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CENTRAL KALAHARI LIVESTOCK

DEVELOPMENT PROGRAMME

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HEREROLAND STOCK FARMER SETTLEMENT PROGRAMME

1. PROJECT CONCEPT

1.1 Introduction

The proposed model describes the situation applicable to the communal areas in Hereroland. Here we find two extremes: on the one hand farmers who own more than a thousand head of cattle, and on the other hand farmers who own relatively few animals, for example ± 10 head of cattle. Although most of the farming takes place on a communal basis, there are individual farming units which are run on a commercial basis within the communal area. The application of the model must thus be flexible enough to offer advantages for each individual case without disadvantaging others.

This document thus aims to:

(a) draw up proposals for a development model;
(b) suggest proposals for the implementation of the development model;
(c) make an approximate calculation of costs and
(d) serve as a guideline in order to obtain funds for the project.

1.2 Problem formulation

The communal areas are characterised by certain traditions which are not beneficial to agricultural development. Land is owned and used communally and existing agricultural infrastructure has mostly been supplied free of charge by the government and is also mainly maintained by the government.

There is thus no incentive for individuals to develop or maintain any improvements such as pumps, drinking places or fences.

As a result, areas which have been opened up (± 63% of the total area) are over-populated and over-exploited, while large areas (± 37% of the total area) are completely under-exploited, mainly due to the absence of water and farming infrastructure. In the over-populated parts of the target areas, approximately 5500 farmers with more than 304 000 LSU (live stock units) are registered in Hereroland. The average stock figure is ± 9,87 ha per LSU, which is approximately 40% higher than the allowable carrying capacity.
The shortage of basic agricultural infrastructure and th. communal utilisation system prevents any conservation programmes such as grazing control, stock improvement, adaptation of stock numbers to the carrying capacity of the veld being applied and contributes directly to the further deterioration and destruction of the veld. The communal system makes extension activities and training almost impossible as it can at most be applied to basic animal health. Any development model would therefore have to have the conservation and protection of the soil as its basis.

As aspect which will have to be thoroughly considered is the demography of the region. A large number of people are dependent on agriculture for their survival. These people have no other livelihood and are currently occupying the land. Unfortunately all these people cannot be classified as "farmers", but provision will have to be made for them in any development model.

1.3 Method of approach

(a) The main aims of the project must be to settle individual, full-time commercial farmers on farming units within the

area, which will ensure a certain minimum income for the farmer. This should be done by opening up new farming areas that are at present under-utilised or completely unutilised.

(b) To accommodate farmers who prefer to continue their activities within the communal system, by devising ways to allow the scheme to make it possible for them to improve their situation without them seeing the scheme as a threat to themselves.

(c) Maximum decision making with regard to farm management must be delegated to an individual farmer (or group of farmers) by means of support services which will allow them to perform this task.

(d) Development must not take place to the detriment of the soil.

(e) The principles contained in this scheme should be acceptable in a future agricultural policy.

(f) The project must be able to expand to place the whole of Hereroland on a more productive footing.

1.4 Proposed development model

In the light of the above points of departure it is clear that more than one category of farmer will have to be accommodated within the scheme in order to address the problem formulation.

1.4.1 Target groups

The target group for this scheme includes farmers who are at present farming communally as well as those who are farming as individuals within the communal area. The

norm which has been accepted for a farming unit which will ensure a minimum income (R20 000 - R25 000/annum) for the Herero farmer has been fixed at 4900 ha per farming unit. (Stocked at 1 LSU on 12 ha, which is the carrying capacity norm for the area, and a policy of 80 - 85% stocking throughout the year, this entails a herd of ± 327-347 LSU per farming unit of 4900 ha). When settling individuals or groups, the following categories of farmers must be considered within the sketched guidelines of the scheme:

(a) Category 1 farmer: = farmers who own the maximum allowable number of cattle and more, namely 327 LSU and more.

(b) Category 2 farmer: = farmers who own ± 75% of the maximum allowable number of cattle to just less than the maximum number, in other words 245-326 LSU.

(c) Category 3 farmer: = farmers who own ± 50% of the maximum allowable number of cattle to just less than 75% of the maximum, in other words 160-244 LSU.

(d) Category 4 farmer: = farmers who own not less than 50 LSU, to just less than 50% of the maximum allowable number of cattle, in other words 50-159 LSU.

1.4.2 <u>Description of the method</u>

(a) Participation in the scheme takes place voluntarily by means of an official application according to which applicants are evaluated on the basis of stock numbers and their personal or group's financial position. (In other words, a farmer or group of farmers with, for example, 200 LSU plus R23 000 cash on hand can qualify as category 2 farmers - 1 LSU @ R500 per head).

(b) Only the minimum basic infrastructure will be accepted as the responsibility of the government, namely the opening up of boundary lines, the surveying of farming units (4 beacons) and the establishment of one watering point (only

the water source) per farming unit.

(c) All further farming infrastructure (boundary fences, internal camps, water installations, etc) are the farmer's responsibility. Financing for these improvements are made available to the farmer on a merit basis according to the conditions of the scheme and by means of credit facilities.

(d) Support services such as planning services, advisory services, training and extension services are made available to all participatory farmers and are the responsibility of the government. Means of production and the acquisition of movable assets are also made possible by means of credit facilities and supply facilities against the farmer's account.

(e) The farmer can join commercial institutions such as Agra as soon as the institution is willing to supply services of the above-mentioned type in the area concerned.

(f) The farmer can also become a member of organised agriculture (NAU) by forming farmers associations and regional agricultural unions.

1.4.3 <u>Scope of the project</u>

With the above as background and although only certain target areas, namely Otjituuo, Okamatapati, Otjinene, Epukiro, Rietfontein and Okakarara have been identified for new development, the whole of Hereroland West and East is seen as the eventual project area. The proposed development programme, as the opening up of new potential farming areas and the establishment of farmers in these areas, cannot be considered in isolation from the areas which are already settled and where mainly communal farming is taking place. On the other hand there are already farmers

farming individually within the communal areas.

The project is thus concerned with three main types of farmers, namely:

(a) Self-established farmers

These farmers are in the minority, but are found in all identified areas. These are farmers who, on their own initiative and at their own expense have, on an individual basis developed an infrastructure on farming units, and have established themselves there. However, they experience problems with financing their activities or with the further development of their farms as they have no access to financing facilities which are normally available to the farming sector. (For example, the Landbank, Agricultural Credit and cooperative facilities). These farmers are thus not physically part of the proposed development scheme, but are part of the farming community in the area, with certain development needs. These farmers are a positive and progressive group who have already applied their own initiative to solving the problems of their situation in the area and thus support for them is justified.

(b) Farmers to be established on scheme farms

These are the farmers who are at present farming on communal farming units are mainly those who have expressed the need for individual farms in order to escape from the present problem situation of over-population in the communal areas. These are farmers who wish to be established as individuals on economically viable farming units or they can be a group of farmers (more than 1-up to a maximum of 4) who wish to be established together on an economically viable farming unit, where they can farm individually or cooperatively These farmers are physically

settled on scheme farms according to categories and conditions of the scheme.

(c) Farmers in withdrawn areas

These are the farmers who remain behind on communal areas after the withdrawal of those farmers who are to be settled elsewhere in order to relieve pressure on grazing and attendant problems as sketched in paragraph 1.2. According to utilisation rights in the communal areas, these farmers are in the majority in the farming community. The aim is to reorganise, plan, support and control these areas in order to prevent them from further deterioration and in an attempt to reclaim these areas and rehabilitate their farming activities or practices.

A fourth aspect which must be mentioned as part of the scope of the project is service centres which will be required to support the development programme especially with regard to logistical services.

