

REPUBLIC OF BOTSWANA

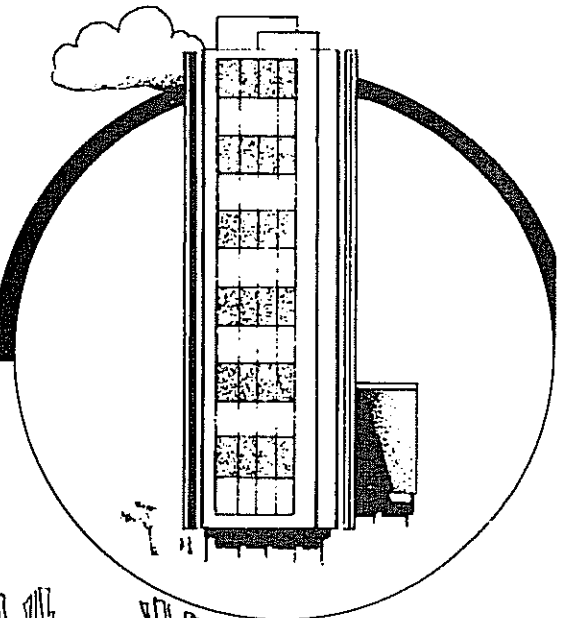
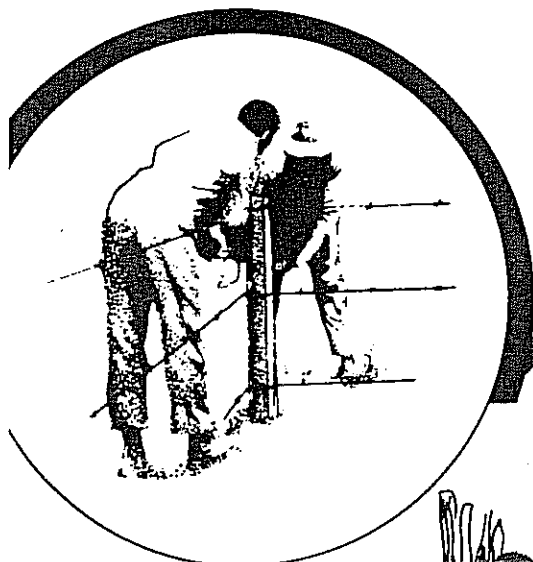
Ministry of Local Government, Lands and Housing

Division of Planning, Statistics and Research

EVALUATION STUDY
ON THE

JULY, 1999

SOCIO-ECONOMIC IMPACT OF THE CBPP ERADICATION AND
GOVERNMENT RELIEF PROGRAMMES ON THE
COMMUNITIES OF NGAMILAND DISTRICT AND OKAVANGO
SUB-DISTRICT



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The Applied Research Unit, Division of Planning Statistics and Research was charged with the evaluation of the impact of the Contagious Bovine Pleuro Pneumonia (CBPP) eradication and the effects of relief measures which were put in place at the time of destruction. The Unit found it necessary to collaborate with other Ministries to form a study Team, as issues for evaluation cuts across sectors. The evaluation was carried out under direction of an Inter-Ministerial Reference Group.

The Study Team would like to express their sincere gratitude to the residents of the sampled localities and or settlements, especially the selected households who responded to the questions put to them. Thanks also to the Temporary Assistants who were responsible for the interviews. Mr Mpho Daniel needs particular mention as he directed most of the interviews.

The Team would like to extend their gratitude to the Reference Group who participated fully especially in refining the objectives of the study and Terms of Reference. The Central Statistics Office for making available the data processing software (IMPS). The CBPP Co-ordinating office is equally responsible for the success of this study.

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ACRONYMNS

CBPP	Contangious Bovine Pleuro Pneumonia
FAP	Financial Assistance Policy
ALDEP	Arable Land Development Programme
ARU	Applied Research Unit
MLGLH	Ministry of Local Government Lands and Housing
MOA	Ministry of Agriculture
MFDP	Ministry of Finance and Development Planning
RDCD	Rural Development Co-ordinating Division
FHD	Family Health Division
DPS	Division of Planning and Statistics
DCPF	Division of Crop Production and Forestry
LIPW	Labour Intensive Public Works
PEM	Protein Energy Malnutrition

TERMS AND DEFINATIONS

1. **Locality** is any human settlement with a name and identifiable boundary.
2. **Lolwapa or dwelling** consists of one or more structures or buildings, permanent or temporary, usually surrounded by a fence/wall to mark its boundaries. In some areas these structures may not be fenced but found in close proximity.
3. **Household** consists of one or more persons related or not related, living together under the same roof in same lolwapa. They eat together from the same pot or making common provision for food and living arrangements.
4. **Head of Household** is any person, male or female at least 12 years old whom other members of the household regard as their head, the decision-maker and provider.
5. **Respondent** may be head of household or any member of the household who is responsible enough to answer on behalf of the household.

CHAPTER 1

1. BACKGROUND

1.1 Introduction

The Contagious Bovine Pleuro Pneumonia (CBPP) first diagnosed in the Xaudum Valley in February 1995. This disease spread over the Okavango/Ngamiland districts. Ngamiland and Okavango Districts are in the northwestern part of Botswana. A decision was made by Government to destroy all cattle in the District as a measure to eradicate the disease. Since people in this area rely a lot on the cattle industry it was expected that the destruction would have, a traumatic and far reaching experience on their lives. Tasks were identified to facilitate the full and proper eradication and later restocking for those farmers who would have opted for cattle instead of cash.

1.2 Logistics

A multi-disciplinary District Reference Group was set up to guide the execution of the numerous identified tasks for the successful eradication of the disease. An office was set up headed by CBPP co-ordinator to which the District Reference Group reports. The arrangement was such the Co-ordinator reports to the Permanent Secretary, Ministry of Agriculture as the Accounting Officer and Chairperson of the Permanent Secretaries Reference Group. This Group inturn reports to the Ministerial Task Force Chaired by the Minister of Presidential Affairs and Public Administration that reports to His Excellency the President. Later when the restocking exercise was concluded a decision was made that remaining activities on the project are more for the Ministry of Local Government Lands and Housing than the Ministry of Agriculture. It was therefore decided that the Co-ordinator should now report to the Permanent Secretary in MLGLH. All reporting channels were now referred to MLGLH.

1.3 Guidelines for the Operations of the District Reference Group

To guide the District Reference Group, terms of reference were drawn as follows:

1. To effect blockading Ngamiland through picketing and continuous patrolling of cordon fences along the Ngamiland District boundary as well as Botswana/Namibia border.
2. To effect the eradication of the disease by destroying all cattle in Ngamiland. Livestock in fenced farms to be spared until after testing at which a final decision will be made by Government.
3. To effect compensation to farmers as and when their cattle are destroyed.
4. To effect immediate and urgent relief measures to farmers, employees in the cattle industry and other groups who would otherwise benefit from the cattle industry directly or indirectly.
5. To intensify and where possible "tailor make" some Government Programmes and Projects to suit the speed and condition arising out of the CBPP eradication and propose any new projects aimed at alleviating the hardships brought about by the eradication.
6. To take any other measures accidental or connected with the eradication of the CBPP disease.

These terms of reference were to be achieved by undertaking some activities that included:

- Provision of up-to-date information on the characteristics and profiles of the affected population with a view to determine their relief needs.
- Assess the suitability and appropriateness of undertaking new economic activities with a view to diversify the Ngamiland economic base.

A lot of brainstorming was done to address the tors. Emphasis was made that projects and programmes suggested as ways of relief measures should be

sustainable and create employment within a public works concept. In addition, a monitoring and Evaluation mechanism should be incorporated as an integral part of the relief implementation.

This study confines itself to impact of the terms of reference numbers 3, 4, 5, and 6. The interest in tor 3, 4, 5 and 6 are how compensation money was used, have the lifestyles of the affected people changed, have proposed projects benefited the people and are they sustainable respectively. A number of questions arise, that is, are there any adjustment mechanisms which have allowed the communities to graduate from the trauma since the destruction of their cattle. Can Government relief programmes be stopped, what should be the future of the CBPP co-ordinating office. Considering the remaining activities can Ngamiland District Council cope with the additional load if handed over to it.

1.4 Objectives of the Study

I) Main Objective:

To investigate the socio-economic impact of the CBPP eradication and Government relief programmes on the communities of the Ngamiland District and Okavango Sub-District.

II) Specific Objectives:

- a) To investigate the effects of the cattle destruction on the welfare of the Ngamiland people that is the farmers, employees and other groups of people who otherwise would have benefited from the industry.
- b) To measure the impact of Government assistance programmes, which were put in place to, help people continue to sustain a living.
- c) To measure the effectiveness of monetary compensation on investments ventures and consumption patterns.
- d) The study should recommend course of action as it pertains to the continued existence of the CBPP Co-ordinators office and the relief measures.

To achieve the above objectives terms of reference were drawn and approved by the District Reference Group. These were:

- 1) The study should assess the impact of relief measures on the affected population or households with a view to re-consider the intensity of government programmes.
- 2) Determine the level of benefiting populations and identify impediments that deter households from accessing available assistance programmes.
- 3) To compare family structures now and before and investigate any unusual occurrences that may be a result of the cattle eradication.
- 4) To compare health status now and before.
- 5) Effects of relocation by some households due to preferred compensation.
- 5) Investigate effects of existence and type of animals now owned on rangeland.
- 6) To evaluate the effect of monetary compensation on the welfare of the people.

