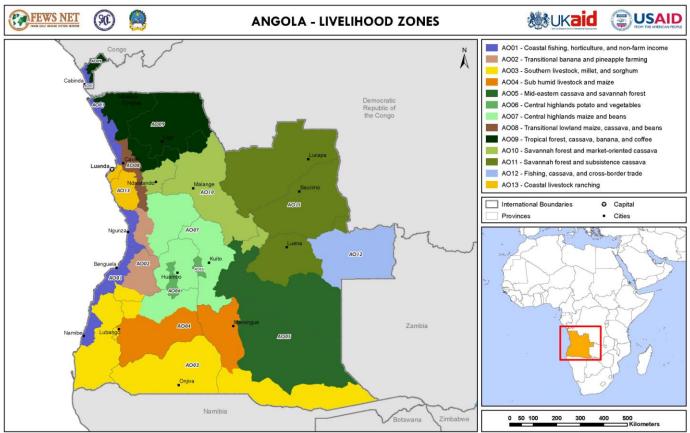






ANGOLA Livelihood Zones and Descriptions

November 2013



Updated: October 16, 2013





TABLE OF CONTENTS

Acknowledgements
Acronyms and Abbreviations4
Introduction5
Livelihood Zoning and Description Methodology5
Livelihoods in Rural Angola
Recent Events Affecting Food Security and Livelihoods
Coastal Fishing Horticulture and Non-Farm Income Zone (Livelihood Zone 01)10
Transitional Banana and Pineapple Farming Zone (Livelihood Zone 02)
Southern Livestock Millet and Sorghum Zone (Livelihood Zone 03)
Sub Humid Livestock and Maize (Livelihood Zone 04)20
Mid-Eastern Cassava and Forest (Livelihood Zone 05)23
Central Highlands Potato and Vegetable (Livelihood Zone 06)26
Central Hihghlands Maize and Beans (Livelihood Zone 07)29
Transitional Lowland Maize Cassava and Beans (Livelihood Zone 08)
Tropical Forest Cassava Banana and Coffee (Livelihood Zone 09)35
Savannah Forest and Market Orientated Cassava (Livelihood Zone 10)
Savannah Forest and Subsistence Cassava (Livelihood Zone 11)41
Fishing Cassava and Cross Border Trade (Livelihood Zone 12)44
Coastal Livestock Ranching (Livelihood Zone 13)47
Annex I: Livelihood Zones and Administrative Areas50
Annex 2: List of Participants

ACKNOWLEDGEMENTS

The Livelihood Zoning Workshop and this report were co-led by James Acidri of Evidence for Development (EfD), Evance Chapasuka, Masozi Kachali and Carla Monteiro of SADC RVAA Programme, with technical support from Antonio Mavie of FEWSNET Mozambique Country Office, Phumzile Mdladla of FEWSNET Southern Africa-Pretoria Regional Office and Gary Sawdon of FEWS NET Head Office in Washington. This activity was conducted in collaboration with the main partners, the Government of Angola (GoA) Ministry of Agriculture and Rural Development (MINADERP), Cabinet for Food Security (GSA) and Southern Africa Development Community, Regional Vulnerability Assessment and Analysis (SADC-RVAA) program.

Special thanks are extended to the staff of GSA, especially the Director, Mr. David Tunga, Maria da Silva, Ermelinda Caliengue, Elsa Gaspar, and Odete Rochete as well as Duncan Samikwa of the SADC RVAA programme without whose contributions this Angola Livelihood Zoning "Plus" report could not have been developed.

This report will form part of the knowledge base for Cabinet for Food Security (GSA), FEWS NET, and Southern Africa Development Community, Regional Vulnerability Assessment and Analysis (SADC-RVAA) program's food security monitoring activities in Angola.

FEWS NET Washington info@fews.net www.fews.net FEWS NET is a USAID-funded activity. The content of this report does not necessarily reflect the view of the United States Agency for International Development or the United States Government.



ACRONYMS AND ABBREVIATIONS

EfD	Evidence for Development
FEWS NET	Famine Early Warning Systems Network
G	Gathering, usually for wild foods or products
GSA	Cabinet for Food Security
GoA	Government of Angola
HEA	Household Economy Approach
ΙК	Payment for services in kind
MINADERP	Ministry of Agriculture and Rural Development
ОР	Own produced crops
RVAA	Regional Vulnerability Assessment and Analysis Program
SADC	Southern African Development Community
USAID	United States Agency for International Development
Μ	Market-purchased food
USG	United States Government
UN	United Nations

INTRODUCTION

In recent years the GoA, especially technical staff and policy makers in the MINADERP have been introduced to livelihood methods and analysis for the assessment of populations at risk of food insecurity. The SADC Secretariat through the RVAA Programme has been providing introductory livelihood training sessions, as well as ongoing technical advisory support.

In November 2011, an initial livelihood zoning exercise was carried out by the SADC RVAA programme in partnership with the GoA, particularly the MINADERP. However this pilot exercise was only undertaken in the Province of Kwanza Sul. A total of three livelihood zones were identified and defined within the province.

As a result of these initiatives, the GoA has expressed strong interest in additional training, as well as extending the livelihood mapping exercise to the entire country.

FEWS NET, being a technical partner to the SADC RVAA programme, entered into discussions with both SADC and the GoA to develop plans to further this work. Taking into consideration the complexity, inaccessibility and the large size of Angola, it was difficult to zone the whole country in a single national workshop. In the light of this, FEWS NET, the GoA and SADC developed a strategy to conduct several regional livelihood zoning workshops during the course of 2013. The culmination of these activities would include a national livelihood zoning plus product for Angola.

In February 2013, a market flow map and sub national livelihood zoning plus workshop covering central and southern regions of Angola was held, including the provinces of: Benguela, Huambo, Bie, Cuando Cubango, Cunene, Namibe, and Huila. A second workshop was held in September 2013. It aimed to complete the process of identifying and defining national livelihood zones for Angola by covering the north, eastern and parts of central region particularly the provinces of Luanda, Bengo, Zaire, Cabinda, Uije, Cuanza Norte, Malange, Lunda Norte, Lunda Sul and Moxico.

FEWSNET also started monitoring food insecurity in Angola remotely in 2013.

LIVELIHOOD ZONING AND DESCRIPTION METHODOLOGY

The Livelihood Zoning "Plus" product is based on the Household Economy Approach (<u>http://www.feg-consulting.com/resource/practitioners-guide-to-hea/practitioners-guide-to-hea/</u>). It includes a traditional livelihoods zoning component (<u>http://www.feg-consulting.com/resource/practitioners-guide-to-hea/2%20Livelihood%20Zoning.pdf</u>). In addition, some key characteristics of socioeconomic status are explored through the juxtaposition of the relatively poorer and relatively better-off households. The Livelihood Zoning Plus product also provides a certain minimum amount of information about all livelihoods, such as food sources and main income sources for each group in each zone. A brief description of general characteristics is also included in the product, along with seasonal and food access calendars for each zone. Finally, the zones most vulnerable to food insecurity are identified.

HEA defines a livelihood zone as a geographic area in which households obtain their basic survival needs, notably food and cash income, in relatively similar ways. This means that they also typically have similar socio-economic groupings with similar asset bases, as well as relatively similar consumption patterns. These similarities apply to both good and bad years in that coping strategies in response to shocks within the same livelihood zone are also relatively similar.

For more information about Household Economy Approach principles and analysis, visit the livelihood pages at http://www.fews.net or download "Application of the Livelihood Zone Maps and Profiles for Food Security Analysis and Early Warning."

Livelihood zone maps and descriptions form part of the knowledge base for FEWS NET's food security monitoring activities. These tools, however, are not designed as a comprehensive analysis of food security or as a complete monitoring tool, but rather to provide points of reference and indicate whether the conditions reported at a given time justify a more in-depth study. The results presented in this report describe how households may be affected by various shocks. They provide a geographic context for interpreting existing monitoring data on production, prices, and other indicators in order to identify potential problems. Rapid assessment teams may be able to use the zoning as a basis for sampling in their studies.

The Livelihoods Zoning 'Plus' methodology consisted of four steps:

Step one: At the start of this exercise, secondary data was made available for the livelihood zoning plus process. This included information on agro ecological zones, farming systems, livestock density, provincial level livelihood zones and information on other livelihoods activities.

Step Two: Representatives from each province came together in two regional level workshops (Benguela and Malange) to divide the southern and parts of central and northern, western, eastern and remaining parts of central regions of the country into livelihood zones.

Step Three: Descriptions of each livelihood zone were drafted at the two regional workshops, identifying the key characteristics of livelihoods found in each zone, as well as the seasonal and consumption calendars.

Step Four: An initial version of the consolidated regional reports was circulated to the participants for comment in by third week of October 2013, leading to this final version of the report, published November 30th 2013.

This report covers the consolidated national livelihood zoning plus workshops held in Benguela (February 27th to March 2nd) and Malange (September 9th to 12th). The purpose of both exercises was to generate a national livelihood zone map with descriptions for the entire country. The workshop output described in this report has the following uses:

- 1. Provides a context for identifying and understanding economic differences across all regions of the country as they affect households
- 2. Defines an appropriate sampling frame for assessments
- 3. Identifies appropriate and relevant indicators for monitoring food security

¹ <u>http://v4.fews.net/docs/Publications/Guidance_Application%20of%20Livelihood%20Zone%20Maps%20and%20Profiles_final_en.pdf</u>

LIVELIHOODS IN RURAL ANGOLA

As a preparatory activity, FEWS NET completed a <u>Desk Review</u>² of the food security context in Angola that was used as a foundation for identifying and generating the livelihood zones for Angola.

- Angola's high economic growth rate in recent years, averaging 17% per year from 2004 to 2008 falling to 3.9% in 2011 and picking up to 6.8% in 2012 has been largely driven by high international prices for its oil, complemented by diamond exports. This has helped to finance a postwar reconstruction boom and resettlement of displaced persons. It has also contributed to high growth and employment creation in the agricultural and construction sectors, providing livelihoods for the rural population. However, much of this economic growth has not been evenly distributed, evidenced by the high level of social inequality (Gini Index of 58.6 percent) which is visible across the country.
- More than 85-90% of the rural populations in Angola rely on subsistence agriculture as the main source of livelihoods, except in the coastal area where irrigation is practised by commercial farmers and to some extent the tuber-producing northern provinces. However, most rural agriculture has fallen to a subsistence level, with little or no marketable surplus. (WFP/VAM Angola, June 2005).
- Angola has a tropical climate with wet and dry seasons. Rainfall increases from south to north. The mean rainfall
 along the coastal strip with semi-arid conditions varies from less than 50-100mm in parts of Namibe province to
 more than 800mm in the coastal areas of Zaire and Cabinda provinces. Further inland the variation is from about
 600mm in the south to more than 1600mm in parts of Uige and Lunda Norte provinces, which enjoy rainfall
 throughout much of the year.
- The country is made up of six broad agro ecological zones. : (i) the large and high inland plateau zone in the midsouth and central part of the country, characterized by dry highland plains and including the highest point in Angola, Morro de Môco (2,620m), with hills and mountains in between the high plateau. (ii) the humid climatic zone towards extreme north and northeastern region. (iii) the sub humid zone which occupies most of the central, eastern and northern regions characterized by equatorial and savannah rainforests. (iv) the semi-arid zone stretching from the south east along the 1,600km coastline from Namibe towards Luanda, mainly characterized by lowlands and plains. (v) the arid zone which stretches from the southwest towards Luanda province, and (vi) finally the desert areas in extreme Southwest, mainly concentrated within Namibe province.
- These regional differences are the main influence on livelihood patterns, including the fishing activities and
 irrigated farming along the coast; livestock, sorghum and millet production in the south; maize, cattle and milk
 production along the northern Cunene transhumant areas, with transition to humid and rainy conditions in central
 and northern regions; and the predominantly cassava, banana and coffee producing areas in the broad leaf/ green
 rainforest, well endowed with tropical timber especially in parts of central, eastern and northern Angola.
- Apart from agro-ecological factors which have shaped livelihood patterns in most of rural Angola, increased access
 and better linkages to markets and trading opportunities following the end of the 27 year civil war continue to
 influence rural livelihoods, particularly between the agriculturally productive interior and the strategic and
 lucrative coastal food markets in areas such as Benguela, Lobito and Luanda. There has been improved
 infrastructure development of main national roads and the reconstruction of the Benguela railway line which
 follows the ancient trading routes through Benguela, Huambo and Bié.