(d) Service centres

In the absence of service facilities and due to long distances and insufficient infrastructure, service centres will play a key role in the successful implementation and control of a development programme in this area. It is essential to establish certain core activities at such a service centre such as the provision of farming inputs, basic foodstuffs, training and extension facilities and activities, social infrastructure and credit facilities. It is essential that a service centre be easily accessible to those it is meant to serve. However, the point of departure concerning the development of service centres remains on the one hand that existing infrastructure should be used where possible in order to keep development costs to a minimum, and on the other hand that it must

function cost effectively and must be functional. The availability of existing infrastructure to support such a service centre, together with the availability of water are important criteria as far as decision making is concerned with regard to the priority ranking of target areas.

1.4.4 Project funding

The funding for the project is envisaged as follows:

(a) Funding for non-recoverable project costs:

The financing of basic infrastructure ("off farm"), external management, research (where necessary), extension and training are considered to be a government function and can take place in the following ways:

(i) By means of a transfer payment from the central revenue fund (Central Government) to its agent responsible for the specific functions (in other words a "grant").

(ii) By means of a "soft loan" by the Central Government from the Development Fund. The Central Government guarantees this loan. This form of financing will be necessary in cases where the central revenue fund does not have sufficient funds to finance these project costs all at once. In effect the guarantee of the loan means that the Central Government budgets to repay the loan on an annual basis to the Development Fund.

(b) Funding of recoverable project costs:

Recoverable project costs are considered to be those costs recovered directly from the farmer and for which the

farmer(s) is directly responsible. These project costs are divided into three broad categories, namely:

(i) Long term for farming infrastructure ("on farm development")

(ii) Medium term for, for example, farm machinery and equipment.

(iii) Short term for, for example, production credit such as feed, licks and fuel.

Financing of the above-mentioned project costs can take place from the following sources:

(aa) By the Central Government, by means of an Agricultural Credit Fund for this purpose,to be administered by the Central Government.

(bb) By the Central Government by means of an annual grant to an Agricultural Credit Fund which is administered by its agent

(cc) By a loan from the Development Fund or possibly foreign investors/donors to the Central Government, to be administered by the Central Government or its agent. Where required, the Central Government can give a guarantee for such a loan.

1.4.5 <u>Recovery of financial aid and other development aid</u>

(a) Soil utilisation

The right of utilisation on farming units should be based on the principle of a quid pro quo, since communal land is a non-negotiable asset and thus does not have a market or rent value. The present form of quid pro quo is based on a grazing fee per LSU per month and is determined on the basis of the number of stock on a specific unit. The present norm is R1-00 per LSU per month or R12-00 per LSU per annum.

This fee can be as much as R3919 per annum on a farm of 4900 ha, depending on the allowable stocking, and can be used by the government for the recovery of capital costs of basic infrastructure provided by the state on a farming unit (refer paragraph 1.4.3 (a)), and/or to provide new areas with basic infrastructure or to make good running expenses with regard to extension, training and management functions.

Stock numbers can differ from month to month on each farm and since it is an impossible task to count them every month, it is also impossible to link rent/payment to physical stock numbers. It is suggested that rent/payment be linked to the potential carrying capacity of the farm. Thus the rent/payment will be R3919 for a farm per annum irrespective of stock numbers or the number of farmers concerned (4900 ha ÷ 12 ha/LSU X 80% stock X R1/month X 12 months/year). Farmers who farm communally on a unit are taxed proportionately.

(b) *Maintenance and upkeep of basic infrastructure are the direct responsibility of the land user(s).*

(c) *Financial aid for further farm development ("on farm") is directly recoverable from the user of this aid, according to the specific agreement between the creditor and the user.*

(d) *Medium term credit (for example for machinery and equipment) and short term credit (for example production loans/ credit) are also directly recoverable from the user according to the specific agreement between the creditor and the user.*

(e) *As long as external management is required for the specific scheme, this is paid for by the state and not by the farmer(s). These costs also include extension, training and research, which are government functions.*

(f) *All direct financial aid to a farmer/group of farmers will be based on the repayment ability according to specific terms and agreements between the user(s) and the suppliers thereof.*

(g) *Financing norms (terms) must at least be in line with existing norms of the Agricultural Credit Board, which hold for the area concerned, but have not been implemented there for various physical reasons.*

1.4.6 *Settlement of farmers of farming units*

(a) *Settlement takes place on a voluntary basis by means of a formal application by an individual or a group, of not more than four farmers, per farming unit.*

(b) *Settled farmers who already own the maximum allowable number of stock for a farming unit but still farm on communal ground will themselves be responsible for the development of the physical infrastructure on the farm, with the exception of the basic infrastructure (opening up of boundary lines, surveying of the unit and one usable borehole). The scope of financial aid to these farmers to develop their farms further will, to a large extent, be determined by their own financial ability - they may be expected to make a cash contribution of their own.*

(c) *Farmers in other categories (farmers with less stock than the maximum allowable number per farming unit) are accommodated on the same basis as individually settled farmers, except that more than 1 farmer, with a maximum of 4 farmers, may apply per farming unit. Farmers in this category will probably not have the cash with which to develop the infrastructure on their farms, and thus they will require greater financial aid without being expected to make a cash contribution, or they may be expected to make a smaller cash contribution than an individually*

settled farmer.

(d) *Since farmers to be settled on units will be coming from over-populated areas, attention will simultaneously be given to those communal farmers remaining on the land from which the new farmers have been withdrawn. In the first place this entails control of this land to prevent new settlers from moving in. In this way stock numbers will be limited to the allowable carrying capacity for that area, remaining farmers will be reorganised and prepared, by means of extensional and training, to farm according to the principles of the scheme.*
It is also possible that a group of "small" farmers (maximum 4 per farming unit) will apply for "individual" settlement (scheme farm) and that a settled farmer (farmer with maximum allowable number of stock for that area) will remain behind. Such farmer may then also apply under the terms and conditions of the scheme to develop the infrastructure of the farming unit concerned himself.

(e) *There are also those farmers who have already, at their own expense and using their own initiative, independently developed individual farming units in the area, and who also require aid. Although they are not part of the scheme farms (as in the case of the communal farming units) these farmers have proved themselves and deserve to be helped. They may also apply for financial aid, extension and training in order to develop these farming units further, on condition that the farming unit falls within the long term development plan of the area and that scheme conditions are accepted for the particular farmer. The financial aid given to such a farmer will largely depend on his own financial ability (has made own contribution or is able to do so).*

(f) *This development is undertaken on a voluntary basis and its aim is to open up unutilised farming areas for independent economic farming practices in an orderly and planned way within communal areas, rather than to replace the communal system totally by a different system. Thus people who prefer the communal system are free to continue in this way as in the past, on condition that a future government supports this view.*

1.5 *Implementation proposals for planned project*

The proposed scheme will require large capital inputs which are at present a limiting factor in Namibia. It would, however, be unreasonable under the present circumstances to expect the government to fund the entire project or to place to great a financial burden on the entrepreneur. Consequently it is suggested that target areas, which have already been identified, be placed on a priority list for development and that the development process in a specific area be carried out in phases.
The following phases are suggested:

1.5.1 *Phase 1:*

Step 1: (i) Complete investigation/survey of the availability of water for the opening up of new farming areas.

(ii) Determination of priority area on the basis of the results of step 1, as well as other criteria such as existing infrastructure, cost of water development, concentration of people and animals, acceptance of project proposals, quality and ability of intending participants.

Step 2: (i) Development of water sources in area with highest priority according to set criteria.

(ii) Physical farm planning and layout according to availability of water sources.

(iii) Opening up and survey of boundary lines and farm units (erecting of 4 corner beacons) according to farm planning and layout.