CHAPTER 2

2. METHODOLOGY

2.1 The Study Area

Northwest District is composed of Ngamiland South, Ngamiland Delta and Ngamiland North. Ngamiland South and Ngamiland Delta constitute Ngamiland District while Ngamiland North constitutes the Okavango Sub-District. The population of this area is estimated around 94.5 thousand according to the 1991 population and housing census.

Table 2.1 Population Distribution for the Region by Sex

District	Total Population	Total Population	
		Male	Female
Ngamiland South	55469	26769	28700
Ngamilnad Delta	2342	1191	1151
Ngamiland North	36723	16350	20373

Source: CSO, 1991 Population and Housing Census

Location of the region (see Map insert)

Characteristics of settlements, localities in this area are long distances between and are difficult to navigate except with two axle vehicles.

Populations found in this area has similar characteristics within the settlements and are different between. Also characterising the settlements is the extreme size differences in terms of dwellings or number of households.

This therefore suggests that total enumeration of settlements was not necessary, as different people in the same settlement or locality will give similar responses. The magnitude of the differences between should come out from the findings of the research.

In order to assess the effects of the CBPP eradication and the impact of Government relief programmes, and taking into consideration these distances and the limited time a decision to take a sample was made.

It was understood that main village (catchment) areas would have lands and cattle-posts associated with them. Primary sampling units were defined as

localities or small segments of settlements /villages with similar characteristics. It was agreed that a total sample of 10% of the total primary sampling be taken. A total sub sample of 25 % will constitute a representative sample of secondary sampling units. Primary sampling units are the settlement; localities; enumeration areas, while secondary sampling units are the households within these. A pre-listing of total number of households was obtained from the Census Office, Central Statistics Office (CSO).

2.2 Sample Design

A two-stage cluster sampling procedure was used where clusters are the localities or enumeration areas where localities are undefined on the map. The proportion to select into the sample was determined by the total number of psu's in the Main Village Area. In the 1st stage primary sampling units were selected randomly. Second stage a random sample equal to 25% of the secondary sampling units is selected. A list of households in the clusters was provided by CSO according to the 1991 Population and Housing Census. This information allowed for the pre-selection of sample households before going to the field.

2.3 Sample Selection

A total of 667 primary sampling units were found in the Two Sub-Districts. Ten percent translated into 67 primary sampling units for the whole are of study. The total sample was then allocated between the two districts proportional to the total number of primary sampling units in each District. Ngamiland was allocated X1 units and Okavango X2 units. The total number of secondary sampling units was 1777. The total sample was allocated proportional to the number of primary sampling units in the first stage. Catchment areas were further stratified by locality type, that is, Village, Lands and Cattle-posts. Within catchment areas a deliberate allocation was adopted, that is, weights were attached to these different strata as follows:

1. Villages 50%
2. Lands 33%
3. Cattle-Posts 17%

These weights were more biased towards Village stratum because it is assumed that during the CBPP eradication people moved from the cattleposts

to the villages. The above percentages quota was reach by selecting each randomly with the use of random numbers. Households within the stratum were also randomly selected until the sample size was reached. The total number of households as enumerated during the 1991 Population and Housing Census determined the number of digits. . For example for the i th Main Village Area.

Total Localities in Ngamiland District = M_i where $i = 1,2$

Total Localities in the j^{th} Main Village Area = M_{ij} where $i = 1,2$ and $j = 1,2...H_i$

Proportion of Localities to select into sample from Main Village area j will be M_{ij} / M_i

Sample total for the j^{th} Main Village area is m_{ij}

The Total Sample for the i^{th} District is $m_i = \sum m_{ij}$ where m_{ij} is the sample from the i^{th} District j^{th} Main \

Total Village localities to select into the sample $v = \sum .5m_{ij}$

Total Lands localities to select into sample $l = \sum .33m_{ij}$

Total cattle - post localities to select into sample $c = \sum .17m_{ij}$

The same applies to other Main Village Areas for Ngamiland and Okavango Districts. Note that the initial sample is 10% of the total localities and the above is simply how the sample is allocated by the different strata.

Table 1.1 Sample Allocation by the Different Village Areas and within Village Areas, Ngamiland

V. Area	Total number of localities	Total to Select into sample	Sample Village Localities	Sample Land Localities	Sample Cattle-Post Localities
Maun	74	8	4	3	1
Sehitwa	53	5	3	2	1
Matlapana	10	1	1	0	0
Tsao	24	2	1	1	1
Shorobe	32	3	2	1	1
Toteng	20	2	1	1	0
Jao	1	0	0	0	0
Kareng	21	2	1	1	0
Phuduhiudu	7	1	1	0	0
Xaxa	2	0	0	0	0
Xangwa	9	1	1	0	0
Ditshipi	2	0	0	0	0
Makalamabedi	69	7	1	4	2
Khaxhaba	1	0	0	0	0
Diadora	1	0	0	0	0
Saboro	1	0	0	0	0
Daonara	1	0	0	0	0
Katamaha	2	0	0	0	0
Diadora	1	0	0	0	0
XanaXao	1	0	0	0	0
Others	17	2	1	1	0
Total	349	36	17	14	6

Table 1.2 Sample Allocation by the Different Village Areas and within Village Areas, Okavango

Village Area	Total Localities	Total for Sample	Village Localities	Land Localities	Cattle Post Localities
SERONGA	20	2	1	1	0
NGARANGE	8	1	1	0	0
BEETSHA	6	1	1	0	0
NDORTSHA	2	0	0	0	0
MOKGATSHA	1	0	0	0	0
GWEXAO	2	0	0	0	0
SHAOWE	2	0	0	0	0
XADAU	3	0	0	0	0
XAKAO	8	1	1	0	0
KAUKWI	5	1	1	0	0
MOHEMBO	9	1	1	0	0
IKOGO	6	1	1	0	0
SEPOPA	11	1	1	0	0
NXAMASERE	4	1	1	0	0
SHAKAWE	53	6	3	2	1
NXAUXAU	12	1	1	0	0
NOKANENG	12	2	1	1	0
GUMARE	27	3	1	1	1
ETSHA	23	3	1	1	1
OTHERS	4	1	1	0	0
Total	218	26	6	1	

2.4 Data Collection

Quantitative approach

A structured questionnaire was administered to all households selected into the sample to elicit information on (i) sources of livelihood (ii) utilisation of cattle compensation money (iii) knowledge of Government Poverty Alleviation programmes. The general perception of the discontinuation of Labour Intensive Public Works Programme.

2.5 Problems Encountered

Funding

Data collection was limited by time constraint. Initially this study was to start in December 1998 but delayed due to funding problems. The study ultimately started in March 1999. Data collection was carried out from 8 March to 29 April 1999. The Study Team had wanted to employ different methodologies in data collection but due to time factor some of the methodologies have not been used, especially the qualitative methods. Participatory rural appraisal method, which was supposed for usage was abandoned unfortunately as, said above. All this is due to the delayed study schedule due to funding. These other methods have been abandoned because it is necessary based on the study results to advice Government on the situation in Ngamiland especially that drought has been declared in the whole country.

Staffing

Initially the Team comprised of representation from:

1. Ministry of Local Government Lands and Housing
2. Ministry of Health
3. Ministry of Finance and Development Planning
4. Ministry of Agriculture

It proved difficult to have the team working on the project together due to other commitment in their respective Ministries. It is our hope (authors) that in future an exercise of this nature which cuts across sectors will be given the

necessary attention it deserves by Ministries. Also of pertinent importance is the availability of quality staff for data collection and supervision. Good results depend highly on quality data. Researchers tend to attach less importance to data collection and more on data analysis, however the reverse is true.

CHAPTER 3

3. EVALUATION FINDINGS

3.1 DEMOGRAPHIC PROFILES

3.1.1 Sex of the Household Head

One thousand and twenty-seven households were interviewed in the District and Sub-District. Overall, 50 percent of the interviewed households were Male headed and the other 50 percent Female headed. When taking the two administrative districts separately, the trend changes, albeit with very small margins. It was found that there were more Female headed households in Okavango Sub-District compared to Ngamiland District. This disparity can not readily be explained. It was expected that the majority of the household heads were going to be females as this is the trend in most rural areas of Botswana. . These figures show that there is a preponderance of female head of house holds over males. Contrary to this, the figures for the Ngamiland administrative district show that there is a slight urge of male headed households over female headed with males representing 246 (24 %) and females accounting for 208 (20.3 %). These figures are shown in Table 1 below.

A total population of 3909 people was counted within the selected sample. Comprising this population was approximately 52 and 48 percent for females and males respectively. Less morbidity was observed within the sampled localities. The figures are 79.9 percent at same residence after discounting those who were not born at the time of eradication.

Of the total 50.7 % population of the Okavango 951 (24%) were males as opposed to 1060 (27 %) for the female.

Overall, these figures show that there is a general deviation from the normal trend, which usually shows that females head most households in rural Botswana. The probable explanation for this may be attributable to the culture of the communities in the study area where polygamy is still accepted and widely practised. This, combined with other factors such as the migration patterns of the population in the study area, especially after the onset of the cattle lung disease are factors which should be taken into consideration when studying the family structure of the population in the study area.

3.1.2 Household Head relation with other members of the household

The study attempted to establish whether heads households were readily available to respond to the questionnaire and if they were not available who would usually be responsible for the task. Connected to this attempt was the presumption that most of the household composition was going to complex as opposed to the normal family structure as result of intra - migration. Families and individuals will always migrate to where they would find a livelihood

especially after losing cattle or employment through the cattle lung disease eradication. Those who moved to stay with relatives were going to increase the burden on family consumption and increase the dependency ratio.

3.1.3 Ethnic origin/group affiliation

The study found out that there were people of different ethnic origins within the two administrative districts covered. A total of ten of these were identified which carried a significant number of people, with those which carried a relatively an insignificant number of people being grouped as others (see table below).

