

Baseline Profile

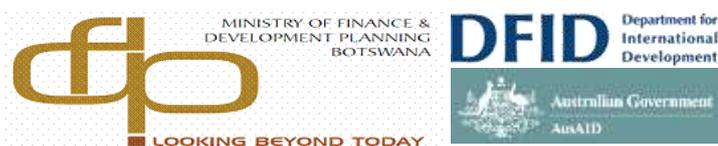


Central-Southern Open-Access
Livestock and Upland Crops
Livelihood Zone



Republic of Botswana

Financed by:



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The Botswana Vulnerability Assessment Committee, which comprises:

- Ministry of Finance & Development Planning - EMP, CSO, Macro, PDC;
- Office of the President - Disaster Management Office;
- Ministry of Local Government - Dept of Local Government Finance & Procurement/Food Relief Services, Dept of Local Government Technical Services, Dept of Social Services, Dept of Local Government Development Planning - *Ipelegeng*
- Ministry of Environment Wildlife & Tourism - Dept of Meteorological Services, Dept of Forestry & Range Resources, Dept of Wildlife & National Parks;
- Ministry of Agriculture - Dept of Crop Production, Dept of Animal Production, Dept of Veterinary Services, Dept of Agric-business Promotion, Dept of Agricultural Research;
- Ministry of Minerals, Energy & Water Resources - Dept of Water Affairs/Water Utilities;
- Ministry of Health - Department of Public Health -Nutrition & Food Control Division
- Ministry of Lands & Housing - Dept of Lands, Dept of Surveys & Mapping;
- Ministry of Labour & Home Affairs - Dept of Labour
- Ministry of Trade & Industry - Dept of Trade & Consumer Affairs
- Ministry of Works & Transport - Central Transport Office (CTO)
- Botswana Agricultural Marketing Board, Bank of Botswana, National Food Technology Research Centre
- Botswana Red Cross Society
- UN Partners (UNDP, UNICEF, UNFPA, UNAIDS, FAO)
- Botswana Council of Non-Governmental Organisations (BOCONGO)

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Botswana Vulnerability Assessment Committee

November 2010

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Acronyms

BMC	Botswana Meat Commission
BVAC	Botswana Vulnerability Assessment Committee
BWCSU	Central-Southern Open-Access Livestock and Upland Crops Livelihood Zone
CSO	Central Statistics Office (now Statistics Botswana)
CWCs	Child Welfare Clinics
FMD	Foot and Mouth Disease
HEA	Household Economy Approach
ISPAAD	Integrated Support for Arable Agriculture Development
KIs	Key Informants
LIMID	Livestock Management and Infrastructural Development
LSD	Lumpy skin Disease
OVCs	Orphan and Vulnerable Children
RADP	Rural Area Development Programme
SADC	Southern African Development Community
VDCs	Village Development Committee
VET	Village Extension Team

Introduction and Methodology

The Botswana Vulnerability Assessment Committee (BVAC) has embarked on a baseline assessment in a number of livelihood zones in rural areas. The information on rural household livelihoods is required as a reference point for modelling likely effects of a shock such as market failure, drought or flooding which affects households' ability to manage. The aim of the baseline assessment for the Central-Southern Open-Access Livestock and Upland Crops livelihood zone was therefore to obtain detailed information on rural livelihoods in the zone for purposes of informing programming and appropriate policy design in the medium and long-term period.

The objectives of the assessment were firstly, to establish livelihood baselines of rural households within the communal arable and livestock farming areas in the eastern part of Botswana and secondly, to enhance technical skills of BVAC members in vulnerability assessment and analysis. The first objective had the purposes of monitoring households' vulnerability to natural and manmade hazards as well as poverty and also of providing information that assists in effectively informing programming and presenting implications for policy design.

The exercise followed the Household Economy Approach (HEA) and the following fifteen villages were visited: Sekhutlane, Mokatako, Moshaweng, Tsonyane, Maboane, Sorilatholo, Loologane, Mookane, Matsitama, Mabesekwa, Changate, Moletemane, Lepokole, Mabua and Mokgware. In each village, focus group discussions were conducted first with the village key informants who defined four wealth groups and then follow-up focus group interviews were conducted with representatives of households from each of the four wealth groups in the village.

A year ranking exercise was also conducted with community leaders and the details of the year ranking by key informants (community leaders and focus groups) were used to identify the twelve-month period from March 2009 to February 2010 as the reference consumption year or baseline year¹ for the livelihoods assessment and analysis. The reference year identified was characterised by average rainfall, harvest, pasture, milk production, wild food, water, less poisonous plants and fair livestock prices.

Main Conclusions and Implications

- The poorer wealth groups use a higher percentage of their income on food and this percentage reduces with increasing wealth. The 'very poor' spend 34 percent of their income on staple food. These households are highly vulnerable to fluctuations in the price of staple foods, due to their weak purchasing power and high dependence on food purchases throughout the year. Government food support contributes 32 percent of the total food energy requirement for this wealth group. Without Government support, their expenditure on staples would rise to 65 percent of their income.
- The contribution to food from own crop production increases with wealth as is evident from the size of the area cultivated across the wealth groups. Agricultural productivity is medium in this zone and areas cultivated and the contributions to food from own crops are as follows:
 - The 'very poor' - 1.5ha cultivated, contributing 8 percent of food energy
 - The 'poor' - 3ha cultivated, contributing 29 percent of food energy
 - The 'middle' - 5ha and cultivated, contributing 48 percent of food energy
 - The 'better-off' - 7.5ha cultivated, contributing 64 percent of food energy
- The 'very poor' not only cultivate less land, they typically do not own livestock. They spend most of their time working for 'better-off' households to secure their immediate cash needs to buy food and other necessities, minimising the time they have for cultivation of their own land but also reducing the risks associated with cultivation. The returns on cultivation are also very low at only three 50 kilogram bags harvested per hectare, making the payment so small that they prefer to use their labour for immediate cash or food rather than investing in developing their land. This suggests that other livelihood options should be considered for the group in order to improve their food and income base.
- The main source of cash income across for all the wealth groups except for the 'better-off' during the reference year was employment. The sources of income for 'very poor' are mainly limited to

¹ In this report, the phrases 'reference consumption year', 'reference year' and 'baseline year' are used interchangeably.

agricultural labour (28 percent), Government public works—*Ipelegeng* - (19 percent) and old age pensions (OAP) (14 percent).