1.5.2 Phase 2:

Step 1: (i) Advertisement of farm units, evaluation of applications and selection of applicants on the basis of quality, financial ability, stock numbers and types of farm units available.

Step 2: (i) Development of a service centre and its institutional framework.

(ii) Setting up of a support service programme for intending participants.

(iii) Locating of applicants on farm units after finalisation of agreement of tenancy between the authorities and the land user as well as after finalisation of loan agreements between the creditor and the land user.

Step 3" (i) Development of minimum required farming infrastructure by the farmer(s) according to prescribed specifications, farm planning and according to the financial ability of each.

(ii) Implementation of support service functions such as extension, training, financing, marketing, etc.

Phases 1 and 2 should be completed within 4-5 years after funds have been obtained for the project.

1.5.3 Phase 3:

Step 1: Continuation of support service functions for participatory farmers.

Step 2: *Further physical development of farm units according to prescribed specifications, farm planning and according to the financial ability of each type of farmer to an 8 camp system.*

Step 3: *Should be completed within 8-10 years after the project commences.*

1.5.4 *Phase 4:*

Step 1: *Continuation of extension and training for participatory farmers (government function).*

Step 2: *Phasing out of the development agent and phasing in of the private sector to provide recoverable support services to the farmers.*

Notes on the implementation proposals

(i) *The period of time over which phases 1-4 should stretch is not of necessity fixed, and will be dictated by the tempo of development which can only be determined by hard reality.*

(ii) *Individual farmers/groups of farmers may progress faster or slower and it may be that the mentioned phases may hold true for some and not for others, although each individual farmer will be evaluated on a continual basis on grounds of his progress and achievements.*

(iii) *The phasing out of the development agent and the phasing in of the private sector may take place at an earlier stage, depending on the willingness of the private sector to participate. The agreement of tenancy between the farmer and the government may possibly be transferred to private ownership which may mean that the participation of the private sector becomes less risky and can thus be advanced.*

(iv) In the phases described above, no mention is made of the farmers in the withdrawn areas and farmers who are already farming on their own initiative on individual farm units within the communal areas. It must be accepted that attention will have to be given to these farmers during the same period over which the settlement schemes are being implemented. The nature and scope of aid to these farmers can, however, only be determined as soon as settlement schemes have been implemented.

(v) Further, no mention has been made of the involvement in other identified target areas or when this is to take place. The availability of funds is the determining factor here and as soon as sufficient funds can be obtained, a start can be made with the following priority area or with the opening up of the next series of new farming units in a specific priority area. In this connection it should be mentioned that there is no necessity to wait until phase 4 of a specific area has been completed, if sufficient funds are available.

2. ECONOMIC

2.1 <u>Position of the farmer</u>

The point of departure is that the farmer must be able to realise a spendable income of R25 000 per annum if he is established alone on a farm. Compare point 3.3 under technical, where herd composition and norms for a farm of 4900 ha are set out.

2.1.1 *Marketing*

The number of animals that can be marketed annually and incomes that can be realised are as follows:
Total: 80 animals at a total of R67 680 (gross)
20 cows (adult): (216 kg @ R3,50 = R756,00) R15 120
40 oxen: (239 kg @ R4,00 = R956,00) R38 240
20 heifers: (179 kg @ R4,00 = R716,00) R14 320

2.1.2 *Marketing costs*

If animals are marketed through the Namibia Meat Board the costs are as follows for the number of animals mentioned under point 2.1.1:

Transport	*R 8 000*
Other (levies, fees, commissions)	*R 9 600*
Total	*R17 600*

2.1.3 *Production costs*

The production costs on a farm of 4900 ha with a herd composition as mentioned under point 3.3.5 should be the following:

Licks: (284 x R30)	*R 8 520*
Drenching, inoculations, medicine (366 x 6)	*R 2 196*
Labour (R1,20 x 4900)	*R 5 880*
Water supply (0,03 x 366 x 365)	*R 4 007*
Vehicle costs (800 x R0,50)	*R 4 000*
Maintenance costs (0,25 x 4900)	*R 1 225*
Total:	*R25 828*

2.1.4 Other revenue

Revenue from hides and offal amounts to an average of R120 per animal
Thus 80 animals x R120 = R9 600

2.1.5 Revenue/costs:

The annual revenue and costs for a farmer should be the following:

Revenue	R77 280
Meat	R67 680
Offal and hides	R 9 600
Costs	R47 347
Marketing costs	R17 600
Production costs	R25 828
Rent (as mentioned under point 1.4.5)	R 3 919

Income minus directly allotable costs R29 933
Capital originally required by farmer (See 5.4)
Infrastructure R77 500
Equipment R18 000
Suppositions: Interest rate: 4% made available to farmer
Period : Infrastructure 30 years
: Equipment 5 years

Production credit and interest has been included under 2.1.3

Annual capital and interest amortisation is thus:

Infrastructure: R 4 481-83
Equipment R 4 043-34
Total: R 8 525-17

Net farming revenue (before capital + interest amortisation): R29 933-00
Capital + interest amortisation R 8 525-17
Net farming revenue (before tax) R21 407-83

3. TECHNICAL

In order to clinch matters concerning technical design criteria for the proposed project, the situation with regard to the most important environmental factors, project factors and farming factors were examined. Where information was lacking, suppositions were used which were based on similar types of farming in neighbouring areas.

3.1 Environmental factors

3.1.1 Availability of water:

The availability of sufficient subterranean water in the target areas (unutilised parts) is unknown and uncertain. An investigation into this matter will thus have to be of the highest priority before a start can be made with any project development. The availability of water is the most important single criterion for decision making with regard to the target area in which a development programme should be started. The costs linked to water development and the availability of funds for this purpose are further determining factors. The Government, in conjunction with the Department of Water Affairs, is responsible for this aspect.

3.1.2 *Grazing:*

Grazing in the target area (unutilised parts) is of a high quality and is in a climax condition since it has been unused for decades. A total of between 2-3 million hectares of this grazing is still available, which is very suitable for cattle farming, although very sensitive to heavy stocking. A carrying capacity norm of 12 ha/LSU is accepted for the area and with a policy of 80-85% stocking (based on this norm), farms can, with reasonable certainty, be stocked at 15 ha/LSU.

The vegetation can generally be described as camelthorn savannah, tree savannah and dry forest. The soil can generally be described as yellow soil and inland sands.

3.1.3 *Climate*

The climate can be described as dry, warm steppe with summer rainfall.

(a) *Rainfall*

(i) *The rainfall varies between 300-400 mm/annum in the eastern parts to between 400-500 mm/annum in the western parts of Hereroland (with an average deviation of 25-35% from the annual average).*

(ii) *The rainfall frequency is on average 30-40 rainy days per annum.*

(iii) *More than 90% of the annual average falls from October to March.*

(iv) *The average potential evaporation is between 2600-2800 mm per annum.*

(b) Temperature

(i) The day average minimum for the coldest month is 4-5 degrees Celsius, while the day average maximum for the hottest month varies from 32-33 degrees Celsius in the west and 33-34 degrees Celsius in the east.

3.1.4 Suitability

The climate is very suitable for man and animals, in fact it is very suitable for cattle and goat farming. A large variety of cattle breeds are found in the area and the quality of stock is reasonable and thrives under local conditions.

3.2 Project factors

3.2.1 Infrastructure

In the over-populated parts of the area limited infrastructure exists in the form of telephones, roads, clinics, schools and hostels, general dealers, auction pens and tribal/administrative offices.

Water infrastructure is limited to the Berg Aukas-Okakarara government water scheme which serves only a section of Hereroland West, which is already over-populated and over-utilised. The rest of the over-populated parts of Hereroland West and East are served by thinly spread boreholes.