Okavango						
Ethnic Grouping	Total		Male		Female	
	Total	Percent	Total	Percent	Total	Percent
Total	573	100	267	46.6	306	53.4
Bayeyi	175	30.5	78	13.6	97	16.9
Bambukushu	231	40.3	106	18.5	125	21.8
Basarwa	25	4.4	15	2.6	10	1.7
Bakoba	9	1.6	6	1	3	0.5
Batawana	26	4.5	11	1.9	15	2.6
Baherero	12	2.1	8	1.4	4	0.7
Basubia	8	1.4	3	0.5	5	0.9
Barotsi	4	0.7	2	0.3	2	0.3
Bakgalagadi	21	3.7	6	1	15	2.6
Batereku	35	6.1	23	4	12	2.1
Others	27	4.7	9	1.6	18	3.1

In the Okavango Sub-District, the most distinct groups were the Bayeyi and Bambukushu comprising of 406 (71%) people. In the Ngamiland administrative district, the most significant groups were the Bayeyi and Batawana comprising of 232 (51 %) people, followed by the Basarwa 43 (9.5 %), Bambukushu 26 (5.7 %) and Baherero 26 (5.7 %) people in that order. The general observation from these figures is that Bayeyi are the most prominent group followed by the Batawana and Bambukushu.

3.1.4 Education

Illiteracy level in the region is high, but varies according to group affiliation (ethnic groups). The prevalence of never been to school was more pronounced for Bayeyi 267(29%) and Bambukushu 293(32%). This may be partly due to their dominating numbers in the sample.

3.2 SOURCES OF LIVELIHOOD

Livestock rearing and arable farming have been the main sources of livelihood for the majority of the rural population in Botswana. It was therefore assumed that the killing of cattle in the whole of Ngamiland district would have an adverse negative effect on the livelihoods of the communities in the area. The communities depended largely on cattle as a source of income (through their sales), as a source of food (meat and milk). It in addition provided draught power, provision of raw materials through their hides, and was a source of prestige. Although arable agriculture has been mainly practised at a subsistence level, it has over time provided food and some cash from the sales of crops. Lack of draught power therefore will lead to decreased arable practise.

Because of the above-mentioned reasons, the study aimed at establishing the changes in the sources of livelihoods before and after CBPP eradication. Different sources of livelihood which were seen to be of major impact were investigated and these included; the rearing of cattle, goats / sheep, donkey keeping, poultry, arable farming, wage employment and government assistance programmes.

It was found that of all the households visited 69.6% said they owned cattle before CBPP eradication, while 30.4% said they did not. On the contrary, 29.4 % said they own cattle after CBPP eradication as compared to 70.6% who said they did not. As the figures show, there is a great variation in cattle ownership between the two periods studied.

However, the situation is not so much striking when looking at the ownership of goats or sheep. Fifty three percent of the population studied said they owned goats or sheep before CBPP eradication while 47 % said they did not. The figure slightly went down for those who said they owned goats or sheep (48.3 %) and slightly went up (51.7%) who did not. The only reason which could be attached to the decrease in the number of goats after CBPP eradication is that families have resorted to goats as a substitute for cattle, that is, they can sell or kill them to make a livelihood. Similarly, the number of those who kept poultry went down after CBPP eradication.

There has been no significant change in the ownership of donkeys before and after CBPP eradication. For both periods, 40% of the total number of the respondents said they owned some donkeys while 60% said they did not. It should be noted that the expectation was that more people would own donkeys after CBPP eradication, secured through ALDEP since these would be the main source of draught power.

Some factors maybe responsible for non ownership of donkeys which include; people having no money for down payment, most people said they did not

know how to harness donkeys, while others complained that the donkeys available were not trained as drought animals.

As noted before, lack of drought power leads to decrease arable production. Indeed the study has established that fewer families are involved in arable farming as compared to the period before CBPP eradication. Of all the households visited, 79.5% said arable farming has been their source of livelihood while 20.5 said it was not. On the other hand, only 60% of the households interviewed said they depended on arable farming, as their source of livelihood as opposed to 40% who said it was not after the CBPP. One notices that there has been a 20% decline in arable farming between the two periods under investigation. The obvious reason for this decline is attributable to lack of or a decrease in drought power.

3.2.1 Cattle compensation and money usage

Overall household with less number of cattle opted for 100% compensation method. Compensation money was used differently by gender. Male heads tended to use their money in more profitable activities such as buying cattle, provision of housing for their households and saving money with the bank. Proportions of compensation money spend on food and clothing was higher for female headed households compared to male-headed households. This was not only significant at sample regional total, but was also evident within the District and Sub-District. This is to some extent explained by the common high dependency ratios associated with female-headed households. Although vending/hawking became a common activity in the District, it did not come out as a significant source of income. This may be due to lack of management skills and accounting skills to sustain such ventures. Female-headed households emerged more significant in undertaking this activity. Hawking is very common along the streets of Maun Village and homes. Ngamiland District and Okavango Sub-District reported 40 and 49 percent households spending compensation money on food and clothing respectively. For the District, the percentage may be lower as progressive centres like Maun offer alternative sources of income through employment opportunities in the formal sector that exists here.

Some individual reports were as below:

“I had too many girlfriends. I never thought the money would finish. I was drinking expensive liquor which was not familiar”.

3.2.2 Knowledge on Government Assistance Programmes

The study results reveal that almost all households selected into the sample were aware that there is Government Assistance programmes in their District. However, respondents were unable to associate their knowledge with specific assistance programmes. Very low percentages were observed for households not aware of assistance programmes. The lack of households to

associate their knowledge with specific programmes is clearly shown by statistics for individual assistance programmes below.

Table 1. Number of households aware of Government Assistance Programmes

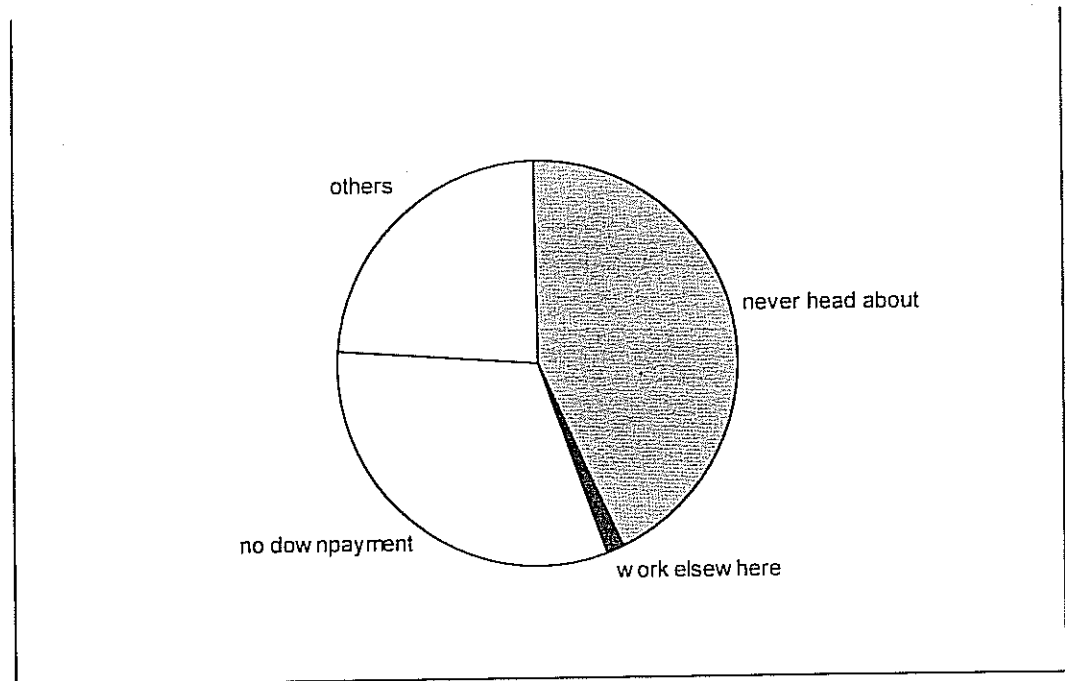
	Total		yes		no	
	Total	Percent	Total	Percent	Total	Percent
Total	1027	100	995	96.9	32	3.1
Okavango	573	100	559	97.6	14	2.4
<u>Ngamiland</u>	<u>454</u>	<u>100</u>	<u>436</u>	<u>96</u>	<u>18</u>	<u>4</u>

3.2.3 Financial Assistance Policy

Table 1 below shows a very small percentage of households reporting that they are participating in Financial Assistance Programme while a higher percentage reported non-participation. Reason for non-participation in FAP is attributed largely to lack of knowledge and lack of money for down payment. This picture is shown by results at District and District and Sub-District level. At least 43 percent in Okavango reported they have never heard about the programme or they did not have money for down payment. In Ngamiland District, this constituted about 32 percent of households not participating in FAP.

Table 1. Number of Households with at least one member participating in FAP

	Total		Yes		no	
	Total	Percent	Total	Percent	Total	Percent
Total	1022	100	56	5.5	966	94.5
Okavango	572	100	16	2.8	556	97.2
<u>Ngamiland</u>	<u>450</u>	<u>100</u>	<u>40</u>	<u>8.9</u>	<u>410</u>	<u>91.1</u>



3.2.4 Labour Intensive Public Works

A very high percentage reported participation in LIPW programmes compared to FAP above. However, less participation was recorded for the Okavango Sub-District. Reasons advanced for the non-participation are working elsewhere, too old to work and a very small percentage (2.9) reporting they have no knowledge of the programme. This is a clear indication that dissemination of Labour Intensive Public Works information has been wide within the District and Sub-District.