² http://www.fews.net/docs/Publications/AO_DeskReview_2012_10.pdf

ANGOLA Livelihood Zones and Descriptions

- Furthermore the presence of natural resources such as petroleum, diamonds, iron ore, phosphates, copper, feldspar, gold, bauxite and uranium, hydroelectric potential and rich agricultural lands are also likely to continue to enhance livelihoods across the country. However, despite the significant reduction of poverty levels, at present the country has remained poor and imports most of the food required for domestic consumption.
- The other major economic activity which has shaped the livelihoods of rural populations is the expanding construction industry, a product of the fast growing economy. This has provided work opportunities through housing, road, airport, railway and social infrastructure projects in rural parts of the country.

The above background information and the expert judgment of participants regarding livelihood activities in rural parts of Angola led to the identification of thirteen broad livelihood zones:

- i. Coastal Fishing, Horticulture and Non-Farm Income.
- ii. Transitional Banana and Pineapple Farming.
- iii. Southern Livestock, Millet and Sorghum.
- iv. Sub Humid Livestock and Maize.
- v. Mid-Eastern Cassava and Savannah Forest.
- vi. Central Highlands Potato and Vegetables.
- vii. Central Highlands Maize and Beans.
- viii. Transitional Lowland Maize, Cassava and Beans.
- ix. Tropical Forest, Cassava, Banana and Coffee.
- x. Savannah Forest and Market Oriented Cassava.
- xi. Savannah Forest and Subsistence Cassava.
- xii. Fishing, Cassava and Cross Border Trade and
- xiii. Coastal Livestock Ranching.

In general, the risk of food insecurity is greatest in those areas in which there is a high risk of production failure due to semi-arid climatic conditions, frequent occurrence of natural hazards and where the poorest groups have limited opportunities to obtain income and the greatest difficulties in accessing markets. The following zones are considered to be at greatest risk of food insecurity in rural Angola.

The Southern Livestock, Millet and Sorghum Zone (AO03)-This is an arid part of the country which experiences frequent droughts and dry spells. These conditions result in highly variable grain production. Drought may also lead to a lack of pasture and surface water, which occasionally results in significant loss of livestock, a key livelihood asset in the zone.

The Central Highlands, Maize and Beans Zone (A007)-This zone has a significant number of formerly displaced people. Despite its favorable agro-climatic conditions, the zone faces constraints such as small agricultural plots due to high population density, fewer productive assets and relatively poorer households which have not recovered from losses during the civil war, and frequent climatic hazards such as floods, drought and dry spell conditions. This makes the zone vulnerable to food insecurity due to low levels of household resilience to both natural hazards and economic shocks.

Savannah Forest and Subsistence Cassava (AO11)-With favorable climatic and good growing conditions, the potential of this zone is very high. However production remains at a subsistence level, with a high dependence on cassava and little economic diversification. It is characterized by physical inaccessibility due to its remoteness caused by the lack of infrastructure development. It is not linked to any strategic (regional or national) market to facilitate regular access to food and income. As such, this is one of the zones at greater risk of food insecurity.

RECENT EVENTS AFFECTING FOOD SECURITY AND LIVELIHOODS

2013/2014	Below normal rainfall and prolonged dry spell conditions in Southern Angola have affected
	millet and sorghum production, pasture and grazing conditions with reduced access to water
	for livestock. This has increased overall risk to household food insecurity due to loss of own
	crop harvest and livestock products as well as income from crop and livestock sales.
2012/2013	Erratic and below-normal rainfall across much of Angola in early 2012 contributed to reduced
	agricultural production, leading to increased food insecurity and a heightened prevalence of
	acute malnutrition, especially in southern and some parts of central Angola. Source-
	USAID/OFDA- Office of Food for Peace (Latest Angola Fact Sheet- Humanitarian Assistance in
	Review).
2011/2012	Increased agricultural production due to favourable rainfall in the whole country including
	central and southern regions. This resulted in higher levels of food supply than demand,
	forcing a reduction in prices. This ultimately reduced household incomes in some rural areas,
	causing cash deficits especially in the highly productive agricultural areas of the central
	highlands.
2010/2011	Favourable rainfall across the country, but specifically in the central region and an increase in
	agricultural production especially of staple foods, and improved livestock conditions. This
	resulted in an increase in livestock products such as milk and meat for both consumption and
	sale.
2009/2010	Above normal rainfall causing floods in some areas including central and southern Angola.
	Overall crop production was lower than average in most areas especially in southern and
	central Angola. This also affected grazing and livestock conditions due to the poor weather
	conditions and outbreaks of livestock diseases in some areas.

COASTAL FISHING HORTICULTURE AND NON-FARM INCOME ZONE (LIVELIHOOD ZONE 01)

Food security risk								
Low food security risk, due								
options at household level								
Main productive assets								
Poor	Better-off							
Fewer goats, sheep, pigs	More goats, sheep and							
and poultry	pigs in pens.							
Fishing equipment	Fishing equipment							
(wooden canoe, net,	(motorized boat, net							
lines hook- " <i>Muzuas")</i>	and hook)							
Bicycle	Motor vehicle							
Cultivable land- fewer	Cultivable land- more							
hectares.	hectares.							
Main foods consumed and	l sources							
Poor	Better-off							
Cassava (OP/MP)	Cassava (OP)							
Vegetables (OP)	Vegetables (OP)							
Maize (OP/MP)	Maize (OP/MP)							
Fish (G/MP)	Fish (G/MP)							
Meat (MP)	Meat (OP/MP)							
Banana (MP)	Banana (OP/MP)							
Main income sources								
Poor Better-off								
Sale of fish	Sale of fish							
Sale of vegetables	Large scale-whole sale							
Small scale trade	trade							
Sale of non-farm labor	Formal employment							
Sale of domestic fuel	Sale of vegetables							
Sale of salt	Cash remittances							
Main markets								
The strategic food markets	include Locais, Luanda,							
and Benguela; meanwhile	labor is traded in the							
growing formal and inform	al service industries							
(warehouses and fish proc								
Main hazards and approxi								
Rough seas during the rai								
Invasion by large numbers	-							
the rainy season								
Sea floods with salty water	r flooding into fresh							
water during the period N	-							
Oil spills occur throughout	•							
Vegetable crop pests and c	-							
end of rainy season in Mar	_							
Main coping strategies	r ·							
Labor migration to urban	Increased trading in							
areas such as Luanda	manufactured goods							
Increased reliance on	Increased reliance on							
self-employment	cash remittances from							
sen employment	relatives working							
	elsewhere							

This zone lies on the coast line, stretching along Namibe, Benguela, Kwanza Sul, Kuanza Norte, Zaire and Cabinda Provinces. It is characterized by arid and semi-arid conditions in the south, changing to a cool tropical climate in the northern areas especially along the coastline of Zaire and Cabinda Provinces.

The topography is characterized by a narrow coastal flatland plain with an altitude of 0-400 meters, which rises abruptly to an inland plateau. Vegetation cover is mainly grass and woodlands with pockets of mangroves, steppe and old stands of olives and oil palms dating from colonial days.

Precipitation ranges from 50-100mm per annum in the arid and semi-arid south increasing to about 800mm in the tropical north particularly in Zaire and Cabinda Provinces. The rains normally commence in early October to April with a break in May until September. Average temperature ranges from a maximum of 25 to 30 °C in December/March to a minimum of 17 to 20°C in June to July.

This area has a population density of approximately 5-10 inhabitants per square kilometers with higher concentration of people in urban centers (National Population Census-2000).

The soils are naturally fertile and comprised of clay and alluvial soils, which are highly suitable for crop farming, but not effectively utilized due to arid and semi-arid conditions especially in the south. The land areas cultivated are small, averaging 0.8 hectares. Most farming is done by hand, although the better- off group employs labor and as a result, they have larger landholdings. In comparison to the northern part of the zone, as well as other parts of the country, the southern part of this zone has very low agricultural potential.

The primary source of household food in the zone is from the market, although horticultural crops (tomatoes, onions, cabbages and spinach) are grown in the south of the zone using rainfed and irrigated agriculture. Cassava and maize are produced along the northern coastline particularly by the better off. The better-off group rear small livestock, including goats, sheep, pigs and poultry chiefly for household consumption.

The main factors which determine wealth are access to fishing equipment, livestock ownership, size of cultivated land and ability to take up other available employment and economic opportunities. Household incomes in this zone are mainly based on large-scale, commercial and semi industrial marine fishing, as well as small holder fishing activities. The poor and better-off chiefly depend on the sale of fish for income.

However, the poor group also relies on the sale of vegetables, domestic fuel production (wood, charcoal, and coal), petty trade, unskilled labor in warehouses, fish processing plants and other services sectors. The better-off group supplements their income with small commercial trade and formal employment in the service sector, as well as cash remittances. Other available economic activities include salt and coal mining in specific locations along the coast line, primarily in the central and southern parts of the zone.

It should be noted that the relatively developed transport and communication infrastructure (tarmacked road networks, reliable air transport with renovated airport facilities and functional railway lines) have facilitated trade with the agriculturally productive interior part of Angola. These facilities have made this zone easily accessible by traders and investors within and outside Angola.

The main markets for the fish trade include: Namibe, Tombua, Lucira, Baia-Farta, Estomba-Benguela, Port Amboim, Sumbe, Luanda and Cabinda. These markets are complemented by seasonal markets such as Sal does Sol-Namibe for salt trade and Namibe and Caponte-Benguela for sale of vegetables. This zone is also home to a new oil refinery currently being developed along the Lobito coastal area. The oil industry has also enhanced market access especially for local products.

The main hazards and shocks include heavy seas which occur in November to March; large numbers of seals which are considered pests in September to April; flooding of salty water into the fresh sea water in March to April and oil spills causing environmental pollution especially along the northern coastal line throughout the year. The poor and better-off groups mainly cope through labor migration, increased reliance on self-employment and cash remittances.

SEASONAL CALENDAR, ZONE 01

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Seasons</u>												
dry season												
wet season												
lean season												
Cropping												
vegetable production												
land preparation												
planting/sowing												
weeding												
harvesting												
Other												
fishing												
<u>Hazards</u>												
gigantic ocean waves												
invasion by seals												
salty water-sea flooding												
oil spills												
Legend		land pr	eparati	on		sowing	g	we	eding		har	vest

The seasonal activity calendar shows the rainy season takes place from October to April, with the dry season from May to September. The lean season is immediately after the festive season in December from January to April.

Vegetable production takes place throughout the year whilst crops such as cassava and maize, mainly grown in northern parts of the zone, are seasonal. The agricultural season starts with land preparation in August and September, followed by planting and sowing in October and November. Weeding takes place in November with harvesting especially of the maize crop in the period December to January. Other activities especially for cassava crop take place throughout the year. Marine and river fishing also takes place throughout the year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Staple foods</u>												
cassava												
maize meal												
Income												
sale of fish												
retail trade												
off farm-casual labor												
Expenditures												
education (learning matierals)												
health care (higher cost)												
Legend		own pi	roductio	on	ma	rket pu	rchase		in-kind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 01

ANGOLA Livelihood Zones and Descriptions

The consumption calendar shows that the poor group in the northern parts of the zone (coast lines of Cabinda and Zaire provinces) do not purchase the staple cassava, whereas the poor group in the southern parts (coast lines of Namibe, Benguela, Kwanza Sul and Bengo provinces) purchase staple maize throughout the year. Fish sales, retail trade in household items and casual labor activities (warehouses and fish processing plants) also take place throughout the year.

Primary education is currently free in Angola. However households do spend on learning materials. These expenses are normally during the months of February to June and August to November. The cost of health care normally picks up during the rainy season, due to increased cases of malaria.

TRANSITIONAL BANANA AND PINEAPPLE FARMING ZONE (Livelihood zone 02)

Food convity rick	
Food security risk	duration and a state law.
Highly productive crop pro	ducing area, with low
food security risk.	
Main productive assets	
Poor	Better-off
Cultivated land- fewer	Cultivated land-more
hectares.	hectares.
Fewer goats	Cattle
Fewer pigs	More goats
Poultry (chicken and	More pigs
ducks)	Poultry (chicken and
Main foods consumed and	ducks)
Poor	
	Better-off
Maize (OP/MP)	Maize (OP/MP)
Fish (G/MP)	Bananas (OP/MP)
Vegetables (OP)	Fish (G/MP)
Cassava (OP/MP) Meat (MP)	Meat (MP/OP) Milk (MP/OP)
weat (wP)	Fruits (OP)
Main income sources	
Poor	Better-off
Sale of vegetables	Sale of bananas
Sale of maize	Sale of maize
Sale of agricultural labor	Sale of pineapples
Sale of goats	Sale of cattle
Sale of pigs	Sale of goats
Sale of hand crafts	Small scale trade such
Sale of local brew	as mineral water
Sale of domestic fuel	
Main markets	1
Main markets accessible in	the zone include
Caponte and Chapanguela	. Local labor employment
is mainly within banana an	
External employment is als	so accessible in
neighboring peri-urban are	
migrant labor along the co	
Main hazards and approxi	mate frequency
Seasonal floods occurs ann	nually from November to
December	
Livestock diseases occurs e	every second year from
June to September	
Low crop prices during yea	rs of good harvest.
Main coping strategies	
Poor	Better-Off
Increased labor	Increased sale of cattle
migration	Increased levels of self-
Increased self-	employment
employment	
Increased cash	
remittance's	

This zone lies in Benguela and the western part of Kwanza Sul Provinces. The topography is mainly flat and characterized by savannah grass and woodlands with meadows, steppe and bushy scrubs, which make it suitable for crop production and to a lesser extent livestock. The area is endowed with other natural resources including quartz, thermal and mineral waters.