More than 50% of the area is under-populated or completely unpopulated, mainly due to the total absence of the above-mentioned infrastructure.

3.2.2 *Skill*

Traditionally the Herero farmer is a cattle farmer and has at his command the basic knowledge for cattle farming. The quality of the Herero farmers' cattle in comparison to the quality of animals in other communal areas is evidence of their skill as cattle farmers.

The appearance of commercial farming units (although only a few) in the communal areas which have been developed on own initiative and at own expense, as well as the number of Herero farmers who are already involved in the commercial sector outside the communal area are further signs of their progressiveness and entrepreneurship.

Training and extension are at present mainly limited to animal health and basic technical courses, as the communal systems (communal use of land) do not allow for meaningful and applicable extention and training.

3.2.3 *Landownership system*

Hereroland is a communal area in which the communal system of landownership is applied. No private ownership exists and the land is trustland owned by the government. Since this land is non-negotiable it has no market or rent value.

The present system has a dampening effect on the entrepreneur to take the initiative or to become physically involved in the development of the area.

The ownership system is the main reason for the symptoms of decline of the soil. Overcropping, uninvolvement, inefficiency and lack of quid pro quo may be mentioned here.

The system further makes it almost impossible to treat the symptoms, for example control over stock numbers, extension and training. It is in any case not meaningful or practical.

3.2.4 Attitude towards development

Based on requests (individual and from groups), discussions with various parties (deputations, authorities, community leaders and political leaders) from the area as well as meetings and applications for development aid made to the Development Corporation (FNDC) especially during the past five years, it can be said with a reasonable amount of certainty that the majority of the farmers in the area are positive in their attitude. It can also be confirmed that the communal system has become unacceptable to the majority of farmers. Private land ownership within the communal area is highly acceptable to these people, but even a system which offers sufficient incentives and security and which includes negotiability of rights would be acceptable to them, even without land ownership.

3.2.5 Other positive project factors

The need for the project and the form of the project has originated amongst the people themselves and has already been widely tested, with positive results.

Sufficient potential commercial farmers can be identified for the project.

Enough high potential, unoccupied areas are still available for project development.

Enough skill in cattle farming is available within the country to maintain a support service programme and keep it functional.

The present export market for Namibia beef is at present undersupplied and there is considerable scope for expansion. The export value of beef from Namibia in 1988 was R298,98 million and it is estimated that the added value on this product amounts to an additional R75 million if total exports were to be processed locally and exported in refined form. As a result of independence the international market should also become accessible. Hereroland can make a considerable contribution if this project is developed.

No veterinary restrictions (flow restrictions) exist for Hereroland and all existing markets for any form of marketing are available to the area. (In other communal areas like Kaokoland, Owambo, Kavango and Caprivi this is not the case).

3.2.6 Job opportunities

Except for the project participants (farmers to be established, self-established farmers, those remaining in withdrawn overpopulated areas) and their families, the project holds great advantages for:

(i) farm labourers
(ii) local traders
(iii) employees at service centres
(iv) private contractors and their labourers (opening up/chopping open of boundary lines, water drilling, piecework with regard to fencing, building of dams, troughs, etc.).

Much of the development work, especially non-recoverable infrastructural work, can be given to private local contractors on tender.

(The availability of funds will determine the scope of the project, which will, in turn, determine the creation of job opportunities).

3.2.7 *Project model*

The project model provides amply for broadly based participation by accommodating the following components:

(i) *Individually settled farmers*

(ii) *Cooperative farming (where farmers are not yet strong enough on their own for individual settlement)*

(iii) *Self-established farmers*

(iv) *Planning, reorganisation, rehabilitation and control of over-populated existing units from which farmers have been withdrawn for settlement elsewhere*

(v) *Service centres for support services to the above- mentioned categories of farmers.*

3.3 *Farming factors*

3.3.1 *Accepted norms:*

(i) *Income:* *R25 000 spendable income*

(ii) *Size of farm:* *Farming units of 4900 ha each*

(iii) *Stocking:* *Carrying capacity of veld 12 ha/LSU @ 80 - 85% stocking (thus 327-347 LSU/4900 ha).*

Marketing:

	DESCRIPTION	*WEIGHT (KG)*	*PRICE(R)*
a)	*Weaners*	*180*	*360*
b)	*Year old animal*	*220*	*450*
c)	*2 year heifer*	*330*	*700*
d)	*2 year ox*	*370*	*750*

3.3.2 Production costs

Inoculation, dosing costs plus medicine: R6,00 per animal per annum.

Lick costs: R30 per animal per annum, excluding calves.

Labour: R1,20 per ha.

Water supply: 3 cents per animal per day for fuel plus maintenance of machinery.

Vehicle costs: 800 km per month at 50 c per km for fuel and maintenance.

Maintenance costs of pens, fences: 25 c per ha.

3.3.3 Production norms

Calf percentage: 70%

Mortality: (a) Conception to weaning: 6%
(b) Weaning to adulthood: 2%

MASSES AT VARIOUS AGES	OXEN	HEIFERS
12 months	225 kg	210 kg
18 months	310 kg	290 kg
24 months	370 kg	330 kg
30 months	460 kg	400 kg

Adult cow: 450 kg
Wean mass: 180 kg at age 7 months
Cow replacement: 20%
Marketing age: oxen and heifers 30 months
Mating age: of heifers approximately 27 months (÷ 350 kg) to calf at age 3 years
Three month serving season: February to April
Three percent bulls are used.
Slaughter percentage (a) oxen: 52%
(b) heifers: 54%
(c) cows: 48%
Stocking: 12 ha per animal @ 80 - 85% stocking.

3.3.4 Marketing aspects

Marketing period: April to August
Gross meat prices per kg: oxen and heifers: R4,00;
cows: R3,50
Prices of offal and hides: R120 per set
Transport costs: R100,00 per animal
Other costs such as levies, fees, commissions etc: R120,00 per animal

3.3.5 Herd composition

(a) Total LSU approximately 420

(b) Breeding herd size 120

(c) Annual replacement in cow herds = 24

(d) Age groups as at 1 April annually:

	ANIMALS	LSU FACTOR	LSU
Cows 3 years and older (mated)	100	1,43	143,0
Heifer over 2 years (mated)	20	1,27	25,4
Cows 3 years and older (rejected)	20	1,11	22,2
Heifers over 2 years (rejected)	20	1,0	20,0
Oxen over 2 years	40	1,11	44,4
Heifers over 1 year	40	0,91	36,4
Oxen over 1 year	40	0,91	36,4
Calves (± 4 months old)	82	-	-
Bulls	4	1,63	6,5
Grand total:	366		334,3

3.3.6 Dosing, inoculation and dipping programme

Programme to be followed as provided by the Government.

3.3.7 Supplementary feeding programme

- phosphate lick
- climate throughout year determines addition to the phosphate lick
- addition before marketing (rounding off)

3.4 Project development

3.4.1 Farm planning

The following planning is suggested for each unit:

(a) 8 camps per unit
½ of farm unit for cow herd
¼ of farm unit for weaned calves
¼ of farm unit for marketing and replacement animals

(b) water supply in each camp

(c) The further physical expansion of the farm to contain, for example, 4 camps per herd, is optional. The planning of each farm unit will be supplied to each farmer by the Directorate of Agriculture and the Government.

3.4.2 Prescriptions for fencing

(a) Before permission is given for the fencing of unit, such a unit must first be surveyed by a surveyor. (Unsurveyed farms which have already been fenced cause quarrels and court cases for which the government then has to pay, for example Tucsinrus in Epukiro).

(b) It is suggested that the prescriptions of the existing tender board regulations be followed with the prescriptions for fencing, namely:

(i) boundary fences with 5 (compulsory) or 6 (optional) steel wires, fencing posts (7') every 20 m, 5 droppers between posts, straining posts (8') 500 m apart, fence 1,2 m high.