3.2.5 Food Rations

Out of the total enumerated households 69.2 percent reported one of the household members participates in food rations. There is less participation in food rations in Ngamiland District and this may be underestimated by the influence of Maun village where job opportunities are better. Reasons for non-receipt of food rations is attributed to heads of households working and therefore not registered for food rations. Others claim they have been left out without any reason.

3.2.6 Arable Land Development Programme

Similarly for ALDEP, less participation has been reported. This is however higher than participation in FAP (5.5%). ALDEP participation (27.3%) as may be expected is influenced by the distribution of donkeys for draught power purposes. In addition, ALDEP participation may be higher because the project costs here are reasonably lower than those for FAP projects. Reasons advanced for non-participation were given as lack of money for down payment

3.3 RANGELAND

Rangeland should allow farmers to continue building their stock. There were however very remote complains that new species of grasses are showing in some areas. These grasses were reported not very palatable to animals.

These were sited around Komana area and may need further investigations.

Respondents believe the grasses were brought in by cattle for restocking.

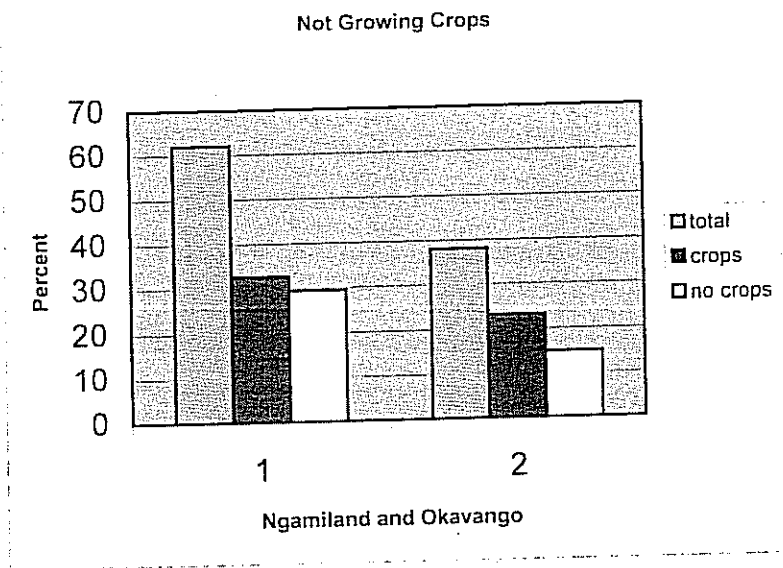
3.4 SOURCES OF FOOD

The study made an attempt to establish the main sources of food for the households interviewed. It was observed that Government rations stood at 13.9%, followed by own production 10.1%, and wages 8.3% in that order. These figures simply indicate how important are rations from government as a source of food for the said households. The statistics showed that a combination of own production and government rations which stood at 36.4% and that of wages and government, 12.8% nearly represented 50 % of the sources of food in the households interviewed.

Further analysis showed that male headed households depended more on wages as compared to female headed households. On the other hand, female headed households depended more on government rations as compared to their male counterparts.

On the overall, these figures indicate the importance of rations and wages as a source food in the households although female headed households tend to be more dependant on food handouts from government.

Arable farming is carried out by sixty two percent of households interviewed. This percentage is high and comparable to national proportion, however the small field sizes and low yields associated with the traditional arable agriculture renders it insignificant. Out of this number of households 68.3% reported they did not expect to harvest, while 13.8 percent of those who expect any harvest reported it will last less than a month. In all 82.1 % have no harvest or enough food for less than one month.

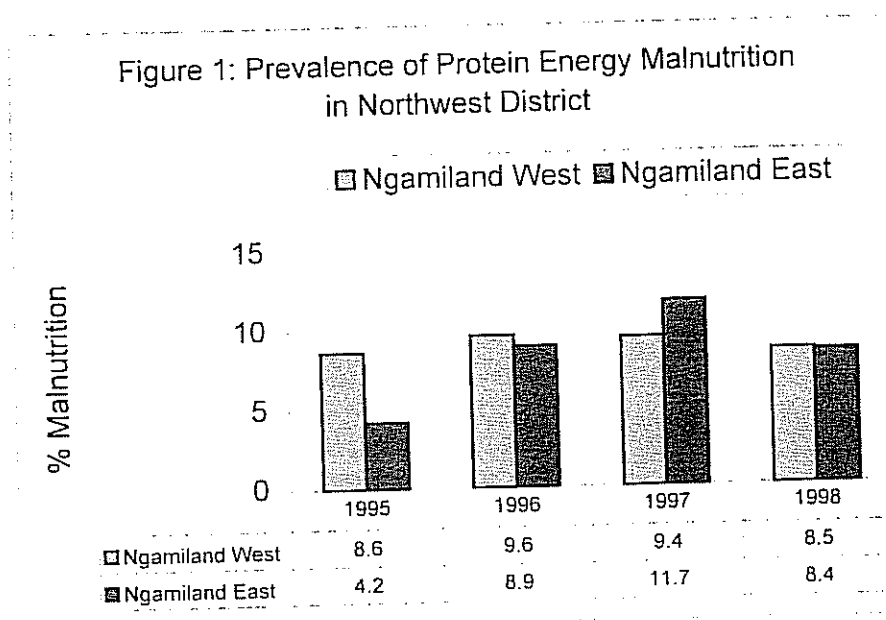


3.5 NUTRITIONAL SITUATION

3.5.1 Annual Protein Energy Malnutrition

The average annual prevalence of Protein Energy Malnutrition (PEM) in Ngamiland East in 1995 was 4.2%. The year 1995 is considered as a year in which the livestock was not affected by cattle lung disease (Contagious Bovine Pleuro Pneumonia). Following the eradication of cattle lung disease, the malnutrition rates increased to 8.9% in 1996, 11.3% in 1997 and 8.4% in 1998 (See Fig. 1). This points to the fact that the people in Ngamiland East seem to rely mostly on cattle as a source of income and food. This suggests the eradication of cattle lung disease has had a great impact on the nutritional status of the underfives.

On the basis of this nutrition trend in Ngamiland East as depicted in Fig. 1, it appears that the nutritional situation has not generally improved.



However, in Ngamiland West the district experienced a slight increase from 8.6% in 1995 to 9.6% in 1996. The situation continued to stabilize in 1997 and has remained so in 1998.

3.5.2 Moderate Malnutrition

With regard to the prevalence of moderate malnutrition on quarterly basis which reflects on the agroclimatic conditions in Botswana, a stable situation was observed in Ngamiland West from 1995 to 1998. As depicted in Fig. 2 an increase in the prevalence of malnutrition was mostly noted during the first quarters. The stable situation in Ngamiland suggests a coping strategy among communities over years.

Figure 2: Prevalence of Moderate Malnutrition in Ngamiland West

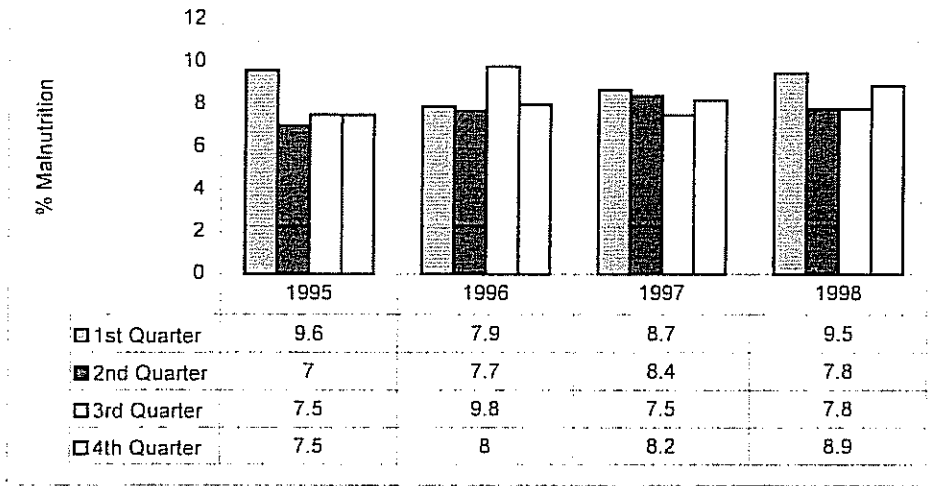
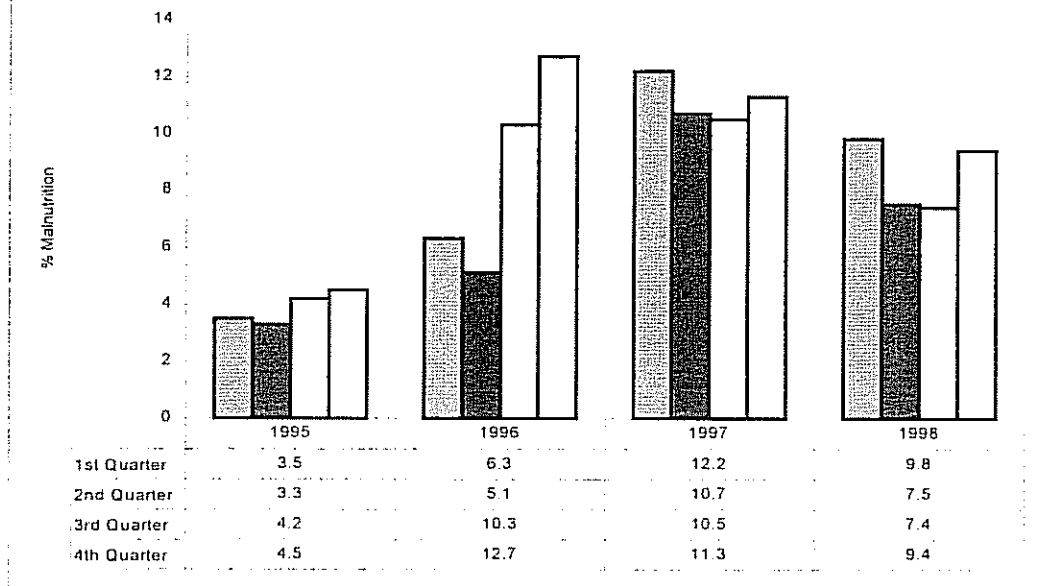


Figure 3: Prevalence of Moderate Malnutrition in Ngamilnd East



In Ngamiland East as shown in Figure 3, a stable situation was only noticed during the year 1995. In 1995 the worsening quarters were the 3rd and 4th quarters with prevalences at 10.3% and 12.3% respectively. In 1997, the first quarter reflected a slight increase to 12.2% and the situation stabilized in the remaining quarters. In 1998 a slight decline was observed during the second and third quarter which indicate a slight improvement in the nutritional status of the underfives. Nevertheless towards the end of the fourth quarter malnutrition picked up to 9.4%.