- The ‘very poor’ productive asset base (excluding land) is small, making them more vulnerable to shocks, despite government programmes. There are significant government programmes such as Livestock Management and Infrastructure Development (LIMID), Integrated Support for Arable Agriculture Development (ISPAAD) and Remote Area Development Programme (RADP). However, the following reasons limit the uptake of these programmes by the ‘very poor’ and ‘poor’:
 - The need for quotations to qualify for LIMID (they do not have means to travel around in search of quotations from suppliers of the inputs they need for their projects).
 - The need for permanent water source is a challenge and households from the ‘very poor’ and ‘poor’ wealth groups do not own boreholes. Hence, they do not have access to a permanent water source which is a requirement to benefit from the LIMID programme.
 - There are requirements for cluster fencing under ISPAAD that are difficult for the poorer households.
 - The RADP is intended to build assets for the remote area dwellers.
- Primary education is free and secondary education is heavily subsidised for all wealth groups. Education expenditure for the ‘very poor’ and ‘poor’ is 11 percent of income because government assistance programmes such as RADP and the Destitution Support Programme. However other wealth groups incur educational costs such as uniforms, school fees, toiletries etc.
- Production potential for the zone is, on average, 150kg/ha, which compares well with the national average. However, some areas are not good for crop production. Other productive areas are far from markets and also have poor access roads, which drives up transport costs and undermines the prices paid to farmers for their crops.
- Households spend less on these essential items such as inputs because of provision by Government through its support to the agricultural sector.

Zone Description

The Central-Southern Open-Access Livestock and Upland Crops livelihood zone has been assigned the abbreviation code “BWCSU”. This short-hand code is used in mapping and in many related data and analysis tables.

This zone spreads across a large part of eastern Botswana, lying east of the centre of Southern district, in the central part of Kweneng district, up a strip on the main A1 highway and railway line in Kgatleng district, and in a strip in the south-east of Central district and in a tiny part of North East District (the list of villages covered is included as Appendix 1). It is situated between latitudes 20 degrees to 26 degrees south and longitudes 24 degrees to 29 degrees east with vegetation that is mainly savannah and grass species. The average annual rainfall for the zone ranges from 450mm to 550mm and it falls mainly from November to April.

Table I – Population estimates and projections for the zone by district for 2011

Admin District	Proj.2011	
	BWCSU	Dist
Central (excl Sowa, Orapa, Selebi-Phikwe)	103,919	524,555
North East (excl Francistown)	26,684	48,927
Kgatlang	65,386	79,550
Kweneng	983	262,464
Southern (excl Jwaneng)	58,039	70,386
TOTAL	255,010	460954

It is a large zone and contains approximately 55 percent of the population of those districts. Very approximate population estimates were calculated by overlaying the geographical land areas of the livelihood zones with the population estimates for the districts in 2011². These district estimates were those supplied as yearly district population projections by the Central Statistics Organisation (CSO).

² Following the planned Census for 2011, these rough estimates of population in the zone will be recalculated. Once this is done, there may be significant changes to the data shown in Table I.

In the table above, the numbers under the column headed 'BWCSU' are the livelihood zone populations within each corresponding district. Although the table shows population numbers down to individuals (and there is no rounding), it is following standard practice when reporting population data but these are only projections and rough estimates, no degree of accuracy is implied.

Communities in this zone practice mixed farming with both livestock and crops. Agricultural activities in the zone include cattle rearing, small stock rearing and crop production. There are a variety of cattle breeds, which are mainly cross breeds of Tswana and other exotic breeds, while small stock consists mainly of the Tswana breed. Livestock husbandry practiced in this zone uses a communal grazing system, in keeping with the "open access" land tenure. The zone has upland cultivatable land which is utilized in one cropping season (summer) and the main crops grown are maize, sorghum and cowpeas, with preference for maize over sorghum and some millet, mainly grown in the northern part of the zone. Although agro-climatic conditions are favourable, the potential for cropping is mixed as some parts of the zone have sandy soils which are less suitable. Crop production contributes a significant percentage to household food sources for the 'poor', 'middle' and especially the 'better-off' households, while for the 'very poor' it is minimal.

In addition to the better soils, the high concentration of industries, commercial centres and presence of mineral resources make this zone an attractive area for settlement. Petty trading, a component of income from self-employment, is the largest source of cash for 'better-off' households, followed by livestock sales. 'Middle' households rely on employment (e.g. from labour), as their largest source of income and this is followed by livestock sales. The main source of income for the poorer households is casual labour from agriculture, followed by *Ipelegeng* (Government public works) and the old age pension. The zone also provides employment opportunities for some households on commercial farms. Wild foods, such as berries, are another source of income while poorer households in the northern part of the zone also gather mopane worms for sale.

Private butcheries provide a market for most of the livestock in the zone and some farmers sell their cattle at Botswana Meat Commission (BMC). The poorer households sell their livestock to local buyers mainly because it is not cost effective to transport smaller numbers of cattle to BMC. Cereals are mainly

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall												
Land Preparations												
Seed Distribution												
Ploughing/Planting												
Weeding												
Green Harvest												
Preparations for Harvest (threshing ground and grain storages)												
Dry Harvest and Threshing												

sold locally. Labour migrations to the mines are mainly to the Jwaneng and Letlhakane diamond mines, the Francistown-Tati gold mine, and the copper and nickel mines in Selibe Phikwe.

with most of the area in the zone falling between 30 to 40 percent (CSO, 2008). Therefore, this poverty headcount corresponds roughly with the 'very poor' wealth group.