(ii) *Inner camps with at least 4 steel wires, fencing posts every 20 m, 5 droppers between posts, straining posts ever 500 m, fence 1,2 m high.*

(iii) *As funds are limited it is suggested that the entrepreneur/farmer himself chops droppers or has them chopped from natural bush and also erects the fences himself according to the set specifications.*

3.4.3 *Existing infrastructure*

Where existing infrastructure has been erected at own expense, such work will be considered as a personal contribution by the farmer concerned, on condition that the farm unit fits in with the total farm planning of the area. Where such infrastructure does not conform to the specifications, or does not fit in with the total farm planning of the area, the same farmer can apply for financial aid in order to conform to the above-mentioned specifications. As much of the existing material as possible must be used for this adaptation. No farmer will be compensated for existing infrastructure already on a farm which may fall within the scheme. (Areas where this situation may occur are Otjituuo, Okamatapati, Otjinene and Rietfontein).

3.4.4 *Land size*

It is accepted policy that the farm size will be 4900 ha (7.0 km x 7.0 km). The long term carrying capacity norms of the area will, however, have to be looked at. There will have to be a difference in land size between occupied and unoccupied areas, since the already occupied areas may take 5-10 years before the land can be optimally utilised. The question then arises how big the farms ought to be.

An economic farm size is that unit which will ensure the farmer a potential net farming income of ± R25 000 per annum (after capital amortisation). The size of the farm must thus be adapted to this.

3.4.5 *Method of allocation*

(a) *Farmers in each area apply for a certain farming unit in that area. Applications are evaluated, surveys are done by the agricultural credit board/agricultural committee in conjunction with the Headman and his Council. (The same conditions as for the 1/10 scheme).*

(b) *The land/unit is then allocated to the approved applicant. Within 90 days after allocation the applicant must indicate whether he accepts the conditions as contained in the rent contract. The basic rent becomes payable as soon as the contract is signed.*

3.4.6 *Criteria or conditions with which a farmer must comply*

(a) *Qualifications:*

(i) *The person must be a Herero*
(ii) *The person must preferably be able to read and write*

(b) *Age:*

A maximum age of 60 years is suggested. The health of people older than 60 years must be proved by a medical doctor.

(c) *Habits:*

All candidates who qualify to be involved as farmers must also undergo a selection process according to agricultural credit conditions, despite the fact that they have met the minimum requirements.

(d) *If it is decided to develop the unutilised parts of an area first and such a unit has not previously been allocated by the Headman and his Council, such a unit will be advertised by a Commissioner's office.*

3.4.7 *Conditions on which land is allocated to farmers*

(a) *The tenant must personally and in a useful manner occupy the allocated unit within a reasonable period (maximum 180 days) after date of allocation, and personally live on the concerned property in a useful manner and in a habitable house which has been approved by the landlord, for at least eleven months in each calendar year.*

Useful occupation of the property includes:

(i) *The proper care and maintenance of the improvements thereon;*
(ii) *The maintenance and improvement of the fertility of the soil and the prevention of soil erosion;*
(iii) *The extermination of noxious and other weeds and vermin in accordance with the stipulations of any law which prescribes such extermination;*

(b) *The tenant is not entitled to sublet the rent contract or the property as a whole or in part during the term of the rent contract, or to surrender, transfer, convey or mortgage his interest in the rent contract or in the property without the prior written permission of the*

landlord. The tenant may also not keep further animals in another part of the communal area.

(c) The tenant must develop and manage the property exclusively to his own advantage and for his own use. The property may only be used for agricultural and stock breeding purposes and for the processing of those agricultural and other products which the tenant may cultivate thereon.

(d) The tenant may not chop down, damage, or destroy any trees on the property without the written permission of the landlord, but is entitled to use dry wood on the property from time to time for his own fuel and domestic purposes, without permission.

(e) The tenant must apply himself exclusively to farming and, without the written permission of the landlord, may not follow any other profession or occupy any other position which will force him to be absent from the property.

(f) The tenant may at no stage exceed the set carrying capacity of the property, and he may at most keep the number of stock units on the property as determined from time to time by the landlord.

(g) The tenant must see to it that his private stock is at all times marked with his registered brand/mark and not with the reserve's brand.

(h) The tenant must plan the farming activities on the property in conjunction with the Department of Agriculture and organise his activities according to this planning.

(i) The tenant must carry out the farming activities and keep the financial records of these activities to the satisfaction of the landlord.

(j) The tenant accepts the property subject to all the servitudes obtained or held by the government and is on the other hand entitled to the privileges of any servitude in favour of the property which is not specifically excluded in the agreement of tenancy.

(k) The tenant is responsible for all boundary or other fences on the property, or all interest and other monies which may be payable in connection with those fences, and that responsibility is regulated according to any law which may, from time to time, be made applicable to the erection, maintenance, or use of such fences.

(l) All mineral rights on or beneath the property are specifically reserved by the Government.

(m) The tenant has no claim for compensation against the landlord or against a prospector or claim holder in case of accidents to people or animals as a result of the existence of shafts, tunnels and other conditions created as a result of prospecting and/or mining operations which took place on the property before the date of commencement of the agreement of tenancy.

(n) The tenant is responsible for the payment of taxes or monies which are payable with regard to the property or may become payable in the future.

(o) The tenant must allow any duly authorised government official to enter the property at any reasonable time in order to inspect anything for which the person concerned is duly authorised.

(p) All rights to game are reserved by the landlord and the tenant undertakes to protect all game on the property without compensation. If problems occur as a result of too much or undesirable game, the tenant may apply to the landlord for permission to utilise the game.

(q) The landlord undertakes to indicate the beacons on the property.

(r) the landlord is in now way responsible for any losses, damage, or inconvenience which the tenant may suffer as a result of the presence, whether with or without the knowledge of the landlord, of any such people or stock.

(s) The landlord may cancel the agreement of tenancy by means of ninety (90) days written notice if the tenant fails to comply with any of the conditions of contract.

(t) The landlord may cancel the agreement of tenancy without notice if the tenant has failed for six consecutive months to pay all amounts with regard to rent/interest and payments.

(u) On cancellation of the agreement of tenancy in accordance with any of the mentioned conditions, the right to occupy the property with all improvements thereon goes to the landlord. No compensation is payable to the tenant for any improvements made to the property.

(v) The tenant admits that (a) the Magistrate's Court has jurisdiction with regard to any claim or damage which may arise from the agreement of tenancy, (b) a certificate from the Department of Agriculture or its proxy or its legal successor will be sufficient evidence of amounts recoverable under the agreement of tenancy and (c) he chooses the property as his domicilium citandi et

executandi for the faithful execution of all actions under the agreement of tenancy.

3.4.8 *Training and extention*

(a) It is recommended that all participatory farmers be obliged to take part in a formal training programme which will cover the following aspects:

(i) optimal soil utilisation - grazing management
(ii) farm planning
(iii) herd management
(iv) financial management
(v) marketing

Training is a continual process and is offered according to needs and can even be adapted where necessary.

(b) Service centre

The ideal would be that each area would have its own service centre for extension and training. (If there is no other available one). Farmers' days and courses could be offered there with the farming unit as model. (Units are developed on the same basis as the other farms). The idea is that a qualified agricultural officer will be established permanently on the unit. Surplus animals form Okumombonde (breeding station) could be transferred to these service centres and the farmers (agricultural officers) could gradually take them over.