3.5.3 Severe Malnutrition

Figure 4 shows the prevalence of severe malnutrition among under fives in Ngamiland East during different quarters of 1995 to 1998. It is obvious that severe malnutrition seem to have not improved from 1996 to 1998. The same trend is to be observed in Ngamiland West(Fig.5).

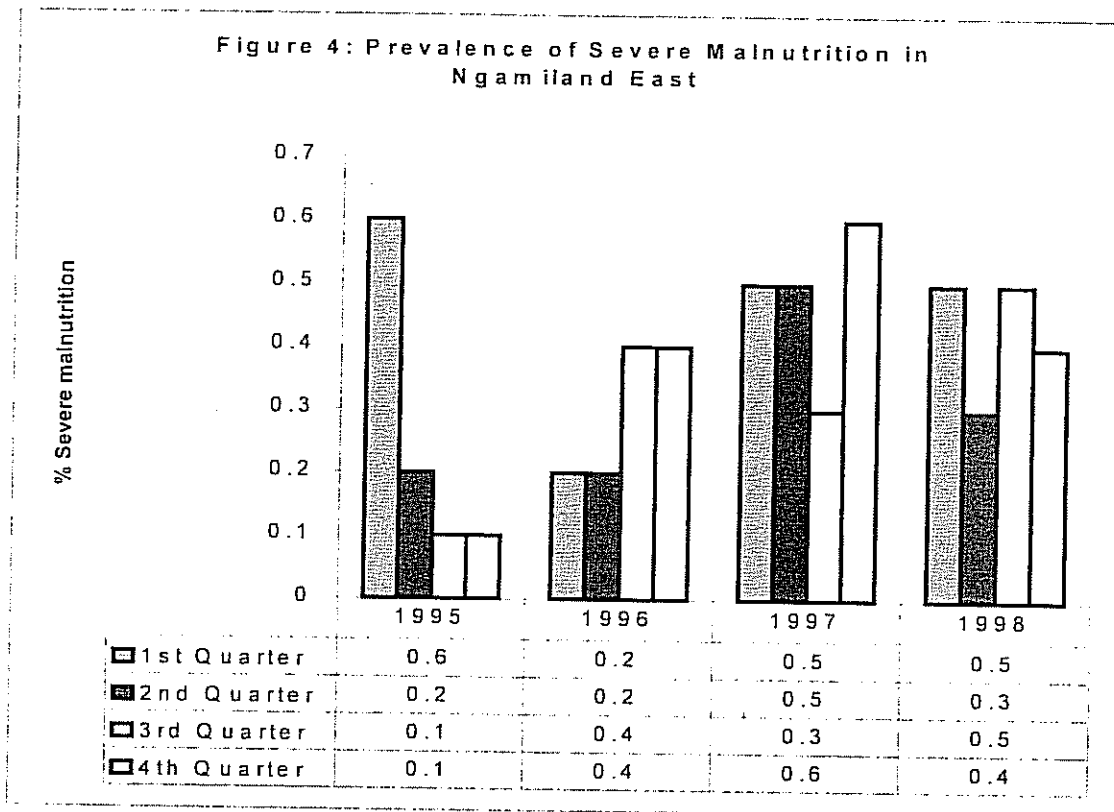
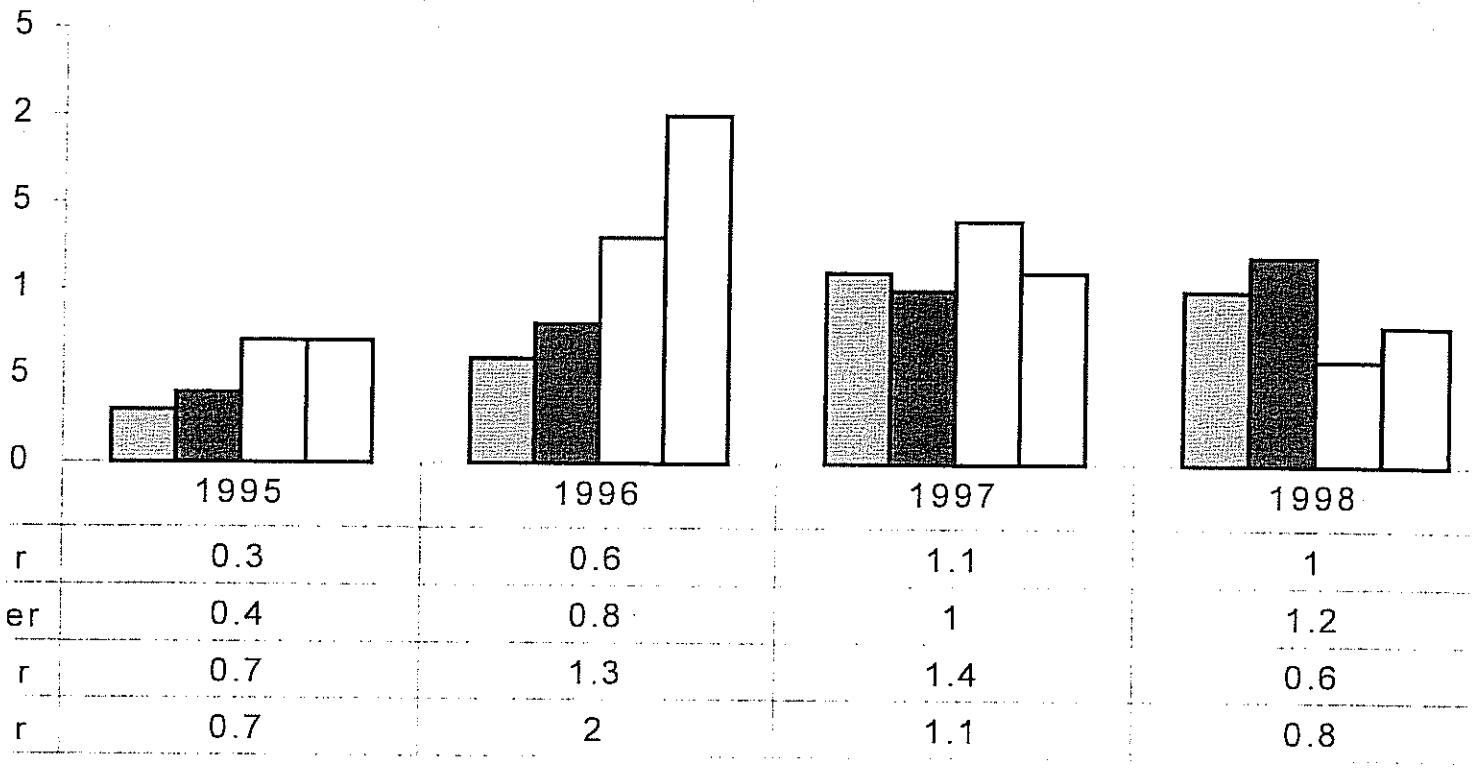


Figure 5: Prevalence of Severe Malnutrition in Ngamiland West



CHAPTER 4

4. CONCLUSION

Statistics collected for this study clearly advocates for a continuation of the Labour Public Works Programmes. This programme has to continue because farming households have not harvested and Labour Intensive Public Works has been the only major alternative employment opportunity. It should be realised that most households in this area have never handled large sums of money and it was necessary to have prepared them for the large sums of money they were about to administer. This is especially true for the households with small cattle heads and having opted for 100 percent compensation method. These are also households who grow crops on a very low subsistence level. Those who have been involved in the cattle industry, as cattle headers have had less interest in other government programmes which were put in place to alleviate unemployment problem. These have therefore moved and shifted into Labour Intensive Public Works as an alternative to their original jobs. It has been expressed at different interview places that income from LIPW is the only income coming to the households for purchase of food and clothing. Surprisingly communities do not talk about saving money from LIPW.

Ngamiland population is more pastoral than arable. The population resource base is limited due to the high illiteracy level and the large young population found here. Families are big and largely the high proportion of sons/daughters and grandchildren explains these sizes. Labour force found in the Ngamiland District and Okavango Sub-District is basically traditional or subsistence agriculture and the unemployed. This is in exception of Maun village where employment in the formal sector is very significant. People would like the LIPW to continue though there are complains of low wages offered.