The area has moderately fertile sandy loam soils which makes it highly productive for tropical fruit production (banana and pineapple). Rainfall in the zone varies widely, with average precipitation of about 200mm in Benguela to 900-1200mm in Bocoio. The zone has a unimodal rainfall pattern, with two distinct seasons, the dry season (May/September) and rainy season (October/April). Temperatures range from a maximum of $20^{\circ}-30^{\circ}$ C in March to a minimum of 16° C to 20° C in June.

This zone is moderately populated with about 10-20 people per square kilometres (National Population Census-2000).

The farming systems in this zone are both by rainfed and irrigated. The poor group cultivates by hand, while the better-off group use a combination of mechanised practices, and limited animal traction, especially in the large banana and pineapple plantations.

The zone is known for both small and large scale commercial plantations both in the high and low lying parts of the zone which provide cash income for the population through direct crop sales and employment opportunities especially among the poor.

Major food crops grown include maize, cassava, beans, peanuts, sweet potatoes, vegetables and some citrus fruits. Both the better-off and some poor households own small numbers of livestock, including cattle, goats and pigs, and in addition, some poultry are kept for household consumption.

The main determinants of wealth in this zone are size of cultivated land and livestock ownership especially among better-off group.

The poor group primarily live at subsistence levels and gain access to food through their own crop production, fishing, market purchases and in some cases food assistance, during poor production years. The better-off are mainly self-sufficient deriving most of their annual food needs from their own crop production. The majority of local inhabitants also purchase fish obtained from the river Catumbela throughout the year.

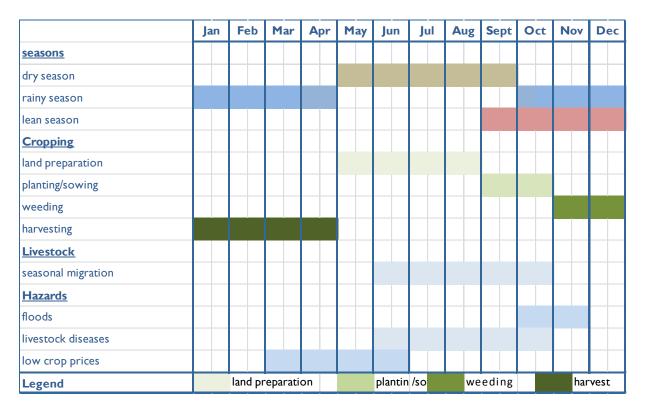
The main sources of income for the poor group are sale of vegetables, fruits, livestock, hand crafts, local brew, domestic fuel (firewood and charcoal) and seasonal agricultural labor. The main income options for the better-off group are the

sale of cash crops (bananas and pineapples). In addition, they also supplement their income by selling livestock and small scale trade such as sale of mineral water.

In recent years, infrastructure development such as tarmac roads and railway linkages has improved physical access to the neighboring coastal areas and the highly productive interior of Angola. The Zone is now easily accessible to key markets such as Gabela, Condé, Caponte, Sumbe, Porto Amboim, Wako kungo, Luanda and Chapanguela for the sale of bananas and pineapples.

For both wealth groups, crop sales supplement household cash income during periods of limited local employment opportunities. Seasonal migration by the poor group to nearby urban and semi-rural areas is high during the months of May to September.

The main hazards and shocks include seasonal flooding, livestock diseases, dry spells and low crop prices. The common coping strategies among the poor group are labor migration, increased self-employment and increased reliance on cash remittances. The better-off mainly increase sale of cattle and engage in various forms of self-employment.



SEASONAL CALENDAR, ZONE 02

Rains commence in October and end in April the following year. The dry season starts in May and ends in September. The lean season is normally from September until December, before green crops become available for consumption in late January. The agricultural season starts with land preparation, chiefly for staple crops such as maize and beans in May to August. This is followed by planting and sowing in September and October. The months of November and December are mainly for weeding. Green consumption starts in January with maize grain and beans harvest from February to April. Activities related to major cash crops (pineapple and banana) are carried out throughout the year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize												
beans												
Income												
sale of bananas												
sale of pineapples												
sale of maize and beans												
Expenditures												
education-scholastic												
matierals												
health care (peak months)												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind	I	gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 02

Consumption patterns in this zone indicate that the poor group depend on a combination of own crop production and market purchase of staple foods. Own production is a major source of food in the months of March to August after which the poor group relies on market purchase mainly of maize and beans. The main income sources are primarily seasonal, with the exception of the sale of pineapples. The poor group sells bananas during the months of November to February. Maize and beans are consumed and sold during the months of May to June. Other seasonal income sources include agricultural labor in the commercial banana farms. Primary education is currently free in Angola. However households do spend on learning materials. These expenses normally occur during the months of February to June and August to November. The cost of health care normally increases during the rainy season, due to increased cases of malaria.

SOUTHERN LIVESTOCK MILLET AND SORGHUM ZONE (Livelihood zone 03)

Food security riskHigh food security risk due to semi-arid conditions and low crop productivity.Main productive assetsPoorBetter-offFewer goatsCattlePigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Wild foods (G)	
and low crop productivity.Main productive assetsPoorBetter-offPoorBetter-offFewer goatsCattlePigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.Hand toolsHand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Main productive assetsPoorBetter-offPower goatsCattlePigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
PoorBetter-offFewer goatsCattlePigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.Hand toolsHand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Fewer goatsCattlePigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
PigsMore goats/sheepPoultryPoultryLand cultivated- fewerLand cultivated- morehectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
PoultryPoultryLand cultivated- fewerLand cultivated- morehectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Land cultivated- fewer hectares.Land cultivated- more hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
hectares.hectares.Hand toolsHand toolsNatural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Natural productsNatural productsMain foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Main foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Main foods consumed and sourcesPoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
PoorBetter-offMillet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Millet (OP/MP)Millet (OP)Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Sorghum (OP/MP)Sorghum (OP)Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Maize (MP)Maize(MP)Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Milk (OP/IK/MP)Milk (OP)Meat (OP/MP)Meat(OP)	
Meat (OP/MP) Meat(OP)	
,	
Gifts	
Main income sources	
Poor Better-off	
Sale of goats Sale of cattle	
Sale of pigs Sale of livestock	
Sale of poultry product sales (milk and	4
Sale of natural products meat)	L
Sale of fish	
Sale of cereals (millet	
and sorghum)	
Main markets	
The main markets accessible in this zone include	
Virei, Ondjiva, Xangongo, Savate, Cuangar, Chitado	,
Luiana, Mucusso and Calai among others. Local	"
labor is also traded within and outside the zone.	
Main hazards and approximate frequency	
Seasonal flood occurs annually during the rainy	
season	
Livestock diseases occurs during the dry season	
Low food prices occurs during harvest season	
Drought conditions which normally occur	
approximately every 10 years	
Dry spells occur once in two or three years	
Main coping strategies	
Poor Better-off	
Increased sale of labor Increased sale of goats	"
Increased collection of sheep and incase of	
wild foods extreme crisis cattle.	
Migration in search of Increased self-	
water and pasture employment	
Long distance movement	
in search of food	

This zone mainly lies in the southern part of Angola within the arid and semi-arid agro-ecological zone. Its topography is generally prairie like flatland. The vegetation is characterized by desert, savannah grass and woodlands. The rivers within this zone include the Cunene which flows across the zone descending gradually to the extreme south and drains directly into a network of valleys including the large Etosha pan in Namibia and other dry waterways. The second major river is the Okavango in the eastern part of the zone, rising from a more densely forested area in Kubango within Bié Plateau. This flows across southeast Angola in a course that is initially broken by rapids. Along its middle course it is joined by the Kwito and Cubango rivers, two of its largest tributaries and then flows along the common border with Namibia, creating flood plain channels suitable for "Olanaka" a traditional form of recessional agriculture in southeastern Angola.

This zone has a unimodal rainfall pattern, with average precipitation of about 200-400mm per annum. There are two seasons, the rainy season which lasts from mid October to March and the dry season from April to early October. The average annual temperatures are variable, increasing from north to south. It is is sparsely populated with about 5 people per square kilometre (National Population Census-2000). The sparse population combined with its arid conditions and sandy soils make it more suitable for livestock than crop production. The gentle relief of the area facilitates transhumant livestock movement following seasonally flooded areas such as the lower parts of Cunene river. A succession of shallow lakes and ponds provides pasture for cattle in the dry season. The permanent Tchimporo ponds in Kuvelai also play an important role in the economic life of the people, by providing fishing opportunities and reserve pasture during critical periods.

The two main factors, which determine the level of wealth among households, are the number of livestock owned and land cultivated per household.

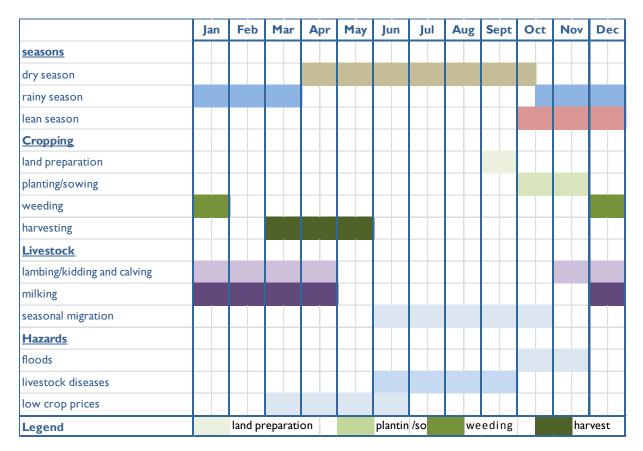
The main food crops grown are small grains (millet and sorghum). There is some maize and vegetable produced for consumption especially along the main rivers and valleys. Seasonal river fishing is also carried out by the local population to supplement their diet.

The poor group subsist through own crop production, milk and wild foods. The better-off group produces slightly more food and all households depend on market purchases of staple foods during the months of December to May, supplemented by milk and meat especially during the rainy season. This zone is known for its milk production which is consumed throughout the year, although the quantities consumed are higher during the rainy season.

Most of the livestock products consumed by poor group are obtained through in-kind labor payment from the betteroff group for herding livestock. Livestock sales are the most important source of cash income for both poor and betteroff group. The poor group obtains income from the sale of goats and pigs, and is also engaged in the sale of charcoal and firewood. The better-off group also obtains income from sale of milk and milk products.

The sale of livestock, livestock products and local labor (herding) is possible because of demand within the zone and access to key strategic markets such as Virei, Ondjiva/ Santa Clara, Xangongo, Savate, Cuangar, Chitado, Luiana, Mucusso and Calai among others. Externla markets are mainly across the border in neighbouring Namibia. The major external markets include Lubango/Mutala in the mid southern regions, Kalueque and across the border into Namibia. Physical access to these markets is relatively good due to a fairly well distributed road network across this sparsely populated part of the country.

The main hazards are seasonal river floods, livestock diseases, low food prices, copled with drought and dry spells during and after the main harvest around April. The common coping strategies among the poor group include increased sale of labor and collection of wild foods, increased sale of livestock and diversification of self-employment options, while the better-off group tend to increase livestock sales and relocate to higher grounds in case of excessive floods especially along the Angola and Namibia border.



SEASONAL CALENDAR, ZONE 03

The rains last from mid October/early November until end of March in the following year. The dry season starts in April and lasts until early October. The lean season is normally from October to December depending on various locations in this vast zone, before increased milk production starts in December and green consumption in late January.

The agricultural season starts with land preparation, chiefly for staple crops such as millet and sorghum from June to August. This is followed by planting and sowing in September and October.

Weeding is done between December and January. Milk production starts from December, picking up around January until April. The poor mainly benefit through inkind milk payment for labor. Food access is complemented by green consumption from late January.

Weeding is done between November and January. Milk production starts from October, picking up around December until April. Food access is complemented by green consumption from late January.