3.4.9 *The cooperative idea*

(a) *A cooperative principle can be considered when land is allocated to the new and communal farmers.*

(b) *It is accepted that certain types of farmers will utilise a farm unit communally. Since such a farm unit is seen as a type of settlement farm, the various farmers may utilise the camps communally with their separate herds as proposed in the farm plan. Cooperatively the farmers will thus be jointly responsible for the following business expenses:*

(i) *For the purchase of bulls. (If no unanimity can be reached concerning the types of bull(s), each farmer may buy his own bull(s) and then keep the cow herds in separate camps during the mating season). It would be impractical to give each farmer a four camp system for, for example 6 or 12 different herds.*

It may be argued that 4 camps are a luxury. It should, however, be remembered that bush encroachment and over-grazing are two of the major problems of the communal system.

(ii) *Purchase of fuel.*
(iii) *Purchase of all spare parts.*
(iv) *Maintenance of improvements.*

(c) *Financial obligations with regard to loans for infrastructure development, if applied cooperatively, are carried communally by the settled farmers.*

4. INSTITUTIONAL

4.1 Central authority

The central government is the highest authority in the country.

Like all communal areas, the land in Hereroland is trustland which belongs to the Central authority.

It is impossible to predict what a future government's decision might be with regard to the privatisation of land. It should, however, be mentioned that there is considerable pressure from within the Herero population for property rights on land. As a start, a long term tenancy on project land is proposed, which could be a forerunner to private ownership.

4.2 Regional authority

Until recently Representative Authorities were in control of trustlands under a proclamation of the Administrator General (AG 8) and legislative and executive authority in these areas was transferred to them with the right to claim certain functions and to handle them themselves.

The functions mainly entailed the following when exercising this right according to AG 8: education, agriculture and forestry, works and health. This was not of necessity the case for all Second Tier Authorities, since each one had the prerogative of deciding on the matter.

The administration of these functions was decentralised and each Second Tier Authority had its own administrative structure within which these functions were controlled.

With respect to the election, and the change in Government, the previous Transitional Government (Cabinet and National Assembly) as well as Representative Authorities were abolished and all the authority was once again centralised in the Cabinet (Ministry). The various administrations (eg Administration for Herero's) continue to administer the trustland under the direct control of the Cabinet until changes are implemented. Regional administrative offices will most probably be activated to control and administer the various regions.

4.3 *Local authority*

The local authority is the Chief's Council (consisting of a headman and councillors) which is probably the authority structure with the greatest legitimacy amongst the people. The power base of this authority level is to be found in the jurisdiction concerning the allocation and control of land and grazing rights. Other authority levels have no involvement in this matter.

The accommodation of this authority level in any institutional framework for development in the area is thus of the greatest importance.

4.4 *Institutional framework for project development*

4.4.1 *Background to proposed project management*

(i) *In the first place the existing authority structure has been taken into consideration in the development of an institutional framework for the proposed development.*

(ii) *In the second place the functions of the various institutions, bodies or boards and committees within these authority levels have also been considered.*

(iii) Thirdly, various institutions and individuals have been considered on the basis of the historical course of the project planning, and on the basis of requests, discussions and negotiations and their involvement in these matters. In other words on the basis of needs from within the community which were made known to various institutions or individuals with a view to aid or support.

(iv) A project committee was appointed by the Government from the above-mentioned participants from different fields and skills in various facets, in order to address a common need in a coordinated manner.

The institutions represented on the project committee were:

- "Administration for Herero's" with its Agricultural Credit Board.
- The then Executive Committee of the Herero Representative Authority.
- Department of Agriculture and Nature Conservation (Central Government).
- FNDC (Development Corporation).
- Development Fund for Namibia.

By means of the Development fund, representatives of the Development Bank of Southern Africa were also involved from time to time during the investigation and planning of the project.

(v) During the investigation and planning, the authority channels of especially the Regional authority and the local authority were constantly followed.

(vi) *In the last instance, the functions, means, responsibilities and abilities of each institution concerned were taken into consideration in determining an institutional framework for the project development.*

4.4.2 *Institutional and individuals involved: role and functions*

(a) *Government involvement:*

The government is represented by the Department of Agriculture and Nature Conservation (ANC), and Department of Water Affairs (WA).

Role, functions and responsibilities:

(i) *Agricultural development policy and strategy for area (ANC).*
(ii) *Member of project team responsible for project investigations, design and planning, (ANC and WA).*
(iii) *Negotiation with Chiefs' councils with regard to availability of land and priority areas/target areas. (ANC)*
(iv) *Responsibility for funding of project. (ANC)*
(v) *Establishment of basic infrastructure - availability of water,survey and opening up of boundaries (ANC and WA). (WA with regard to water supply)*
(vi) *Agriculture training, research and extension. (ANC)*

(v) *Development agent:*

The development agent is represented by the FNDC in the beginning phase of development, but on the basis that functions performed by the FNDC will be transferred to the private sector for their continuation.

(i) *Member of project team responsible for project investigations, design and planning.*

(ii) *Project administration and management on agency basis*

* *implementation and management of service centre*
* *implementation and management of "farmer support services":*
* *Advisory service & consultation at "on farm" development*
* *administration and management of agricultural credit facilities and functions*
* *provision of farming input*
* *organisation of marketing services*
* *organisation of farming techniques and practices*
* *implementation of farmers' training and extension programmes*
* *local management and administrative training and development*

(iii) *Above-mentioned functions and responsibilities of the development agency are carried out with the necessary support from the Department of Agriculture and Nature Conservation.*

Some functions, such as the provision of farming inputs, organising of farmers' associations and cooperative associations and marketing services are, where possible, to be undertaken by means of the private sector, (for example, local general dealers, NAU and AGRA) on condition that this service can be offered to the advantage of the project participants by these institutions.

(iv) *The development agency is further supported by a management committee which will later form the board of directors of a local cooperative movement when the development agency's functions are transferred to this body.*

(v) *Assistance with organisation of financing of the project.*

To summarise, it can thus be stated that the FNDC will play a facilitator's role with regard to the project.

4.4.3 *Management committee*

A management committee is appointed with the purpose of functioning as a decision making body and to support the FNDC during the implementation of the project. As soon as a cooperative body is formed, the management committee will act as a board of directors for the cooperative body.

The management committee is composed of the following:

INSTITUTION	*NO OF MEMBERS*	*CAPACITY*
Dept Agriculture and Nature Conservation	*3*	
FNDC	*3*	
Agricultural credit board	*2*	
Developmentfund	*1*	*Observer*

4.4.4 Project committee

The project committee is responsible for the on-the-ground day-to-day management of the implementation action. It is from this committee that the cooperative body will be developed to continue the project independently after its establishment.

The project committee is composed as follows:

INSTITUTION	NO OF MEMBERS	CAPACITY
Government	1	Extension officer
FNDC*	3	(i)Project manager (ii) Staff (X2)
Private representation**	2	Local businessman/ farmer
Tribal Council	2	(i)Headman (ii)Councillor in-charge of agriculture

* *As far as the FNDC is concerned, the project manager will be replaced after establishment by a local individual (one of the FNDC's employees) who will be trained during establishment as manager of the cooperative body.*

** *Private representation on the project committee provides for two part-time representatives from the business/ farming community during the implementation phase, but with a view to full-time representation of members on the management of the cooperative body, of which all farmers will be shareholders.*

4.4.5 *Financing of the various functions and actions during the different phases of project development.*

Establishment Phase (First 4 - 8 years)

ACTION	FUNCTION	FINANCED BY:
Management Committee (Administration)	Total project planning	State (subsidy)
	1. "Off farm" development (Private sector tender basis)	
	2. Extension and training	State (subsidy)
Project committee (Project manager and staff)	1. Total project management and administration	State (subsidy)
	2. Service centre (Infrastructure)	State (subsidy)
	3. "Farmer support" services:	
	(i) Advice + consultation "on farm"	State (subsidy)
	(ii) Agric. credit (LT, MT, ST)	Soft loan (Dev. Fund) (Recovery from farmers)
	(iii) Farming inputs	Soft loan (Dev. fund) (Recovery from farmers)
	(iv) Demonstration	State (subsidy)
	(v) Implementation farmer training programmes	State (subsidy)
	(vi) Management and admin. training	State (subsidy)

Farmers and labour	*1. "On farm" development, expansion and management*	*Farm income*
Land rent	*Quid pro quo for state inputs*	*Farm income*
After-establishment phase:		
Cooperative body (Management and staff)	*Supply of commercial services as requested by farmers*	*Profits from sales and fees for services*
Extention and training	*Continuation of extension service to farmers*	*State (subsidy)*

5. FINANCIAL

5.1 Target areas

The target areas which will be developed initially are fallow and completely unutilised. The part of Hereroland which is not being utilised amounts to approximately 3 million hectares. It is, however, impossible to develop the whole unutilised area at one time and as a result the following target areas will receive attention first:

(a) Otjinene (new area to be opened up)
Present utilisation: communal in occupied area.