Below are some of what people say about LIPW:

“I have no choice, this is the only job opportunity available to me, though it is further impoverishing me. Money comes late so I get loans from people and by the time the money comes its finished”.

“I have no land so I can not plough. Animals will destroy my produce if I plough. FAP I have vivid information on it. I here it is available in certain areas”.

Some indicators of poverty for north-west (BIDPA, 1997)

Below are some of poverty indicators for the Northwest as shown in the Poverty Alleviation Study by BIDPA.

Geographic distribution of poverty	24%
Poverty Datum Line	-3.6%
Capability Poverty Measure	26.7%
Female Illiteracy Rate	43.0%

The nutritional status of underfives in Ngamiland West has remained stable. In Ngamiland East the prevalence of protein energy malnutrition has declined slightly, but the district has not been able to revert back to figures of 1995.

Discussion with district staff during drought assessment tours has led to conclusions that:

- . the blanket coverage has not made full impact on the nutritional status of the underfives due to irregular supply of food commodities to health facilities.
- . high malnutrition rates among remote area dwellers continue to exist caused by many factors such as alcoholism, high morbidity, child negligence ie. mothers not feeding children as often as required.
- . prevalence of diseases such as TB, HIV/AIDS, malaria, diarrhoea and measles.

CHAPTER 5

5. RECOMMENDATIONS

RECOMMENDATIONS

Based on the sampled population, it is very clear that extension messages are not coming to the communities, that is, communities continue to report lack of focused information on Government Assistance Programmes. They have reported having vague information on certain programmes and as a result unable to take them up. In addition, people have given, as a deterrent to participating in assistance programmes the down payment required of them to qualify.

RECOMMENDATION 1

Based on above it is recommended that **Ministries responsible for assistance programmes should collaborate and develop focused extension messages for dissemination by the extension Teams. These messages should come as a package. Provision of adequate staffing and other resources for the implementation of projects should strengthen extension Teams. Monitoring should be an integral part of all started projects and those to start.**

This recommendation should in particular be addressed by the District Extension Teams who would comprise of District Officer Development, District Adult Education Officer, Department of Integrated Field Services, Department of Crop Production and Forestry, Community Development and Social Welfare to mention a few.

Results support a continued Labour Intensive Public Works, however there is need to define a target population and that continuation of this programme should be a short and medium term solution. The destruction of cattle in Ngamiland especially for those farmers who had less number of cattle and opted for the 100% compensation has had a long-term effect on their culture or traditions. It has been expressed by the households that their lives has changed and is unacceptable. Labour Intensive Public Works will not in the short or long term make up for the gap created because of cattle destruction. The programme is however spending a lot of money that can be used rather to finance a scheme that would pay off in the long term. The administration of the Labour

Intensive public Works involves a lot of money, let alone the financing of the beneficiaries.

There appears a lot of food in the form of cereals is distributed to the people in Ngamiland. There are cases where people complain of being given food they are not used to, example sorghum. Preferences of this nature have always been there and therefore should be taken into consideration whenever food relief measures are contemplated. There is presently a lot of sorghum sitting in some households, because this is not their preferred food.

It is clear that Labour Intensive Public Works and the food rations have gone a long way in alleviating poverty in the affected communities in the Ngamiland district as a whole. However, the interventions have put great stress on resources both financial and material. These can only be maintained on a short-term basis. Such activities could be both agricultural and non-agricultural and could utilise the already existing programmes.

As mentioned before in this report, the majority of people who received compensation opted for hundred percent cash compensation. Most of these fell in the category of those having a relatively lower number of cattle before CBPP eradication and were comparatively less well off. Their compensation money was mainly used for routine domestic purposes such as buying food, uniforms for school children and so forth. This category of respondents is the most vulnerable as they had no money to restock.

Based on this information, the following additional recommendations are made.

RECOMMENDATION 2

Labour Intensive Public Works (LIPW) should continue as a source of employment and income while alternative programmes through extension machinery are offered the affected in preparation for the winding up in June 2000.

RECOMMENDATION 3

It is recommended that more emphasis should be put on productive infrastructure and income generating activities, which could be sustainable in the long term. (A list of productive projects can be found in Karikari/Mphathi report 1997)

The success of the above recommendations are subject to monitoring being an integral part of the project implementation so that designs can be redefined as and when necessary.

RECOMMENDATION 4

The blanket coverage of food rations should be stopped and a new more targeted food rationing be employed.

RECCOMENDATION 5

There were reports that new species of grasses were seen around Komana. The grasses are said to be unpalatable to animals especially cattle. It is **recommended that the Ministry of Agriculture investigate these reports as a precautionary measure for feature adverse effects on livestock.**

RECOMMENDATION 6

In line with recommendation 2 which is, the LIPW should continue until June 2000 therefore the CBPP Co-ordination Office that is responsible for the project should remain in place until the winding up is concluded.

Subsequent to the winding up of the CBPP Co-ordination Office, logistics on the deployment of staff (temporary permanent & pensionable, temporary industrial class and seconded officers) should be worked out.

Appendix I

Members of the Reference Group

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2. H.B. Nthibe	Applied Research Unit, MLGLH (Secretary)
3. H. Mogatusi	Social Welfare Division, MLGLH (Chairperson)
4. Dr. Rahman	STD/AIDS Unit, MOH
5. T.J. Bandeke	Family Health Division, MoH
6. N. Koontse	RDCD, MFDP
7. G.O. Mokgwathi	DA, MLGLH
8. C.T. Ndozi	ARU, MLGLH
9. B. Fidzani	DP&S, MoA
10. R.M. Kwerepe	DCP&F

Study Team

1. H.B. Nthibe	Applied Research Unit, MLGLH (Secretary)
2. T.J. Bandeke	Family Health Division, MoH
3. N. Koontse *	RDCD, MFDP
4. C.T. Ndozi	ARU, MLGLH
5. B. Fidzani *	DP&S, MoA

* unable to fully participate in the study due to other commitments.

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1. 1981 Population and Housing Census Administrative/Technical Report and National Statistical Tables, CSO, MFDP
2. A guide to villages of Botswana, CSO, MFDP
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4. Minutes of the CBPP Steering Committee
5. Socio-economic cost benefit analysis of action and alternatives for the control of CBPP in Ngamiland, Botswana. Townsend R.F., Sigwele H.K. (1997).
6. Projects proposed to relief populations affected by CBPP outbreak in the Northwest District, Ministry of Agriculture 1996.
7. 1998 MLGLH Working Paper 1. Marketing of Kwesakeni and Kaudwane Products.

APPENDIX II

ETHNIC GROUPINGS

Table 1. Number of Households by Ethnic Grouping and Head of Household Sex for Okavango

Ethnic Grouping	Total		Male		Female	
	Total	Percent	Total	Percent	Total	Percent
Total	573	100	267	46.6	306	53.4
Bayeyi	175	30.5	78	13.6	97	16.9
Bambukushu	231	40.3	106	18.5	125	21.8
Basarwa	25	4.4	15	2.6	10	1.7
Bakoba	9	1.6	6	1	3	0.5
Batawana	26	4.5	11	1.9	15	2.6
Baherero	12	2.1	8	1.4	4	0.7
Basubia	8	1.4	3	0.5	5	0.9
Barotsi	4	0.7	2	0.3	2	0.3
Bakgalagadi	21	3.7	6	1	15	2.6
Batereku	35	6.1	23	4	12	2.1
Others	27	4.7	9	1.6	18	3.1

Table 2. Number of Households by Ethnic Grouping and Head of Household sex for Ngamiland

Ethnic Grouping	Total		Male		Female	
	Total	Percent	Total	Percent	Total	Percent
Total	454	100	246	54.2	208	45.8
Bayeyi	125	27.5	65	14.3	60	13.2
Bambukushu	26	5.7	14	3.1	12	2.6
Basarwa	43	9.5	29	6.4	14	3.1
Bakoba	15	3.3	7	1.5	8	1.8
Batawana	107	23.6	63	13.9	44	9.7
Baherero	26	5.7	14	3.1	12	2.6
Basubia	13	2.9	6	1.3	7	1.5
Barotsi	5	1.1	3	0.7	2	0.4
Bakgalagadi	23	5.1	9	2	14	3.1
Batereku	6	1.3	3	0.7	3	0.7
Others	65	14.3	33	7.3	32	7

APPENDIX III

HOUSEHOLD CHARACTERISTICS

Table 1. Number of Households by sex of Household Head and District

District	Total		Male		Female	
	Total	Percent	Total	Percent	Total	Percent
Total	1027	100	513	50	514	50
Okavango	573	55.8	267	26	306	29.8
Ngamiland	454	44.2	246	24	208	20.3

Table 2. Sample Population by Sex and District

District	Total		Male		Female	
	Total	Percent	Total	Percent	Total	Percent
Total	3909	100	1888	48.3	2021	51.7
Okavango	2011	51.4	951	24.3	1060	27.1
Ngamiland	1898	48.6	937	24	961	24.6

Table 3. Relationship of Household Member to Head of Household by District

Relationship	Total		Okavango		Ngamiland	
	Total	Percent	Total	Percent	Total	Percent
Total	3599	100	1826	50.7	1773	49.3
Household Head	662	18.4	365	10.1	297	8.3
Spouse	211	5.9	109	3	102	2.8
Son/Daughter	1724	47.9	926	25.7	798	22.2
Relative	1002	27.8	426	11.8	576	16
Others	0	0	0	0	0	0