Livestock holdings, amount of land cultivated, type of employment and business owned are the main determinants of wealth in the zone. Wealthier households own significant numbers of cattle and goats while 'very poor' and 'poor' households typically own very few numbers of livestock—and then usually just goats and chickens. The poorer households seek casual labour employment, while the 'better-off' households are engaged in formal and petty trading self-employment.

Access to arable land is open regardless of wealth group or status. The amount of land cultivated, however, varies significantly by wealth status. The 'better-off' households are able to cultivate larger areas and use animal draught power, tractors and planters and are also at liberty to engage people from the lower wealth groups to assist them. The poorer households, on the other hand are limited to cultivating small pieces of land because they are busy seeking work elsewhere to meet their immediate needs. Hence they not only lack assistance from others, the time available for working in their own fields is markedly reduced. Although free Government tractor services are available, the 'very poor' and 'poor' do not make good use of them because their fields are not adequately de-stumped. They use their own hand hoes, which they mainly use for weeding.

Education in Botswana is free for primary school and a small annual fee of about P300 is paid for secondary school. The 'very poor', 'poor', 'middle' and 'better off' spend P 633, P 632, P1253 and P1650 respectively on school uniforms and payment of school fees. Other costs incurred under school expenses are for transport in cases where the school is far from the home. Children from poorer households typically drop out of school at Standard Seven or Junior secondary and few reach Senior Secondary level while children from 'better-off' households are able to progress up to tertiary education.

The importance of education level is pronounced in terms of the proportion of income that the wealthier households get from formal employment and remittances from their educated children. For 'poor' households, the opposite applies as a primary school or Junior Certificate level of education limits their capacity to obtain better paying jobs. Income activities mainly done by 'poor' households therefore include casual labour (such as weeding, de-stumping and livestock herding), self-employment (such as the cutting and selling of grass, house smearing, selling of mophane worms, collection and selling of wild fruits), public works activities (*Ipelegeng*) and domestic work. Income sources for the 'better-off' households include capital-intensive self employment activities (such as petty trading), livestock sales, crops sales, collection and selling of mophane worm, formal employment.

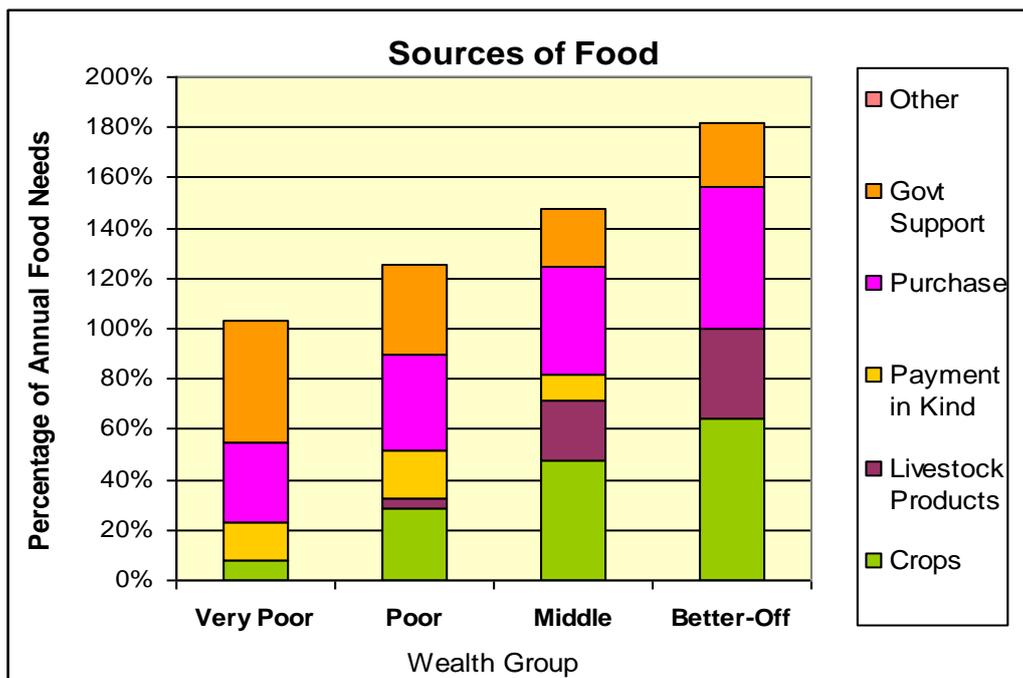
In terms of ownership of productive assets, the 'very poor' and the 'poor' typically own hand hoes, axes, machetes and sickles; the 'poor' own the same with the addition of donkey carts and mould board ploughs. The wealthier households also own ploughs, donkey carts, planters and some own tractors and vehicles.

Livelihood Strategies

Sources of food

The main sources of food across all wealth groups in this livelihood zone include own crop production, livestock products, purchase, payment in kind and government food assistance. Own crop production contributes 8 percent of the minimum food energy requirement for the 'very poor', 29 percent for the 'poor', 48 percent for the 'middle' and 64 percent for the 'better off'. The contribution of own crops for the 'very poor' so much less due to the low area cultivated by this group. Purchases are an important source of food contributing 32 percent for the 'very poor', 38 percent for the 'poor', 43 percent for the 'middle' and 56 percent for the 'better off'. Direct food payments (or payments in kind) contribute about 15 percent of requirements for the 'very poor', 19 percent for the 'poor' and 10 percent for the 'middle'; the 'better-off' do not obtain food from this source. The following is a detailed description of how each source contributes to the household food income for each wealth group.

Figure 3 - Sources of food as a percentage of average minimum requirement



Livestock products

The 'middle' and 'better off' obtain a significant proportion of their food energy from livestock products: 26 percent 'better off' and 38 percent of their food energy requirements respectively. This is because of the higher number of livestock that they own. The 'poor' obtain only 4 percent of their food energy from livestock products while the 'very poor' do not obtain any significant amount as they do not own productive livestock.

Own crop production

The main food crops grown by all wealth groups in this zone are maize, sorghum and beans. Millet is also grown in the northern part of the zone. Maize is the preferred staple over sorghum; households prefer producing it because it does not require as much labour for activities such as bird scarring and intensive post harvest work.