(i) 5 x 4900 ha - establish farmers
(ii) 1 x - service centre
(iii) Organisation of withdrawn units in conjunction with Chief's Council
(iv) Support service simultaneously (where possible) to individual farming units on surveyed farming units.

(b) *Epukiro (new area to be opened up)*

Present utilisation: communal in occupied area.

(i) 5 x 4900 ha - establish farmers

(ii) 1 x - service centre

(iii) Organisation of withdrawn units

(iv) Support service simultaneously (where possible) to individual farming units on surveyed farming units.

(c) *Rietfontein (surveyed units without water points ± 6200 ha)*

(i) 5 x ± 6000 ha - establish farmers

(ii) Tallusmanus (service centre)

(iii) Organisation of farms from which farmers are withdrawn

(iv) Support services simultaneously (where possible) to individual farming units on surveyed farm units.

(d) *Okamatapati (opening up of new area)*

Partially surveyed

(i) 5 x 4900 ha - establish farmers

(ii) 1 x - service centre

(iii) Organisation of farms from which farmers have been withdrawn

(iv) Support service simultaneously (where possible) to individual farming units on surveyed farm units.

(f) *Okakarara*

A request for a similar project has already been received from this area. Planning is the same as for the other project areas.

Initially Otjinene and Epukiro are seen as the first priorities. According to planning, two projects will be started simultaneously during the first year. This will be followed by a further two projects every ensuing year.

However, priority with regard to target areas depends on factors such as the availability of water, acceptance by tribal councils, etc. The result can be that changes might occur in the priority order of areas to be developed.

5.2 Financial implications

NB: Inflation has not been taken into consideration and all costs indicated have been calculated at present value.

5.2.1 Stock farmer establishment unit

(a) Fixed assets 8 camps

(i)	*Survey costs*	*R 5 000*
(ii)	*56 km stockproof fencing @ R1 500/km*	*R 84 000*
(iii)	*Pens*	*R 10 000*
(iv)	*1 borehole (150 m) @ R70/m (including lining) + R5 000 for investigation*	
(v)	*3 reservoirs + erection (9,9m x 1,83m) @ R5 000 each*	*R 15 000*
(vi)	*3 troughs + fittings @ R500 each*	*R 1 500*
(vii)	*1 borehole installation @ R18 000 each*	*R 18 000*
(viii)	*1 crush-pen @ R4 000*	*R 4 000*
(ix)	*3 500m plastic pipe + laying thereof @ R7,50/m (40mm class 6)*	*R 26 250*
(x)	*Opening up/chopping open of boundaries*	*R 22 000*
	TOTAL	*R201 250*

(b) Business capital *R 10 000*

5.2.2 Service Centre

(a) Fixed assets

(i)	Building (cooperative) 20m X 12m	R 76 000
(ii)	Dwelling	R 35 000
(iii)	Labourers houses (3 labourers)	R 30 000
	TOTAL	R141 000

(b) Moveable assets

1 x 4x4 truck @ R43 000	R 43 000

(c) Business capital

Stock for cooperative is included + salaries	R 60 000

5.2.3 Project investigation, planning, implementation and management

(a)	Project investigation and planning (S + T, transport costs, etc)	R 5 300
(b)	Implementation and management (annually) (salaries, S + T, transport costs, housing, etc)	R210 000

5.2.4 *Summary*

(a)	*Cattle farmer establishment/unit*	
	Assets	*R201 250*
	Business capital/annum	*R 10 000*
(b)	*Service centre/unit*	
	Assets	*R184 000*
	Business capital/annum	*R 60 000*
(c)	*Investigation, planning, implementation and management*	
	Investigation and planning (once)	*R 5 300*
	Implementation and management/annum	*R210 000*

The total cost will thus depend on the number of cattle farmer establishment units and service centres that are to be developed.

5.3 *General*

External sources of financing must be used because insufficient government funds are available for the total project. Furthermore, "soft" loans will be required in order to ensure the viability of the project. The entrepreneurs are not fully developed and must be given the opportunity for further training. It is thus desirable that the entrepreneurs undergo a period of training and extension while their financial burden should not be too high during their "growth" period.

5.3.1 *Financing possibilities*

- *State: The Government has R180 000 which can be used as part of the financing required for the development of the first two service centres.*

- *Implementation agency: It must be accepted that the implementation agency will be unable to contribute any capital to the project.*

- *Other bodies: A financing institution is required in order to obtain funds for the proposed project. Only R180 000 is available from state funds and the remainder of the development capital required must thus be obtained elsewhere.*

5.3.2 *Assets*

The question may arise in whose name certain assets should be registered. The following arrangement can be applied: if the farmer has the sole right to the use of the asset this asset is registered in the farmer's name. If a group of farmers use an asset communally, whether directly or indirectly, this asset is registered in the name of the service centres.

5.3.3 *Production credit*

All production credit is channelled through the cooperative activities of the service centre. Thus the farmer does not obtain an amount of money for business expenses which he can spend according to his own discretion. He merely receives a credit facility at the cooperative against which he can purchase production inputs.

5.4 Expected programming of funds

Tables 1, 2 and 3 give an exposition of the funds required and the amount of capital required during the various years.

TABLE 1 CATTLE FARMER ESTABLISHMENT UNIT

COMPONENT	1	2	3	4	5
Survey	5 000				
Fencing	42 000	21 000			21 000
Pens	5 000				5 000
Borehole	15 500				
Dams	5 000				10 000
Troughs	500				1 000
Water pump system	18 000				
Crush-pen	4 000				
Pipelines					26 250
Opening up of lines	22 000				
Business capital	10 000				
TOTAL	127 000	21 000			63 250

The total development capital requirements for the development of one cattle farming unit amounts to R211 250.

TABLE 2 *SERVICE CENTRE*

COMPONENT/YEARS	*1*	*2*	*3*	*4*
Co-op building	*76 000*			
Dwelling	*35 000*			
Labourers' houses	*30 000*			
4X4 vehicle	*43 000*			
Business capital	*60 000*	*40 000*	*40 000*	*20 000*
TOTAL	*244 000*	*40 000*	*40 000*	*20 000*

The capital required to establish a service centre amounts to R344 000.