Other important seasonal activities include lambing, kidding and calving from November and milking in December until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Staple foods												
millet and sorghum												
millet and sorghum												
barter trade (livestock for grain)												
Income												
sale of livestock												
sale of millet/sorghum												
sale of natural products												
<u>Other</u>												
wild foods												
Expenditure												
health care (peak months)												
Legend		own pr	oductior	n	ma	rket pur	chase		inkind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 03

The consumption pattern among poor group in this zone shows a greater reliance on staple purchases in the market than own production. Own crops of millet and sorghum normally last for the period May to October. The main staple foods purchased by the poor group from October to April are millet and sorghum. They also rely on other types of food such as milk, meat and vegetables. The poor group also barter livestock (goats and sheep) for grain (millet and sorghum) during the period December to May, and this is the period before the next harvest. Wild foods especially fruits are available in the months of March to April and August to September.

The main sources of household income are the sale of livestock (goats and sheep), natural products (local crafts and firewood) and to a limited extent millet and sorghum grain immediately after the main harvest (June to August). The main expenditure is health care and this normally increases during the rainy season from October to April. Other important expenditure for education (scholastic matierals and school fees) is mainly covered by the government.

SUB HUMID LIVESTOCK AND MAIZE (Livelihood zone 04)

Low food security risk, due to high agricultural productivity.Main productive assetsPoorBetter-offFewer cattleMore cattlePoultryGoatsLand cultivated- fewerSheephectare'sPigsHand toolsLand cultivated- more hectare's Animal tractionMain foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Millet (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Mik (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Maize of labor (agriculture Sale of labor (agriculture Sale of fishSale of fishSormal Employment Formal EmploymentSale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsFloodsLivestock diseasesCrop pests and diseasesFormal grading conditions FloodsFrequent wild fires-to replenish grazing conditions FloodsPoorBetter-OffLivestock diseasesInrigation Increased collection of Wild foodsPoorBetter-OffLivestock diseasesSale of natural products Miner		
productive assetsPoorBetter-offFewer cattleMore cattlePoultryGoatsLand cultivated- fewerSheephectare'sPigsHand toolsLand cultivated- morehectare'sAnimal tractionMaire foods consumed ant sourcesPoorBetter-offMaize (OP/MP)Mailet (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Mait (OP/MP)Beans (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Milk (OP/MP)Sale of (MP)Beans (MP)Fish (MP)Beans (MP)Fish (MP)Beans (MP)Sale of cattleSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of fishFormal EmploymentSale of natize(milk and meat)Sale of natizeMinerals- i.e. GraniteHunting.Oportunities are within the zone and include agriMain hazards and approximate frequencyDrought and dry spell conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFloodsLivestock diseases </td <td>Food security risk</td> <td></td>	Food security risk	
Main productive assetsPoorBetter-offFewer cattleMore cattlePoultryGoatsLand cultivated- fewerSheephectare'sPigsHand toolsLand cultivated- morehectare'sAnimal tractionMain foods consumed ant sourcesPoorPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (G/P)Beans (MP)Fish (MP)Wild foods (G)Meat (OP)Sale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of fishFormal/informal tradeSale of naize(milk and meat)Sale of naizeSale of investock productsSale of naizeMinerals- i.e. GraniteMain marketsFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Main marketsThe main local employment opportunities are within the zone and include agriculturel work, such as land preparation, sowing, removal of weeds and harvesting etc.Main coping strategiesFrequentyPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Low food security risk, due	to high agricultural
PoorBetter-offFewer cattleMore cattlePoultryGoatsLand cultivated- fewerSheephectare'sPigsHand toolsLand cultivated- morehectare'sAnimal tractionMain foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Beans (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Meat (OP)Baens (MP)Fish (MP)Wild foods (G)Sale of fishMain income sourcesSale of livestock productsPoorBetter-offSale of fishFormal EmploymentSale of fishFormal EmploymentSale of fishFormal EmploymentSale of fishFormal LemploymentSale of natural productsMinerals- i.e. GraniteHunting.Main marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main coping strategiesForquent wild fires-to replenish grazing conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions FloodsLivestock diseasesFormal jarionIncreased collection of wild foodsDist	productivity.	
Fewer cattle PoultryMore cattle GoatsLand cultivated- fewer hectare's Hand toolsSheep Pigs Land cultivated- more hectare's Animal tractionMain foods consumed and sourcesPoorPoorBetter-offMaize (OP/MP)Maize (OP) Millet (MP/OP)Sorghum (MP)Sorghum (MP/OP) Rice (MP)Maite (OP/MP)Rice (MP) Meat (OP/MP)Maite (OP/MP)Cassava (MP) Milk (OP)Milk (OP/MP)Beans (MP) Fish (G/MP)Main income sourcesMeat (OP)PoorBetter-offSale of labor (agriculture sale of labor (agriculture sale of fishSale of cattle Formal Employment Sale of livestock products Mile and meat)Sale of natural products Huning.Formal Employment Formal/informal tradeMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions FloodsFlood ingrationIrrigation IrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Main productive assets	
PoultryGoatsLand cultivated- fewerSheephectare'sPigsHand toolsLand cultivated- morehectare'sAnimal tractionMain foods consumed arreyPoorBetter-offMaize (OP)Maize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Milk (OP)Beans (MP)Sale of cattleSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of natural products Hunting.Formal Imformal tradeMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Drought and dry spell conditions FloodsImage on ditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Poor	Better-off
LandCultivated-fewerhectare'sPigsHand toolsLand cultivated- morehectare'sAnimal tractionMair foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of natize(milk and meat)Sale of natize(milk and meat)Sale of natizeSale of iniormal tradeSale of natural productsFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Imerals- i.e. GraniteThe main local employment opportunities are withinthe zone and include agricultural work, such as landpreparation, sowing, removal of weeds and harvestingetc.Main hazards and approximate frequencyDrought and dry spell conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection ofDis	Fewer cattle	More cattle
hectare's Hand toolsPigs Land cultivated- more hectare's Animal tractionMain foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP/OP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Villet-offSale of labor (agriculture and coal mines)Sale of cattle Sale of fishSale of fishFormal Employment Formal Informal trade Minerals- i.e. GraniteSale of natural products Hunting.Formal/informal trade Formal/informal trade Ninerals- i.e. GraniteMain narketsThe main local employment of weeds and harvesting etc.Main hazards and approxiture FloodsForguent with fires- to replotunities are within the zone and include agriculture sole of natural productsMain marketsThe main local employment of weeds and harvesting etc.Main hazards and approxiture FloodsFirequencyDrought and dry spell conditions FloodsFirequencyLivestock diseases Crop pests and diseasesFirequencyPoorBetter-OffLabor migrationIrrigation InrigationIncreased collection of wild foodsBetter-Off	Poultry	Goats
Hand toolsLand cultivated- more hectare's Animal tractionMain foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Beans (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Meat (OP)Main income sourcesPoorPoorBetter-offSale of labor (agriculture and coal mines)Sale of livestock productsSale of maize(milk and meat)Sale of fishFormal EmploymentSale of fishFormal EmploymentSale of natural products Hunting.Minerals- i.e. GraniteMain marketsIthe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approxite frequencyDrought and dry spell contions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesPoorBetter-OffLabor migrationIrrigation Inreased collection of Wild foodsMain coping strategiesDoistant purchase of food/ adequate stocks.	Land cultivated- fewer	Sheep
Main foods consumed and source's Animal tractionMain foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Wild foods (G)Sale of cattleSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of fishFormal EmploymentSale of natural products Hunting.Minerals- i.e. GraniteMain marketsTormal frequencyThe main local employment opportunities are within the zone and include agri-lural work, such as land preparation, sowing, remover of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditions Fluctuating market food pricesPoorBetter-OffLiabor migrationIrrigation IrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	hectare's	Pigs
Animal tractionMaine courcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Millet (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of labor (agriculture ale of cattleSale of livestock productsSale of maize (milk and meat)Sale of fishSale of fishFormal EmploymentSale of natural products Hunting.Formal ImploymentThe main local employment opportunities are within the zone and include agri-lural work, such as land preparation, sowing, remuse of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to repl-ish grazing conditions Fluctuating market food pricesPoorBetter-OffLabor migrationIrrigation InrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Hand tools	Land cultivated- more
Main foods consumed and sourcesPoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of fishFormal EmploymentSale of attleFormal/informal tradeSale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorPoorBetter-OffLabor migrationIrrigation InrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.		hectare's
PoorBetter-offMaize (OP/MP)Maize (OP)Millet (MP)Sorghum (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Sale of cattleSale of labor (agriculture and coal mines)Sale of cattleSale of fishFormal EmploymentSale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorPoorBetter-OffLabor migrationIrrigation Increased collection of wild foodsNild foodsAdequate stocks.		Animal traction
Maize (OP/MP)Maize (OP)Millet (MP)Millet (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Milk (OP)Main income sourcesSale of labor (agriculture and coal mines)Sale of labor (agriculture and coal mines)Sale of cattle Sale of livestock productsSale of maize(milk and meat)Sale of ratural products Hunting.Formal EmploymentSale of natural products Hunting.Formal/informal tradeMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIncreased collection of wild foodsWild foodsAdequate stocks.	Main foods consumed and	sources
Millet (MP)Millet (MP/OP)Sorghum (MP)Sorghum (MP/OP)Rice (MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Wild foods (G)Sale of cattleand coal mines)Sale of cattleSale of labor (agriculture and coal mines)Sale of livestock productsSale of maize(milk and meat)Sale of fishFormal EmploymentSale of natural productsFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Vitral work, such as land preparation, sowing, remover of weeds and harvesting etc.Drought and dry spell conditions FloodsForquencyLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditions Fluctuating market food pricesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Poor	Better-off
Sorghum (MP)Sorghum (MP/OP)Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Wild foods (G)Beans (MP)Main income sourcesBetter-offPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishSale of livestock productsSale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to repl=rish grazing conditions Fluctuating market food pricesPoorBetter-OffLabor migration Increased collection of wild foodsMing foodsIrrigation Distant purchase of food/ adequate stocks.	Maize (OP/MP)	Maize (OP)
Rice(MP)Rice (MP)Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Wild foods (G)Beans (MP)Main income sourcesBetter-offPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishSale of livestock productsSale of fishFormal EmploymentSale of natural products Hunting.Formal ImploymentMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to repl=rish grazing conditions Fluctuating market food pricesMain coping strategiesPoorPoorBetter-OffLabor migration Increased collection of wild foodsMil foodsDistant purchase of food/ adequate stocks.	Millet (MP)	Millet (MP/OP)
Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishSale of livestock productsSale of fishFormal EmploymentSale of natural products Hunting.Formal/informal tradeMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIncreased collection of wild foodsWild foodsMain provide sole sole sole sole sole sole sole sol	Sorghum (MP)	Sorghum (MP/OP)
Meat (OP/MP)Cassava (MP)Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishSale of livestock productsSale of fishFormal EmploymentSale of natural products Hunting.Formal/informal tradeMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIncreased collection of wild foodsWild foodsMain provide sole sole sole sole sole sole sole sol	Rice(MP)	Rice (MP)
Milk (OP/MP)Beans (MP)Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Main income sourcesPoorPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fishSale of livestock productsSale of fishFormal EmploymentSale of attleFormal/informal tradeSale of natural products Hunting.Minerals- i.e. GraniteMain marketsVinerals- i.e. GraniteThe main local employmentopportunities are within the zone and include agricultural work, such as land preparation, sowing, remover of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food preversityFloorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Meat (OP/MP)	
Fish (G/MP)Meat (OP)Cassava (MP)Milk (OP)Beans (MP)Fish (MP)Wild foods (G)Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of fish (milk and meat)Sale of fishSale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migration Increased collection of wild foodsMid foodsAdequate stocks.	Milk (OP/MP)	Beans (MP)
Beans (MP)Fish (MP)Wild foods (G)Fish (MP)Main income sourcesPoorPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditions Fluctuating market food pricesPoorBetter-OffLabor migrationIrrigation Distant purchase of food/ wild foods	Fish (G/MP)	
Wild foods (G)Image: Section of the secti	Cassava (MP)	Milk (OP)
Main income sourcesPoorBetter-offSale of labor (agriculture and coal mines)Sale of cattle Sale of livestock products (milk and meat)Sale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Beans (MP)	Fish (MP)
PoorBetter-offSale of labor (agriculture and coal mines)Sale of cattleSale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseasesCrop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migration Increased collection of wild foods	Wild foods (G)	
Sale of labor (agriculture and coal mines)Sale of cattle Sale of livestock productsSale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.	Main income sources	
and coal mines)Sale of livestock productsSale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are withinthe zone and include agricultural work, such as landpreparation, sowing, removal of weeds and harvestingetc.Main hazards and approximate frequencyDrought and dry spell conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replerish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.	Poor	Better-off
Sale of maize(milk and meat)Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseasesCrop pests and diseases Frequent wild fires-to replerish grazing conditions Fluctuating market food pricesMain coping strategies PoorBetter-OffLabor migration Increased collection of wild foodsIrrigation	Sale of labor (agriculture	Sale of cattle
Sale of fishFormal EmploymentSale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions FloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigation Distant purchase of food/ adequate stocks.	and coal mines)	Sale of livestock products
Sale of cattleFormal/informal tradeSale of natural productsMinerals- i.e. GraniteHunting.Minerals- i.e. GraniteMain marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategies PoorBetter-OffLabor migration Increased collection of wild foodsIrrigation adequate stocks.	Sale of maize	(milk and meat)
Sale of natural products Hunting.Minerals- i.e. GraniteMain marketsMinerals- i.e. GraniteThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategies PoorBetter-OffDabor migration Increased collection of wild foodsIrrigation adequate stocks.	Sale of fish	Formal Employment
Hunting.Main marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategies PoorBetter-OffLabor migration Increased collection of wild foodsIrrigation adequate stocks.		Formal/informal trade
Main marketsThe main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategies PoorPoorBetter-Off Labor migration Increased collection of wild foods	Sale of natural products	Minerals- i.e. Granite
The main local employment opportunities are within the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food pricesMain coping strategies PoorBetter-OffDate migration Increased collection of wild foodsIrrigation Distant purchase of food/ adequate stocks.	Hunting.	
the zone and include agricultural work, such as land preparation, sowing, removal of weeds and harvesting etc. Main hazards and approximate frequency Drought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food prices Main coping strategies Poor Better-Off Labor migration Irrigation Increased collection of Distant purchase of food/ wild foods adequate stocks.	Main markets	
preparation, sowing, removal of weeds and harvesting etc.Main hazards and approximate frequencyDrought and dry spell conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/	The main local employmer	t opportunities are within
etc. Main hazards and approximate frequency Drought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food prices Main coping strategies Poor Better-Off Labor migration Irrigation Increased collection of Distant purchase of food/ wild foods adequate stocks.	_	
Main hazards and approximate frequencyDrought and dry spell conditionsFloodsLivestock diseasesCrop pests and diseasesFrequent wild fires-to replenish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.	preparation, sowing, remo	val of weeds and harvesting
Drought and dry spell conditions Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food prices Main coping strategies Poor Better-Off Labor migration Irrigation Increased collection of Distant purchase of food/ wild foods adequate stocks.		
Floods Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food prices Main coping strategies Poor Better-Off Labor migration Irrigation Increased collection of Distant purchase of food/ wild foods adequate stocks.		
Livestock diseases Crop pests and diseases Frequent wild fires-to replenish grazing conditions Fluctuating market food prices Main coping strategies Poor Better-Off Labor migration Irrigation Increased collection of Distant purchase of food/ wild foods adequate stocks.		litions
Crop pests and diseasesFrequent wild fires-to replenish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.		
Frequent wild fires-to replenish grazing conditionsFluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection of wild foodsDistant purchase of food/ adequate stocks.		
Fluctuating market food pricesMain coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.	• •	
Main coping strategiesPoorBetter-OffLabor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.		
PoorBetter-OffLabor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.	Fluctuating market food pr	ices
Labor migrationIrrigationIncreased collection ofDistant purchase of food/wild foodsadequate stocks.		
Increased collection of wild foodsDistant purchase of food/ adequate stocks.		
wild foods adequate stocks.	-	-
	Increased collection of	Distant purchase of food/
Increased calo of	wild foods	
Increased sale of Increased sale of Investock	Increased sale of	Increased sale of livestock
livestock Purchase of livestock		Purchase of livestock
Migration in search of drugs	Migration in search of	drugs
water and pasture	water and pasture	