Land cultivated ranges from 1.5ha for the 'very poor', 3ha for the 'poor', 5ha for the 'middle' and 7.5ha for the 'better off'. Wealthier households cultivate bigger pieces of land and also use more modern farming equipment and tools. This contributes to higher yields and production, giving them a greater and reliance on their own crops compared with poorer households.

Food Purchased

Purchases constitute a significant source of food for all the wealth groups in this zone. The main types of food purchased by all wealth groups are maize meal and sorghum followed by other food items such as cooking oil, sugar and meat. Food purchases for the 'very poor' and 'poor' contribute 32 percent and 38 percent to their minimum food energy requirements respectively while for the 'middle' it is 43 percent and it is 56 percent for the 'better-off'.

Although all wealth groups purchase food, 'very poor' and 'poor' households' buy mainly staple foods while wealthier households spend significant amounts of money on items like meat, sugar, rice, wheat flour and cooking oil. The 'very poor', on the other hand, spend approximately 34 percent of their total annual income on staple food and the 'poor' spend 19 percent compared with 6 percent and 3 percent for the 'middle' and 'better off' respectively.

Government Support (Food Transfers)

Sources of food from government support programmes include the Destitute Package, Orphan Package, School Meals and the Nutrition Supplementation for children below five years of age. The Destitute Package is given to the 'very poor' and 'poor' households only while the Orphan Package, School Meals and Nutrition Supplementation cut across all wealth groups.

An average number of 2 children in primary school and 1 child in secondary school was used to estimate the food consumed from school meals. One child per household was used to estimate the annual food contribution of the nutrition programme for children below five years. The Government food assistance was estimated to total 49 percent of the food energy requirement for the 'very poor', 36 percent for the 'poor', 22 percent for the 'middle' and 25 percent for the 'better off'. 'Better off' households receive more calories than the 'middle' due to their smaller household size: the 'better off' consist of six people whereas the 'middle' consist of seven.

Payment in kind (for labour)

The 'very poor' and 'poor' and the 'middle' households accessed 15 percent and 19 percent and 10 percent respectively from payment for labour in kind. The main activities for earning this food are weeding, de-stumping and harvesting.

Sources of Cash

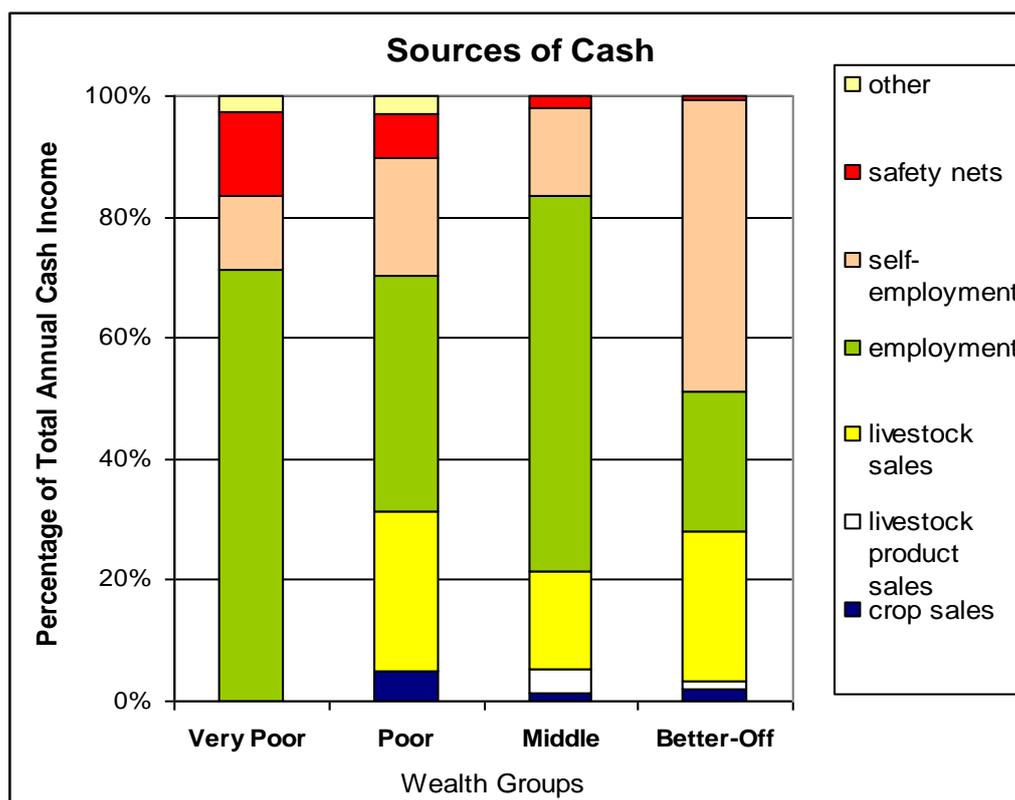
Employment

Employment is an important source of income for all wealth groups, poorer households getting a significant proportion from casual labour such as weeding and smearing (plastering) houses while wealthier households engage in more formal employment such as government functions and in the private sector. Employment contributes 71 percent of total income for the 'very poor', 39 percent for the 'poor', 62 percent for the 'middle' and 3 percent for the 'better off'. Government assistance is important to the 'very poor', with Old Age Pensions contributing 14 percent of their total income and public works programmes (*lpelegeng*) contributing a further 19 percent (total: 33%). Compare this with employment on agricultural activities, which contributes 28 percent, the next most significant source of regular source income in the zone. This is despite the fact that the number of people involved in *lpelegeng* is small and it is on a rotational basis.