Table 4. Sample Population by Educational Attainment and District

Reason	Total		Okavango		Ngamiland	
	Total	Percent	Total	Percent	Total	Percent
Total	3234	100	1730	53.5	1504	46.5
Never attended	917	100	494	53.9	423	46.1
Standard 1-4	760	100	385	50.7	375	49.3
Standard 5-7	799	100	451	56.4	348	43.6
Form 1-3	609	100	320	52.5	289	47.5
Form 4-5	114	100	64	56.1	50	43.9
Tertiary	35	100	16	45.7	19	54.3

Table 5. Population by Place of Residence before CBPP Eradication

District	Total		Same		Different	
	Total	Percent	Total	Percent	Total	Percent
Total	3533	100	2823	79.9	710	20.1
Okavango	1809	51.2	1408	39.9	401	11.4
Ngamiland	1724	48.8	1415	40.1	309	8.7

Table 6. Sample Population by Work Status and District Before CBPP Eradication

District	Total		not working	working	looking for work	student	others
	Total	Percent	Percent	Percent	Percent	Percent	Percent
Total	2626	100	49.8	17.6	2.2	27.8	0.3
Okavango	1293	49.2	27.5	7.5	0.9	12.1	0.2
Ngamiland	1333	50.8	22.3	10	1.4	15.7	0.1

Table 6. Sample Population by Work Status and District After CBPP Eradication

District	Total		not working	working	looking for work	student	others
	Total	Percent	Percent	Percent	Percent	Percent	Percent
Total	2622	100	45.5	25.5	3.7	24.6	0.3
Okavango	1292	49.3	24.9	11.7	1.7	10.6	0.2
Ngamiland	1330	50.7	20.6	13.8	2	14	0.1

APPENDIX IV

Table 1. Number of Households Reporting Having Cattle Before CBPP

District	Cattle before CBPP		No Cattle			
	Total	Percent	Total	Percent		
Total	1057	100.0	711	69.9	311	30.4
Okavango	573	55.8	415	40.6	155	15.2
Ngamiland	454	44.2	296	29.0	156	15.3

Table 2. Number of Households Reporting Having Cattle After CBPP

District	Cattle after CBPP		No Cattle			
	Total	Percent	Total	Percent		
Total	1057	100.0	302	29.4	726	70.6
Okavango	573	55.8	136	13.2	437	42.6
Ngamiland	454	44.2	166	16.2	288	28.0

Table 3. Reporting having goats before CBPP

District	Goat before CBPP		No Goats			
	Total	Percent	Total	Percent		
Total	1057	100.0	549	53.4	478	46.6
Okavango	573	55.8	255	24.7	318	31.0
Ngamiland	454	44.2	294	28.7	160	15.6

Table 4. Reporting having goats after CBPP

District	Goat after CBPP		No Goats			
	Total	Percent	Total	Percent		
Total	1057	100.0	496	48.3	531	51.7
Okavango	573	55.8	219	21.3	355	34.5
Ngamiland	454	44.2	277	27	176	17.2

Table 5. Reporting having donkeys before CBPP

District	Donkeys before CBPP		No Donkeys			
	Total	Percent	Total	Percent		
Total	1057	100.0	414	40.3	613	59.7
Okavango	573	55.8	186	18.1	387	37.7
Ngamiland	454	44.2	228	22.1	226	22.0

Table 6. Reporting having donkeys after CBPP

District	Donkeys after CBPP		No Donkeys			
	Total	Percent	Total	Percent		
Total	1057	100.0	410	40.0	617	60.0
Okavango	573	55.8	207	20.1	366	35.8
Ngamiland	454	44.2	203	19.9	251	24.2

Table 7. Number of households reporting keeping poultry before CBPP

District	Poultry before CBPP		No Poultry	
	Total	Percent	Total	Percent
Total	1057	100.0	605	58.9
Okavango	573	55.8	330	32.3
Ngamiland	454	44.2	275	26.6

Table 8. Number of households reporting keeping poultry after CBPP

District	Poultry after CBPP		No Poultry	
	Total	Percent	Total	Percent
Total	1057	100.0	443	43.1
Okavango	573	55.8	21	20.4
Ngamiland	454	44.2	233	22.6

Table 9. Has arable farming been a source of livelihood in your household before CBPP

District	Yes		No	
	Total	Percent	Total	Percent
Total	1057	100.0	817	79.6
Okavango	573	55.8	474	46.3
Ngamiland	454	44.2	343	33.3

Table 10. Has arable farming been a source of livelihood in your household after CBPP

District	Yes		No	
	Total	Percent	Total	Percent
Total	1057	100.0	620	60.4
Okavango	573	55.8	328	31.7
Ngamiland	454	44.2	292	28.7

Table 11 Source of food in households by District

Source	Total		Okavango		Ngamiland	
	Number	Percent	Number	Percent	Number	Percent
Own Production	104	10.1	40	3.9	63	6.2
Wages	85	8.3	37	3.6	48	4.7
Wages in kind	19	1.8	9	0.9	9	0.9
Remmitances	12	1.2	5	0.5	7	0.7
Govt rations	142	13.9	96	9.4	46	4.5
Others	38	3.7	24	2.3	14	1.4
Own Prod& wages	64	6.3	30	2.9	34	3.3
Own prod. & in kind	10	1.0	6	0.6	4	0.4
Own & Remmitances	0	0.0	0	0.0	0	0.0
Own prod & govt ration	372	36.4	221	21.6	151	14.8
Wages & Kind	7	0.7	2	0.2	5	0.5
Wgaes & remmitances	3	0.3	0	0.0	3	0.3
Wage & govt ration	131	12.8	77	7.5	54	5.3
Kind & remmitances	1	0.1	1	0.1	0	0.0
Kind & govt ration	16	1.6	12	1.2	4	0.4
Remittance & govt ration	21	2.1	12	1.2	9	0.9

Table 12. Source of food in households by Sex of Household Head

Source	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
Own Production	104	10.1	51	5	52	5.1
Wages	85	8.3	48	4.7	37	3.6
Wages in kind	19	1.8	8	0.8	10	1
Remmitances	12	1.2	1	0.1	11	1.1
Govt rations	142	13.9	48	4.7	94	9.2
Others	38	3.7	17	1.7	21	2.1
Own Prod& wages	64	6.3	37	3.6	27	2.6
Own prod. & in kind	10	1.0	6	0.6	4	0.4
Own & Remmitances	0	0.0	0	0	0	0
Own prod & govt ration	372	36.4	202	19.8	169	16.5
Wages & Kind	7	0.7	4	0.4	3	0.3
Wgaes & remmitances	3	0.3	2	0.2	1	0.1
Wage & govt ration	131	12.8	66	6.5	65	6.4
Kind & remmitances	1	0.1	1	0.1	0	0
Kind & govt ration	16	1.6	9	0.9	7	0.7
Remittance & govt ration	21	2.1	10	1	11	1.1

APPENDIX V

ARABLE FARMING

Table 1. Total number of households managing/operating crops by District

District	Total	Growing crops		Not growing crops	
		number	percent	number	percent
Total	1027	637	62.0	390	38.0
Okavango	573	335	32.6	238	23.2
Ngamiland	454	302	29.4	152	14.8

APPENDIX VI

Table 1. Number and percent of households by method of compensation

District	Total		cash 30%		cash 70%		cash 100%		Others	
Total	699	100.0	49	7.0	206	29.5	427	61.1	17	2.4
Okavango	408	58.4	30	4.3	93	13.3	276	39.5	9	1.3
Ngamiland	291	41.6	19	2.7	113	16.2	151	21.6	8	1.1

Table 2. Number of households by how they used compensation money and District

Money usage	Total		Okavango		Ngamiland		
	number	percent	number	percent	number	percent	
1. buy livestock	34		5	19	4.5	17	5.7
2. saved money	65	9.7	34	8.3	35	11.9	
3. food/clothing	304	45.5	199	48.3	118	40.6	
4. downpayment	13	2	10	2.5	3	1.1	
5. build house	47	7	21	5	29	10	
6. vending/hawking	7	1.1	6	1.5	1	0.4	
7. Comb 1 & 2	7	1.1	3	0.8	4	1.5	
8. Comb 1 & 3	28	4.2	22	5.3	8	2.7	
9. Comb 1 & 4	12	1.8	8	2	4	1.5	
10. Comb 1 & 5	3	0.5	0	0	3	1.1	
11. Comb 1 & 6	3	0.5	0	0	3	1.1	
12. Comb 2 & 3	28	4.2	15	3.6	15	5	
13. Comb 2 & 4	0	0	0	0	0	0	
14. Comb 2 & 5	12	1.7	6	1.5	6	1.9	
15. Comb 2 & 6	2	0.3	2	0.5	0	0	
16. Comb 3 & 4	1	0.2	1	0.3	0	0	
17. Comb 3 & 5	22	3.3	14	3.4	9	3.1	
18. Comb 3 & 6	1	0.2	1	0.3	0	0	
19. Comb 4 & 5	0	0	0	0	0	0	
20. Comb 4 & 6	0	0	0	0	0	0	
21. Comb 5 & 6	0	0	0	0	0	0	
22. Other Comb*	80	12	47	11.5	36	12.3	

*comb - combination of responses

Table 3. Number of households by how they used compensation money and District and sex of household head

