scenario entails 27 000 rural families and thus 5400 farming families, of which 540 could be potentially commercial, according to this reasoning. However, Roodt (1983) argued that a total of 2100 households could conceivably find an agricultural livelihood in Ditsobotla. Still, it can be argued that given the limited agricultural activity of most ruralites, there is potential yet unexplored.

5.8 Conclusions

The North West province covers 11.8 million hectares and houses roughly 3.6 million people. It is semi-arid but has potential for dryland cropping, although more than 80% is primarily suitable for extensive grazing. More than 50% of households are described as poor. The province has a relatively small economy, while the sectors with the highest contribution to employment are agriculture, mining and services. The unemployment rate is 43%. Next to mining, agriculture is the most important economic sector in the province. The agriculture and conservation sectors contributed 13% of total gross domestic product and 19% of total formal employment early in the 21st century. This excludes extensive indirect effects. However, the sector does not contribute towards economic growth according to potential.

During the seventies agriculture was considered the foundation of the economy in Bophuthatswana and Agricor was established to promote food production and human development. The mainstay of development was projects, based on a technocratic approach with focus on maximum production. When previous support approaches are evaluated using project design criteria identified in this study, deficiencies in aspects such as participation, co-ordination and social sustainability are obvious. Especially commonality of objectives, equity, cost saving and reconciling technology with social realities did not receive sufficient attention. Although the support philosophy and strategies were generally sound, the political situation created pressure and services-impact was minimal. To a large extent Bophuthatswana remained dependent on the RSA, as economically viability was not achieved.

Since democratisation support services for small-scale producers have changed extensively and the NWDACE has as mission to provide services towards sustainable natural resource use that supports a competitive, equitable sector, endorsing national policy. Specific strategic objectives include facilitation of land reform, access to services, infrastructure development, input cost reduction, sound technology development and transfer, human capital development, accessible markets and information dissemination. Although these objectives are indeed required, the elements of dealing with diversity and lowering costs do not receive enough attention. The new policy deals in general terms with the need for co-operation, linkages and appropriate technology, but does not dwell on group-specific strategies and specific programmes or projects. This will be explored in the next chapter.

The recent deregulation and globalisation on the agricultural sector had a significant effect on agriculture in the province, as in the rest of South Africa, as described in chapter two. In real terms, grain prices have during 2002 for the first time reached levels higher than those obtained during the 1970s. Whilst these favourable prices resulted in benefits to producers, organised agriculture maintains that input costs are still a major concern over the longer term, as are the high levels of debt which could lead to increased bankruptcies. Without a structured development strategy, which from the viewpoint of this study entails a specific group focused project approach; the prospects for the developing agricultural sector are not favourable. The project approach is further investigated in the following chapters.