Self employment

Self employment activities consist of two types: those requiring capital (such as petty trading, the running of a small business or brewing) and those requiring labour and some sort of natural resource (such as collecting firewood, weaving and basketwork, grass cutting and pole sales). 'Better off' households are able, with their increased wealth and asset base, to engage in the capital-intensive activities, from which they get a considerable part of their income—48 percent. The 'poor' obtain the next largest proportion, 20 percent, though this is more from labour-intensive rather than capital-intensive activities and bring in a far smaller cash amount. The 'middle' households, who are doing more capital-intensive activities, obtain a lower proportion of their total income—14 percent—as their capital is retrained. Lastly, the 'very poor', who lack both labour and capital resources, get only 12 percent of their income from labour-intensive activities. Some of these labour-intensive activities, such as grass cutting are seasonal and with a limited and inelastic market. Brewing is done by all wealth groups but the 'very poor' are employed so for them it is actually casual labour; the business being 'owned' by households from the 'middle' wealth group.

Figure 4 - Sources of cash income as a percentage of total for each wealth group



Annual Cash Income in Pula	5 687	10 784	37 947	97 813
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Sale of livestock and livestock products

The 'poor', 'middle' and 'better off' households sell livestock and this contributes 26 percent, 17 percent and 26 percent respectively to each of their total annual incomes. The livestock sold are goats and cattle, which are bought by local butcheries and the Botswana Meat Commission (BMC). The sale of livestock products in this zone is insignificant.

Sale of crops

The 'middle' and 'better off' households sell some of their crops, which include maize, sorghum and sweet reeds. Water melons are also sold and add to their sources of income. Crop sales contribute 1 percent and 2 percent of total income for the 'middle' and 'better-off' respectively and therefore are not a major source of income.

Old Age Pension

This important safety net is not means tested and is aimed at financially assisting the elderly who are 65 years and older. Based on estimations by the community members and on proportional pilling, approximately 30 percent of the households earn income from the old age pensions and this is distributed evenly across all wealth groups—so the same amount of cash was shown as a source of income.

However, the Old Age Pension is an important relative source of income for the 'very poor' and the 'poor' and contributes 14 percent and 7 percent respectively. Compared this with the contribution it makes to the 'middle' and the 'better off' cash incomes at 2 percent and 1 percent respectively.

Expenditure Patterns

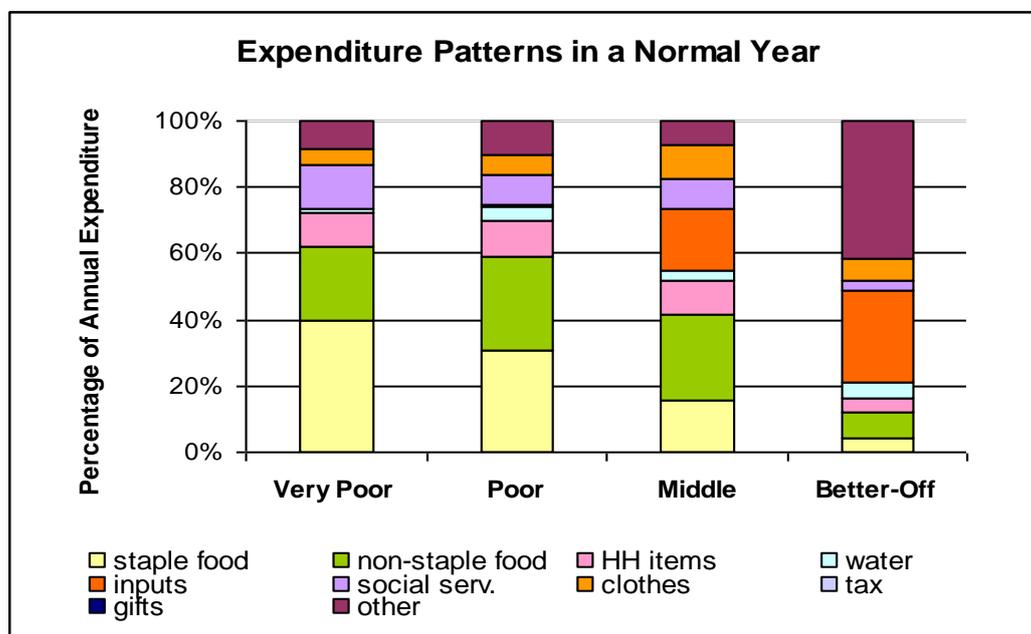
Expenditure on Food

The expenditure patterns in this livelihood zone vary significantly across wealth groups. The 'very poor' and 'poor' households spend 40 percent and 31 percent respectively of their total incomes on staple food

purchases, compared with the 'middle' and 'better off', who spend 16 percent and 4 percent respectively.

The total expenditure on staple food and non-staple food for the 'very poor' and 'poor' households is 62 percent and 59 percent respectively of their total annual household expenditure. This makes food the most costly items on their expenditure lists. It is worth noting that such households are therefore highly sensitive to increases in the price of food—more so than to changes in weather or to weather-induced crop failure.

Figure 5 - Expenditure as a percentage of total for each wealth group



Social Services

Expenditure on social services for the 'very poor' and 'poor' households is 13 percent and 9 percent of the total respectively. Social services encompass school fees, uniforms, and health services. The most significant area in social services is education costs, especially uniforms.

Overall, expenditure on social services is kept low by government subsidies to services like health and education, in addition to support for the crop and livestock sector where ploughing costs, fertilizers and vaccines are provided by government.

'Other' expenditure include transport, beer, gifts, festivals and community obligations and all wealth groups have a proportion of their total expenditure going to these items.