TABLE 3 TOTAL CAPITAL REQUIREMENTS FOR PHASE 1

(2 X Service centres + 10 X Farm units development process starting in year 1,2 and 3)

COMP/YEAR	1	2	3	4	5	6	7	8	9	10
2 service centres	488 000	80 000	80 000	40 000	-	-	-	-	-	-
10 farms	1 270 000	210 000	-	-	632 500	-	-	-	-	-
2 service centres	-	488 000	80 000	80 000	40 000	-	-	-	-	-
10 farms	-	1 270 000	210 000	-	-	632 500	-	-	-	-
2 service centres	-	-	488 000	80 000	80 000	40 000	-	-	-	-
10 farms	-	-	1 270 000	210 000	-	-	632 500	-	-	-
Investigation costs	5 300	-	-	-	-	-	-	-	-	-
Management costs	210 000	210 000	210 000	210 000	210 000	210 000	210 000	210 000	210 000	210 000
TOTAL	1 883 300	2 168 000	2 248 000	620 000	962 500	882 500	842 500	210 000	210 000	210 000

The total capital requirements for the project over a 10 year period amounts to R10 236 800.

5.5 Financing of the project

Finances needed and secured by the Development Fund for the project are the following:

5.5.1 "Off farm" development

Loan I — *Infrastructure and fixed assets*

Financier: Development Fund of Namibia

Institution to take up the loan:	*Government*
Amount:	*R 819 100*
Loan period:	*15 years*
Interest rate:	*2 per cent*
Capital grace period:	*3 years*
Capitalised interest period:	*3 years*
Accumulated capitalised interest:	*R 50 392*
Repayment:	*24 equal half yearly instalments of R 40 930*

COMPOSITION OF LOAN I R'000

FIXED ASSETS	IMPLEMENTATION SCHEDULE					
	1990/91 BASIC COST	1991/92 BASIC COST	1992/93 BASIC COST	1993/94 BASIC COST	1994/95 BASIC COST	TOTAL COST
FNDC CUM SERVICE CENTRES						
Service Centre buildings	152.0	0.0	0.0	0.0	0.0	152.0
Housing	70.0	0.0	0.0	0.0	0.0	70.0
Labourer housing	60.0	0.0	0.0	0.0	0.0	60.0
Debushing	220.0	0.0	0.0	0.0	0.0	220.0
Geohidrological investigations	50.0	0.0	0.0	0.0	0.0	50.0
Boreholes	105.0	0.0	0.0	0.0	0.0	105.0
Detail planning cost	5.3	0.0	0.0	0.0	0.0	5.3
Farm surveying	50.0	0.0	0.0	0.0	0.0	50.0
Escalation	106.8	0.0	0.0	0.0	0.0	106.8
TOTAL FNDC CUM SERVICE CENTRES	819.1	0.0	0.0	0.0	0.0	819.1
TOTAL LOAN TO GOVERNMENT	819.1	0.0	0.0	0.0	0.0	819.1

Loan II — *Vehicles, office equipment and loose tools*

Financier:	*Development Fund of Namibia*
Institution to take up the loan:	*Government*
Amount:	*R 110 400*
Loan period:	*5 years*
Interest rate:	*8 per cent*
Capital grace period:	*1 year*
Capitalised interest period:	*1 year*
Accumulated capitalised interest:	*R 9 008*
Repayment:	*8 equal half-yearly instalments of R 17 736*

COMPOSITION OF LOAN II R'000

	IMPLEMENTATION SCHEDULE					
	1990/91	*1991/92*	*1992/93*	*1993/94*	*1994/95*	*TOTAL COST*
	BASIC COST	*BASIC COST*	*BASIC COST*	*BASIC COST*	*BASIC COST*	
FNDC CUM SERVICE CENTRES						
4 X 4 L.D.V.'s (2)	*86.0*	*0.0*	*0.0*	*0.0*	*0.0*	*86.0*
Office Equipment & loose tools	*10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*10.0*
Escalation	*14.4*	*0.0*	*0.0*	*0.0*	*0.0*	*14.4*
TOTAL FNDC CUM SERVICE CENTRES	*110.4*	*0.0*	*0.0*	*0.0*	*0.0*	*110.4*
TOTAL LOAN TO GOVERNMENT	*110.4*	*0.0*	*0.0*	*0.0*	*0.0*	*110.4*

5.5.2 *"On farm" development*

Loan III *Infrastructure and fixed assets*

Financier: Development Fund of Namibia	
Institution to take up the loan: FNDC	
Amount:	*R2 405 300*
Loan period:	*15 years*
Interest rate:	*2 per cent*
Capital grace period:	*3 years*
Capitalised interest period:	*3 years*
Accumulated capitalised interest:	*R 102 975*
Repayment:	*24 equal half-yearly instalments of R118 073*

COMPOSITION OF LOAN III R'000

IMPLEMENTATION

SCHEDULE

	1990/ 91 BASIC COST	1991/ 92 BASIC COST	1992/ 93 BASIC COST	1993/ 94 BASIC COST	1994/ 95 BASIC COST	TOTAL COST
FIXED ASSETS						
FARMERS						
Fencing materials	420.0	210.0	0.0	0.0	210.0	840.0
Kraals materials	50.0	0.0	0.0	0.0	50.0	100.0
Cushes materials	40.0	0.0	0.0	0.0	0.0	40.0
Dams	50.0	0.0	0.0	0.0	100.0	150.0
Water throughs	5.0	0.0	0.0	0.0	10.0	15.0
Water pumping	180.0	0.0	0.0	0.0	0.0	180.0
Pipe lines	0.0	0.0	0.0	0.0	262.5	262.5
Escalation	118.8	67.2	0.0	0.0	638.8	817.8
TOTAL FARMERS	856.8	277.2	0.0	0.0	1 271.3	2 405.3
TOTAL LOAN TO FNDC	856.8	277.2	0.0	0.0	1 271.3	2 405.3

Loan IV *Breeding stock*

Financier: Development Fund of Namibia

Institution to take up the loan: *FNDC*

Amount: *R 28 800*

Loan period: *8 years*

Interest rate: *2 per cent*

Capital grace period: *3 years*

Capitalised interest period: *3 years*

Accumulated capitalised interest: *R 1 772*

Repayment: *10 equal half-yearly instalments of R3 229*

COMPOSITION OF LOAN IV R'000

	IMPLEMENTATION SCHEDULE					
	1990/91 BASIC COST	1991/92 BASIC COST	1992/93 BASIC COST	1993/94 BASIC COST	1994/95 BASIC COST	TOTAL COST
MOVABLE ASSETS						
FARMERS						
Livestock						
(Own contribution)	1 531.0	0.0	0.0	0.0	0.0	1 531.0
Breeding Stock	25.0	0.0	0.0	0.0	0.0	25.0
Escalation	233.4	0.0	0.0	0.0	0.0	233.4
TOTAL FARMERS	1 789.4	0.0	0.0	0.0	0.0	1 789.4
TOTAL LOAN TO FNDC	28.8	0.0	0.0	0.0	0.0	28.8

Loan V Operational capital

Financier: Development Fund of Namibia

Institution to take up the loan: FNDC

Amount: R 252 400

Loan period: 6 years

Interest rate: 12,5 per cent

Capital grace period: 6 years

Capitalised interest period: 1 year

Capitalised interest: R 32 536

Interest payments: R 36 730

Repayment: One payment of R311 917

COMPOSITION OF LOAN V R'000

	IMPLEMENTATION SCHEDULE					
	1990/91 BASIC COST	1991/92 BASIC COST	1992/93 BASIC COST	1993/94 BASIC COST	1994/95 BASIC COST	TOTAL COST
OPERATING COSTS						
FARMERS PRODUCTION INPUTS						
Livestock	28.0	34.7	43.1	52.8	60.9	219.5
Escalation	4.1	5.2	6.4	7.9	9.3	32.9
TOTAL PROD INPUTS TO FNDC	32.1	39.9	49.5	60.7	70.2	252.4

5.5.3 *Management and implementation*

Approximately R207 000 is needed per annum to finance the management and implementation cost of the development agent (FNDC).

K3 already recommended R210 000, for the first two years of the project, for this purpose.