This livelihood zone is located in the mid southern and central regions of the sub humid part of Angola. It mainly covers Huila and parts of Kuando Kubango provinces. The vegetation in this zone is characterized by deciduous dry forests and savannah grasslands. The main seasonal and perennial rivers in the zone include Cubango, Cuvlei and Matala.

The zone has a unimodal rainfall pattern with average precipitation of about 300-400mm per annum. Soils in this area are relatively fertile clay soils and is moderately densely populated with about 5-10 people per square kilometres (National Population Census-2000).

It is predominantly occupied by agropastoralists and well known for its relatively high agricultural potential from both rain fed and irrigated agriculture. The GoA has supported an agricultural sector rehabilitation programm for the major canals that channel the Matala river (particularly in the Province of Huila). This has had major benefits for maize production.

The main crops grown are maize, millet, beans and vegetables. Other crops grown on a smaller scale include citrus fruits. The main livestock kept are chiefly cattle as the zone is the major producer of milk in the country, goats, sheep and pigs. Poultry are mainly kept for consumption. The local inhabitants also practice seasonal livestock movement in search of water and pasture.

The two main factors, which determine level of wealth among households, are the number of livestock owned and the land area cultivated per household.

The primary source of food for poorer group is from own crop harvest, livestock products and fishing, supplemented with collection of wild foods. The poor group also relies on purchased staples (maize and cassava) during the months of October to February. The better-off group mainly rely on own production and livestock products with minimal purchases of especially non staple foods.

The main sources of income for the poor group include the sale of labor, grain, fish, cattle and firewood with additional income from working in coal mines. The better-off group sells livestock and livestock products (milk and meat) as their main source of income, supplemented with formal employment, trade and minerals such as granite.

Trade in various commodities is possible through well linked key markets such as João de Almeida and Mutundo (Lubango). Most agricultural labor is provided locally within the zone. This area is also strategically situated making it accessible to lucrative regional markets along the coastal areas, and the Namibian border as well as the highly populated central plateau of the country. The flow of supplies and product availability is determined by areas of origin, state of access roads and rail road/environmental factors.

The main hazards and shocks include drought and dry spell conditions, floods, livestock diseases, crop pests and diseases and fluctuating market food prices. Common coping strategies especially among poor group include labor migration, increased collection of wild foods, increased sale of livestock and migration in search of water and pasture.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Seasons</u>												
dry season												
rainy season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
seasonal livestock migration												
<u>Other</u>												
<u>Hazards</u>												
drought and dry spells												
floods												
livestock diseases												
low crop prices												
Legend		land pr	eparati	on		sowing	g	we	eding		har	vest

SEASONAL CALENDAR, ZONE 04

The rainy season runs from October until the end of April the following year. The dry season is between May and September. The lean season is normally from October to January, before green consumption towards the end of January.

The agricultural season starts with land preparation, chiefly for staple crops (maize, beans and cassava) in June to August. This is followed by planting and sowing in September and October. Weeding is done between November and January which also provides employment opportunities among poor group.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Staple foods</u>												
maize												
beans												
fish												
<u>Income</u>												
sale of maize												
sale of fish												
sale of charcoal												
sale of labor												
Expenditures												
education- learning matierals												
health care (peak months)												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind	1	gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 04

The consumption calendar of the poor group shows a reliance on both market purchases and own production. The staple crops include maize and beans supplemented with fishing. Own crop harvest is a major source of food from April until August. Market purchases of especially maize grain and beans normally take place between September and March, after which the poor group can obtain green crops from the new harvest. Fishing is an all year round activity in the main rivers of the zone.

The main sources of cash income include sale of maize in the months of June to September. Fish sales are seasonal and provide household income in the months of October to April. Charcoal is mainly sold from June to September and the sale of labor (agricultural and non-agricultural) is throughout the year providing the much needed income among poor group.

The main expenditures include purchase of scholastic materials required by children at school, since primary education is currently free. Health care expenses normally increase during the rainy season from October to April.

MID-EASTERN CASSAVA AND FOREST (Livelihood zone 05)

Food security risk	•
•	the second diverget first is a
Low food security risk, due	-
and agricultural productivi	ty.
Main productive assets	
Poor	Better-off
Fewer cattle	More cattle
Fewer pigs	Goats
Poultry	More pigs
Land cultivated- fewer	Poultry
hectares	Land cultivated- more
Tractors	hectares
Motor cycle	Bicycle
	Hand tools
Main foods consumed and	
Poor	Better-off
Cassava (OP)	Cassava (OP)
Maize (OP/MP)	Maize (OP/MP)
Beans (OP/MP)	Beans (OP)
Dry fish (MP)	Rice (MP)
Cooking oil (MP)	Dry fish (MP)
Maize and Beans (Food	Cooking oil (MP)
Assistance)	
Main income sources	
Poor	Better-off
Sale of crops	Sale of crops
Sale of firewood and	Sale of cattle
charcoal	Sale of fish
Sale of sand/ rocks	Sale of timber/wood
Sale of wild foods	
Main markets	
The key strategic markets	in this zone are
Chitembo, Cuemba, Rivung	
Most of the labor is seasor	-
the zone from November-	-
Main hazards and approxi	mate frequency
Crop pests and diseases or	ccurs during the rainy
season	
Livestock diseases occurs of	during both dry and rainy
seasons	
Human wild life conflict oc	curs during the months
of February to April	
Fluctuating prices of food	crops, when there is a
good harvest.	
Main coping strategies	
Poor	Better-Off
Sale of poultry	Increased sale of
Increased collection of	livestock
wild foods	
Increased sale of	
firewood and charcoal	
Labor migration	
Cleaning other people's	
fields.	

This zone is located in the mid-eastern and parts of the southern and central regions of Angola. The vegetation is characterized by deciduous forest and grass. However the northeastern parts are endowed with natural resources of open forest with sought after, high value timber. There are also seasonal rivers such as Chifumage, Lumege and the Luena which flow in the eastern part of the zone.

This area has a unimodal rainfall pattern with average precipitation of about 800-1,200mm per annum. The rainy season generally lasts from September to March.

Soils of the area are mainly sandy and clay with relatively moderate to high fertility.

Among the moderately populated parts of the country, this zone has about 5-10 people per square kilometres (National Population Census-2000). The zone contributes about 20% of national crop production, an indication of its high agricultural productivity compared to neighboring zones.

The main food crops grown in this zone are cassava, maize and beans. Other crops produced on a smaller scale include vegetables and citrus fruits.

Livestock rearing is not a predominant feature in this zone although there are small holdings of cattle and pigs. Poultry is mainly kept for consumption.

The two main factors, which determine level of wealth, are the number of livestock owned and the land area cultivated per household.

The poor group chiefly depends on their own crop harvest and fish for daily consumption, supplemented with market purchase of maize, rice, dry fish and cooking oil. The better-off are slightly more self-sufficient in terms of their own production and are less reliant on market purchases.

Crops sales (cassava and maize) are the principle sources of income for both wealth groups, especially during years of surplus. The poor group also supplements its income by selling natural products (charcoal, firewood, sand and stones). The better-off maximize their incomes by selling livestock and timber/wood products. Other forest products exploited by both wealth groups include the collection and sale of high quality honey.

ANGOLA Livelihood Zones and Descriptions

The sale of local products in this zone is possible through access to markets such as Menongue, Rivungo, Mavinga, Nancova, Kuito, Chitembo, Nancova e Mavinga and Kuemba. Local labor employment is also available in the same markets. Most of the labor employment opportunities are seasonal and are available from November- February. Physical access to these markets is fairly good, although sometimes restricted by poor road conditions during the rainy season.

The main shocks and hazards include crop pests and diseases during the rainy season, livestock diseases during both dry and rainy seasons, human wild life conflict during the months of February to April and fluctuating prices of food crops when there is a good harvest.

Common coping strategies especially among the poor group include sale of poultry, increased collection of wild foods, increased sale of firewood and charcoal, labor migration and cleaning other people's fields. The better-off group mainly copes through the increased sale of livestock.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Seasons												
dry season												
rainy season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
Other												
<u>Hazards</u>												
crop pests and diseases												
livestock diseases												
human wild life conflict												
low crop prices												
Legend		land pr	eparati	on		sowing	B	we	eding		har	vest

SEASONAL CALENDAR, ZONE 05

The rainy season is from September until the end of March the following year. The dry season is from April to August. The lean season is from December to February, before the consumption of green crops starts in early March.

The agricultural season starts with land preparation, chiefly for staple crops such as cassava, maize and beans in June to August. This is followed by planting and sowing in September to November. The period December to January is mainly occupied by weeding of crops, which also provides employment opportunity among poor group.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize												
cassava												
fish												
Income												
sale of maize												
sale of fish												
sale of livestock												
sale of charcoal												
Expenditures												
education- learning matierals												
health care (peak months)												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind	l	gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 05

The poor group is more reliant on their own crops than on market purchases. The staple crops include cassava, maize and beans. Own crop harvest especially cassava is consumed throughout the year, compared with maize which is available from March to August. The purchase of maize from the market is normally from September until February; the green maize crop is available from March. Fishing is in the main rivers in an all year round activity.