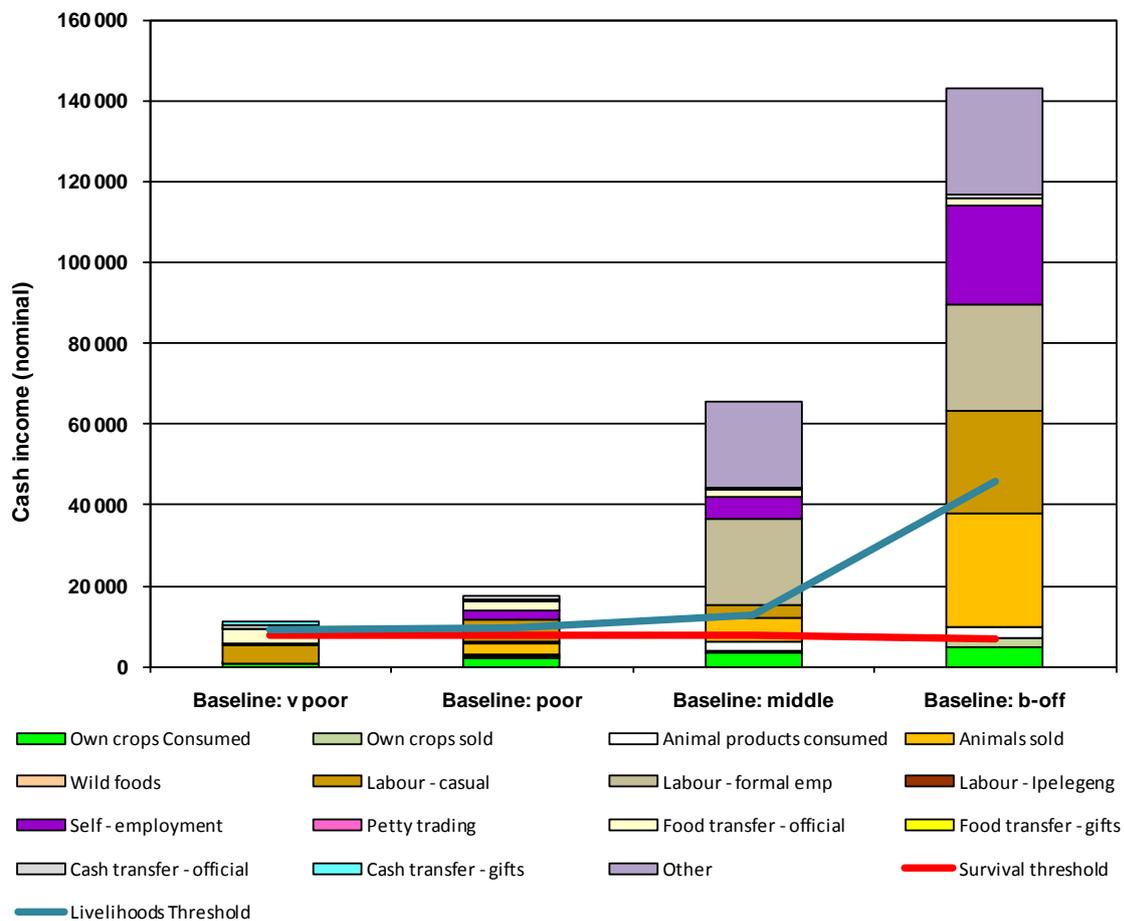
Total Income

Food consumed directly from own production or obtained as a payment or as a gift can be converted to cash income, since this food would have been purchased had the household been earning only cash. The conversion of the food consumed to cash is done by converting the energy of the food consumed into an equivalent staple quantity and pricing the staple. The result is then normalised against the household size of the 'poor' wealth group, so the four wealth groups can be compared with one another.

The result is shown in Figure 6.

The total household income is compared with two thresholds: Survival and Livelihoods. The Survival Threshold is the amount of income required to meet very basic survival needs, consisting of food (an undiversified diet of mostly staples, a few proteins and some fats added in), very basic health and other household needs. The Livelihoods Threshold on the other hand, is the amount of income it would take to eat a more healthy food basket, afford health care and education, as well as preserving asset bases and making some modest investments (such as purchasing seeds) to ensure the household, at the very least, maintains its present standard of living.

Figure 6- Total income normalised to poor household size



Notice that the Survival Threshold is the same across all four wealth groups. This is because this threshold is for a very basic basket of goods and services (just for survival), and does not depend on a person's wealth status.

The Livelihoods Threshold, on the other hand increases sharply as wealth increases. This is for a number of reasons:

- The Livelihoods Threshold is about preserving livelihoods and if a person has more assets, they have to spend more on maintaining and preserving them.
- The Livelihoods Threshold includes expenditure such as that on employment and casual labour, which the wealthier households must do to preserve the incomes of the poor.
- The wealthier households have higher expectations of living standards that they would meet before they spend on other 'essential' expenses. For example, these higher expectations include more expensive (and better quality) foodstuffs, services such as secondary or higher education for their children, etc., which they would prioritise ahead of, for example, providing employment or giving gifts to the poor.