Money usage	Total			Okavango			Ngamiland			
	number	percent	percent	number	percent	percent	number	percent	percent	
Total	669	100.0	56.2	43.8	60.6	31.1	29.5	39.4	25.2	14.2
1. buy livestock	34	5.0	3.5	1.5	2.7	1.5	1.2	2.3	2.0	0.3
2. saved money	65	9.7	6.1	3.6	5.0	3.0	2.0	4.7	3.0	1.7
3. food/clothing	304	45.5	23.0	22.4	29.5	14.1	15.5	15.9	8.9	7.0
4. downpayment	13	2.0	1.4	0.6	1.5	0.9	0.6	0.5	0.5	0.0
5. build house	47	7.0	3.6	3.3	3.0	1.5	1.5	3.9	2.1	1.8
6. vending/hawking	7	1.1	0.5	0.6	0.9	0.5	0.5	0.2	0.0	0.2
7. Comb 1 & 2	7	1.1	0.8	0.3	0.5	0.3	0.2	0.6	0.5	0.2
8. Comb 1 & 3	28	4.2	3.0	1.2	3.2	2.0	1.2	1.1	1.1	0.0
9. Comb 1 & 4	12	1.8	0.5	1.4	1.2	0.3	0.9	0.6	0.2	0.5
10. Comb 1 & 5	3	0.5	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.0
11. Comb 1 & 6	3	0.5	0.3	0.2	0.0	0.0	0.0	0.5	0.3	0.2
12. Comb 2 & 3	28	4.2	2.7	1.5	2.3	1.2	1.1	2.0	1.5	0.5
13. Comb 2 & 4	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. Comb 2 & 5	12	1.7	1.2	0.5	0.9	0.6	0.3	0.8	0.6	0.2
15. Comb 2 & 6	2	0.3	0.2	0.2	0.3	0.2	0.2	0.0	0.0	0.0
16. Comb 3 & 4	1	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0	0.0
17. Comb 3 & 5	23	3.3	1.7	1.7	2.1	0.9	1.2	1.2	0.8	0.5
18. Comb 3 & 6	1	0.2	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0
19. Comb 4 & 5	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20. Comb 4 & 6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21. Comb 5 & 6	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22. Other Comb*	80	12.0	7.3	4.7	7.1	3.9	3.2	4.8	3.3	1.5

APPENDIX VII

GOVERNMENT ASSISTANCE PROGRAMMES

Table 1. Number and percent of households aware of government assistance

District	Total		Aware		Not aware	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100	995	96.9	32	3.1
Okavango	573	100	559	97.6	14	2.4
Ngamiland	454	100	436	96	18	4

Table 2. Number and percent of households participating in FAP by District

District	Total		participate		not participating	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100.0	57	5.5	970	94.5
Okavango	573	100.0	17	2.8	556	97.2
Ngamiland	454	100.0	40	8.9	414	91.1

Table 3. None participation in FAP by Reason by District

Reason for none participation	Total		Okavango		Ngamiland	
	Number	Percent	Number	Percent	Number	Percent
Total	970	100.0	556	57.3	414	42.7
never had about work elsewhere	418	43.1	248	25.6	170	17.5
no downpayment	17	1.7	11	1.0	6	0.6
others	304	31.4	164	17.0	140	14.4
	231	23.8	133	13.8	98	10.1

Table 4. Number and percent of households participating in LIPW by District

District	Total		participate		not participating	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100	442	43	585.0	57
Okavango	573	55.8	254	24.7	319.0	31.2
Ngamiland	454	44.2	188	18.3	266.0	25.8

Table 5. None participation in LIPW by Reason by District

Reason for none participation	Total		Okavango		Ngamiland	
	Number	Percent	Number	Percent	Number	Percent
Total	585	100.0	319	54.6	266	45.4
never had about work elsewhere	17	2.9	8	1.4	9	1.5
no downpayment	115	19.7	59	10.2	56	9.5
others	78	13.3	40	6.8	38	6.5
	117	20.1	34	5.8	83	14.3
	258	44.0	178	30.4	80	13.6

Table 6. Number and percent of households participating in Food Rations by District

District	Total		participate		not participating	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100.0	711	69.2	316	30.8
Okavango	573	55.8	442	43.0	131	12.9
Ngamiland	454	44.2	269	26.1	185	18.0

Table 7. Number and percent of households participating in ALDEP by District

District	Total		participate		not participating	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100.0	280	27.3	747	72.7
Okavango	573	55.8	175	17.1	398	38.7
Ngamiland	454	44.2	105	10.2	349	34.0

Table 8. Number and percent of households with at least one member participating in other income generating activity

District	Total		at least once		none	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100	279	27.2	748	72.8
Okavango	573	55.8	162	15.8	411	40.0
Ngamiland	454	44.2	117	11.4	337	32.8

Table 9. Participation in more profitable other income generating activities

District	Total		more profitable		not profitable	
	Number	Percent	Number	Percent	Number	Percent
Total	279	100.0	157	56.5	121	43.5
Okavango	162	57.9	82	29.5	79	28.4
Ngamiland	117	42.1	75	27.0	42	15.1

Table 10. Number of households by whether LBPW should continue or not

District	Total		Discontinue		Continue	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100	64	6.2	961	93.8
Okavango	573	100	38	6.6	535	93.4
Ngamiland	454	100	26	5.8	428	94.2

Table 11. Number of households by different reasons why LBPW should continue

Reasons Advanced	Total		Okavango		Ngamiland	
	Number	Percent	Number	Percent	Number	Percent
Total	1027	100	573	100	454	100
1. No harvest	2	0.2	2	0.3	0	0
2. Source of income	420	40.9	233	40.7	187	41.2
3. Source of food	201	19.6	117	20.5	84	18.5
4. Skill development	4	0.4	3	0.5	1	0.2
5. Village develop	22	2.1	11	1.9	11	2.4
6. Waste of time	27	2.6	15	2.6	12	2.7
7. Comb 1 & 2	12	1.2	7	1	5	1.1
8. One & three	12	1.2	5	0.9	7	1.5
9. One & four	0	0	0	0	0	0
10. One & five	1	0.1	0	0	1	0.2
11. Two & three	124	12.1	89	15.6	35	7.7
12. Two & four	35	3.4	24	4.2	11	2.4
13. Two & five	96	9.3	35	6.1	61	13.3
14. Three & four	1	0.1	0	0	1	0.2
15. Three & five	27	2.6	7	1.2	20	4.4
16. Four & five	2	0.2	0	0	2	0.4
17. Two three four fiv	41	4	25	4.4	16	3.5



Ministry of Local Government Lands and Housing

Division of Planning, Statistics and Research

Applied Research Unit

1999 Socio-Economic Study on the impact of cbpp eradication and government programmes on the North-West District Communities

SECTION 1. Identification

Question 1.1 Administrative District

Question 1.2 Main Village Area

Question 1.3 Locality Name code

Question 1.4 Household Number

Question 1.5 Name of Household Head

Question 1.6 What is the sex of the Household Head? Male - 1 Female - 2

Question 1.7 Name of Respondent

Question 1.8 Relationship of Respondent to Head of Household
 1. H/H
 2. Spouse
 3. Son/Daughter
 4. Relative
 5. Other Specify

Question 1.9 Ethnic Affiliation of Household Head

Question 1.10 First Visit Date 1.11 Date completed
 (tick appropriate)

1 Completed

2 Vacant

3 Refused

4 Unable to Locate Respondent

Question 1.12 Completed by Code

SECTION 2. SEE THE HOUSEHOLD SECTION ON PAGE

(Sketch of H/Hold on the ground following path of visit)
 (Also show North direction)

SECTION 3. Source of Livelihood
(Put "1" for YES and "2" for NO)

Description	Question 3.1		Question 3.2			
	What are sources of Livelihood in your household		What are/were main sources of livelihood? (Number from 1 to 3)			
	a) Before CBPP eradication	b) After CBPP eradication	a) Before CBPP eradication	b) After CBPP eradication		
Cattle Rearing	Number	Number				
Goats and/or Sheep	Number	Number				
Donkey Keeping	Number	Number				
Poultry						
Arable farming						
Hunting						
Handy Crafts						
Game/Wildlife Farming						
Edible Veld Products						
Medicinal Veld Products						
Fire Wood Collection						
Pools/Rafters						
Thatching/ Reed Collection						
Fishing						
Vending/Hawking						
Wage Employment						
Government Assistance Policies						
Other(s)						

Question 3.3 What are the main sources of food in this household?

1. Own Production
2. Wages
3. Wages in Kind
4. Remittances
5. Government Rations
6. Others Specify

(ask for the number of rations) (Number)

SECTION 4. FARMING

Question 4.1 Does anyone in this household grow any crops in this area? Yes - 1 No - 2 ⇒ Sect. 5

Question 4.2 What farming practice do you use?

1. Molapo
2. Dryland
3. Both

Question 4.3 How long will production from last harvest last you?

1. Will not harvest
2. Less than a month
3. 1 - 2 months
4. 3 - 4 months
5. 5 - 6 months
6. 7 - 12 months
7. 12 months plus

SECTION 5. HORTICULTURE PRODUCTION

Question 5.1 How far is the water source from your household?

1. Within dwelling
2. Less than 500 metres
3. About a Kilometre
4. More than a Kilometre

Question 5.2 Do you grow any fruits or vegetables? Yes - 1 No - 2 ⇒ Sect. 6

Question 5.3 What are the fruits and vegetables grown for?

1. Sale
2. Own Consumption
3. Others

SECTION 2 HOUSEHOLD SECTION

(this section should be completed for every household visited)

Sr No.	Name of Household Member (Starting with Head of Household)	Sex	Age	2.4 Relationship to H/H 1. H/H 2. Spouse 3. Son/Daughter 4. Other(Specify)	2.5 Where was ... Residing Before cbpp eradication 1 - same 2 - different	2.6 What is ... education attainment (see below)	2.7 What is ... marital status	2.8 What is ... Work Status?		2.9 How long has been on this job 1. > a month 2. 1 - 3 months 3. 4 - 6 months
								3. Looking for work	3. Attain	
1								Before CBPP	After CBPP	
2										
3										
4										
5										
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