The main sources of cash income include the sale of livestock in the months of November to February, sale of fish from June to February and sale of charcoal from June to September. Maize sales are normally between September and October when prices are higher.

The main household expenditure items are purchase of scholastic materials required by children at school, since primary education is currently free. Health care expenses normally increase during the rainy season from October to April.

CENTRAL HIGHLANDS POTATO AND VEGETABLE (Livelihood zone 06)

Food security rick	
Food security risk	a to high agricultural
Low food security risk, due	e to nigh agricultural
productivity.	
Main productive assets	Better-off
Poor	
Fewer goats	Cattle
Poultry (chicken and ducks)	More goats
Land cultivated-fewer	Pigs Poultry (chicken and
hectares.	ducks)
Bicycle	Land cultivated-more
Hand tools (hoe, axe and	hectares.
panga)	Motor vehicle
F0-1	Tractor
	Animal traction
Main foods consumed an	
Poor	Better-off
Potatoes (OP/MP)	Potatoes (OP)
Vegetables (OP)	Vegetables (OP)
Maize (MP)	Maize (MP)
Rice (MP)	Rice (MP)
Beans (MP)	Beans (OP/MP)
Cassava (MP)	Cassava (MP)
Main income sources	
Poor	Better-off
Sale of potatoes	Sale of potatoes
Sale of labor	Sale of cattle
Sale of natural products	Formal employment
(charcoal and firewood)	Trade
Sale of fish	
Sale of hand crafts	
Sale of wild foods	
Main markets	
The main markets both fo	
local products including la	
the livelihood zone. The p	
periods are from Novemb	er to December and May
to June.	
Main hazards and approx	
Crop pests and diseases of	occur from September to
March.	woughout the war
Livestock diseases occur the	
	occurs during the harvest
period (February-April) Low crop prices occur imn	nodiately after the main
	iculately alter the main
harvest (May to June) Main coping strategies	
Poor	Better-off
Labor migration	Increased reliance on
Increased search for	cash remittances
employment	Increased sale of cattle
Increased collection of	
wild foods	

This livelihood zone lies in the central highland areas of Huambo and Bie provinces, mainly located in the Southwestern part of the "Central Planalto", which has the highest altitude in the country. The topography is undulating covered by savannah grasslands with pockets of deciduous (natural and artificial) forests, from which some local inhabitants obtain timber and honey. Fishing takes place in the rivers.

The zone has a unimodal rainfall pattern with precipitation of about 800-1,200mm per annum. The two main agricultural seasons are the rainy periods from October-May and the dry months of May-September.

Climatic conditions are both tropical and temperate, with alternating wet and dry periods and a mean annual temperature of about 19-20°CelcuisThis zone has a relatively high population density with about 20-30 people per square kilometers (National Population Census-2000),partly due to the presence of major cities such as Huambo and Kuito . This means that land for agricultural production is limited. The poor group plough with hand tools, the better off use tractors and animal traction.

The main source of livelihood is rainfed agriculture with additional production along the main river banks and valleys. The main crops cultivated are potatoes and vegetables with small amounts of maize, beans, cassava, groundnuts and fruits such as avocados. However agricultural diversification and productivity is limited, due to the small plots cultivated by most households. This zone does not have significant numbers of livestock; however a few cattle are kept for purposes of animal traction. Some goats and chicken are also mainly kept by the poor group mainly for local consumption.

The two main factors, which determine wealth in the zone, are size of land cultivated and livestock ownership per household. The size of cultivable land is extremely limited due to a relatively high population density.

The better-off are mostly self-sufficient in food although they supplement their diet with the purchase of other staples such as maize, rice and cassava.

The poor are also self-sufficient for most of the year and normally purchase potatoes for only two months of the year between January and February.

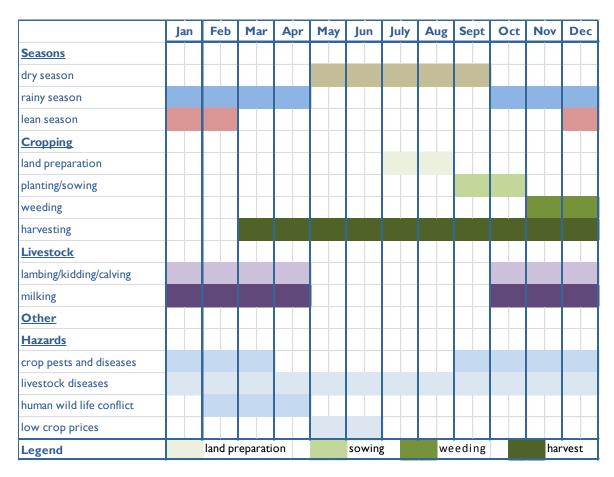
In years of good rainfall, the better-off group produces surplus

potatoes for sale and engage in other economic activities including the sale of cattle, formal employment and trade. The main sources of income among the poor group include the sale of potatoes, agricultural labor, charcoal and firewood. Seasonally, on a smaller scale they also sell handicrafts, as well as wild foods.

Trade and marketing of local products is possible within and outside of the zone. This is due to improved road and railway infrastructure, which links the zone with coastal and other regional markets, including Luanda.

The zone is also accessible to a number of informal markets including Calenga, Chinguar, Ecunha and Alemanha as well as other growth points along the railway and road networks. It is these growth points which provide some of the population with market for their crops. However physical access to feeder and trunk roads is quite limited during the rainy season.

The most frequent hazards are crop pests and diseases, livestock diseases, human wild life conflict and low crop prices. The common coping strategies among poor group are labor migration, increased search for employment and increased collection of wild foods. The better-off normally increase their reliance on cash remittances and increased sale of cattle.



SEASONAL CALENDAR, ZONE 06

The rainy season runs from September until the end of March the following year. The dry season starts in April to August. The lean season is normally from December to February, before green consumption in early March. The agricultural season starts with land preparation, chiefly for staple crops such as potatoes and vegetables as well as maize and beans in June to August. This is followed by planting and sowing in September to November then by weeding from December to January, which also provides employment opportunities for the poor group.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
sweet potatoes												
barter trade												
<u>Income</u>												
sale of potatoes												
sale of maize												
sale of livestock												
sale of charcoal												
Expenditures												
education- learning matierals												
health care (peak months)												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind	I	gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 06

The consumption calendar shows that the poor group mainly depends on its own crops especially sweet potatoes which provide most of the annual food requirement, with a limited reliance on barter trade for potatoes during the lean months of December to February. Green crop consumption begins in March. The main sources of cash income include sale of sweet potatoes in the months of March to December, sale of maize in January and February, sale of livestock in November and December when prices are higher during the festive season and sale of charcoal from June to September.

The main expenditures include purchase of scholastic materials required by children at school, since primary education is currently free. Health care expenses normally increase during the rainy season from October to April.

CENTRAL HIGHLANDS MAIZE AND BEANS (Livelihood Zone 07)

Food security risk											
High food security risk, due to high population											
density and relatively small	size of cultivable land.										
Main productive assets	D										
Poor	Better-off										
Land cultivated- fewer	Land cultivated- more										
hectares.	hectares.										
Fewer goats	Cattle										
Fewer pigs	More goats										
Hand tools (hoe, axe and	More pigs										
panga).	Animal traction										
Bicycle	equipment										
	Motor cycle										
Main foods consumed and	sources										
Poor	Better-off										
Maize (OP/MP)	Maize (OP)										
Beans (OP/MP)	Beans (OP)										
Vegetables (OP)	Vegetables (OP)										
Fresh and dry fish	Fresh and dry fish										
(G/MP)	(G/MP)										
Wild foods (G)	Wild foods (G)										
Main income sources											
Poor	Better-off										
Sale of goats	Sale of crops										
Sale of labor	Sale of cattle										
Sale of charcoal	Sale of goats										
Sale of forest products,	Sale of pigs										
i.e. wild berries,	Trade										
mushroom, honey etc.	nuue										
Main markets											
Informal labor opportunitie	es are available within										
the zone, mainly provided											
households. These include	-										
and non-farm income activ	=										
workers are paid in cash on											
contract.	completion of a specific										
	mata fraguanau										
Main hazards and approxin Floods which affect crops d											
in late September and early											
drainage areas of the livelih	•										
conditions are also sometimes experienced.											
Main coping strategies											
Poor	Better-off										
Increased search for	Increased trade										
casual labor work.	turnover.										
Increased sale of local	Increased search for										
products, e.g. firewood,	formal employment										
charcoal and quitch to c	Colo of livestools										
charcoal and switch to a cheaper diet	Sale of livestock										

This zone lies in Huambo, Kwanza Sul, Bie and some parts of Huila provinces situated in the Central Highlands, Vegetation is mostly open savannah and shrubby grasslands with deciduous forest cover mainly comprised of middle-sized trees and plantations of e.g. eucalyptus and cedar. This area is endowed with natural resources such as water, stones and diamonds.

The zone has a unimodal rainfall pattern, with average precipitation of about 900-1,200 mm per annum. Climatic conditions are tropical and temperate, with maximum temperatures of 25-27 °Celcuis and minimum temperatures of 11-13°Celcuis. The rainy season is from September to March and the dry season from April to August. Soils are moderately fertile with slightly more fertile soils in the south.

There are about 30 inhabitants per square kilometer (National Population Census-2000). Average household land holdings are relatively small. This is due to the high population density, loss of productive assets during the civil war that have not been replaced and frequent climatic hazards. There has recently been a significant increase in the use of animal traction for plowing, especially among the better-off. Oxen are also used to transport agricultural products to nearby markets.

The main farming system is rainfed agriculture, with small-scale irrigation systems. The main crops grown are maize and beans and on a smaller scale sweet potatoes and cassava, especially among the poor group. Much of the crop farming takes place along the foothills and valleys- largely on small, fragmented plots locally known as "gongo", drained along small rivers from the central plateau by lower canals called "ombanda".

These plots allow farmers to cultivate between the main harvests. Livestock reared include cattle, goats and pigs.

The main local determinants of wealth among households are size of land cultivated which depends on availability of draft power and livestock owned..

The poor and better-off all subsist on their own crops, fish and wild foods and some milk. The poor group depends on market purchase of maize in the period January and February, when they have exhausted their own harvest.

Better-off households obtain income from the sale of crops,

livestock and trade. Income opportunities for the poor group are more diverse, although less profitable. They include agricultural and other casual labor, sale of goats, charcoal and wild berries, mushrooms and honey. Most casual labor takes place within the zone, except during periods of crisis, when the poor group migrate to neighboring zones for employment.

As in neighboring areas, this zone recently gained access to a developed road and railway infrastructure as well as reliable air transport in the cities of Huambo and Kuito.

These facilities have helped to link the zone with strategic and more lucrative food markets such as Lobito and Luanda along the coast. Other local markets where the population sell their produce include Kuito, Kamacupa, Catabola, Nhareia, Andulo, Cunhinga, Huambo, Chipindo, Caluquembe, Caconda and Chicomba.

The most frequent hazards are floods, drought and dry spell conditions. The poor group normally cope through increased casual labor and increased sale of local products, while the better-off group employ strategies such as increased trade, r formal employment and sale of livestock.

Dec Mar Apr Aug Sept Oct Nov Jan Feb May Jun July **Seasons** dry season rainy season lean season Cropping land preparation planting/sowing weeding harvesting Livestock lambing/kidding/calving milking Other Hazards floods drought conditions land preparation weeding harvest sowing Legend

SEASONAL CALENDAR, ZONE 07

The rainy season is from September until end of March. The dry season lasts from April to August. The lean season is normally from December to February, before green consumption begins in early March.

Land preparation takes place from March to May and August to September. This is mainly for maize and beans, the staple crops in this zone. This is followed by planting and sowing in June and July, and October and November. Weeding takes place from December to January, providing employment for the poor group.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize and beans												
barter trade												
<u>Income</u>												
sale of livestock												
sale of mushrooms												
sale of honey												
sale of charcoal												
Expenditures												
education- learning matierals												
health care (peak months)												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 07

The poor group mainly depends on maize and beans for food security, with some barter trade of other food commodities during the lean months of December to February. Market purchase of maize and beans takes place in January and February after which the consumption of green crops starts in March.

The main sources of cash income include sale of livestock throughout the year, the sale of mushrooms from November to February and honey in August and September. Charcoal is also mainly sold from June to September.

The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally increase during the rainy season from October to April.