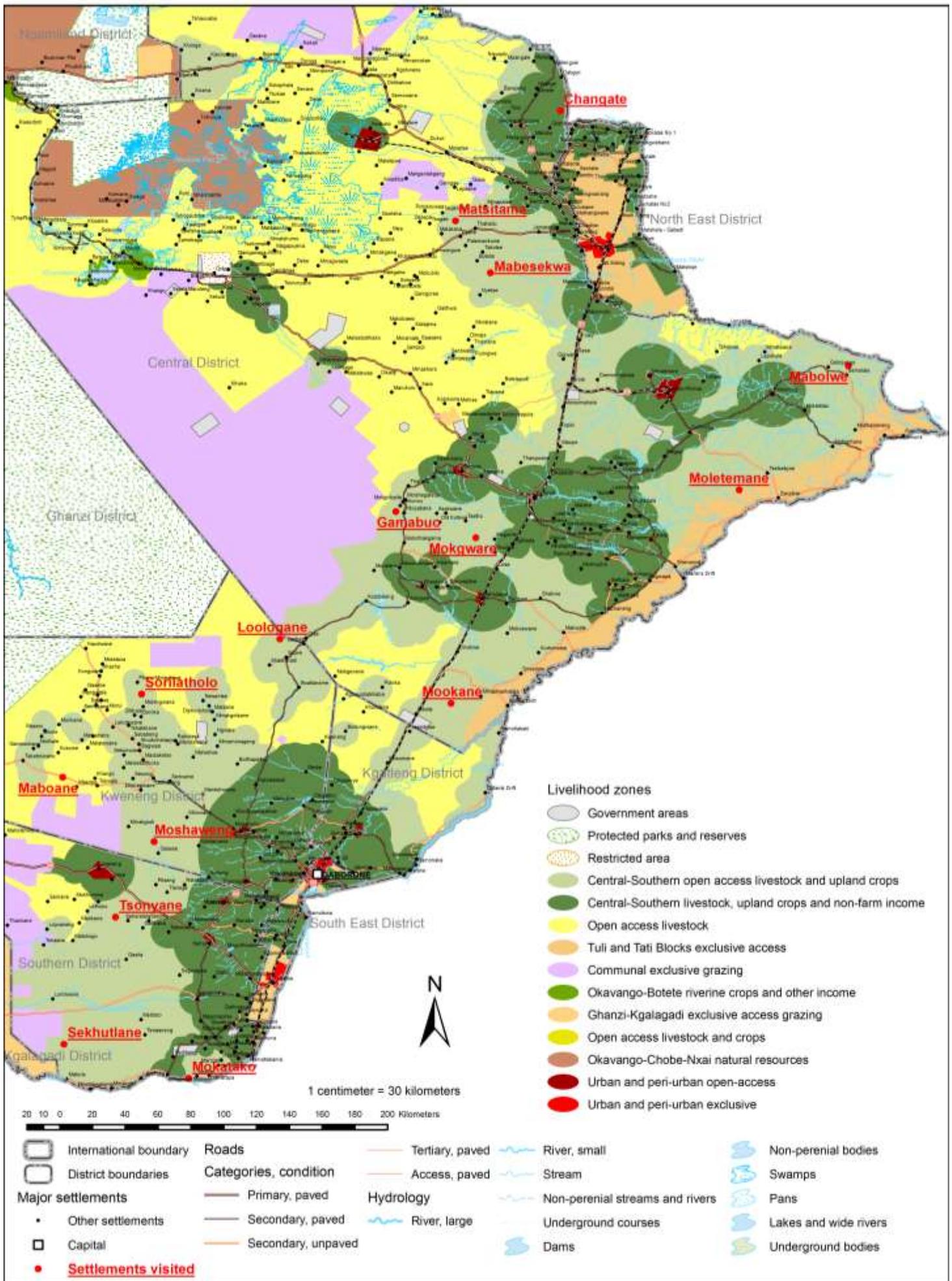
Note that as with cash income, the poorest households have a more diversified income but each source contributes a more limited amount, while the wealthier households rely on relatively fewer, larger sources.

Appendix I

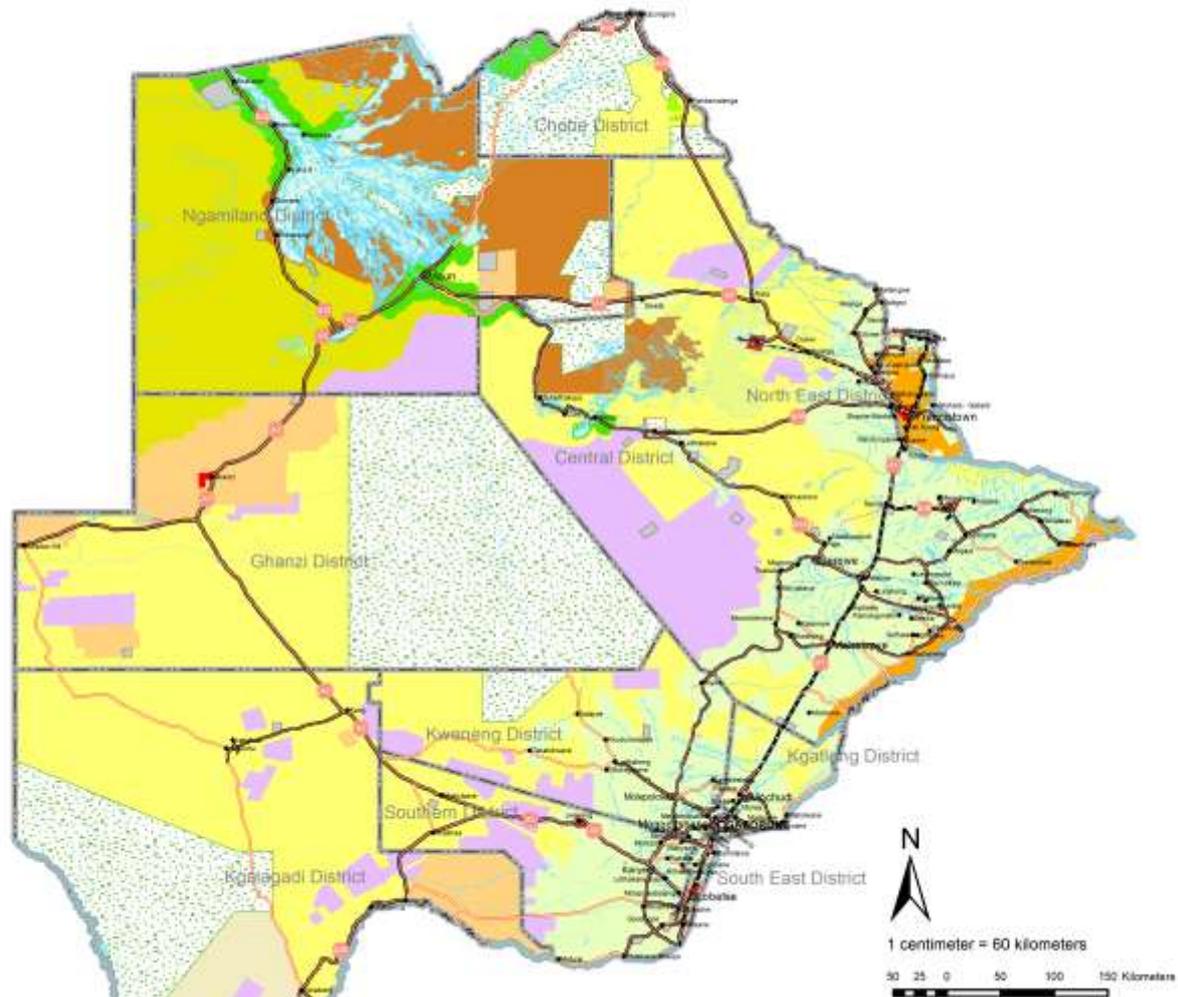
Villages visited during the Assessment

- Sekhutlane
- Mokatako
- Moshaweng
- Tsonyane
- Maboane
- Sorilatholo
- Loologane
- Mookane
- Matsitama
- Mabesekwa
- Changate
- Moletemane,
- Lepokole
- Mabua
- Mokgware