TRANSITIONAL LOWLAND MAIZE, CASSAVA AND BEANS FARMING (Livelihood zone 08)

Food security risk	
Low food security risk, due	to the zone's diversified
cropping pattern.	e to the zone's uiversined
Main productive assets	
Poor	Better-off
Land cultivated- fewer	Land cultivated- more
hectares	hectares
Fewer goats	Cattle
Bicycle	More goats
Hand tools (hoe, panga	Vehicles
and axe)	Motor cycle
Poultry (chicken and	Bicycle
ducks)	Fishing equipment
	Hand tools (hoe, panga
	and axe)
	Poultry (chicken and
	ducks)
Main foods consumed and	
Poor	Better-off
Cassava (MP/OP)	Cassava (OP)
Maize (MP/OP)	Maize (OP/MP)
Sweet potatoes (OP)	Sweet potatoes (OP)
Fish (G)	Fish (G)
Main income sources	
Poor	Better-off
Sale of maize	Sale of maize
Sale of goats	Sale of cassava
Sale of fish	Sale of sweet potatoes
Sale of labor	Sale of fish
Retail trade	Sale of goats
	Retail trade
Main markets	
The main markets accessib	ole in this zone are
Saurimo, Luena and Chitat	0.
Main hazards and approxi	imate frequency
Hailstorms which occur du	ring rainy season
Human and wild life confli	cts occur during the
harvest season.	
Main coping strategies	
Poor	Better-off
Increased collection of	Increased sale of
wild foods	livestock.
Increased labor	
migration	
Increased sale of	
livestock.	

This zone is located in the provinces of Bengo and Zaire along the transitional areas of the Luanda coastal plains and the relatively high altitude interior. Its topography is characterized by highlands in the north, rolling hills in the center and mainly lowlands towards the south. The vegetation is forest and grassland. Other natural resources include diamonds, manganese, and iron in the northern and central areas. Timber products and river fishing are found in the southern part of this zone.

It has a unimodal rainfall pattern with average precipitation of about 200-400mm per annum. There are two distinct seasons: a rainy season from September to April and a short dry season from May to August. Temperatures reach a maximum of about 30-35° Celsius and minimum of 20-25° Celsius. Soils vary in type with more fertile soils in the north and moderately fertile soils in the southern part of the zone.

Population density is around 5 to 10 inhabitants per square kilometer (National Population Census-2000). The average land cultivated per household is about 0.8 hectares, with the better-off cultivating slightly more land due to better access to draft power.

Agriculture is the main economic activity. Mixed crop farming is practiced with minimal use of draft power or mechanized technology. Livestock rearing is not significant. The zone is a transition area from the urban and non-farm economy) to the largely agricultural rural economy.

The main food crops grown are maize, cassava, sweet potatoes, groundnuts, beans, bananas, and vegetables; citrus fruits are grown on a smaller scale. The livestock kept are mainly goats and a few poultry. There is no significant cattle ownership, even among the better-off group.

The three main factors which determine wealth include: size of land cultivated, livestock ownership, access to productive assets, such as agriculture and fishing equipment.

In a typical year, all wealth groups depend chiefly on their own crop production, supplemented by fishing. The poor also rely on

market purchases for staple foods. The better-off are able to hire labor, cultivating more land and producing surpluses. Wild foods are also found, especially towards the end of the rainy season. These foods are collected and consumed by both better off and poorer groups.

The main source of cash income for the better-off is the sale of surplus crops such as maize, cassava and sweet potatoes, followed by fish and occasionally goats. Additional income is also obtained from the sale of household items within the zone. The poor group derive their cash income from the casual labor, the sale of fish m petty trade and occasionally the sale of a goat.

Supplementary income sources include hunting and seasonal fishing along the Congo river, on the northern border of Zaire Province, as well as the coastal estuaries. The zone also has important sites of freshwater biodiversity, which provide employment through hospitality and tourism activities.

Due to climatic conditions harvests are generally poor and staple foods imported from neighboring zones. The main markets for the sale of local products, and unskilled labor are Saurima, Luena and Chitato and neighboring coastal cities and peri-urban areas. The long distance trade with Luanda expands during the rainy season, which coincides with the December festive season.

The main hazards in this zone are hail storms, droughts and dry spells and human-wild life conflict. The common coping strategy for both the poor and better-off group is increased sale of livestock. The poor also collect more wild foods and migrate in search of work.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Seasons												
dry season												
wet season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
vaccination												
Other												
<u>Hazards</u>												
hailstorms												
drought and dry spells												
human wild life conflict												
Legend		land pr	eparati	on		sowing	8	we	eding		har	vest

SEASONAL CALENDAR, ZONE 08

The rainy season is from September until the end of April. The dry season lasts from May to August. The lean season is normally from December to February, before green consumption starts in early March.

The agricultural season starts with land preparation from August to October followed by planting and sowing (mainly maize, beans and sweet potatoes) in October and November. Weeding takes place in December and January, providing

ANGOLA Livelihood Zones and Descriptions

employment for the poor group. Green crops are consumed from January until the main maize harvest in March. Activities related to cassava production take place throughout the year.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.



CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 08

The poor group mainly consume their own cassava and maize, purchasing maize during the months of October to March, which includes the lean season. Green crops are consumed from around the end of February to March. The main sources of cash income include agricultural labor throughout the rainy season, followed by retail trade which is carried out for most of the year.

The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally increase during the rainy season from October to April.

TROPICAL FOREST, CASSAVA, BANANA AND COFFEE (Livelihood zone 09)

Food security risk	
Low food security risk, due	e to high agricultural
productivity.	
Main productive assets	
Poor	Better-off
Land cultivated- fewer	Land cultivated- more
hectares	hectares
Poultry (chicken and	Cattle, goats and pigs
ducks)	Poultry (chicken and ducks)
Bicycle	Motor cycle
Hand tools (hoe, panga	Power driven saws
and axe)	Motor pumps.
Main foods consumed an	d sources
Poor	Better-off
Cassava (OP)	Cassava (OP)
Banana (OP/MP)	Banana (OP)
Beans (MP)	Beans (MP)
Cow peas (OP/MP)	Cow peas (OP)
Vegetables(OP/MP)	Vegetables(OP)
Meat (MP/OP)	Meat (MP/OP)
Fish (G/MP)	Fish (G/MP)
Cooking oil (MP)	Cooking oil (MP)
Wild foods (G)	
Main income sources	
Poor	Better-off
Sale of cassava	Sale of cassava
Sale of natural products	Sale of banana
(charcoal and firewood)	Sale of coffee
Sale of labor	Sale of timber
Sale of hand crafts	Sale of goats
Sale of fish	Sale of fish
Main markets	
The main markets in the z	-
-	inda. Most of these markets
link with Luanda.	
Main hazards and approx	
	ding occurs during the rainy
season	
-	occur during the dry season
Human and wild life confli	ct occurs during the dry
season	
	uch as cassava mosaic and
banana wilt occur annuall	, , ,
Low crop prices especially	for coffee during harvest
season.	
Main coping strategies	
Increased collection of	Increased sale of livestock
wild foods	Increased reliance on self-
Increased sale of local	employment such as trade
crafts	
Increased reliance on	
external cash	
remittances	

This livelihood zone is on the high altitude plateau, along the northern border of Angola with Democratic Republic of Congo (DRC). Vegetation is broad leaf and hard wood forests (The area includes the great Maiombe tropical rain forest in Cabinda Province. In addition to the natural forest there are also plantations of eucalyptus, pine and cypress.. Precipitation is around 1,000-1,400mm per annum. Rains normally commence in October and last until April with a dry season from May to August. Average temperatures range from a minimum of 20° Celsius to a maximum of 32 ° Celsius.

The soils are a mixture of sandy and clay texture, with fertility varying from moderate to high. Most cultivation is done by hand and areas cultivated are quite small averaging, 0.6 to 1.2 hectares. The better-off employ labor and hire tractors and thus can cultivate larger areas.

Population density is approximately 10-20 people per square kilometer (National Population Census-2000). Rainfed agriculture is carried out with unique intercropping practices for cassava, banana and coffee cultivation, which has increased banana and coffee yields. Coffee production has recently been re-introduced to the zone with GoA providing financial incentives. It is expected to become an important economic activity for small holders as well as large scale commercial farmers. Other crops include maize, beans and vegetables.

Livestock holdings include cattle, goats and poultry which are kept for consumption.

The primary determinants of wealth include size of land cultivated and types of crops grown. Other factors include access to productive assets and to paid employment.

The poorer group subsists on their own crops and labor supplemented by hunting and other wild foods. Additional sources of food include fishing and market purchase of beans and other non-staple foods. The better off are largely self-sufficient with saleable surpluses in most years.

The main sources of cash income of the poor group include sale of agricultural labor, employment within the timber industry, sale of surplus crops and sale of charcoal and firewood. The better-off group mainly relies on sale of fish, timber and skilled labor in the commercial timber industry. Marketing of local products, including labor mainly takes place within the zone. However, trade also takes place with Luanda, the coastal markets of Catumbo, Barra-do- Dande, Cacuaco and Cabinda, as well as with the Democratic Republic of Congo. The main constraint to market access includes seasonal flooding.

The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases, such as cassava mosaic and low prices of crops especially of coffee.

However, cassava production is seen as an insurance against food insecurity, during years of general crop failure.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Seasons</u>												
dry season												
wet season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
vaccination												
<u>Other</u>												
<u>Hazards</u>												
floods												
crop pests and diseases												
human and wild life conflict												
Legend		land pr	eparati	on		sowing	B	we	eding		har	vest

SEASONAL CALENDAR, ZONE 09

The rainy season lasts from October until the end of April. The dry season lasts from May to September. The lean season is from January to February, before the start of green consumption in February.

Land preparation takes place from June to September. t This is followed by planting and sowing in October and November. Weeding take place from December to January providing employment opportunities for the poor. Green consumption starts in February, and the main cereal harvest takes place in June. Activities related to cassava production take place throughout the year.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava												
banana												
<u>Income</u>												
sale of cassava												
sale of banana												
Expenditures												
education-scholastic matierals												
high cost of health care												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 09

The poor group consume their own crops (cassava and banana) throughout the year, including the lean months. Cash income among the poor group is mainly derived from the sale of cassava and bananas. Other sources of income, not shown on the consumption calendar include employment in the timber industry and agricultural labor. The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally pick up during the rainy season from October to April.

SAVANNAH FOREST AND MARKET ORIENTED CASSAVA (Livelihood zone 10)

Food an annihus state	
Food security risk	
Low food security risk, due	to high agricultural
productivity.	
Main productive assets	
Poor	Better-off
Land cultivated- fewer	Land cultivated-more
hectares	hectares
Fewer goats	Cattle
Pigs	More goats
Poultry (chicken and	Sheep
ducks)	Poultry (chicken and ducks)
Bicycle	Motor cycle
Hand tools (hoe, panga	Power driven saw
and axe)	Motor pump.
Main foods consumed and	l sources
Poor	Better-off
Cassava (OP)	Cassava (OP)
Beans (OP)	Beans (OP)
Fish (G/MP)	Meat (MP/OP)
Vegetables (OP/MP)	Fish (G/MP)
Poultry (OP/MP)	Groundnut (OP/MP)
Cooking oil (MP)	Vegetables(OP/MP)
Wild foods (G)	Cooking oil (MP)
Main income sources	
Poor	Better-off
Sale of cassava	Sale of cassava
Sale of agricultural and	Sale of vegetables
other labor	Sale of timber
Sale of handcraft	Sale of cattle
Sale of local brew	Sale of goats
Sale of natural products	Trade
(charcoal and firewood)	Trade
Sale of wild foods	
Main markets	
The main markets in the zo	-
	nda. Most of these markets
are linked to Luanda the m	
accessible to inhabitants o	
Main hazards and approxi	
Excessive rainfall and flood	ling occur during the rainy
season	
Strong winds and storm oc	
Human and wild life conflic	cts occur i February to April
and during the dry season	
Crop pests and diseases su	ch as cassava mosaic and
banana wilt occur annually	throughout the year.
Low crop prices especially	of cassava.
Main coping strategies	
Increased collection of	Increased sale of livestock
wild foods	Increased reliance on self-
Increased sale of local	employment such as trade
crafts	
Increased reliance on	
cash remittances	

This livelihood zone is located in the flatland plains of Malanje province, parts of Kwanza North and the western part of Lunda North. Most of the zone is covered by savannah grasslands and scrub brush with pockets of deciduous forest.

Precipitation is around 800-1,200mm per annum. Rains last from October to April with a dry season from May to August. Average temperatures range from a minimum of 16° Celsius to a maximum of 32 ° Celsius.

The soils are mixed, moderately fertile and mainly clay. Most cultivation is done by hand and the areas cultivated are small, averaging 0.5-1 hectare per household for the poorer group. As in other zones the better-off can employ labor and hire tractors, thus their land holdings are much larger.

This zone is sparsely settled with a population of approximately 5-10 people per square kilometer (National Population Census-2000).