Map showing villages visited during the assessment



Botswana Livelihood Zones



Key:-

Major settlements

- Population (2001 Census)
- Up to 25,000 people
 - 25,000 to 150,000 people
 - Capital City

Railway

Roads

- Categories, condition
- Primary, paved
 - Secondary, paved
 - Secondary, unpaved
 - Tertiary, paved
 - Access, paved

Hydrology

- River, large
- River, small
- Stream
- Non-perennial streams and rivers
- Underground courses
- International boundary
- District boundaries
- Lakes and dams
- Non-perennial lakes
- Flood plains
- Pans and occasional flooding
- Swamp
- Islands
- Underground water bodies

Livelihood Zones

- Central-Southern livestock, upland crops and non-farm income
- Government areas
- Restricted area
- Protected parks and reserves
- Tuli and Tati Blocks exclusive access
- Ghanzi-Kgalagadi exclusive access grazing
- Pandamatenga exclusive access cropping
- Communal exclusive grazing
- Open access livestock
- Open access livestock and crops
- Kgalagadi open access small stock
- Central-Southern open access livestock and upland crops
- Okavango-Botete riverine crops and other income
- Okavango-Chobe-Nxai natural resources
- Urban and peri-urban exclusive
- Urban and peri-urban open-access

Appendix III

Government Support programmes in Botswana in the Baseline year

Crop Production: The government of Botswana provides support to farmers with the objective of increasing production and income. These are;

Ploughing: The Government provides tractors to plough up to 5 hectares per household. In case a farmer ploughs their own fields, Government pays P400 per Hectare ploughed up to 5 Hectares and the farmer is subsidised at 50 percent for extra up to a maximum of 16 hectares.

Seed Distribution: A package of free seed is distributed to eligible households and this includes 2 kg of beans, 10 kg of maize, 10 kg of sorghum and 2 kg of millet. This is mainly for open pollinated planting.

Fertilizer: Free fertilizer is distributed to farmers (4 bags/ha) to cover up to 5 hectares. In addition, government provides fertilizer enough to cover up to 11 hectares at a 50 percent subsidy.

Cluster Fencing: Government supports farmer groups by providing fencing material such as razor wire to protect crops from wild animals and livestock

Livestock: The government treats livestock free of charge for all major diseases such as Foot and Mouth Disease, Anthrax, Contagious Abortion and Black Quarter. The livestock owners pay for any other diseases.

School feeding: All children in primary schools are provided with a meal for all schools term days. The food items in the school meals are sorghum, beans, *samp*, beef, cooking oil, milk and bread.

Old age pension: All citizens aged 65 years and above receive a monthly pension of P220.

Supplementary feeding for children below five years: This is supplied free of charge through health facilities throughout the country and the package includes highly nutritious foods such as Tsabana, Tsabotlhe, cooking oil and beans.

Orphans Support: Government support package to orphans and vulnerable children contains maize meal (12.5 kg), Sorghum (10 kg), Rice (5 kg), Samp (2.5) kg, Beans (0.5 Kg), Vegetable oil (0.75 litres) and Milk (3 litres).

Support to Needy Students: Students from 'very poor' households are assisted by government with school fees, school uniform, toiletry and pocket money. In addition, the needy students are also given transport money to and from school based on the distance to school.

Students whose homes are far away from the school are given private accommodation (by Government) and food on a monthly basis. To qualify, one has to be from a destitute household.

Ipelegeng: Public works activities aimed at increasing household incomes of poor households. Main activities include road maintenance, digging wells and clearing bushes. The pay per day is P18.00 for workers and P24.00 for supervisors.

Appendix IV

Botswana Year Ranking and description by Community members

2009/10

Late onset of rains, average rainfall and hail storms in some places

Good grazing

Less crop production compared to 2008/09, good harvest in some places

Ranking: 3 out of 5 therefore a fair year in comparison to other years

2008/09

Late start but good rains

Good crop harvest

Livestock diseases

Heat stress on some crops

Ranking: 3 out of 5 therefore a fair year in comparison to other years

2007/08

Low rains in most parts of the but good in some areas

Average harvest but lower compared to 2008/09

Livestock water and grazing available

Average livestock production

Livestock diseases

Ranking 2 out of 5 therefore a fairly poor year

2006/07

Low rainfall and low harvest

Poor grazing and low livestock production

Good market prices which benefited those with good crop production

A drought year

Ranking: 1 out of 5 therefore the worst of the four agricultural years

Appendix V

Assessment Team members

Keba Molefhi	Ministry of Finance and Development Planning - Food and Poverty Policy Coordination Section
Kutlwano Sebolaaphuti	Ministry of Finance and Development Planning - Food and Poverty Policy Coordination Section
Anastacia Makwa	Ministry of Health - Nutrition and Food Control Division
Boitumelo Keabilwe	Ministry of Local Government- Department Local Government Technical Services
Godfrey Gorogang	Ministry of Works & Transport- Central Transport Office
Eric O. Mesho	Ministry of Agriculture - Department of Animal Production
Priscilla Mbaiwa	Ministry of Environment Wildlife and Tourism- Department of Meteorological Services
Lame C. Ntebang	Ministry of Agriculture-Department of Agri-Business Promotion
Khumile Sebi	Ministry of Agriculture - Department of Crop Production
James Acidri	Namibia Vulnerability Assessment Committee, Technical Advisor (Technical Advisor and Team Leader)
Peter Muhangi	Lesotho Vulnerability Assessment Committee, Technical Advisor (Technical Advisor and Team Leader)