Livelihoods in this zone depend chiefly on agricultural production with livestock of lesser importance. The livestock sector, especially cattle has been severely affected by tsetse fly infestations and trypanosomiasis. Transport networks are good and surplus crops are marketed in t Luanda and other major cities.

The main food and cash crops are cassava, beans, vegetables and citrus fruits. Other crops include maize, bananas and other tropical fruits which are produced along the main rivers. Wild fruits such as baobab are also found in the zone.

Small scale livestock production takes place throughout the zone (cattle, goats, pigs and a few sheep). Poultry is also kept, but in small numbers and primarily for household consumption. Collection of wild foods is an additional food source for the poor, particularly during the lean season.

The key determinants of wealth are land area cultivated and livestock ownership. Both the poor and better-off have saleable surpluses especially of cassava which is traded to other parts of the country. With improved road networks this provides a food-security buffer for other parts of the country, especially the main urban areas including Luanda. The main sources of income for the poor include: sale of cassava, sale of fire wood and charcoal)and casual labor. The better-off mainly rely on the sale of surplus crops, timber products, livestock and small scale petty trade.

The main e markets include: Malanje, Luanda and other urban centers along the coast. Market access is relatively good, due to improved road infrastructure.

The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases such as cassava mosaic and low prices of crops especially of cassava. However the cassava crop has continued to provide an effective insurance in the event of failure of other crops.

Oct Apr May July Aug Nov Dec Jan Feb Mar Jun Sept **Seasons** dry season wet season lean season Cropping land preparation planting/sowing weeding harvesting **Livestock** lambing/kidding/calving milking vaccination Other Hazards floods crop pests and diseases human wild life conflict weeding land preparation sowing harvest Legend

SEASONAL CALENDAR, ZONE 10

The rainy season lasts from October until end of April. The dry season starts in May and lasts until September. The lean season is from January to February, before the start of green consumption in February. Land preparation for bananas, beans, maize and vegetables lasts from June to September. This is followed by planting and sowing in October and November. Weeding takes place from December to January, providing employment opportunities for the poor. Green consumption starts in February; the maize harvest takes place in June. Activities related to cassava production are carried out throughout the year.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava												
beans												
Income												
sale of cassava												
Sale of labor												
Expenditures												
education-scholastic matierals												
high cost of health care												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 10

The poor group consume their own cassava throughout the year. During the lean season (September to January) they purchase beans.

The main sources of cash income include sale of cassava (throughout the year) and agricultural labor which mainly takes place during the wet season. Complementary sources of income are not shown on the consumption calendar. The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally increase during the rainy season from October to April.

SAVANNAH FOREST AND SUBSISTENCE CASSAVA (Livelihood zone 11)

Food security risk							
Moderate food security ris	k, due to subsistence						
level of production.							
Main productive assets							
Poor	Better-off						
Land cultivated- fewer	Land cultivated- more						
hectares.	hectares.						
Fewer goats	Cattle						
Poultry (Chicken and	More goats						
ducks)	Poultry (Chicken and						
Bicycle	ducks)						
Hand tools (hoe, axe and	Motorcycle						
panga)	Bicycle						
	Hand tools (hoe, axe						
	and panga)						
Main foods consumed and	t sources						
Poor	Better-off						
Cassava (OP/MP)	Cassava (OP)						
Maize (MP)	Maize (OP/MP)						
Sweet potatoes(OP/MP)	Sweet potatoes (OP)						
Fish (G/MP)	Fish (MP)						
Meat (OP/MP)	Meat (OP/MP)						
Vegetables (OP/MP)	Vegetables (OP/MP)						
Citrus fruits (OP/MP)	Citrus fruits (OP/MP)						
Wild foods (G)	Wild foods (G)						
Main income sources	Wild roods (G)						
Poor	Better-off						
Sale of cassava	Sale of cassava						
Sale of charcoal	Sale of cattle and goats						
Sale of local brew	Sale of charcoal						
Sale of labor	Trade						
Main markets							
The main internal markets	in the zone are Saurima,						
Luena and Chitato, linking							
across in DRC and Zambia.							
Main hazards and approxi	mate frequency						
Increase in food prices occ							
Human wild life conflicts o	_						
(harvest period)	- '						
Hailstorms occur during the rainy season							
Main coping strategies							
Increased sale of	Increased sale of						
livestock	livestock						
Increased labor							
migration							
Increased sale of wild							
foods							
Increased self-							
employment							

This livelihood zone is located in the eastern region of Angola bordering DRC and Zambia. It spans the provinces of Lunda North, Lunda Sul and parts of Moxico. The vegetation is savannah grassland, mixed with broad leaf deciduous forest (panda wood and bush scrubs); evergreen forest covers the border with DRC.

The zone also has rich mineral deposits, such as diamonds, manganese and iron. High concentrations can be found in the northern and central areas.

This zone has the highest rainfall in Angola. It has a unimodal rainfall pattern with average precipitation of 1,200-1,600mm per annum. Rains normally last from September to April with a dry season from May to August. Average temperatures range from a minimum of 9-15° Celsius to a maximum of 30-35° Celsius. The soils in this zone are mainly ferralitic, psamo-frralitic, psamo-hydromophomic and litossolic with moderate fertility in the southern part and higher fertility in the northern part of the zone. Most farmers, both poor and better-off, use hand tools for land preparation.

A sparsely populated area, the zone has approximately 5-10 people per square kilometer (National Population Census-2000). Cultivation is on small plots, averaging 0.5-1.5 hectares per household. However, in recent years the area planted has slightly increased. Ability to increase the size of cultivated land depends on the availability of household labour for land preparation and weeding.

Rainfed subsistence agriculture is carried out with cassava being the main crop. The zone is relatively remote with poor transport and communication networks and poor market access, particularly in the north-eastern parts of the zone. Generally production has remained at subsistence level.

The most important food crops are cassava, maize, beans, sweet potatoes, vegetables and citrus fruits. Other crops grown on a smaller scale include maize, bananas and other tropical fruits (mangoes, oranges, guavas and pawpaw). Fruit production takes place around homesteads. Wild fruits such as baobab are also plentiful in some locations.

Livestock production takes place on a small scale. Cattle and goats are reared for small commercial purposes, as well as consumption. Chickens and ducks are raised for consumption

purposes only. The main determinants of wealth in this zone are size of land cultivated and livestock owned.

The poor group subsists on their own crop production supplemented by additional market purchase of staples and fishing, hunting and gathering (mushroom and wild honey). The better off are largely self-sufficient in food with saleable surpluses in years of good rainfall.

Crop sales (cassava) constitute the main source of income for both the poor and better-off. Supplementary economic activities include the sale of charcoal, local brewing and agricultural and casual labor. Sale of fruit also provides some additional income for the poor group. The better-off group gain cash income from the sale of crops, small scale trade and during the lean season sale of cattle or goats

In most parts of the country infrastructure development has resulted in much improved market conditions.. However this zone still not fully integrated with key provincial or national markets and access to external markets and trade remains limited. Surplus production is sold locally within the zone, primarily to urban centers such as Saurima, Luena and Chitato.

The main hazards include increases in food prices during the lean season, human-wild life conflict during the dry season (harvest period) and hail storms during the rainy season. The better-off cope through increased sale of livestock. The poor increase their labor migration across the border into Zambia and DRC. They also increase the sale of wild foods and in some cases intensify self-employment activities. Cassava cultivation helps to provide insurance in the event of very adverse food security situations.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Seasons</u>												
dry season												
wet season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
vaccination												
<u>Other</u>												
<u>Hazards</u>												
human and wild life conflict												
hailstorms												
increase in food prices												
Legend		land pr	eparati	on		sowing	g	we	eding		har	vest

SEASONAL CALENDAR, ZONE 11

The rainy season is from October until the end of April. The dry season lasts from May to September. The lean season is from October to February mainly due to low qunatities of cassava production compared with zone 10. Land preparation is from May to August. This is mainly for sweet potatoes, beans, and maize and is followed by planting and sowing from October to December. Weeding takes place from November to December, providing employment for the poor. Green consumption starts in February and maize and other cereal crops are harvested in June. Activities related to cassava production are carried out throughout the year.

Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.



CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 11

The poor group mainly depend on their own crops such as cassava and sweet potatoes. Sweet potatoes are purchased in March and April and July to December, covering part of the lean season. Green consumption starts in January. The main sources of cash income include sale of cassava within the zone and agricultural labor which is available for most of the rainy season. Other complementary income sources (such as sale of charcoal) are not shown on the consumption calendar.

The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally increase during the rainy season from October to April.

FISHING, CASSAVA AND CROSSBORDER TRADE (Livelihood zone 12)

Food socurity rick							
Food security risk	to diversified livelihood						
Low food security risk, due	to diversified livelihood						
activities.							
Main productive assets	Dattan aff						
Poor	Better-off						
Fishing equipment	Fishing equipment						
(nets, hooks and	(canoes and boats)						
baskets)	Cattle						
Fewer goats	More goats						
Poultry (chicken and	Poultry (chicken and						
ducks)	ducks)						
Hand tools (hoe, axe and	Hand tools (hoe, axe						
panga)	and panga)						
Equipment- local	Bicycles						
brewing							
Main foods consumed and							
Poor	Better-off						
Cassava (OP/MP)	Cassava (OP/MP)						
Fish (G/MP)	Fish (G/MP)						
Vegetables (OP/MP)	Goats meat (OP/MP)						
Cooking oil (MP)	Vegetables (OP/MP)						
Wild foods (G)	Cooking oil (MP)						
	Wild foods (G)						
Main income sources							
Poor	Better-off						
Sale of honey wine	Sale of fish						
Sale of wild foods	Sale of cassava						
Sale of fish	Sale of honey						
Sale of local brew							
Main markets							
The main internal markets	in the zone are Luacano,						
Luena, Lumeje, Luau and C							
link with external markets	such as Lumbalaguembo						
in Zambia and DRC.							
Main hazards and approxi	mate frequency						
Floods occur during the rai	•						
Low prices for crops such a	s cassava, which occur						
during the dry season.							
Main coping strategies							
Seasonal movement	Seasonal movement						
from lower to higher	from lower to higher						
ground during rainy	ground during rainy						
season.	season						
Increased labor	Increased sale of						
migration in dry season	livestock						
	Diversification of						
	income activities						
	especially small						
	businesses						

This livelihood zone lies along the extreme eastern border of Angola with Zambia and is situated entirely in Moxico Province. Its topography is mainly flatland plains with lowland valleys and chanas. Vegetation is mainly savannah grassland with deciduous forests. Large rivers flow into lakes, ponds, inland deltas and wetlands. Other natural resources include forest and bush products namely timber, game, fish, mushrooms, honey and minerals.

The zone has a unimodal rainfall pattern. The average precipitation is about 1,000-1,400mm per annum. The rains start in September and end in May. The dry season lasts from June until August. Average temperatures range from a minimum of 15° Celsius in June with maximum of 30° Celsius in October.

Due to frequent flooding, the soils in this zone are mainly low fertility clay soils along the swamps and banks of the Zambezi river.

A sparsely populated area, this zone only has around 5 people per square kilometer (National Population Census-2000). Most farmers use hand tools for land preparation. Average land cultivated is small averaging 0.5-1.5 hectares per household.

Livelihoods chiefly involve fishing, agriculture, hunting and gathering wild food. Fishing is concentrated along the water courses and inland deltas. It is an all year activity and a main source of food and income for both the poor and better-off groups.

Agriculture is entirely rainfed the main crops grown are cassava, maize, beans and sweet potatoes. Other crops grown on smaller scale include tomatoes, onions, cabbages and pumpkins. The main livestock kept are goats and poultry, with a few cattle owned by the better-off group.

Wealth in this zone is defined by access to and ownership of fishing equipment (boats, canoes, nets, lines, spears, and hooks etc.) coupled with size of land cultivated and type and number of livestock owned.

The primary source of food for consumption for poor group is cassava, vegetables, fish, and cooking oil. This is supplemented with collection of wild foods. Poorer households also rely on purchase of cassava from May to September. In years of low

rainfall, the group intensifies their fishing activities. Better-off households mainly rely on their own production, fish, livestock products and some market purchase of both staple and non-staple foods.

The main source of cash income among the poor and better-off is sale of fish. The poor also sell charcoal and firewood wild foods carry out agricultural labor and migrate to urban areas for casual work. In addition to semi-commercial fishing, the better-off group sells its surplus cassava, and engage in timber and retail trade especially with Zambia. The Zambezi river provides large fish for markets in Zambia.

Due to poor road conditions and networks, this zone has limited access to other regional markets, especially the lucrative coastal markets of Angola. Similar to the Subsistence Cassava Zone, it is disadvantaged by distance and its remote location in the eastern region, where road infrastructure is yet to be developed. However the zone has exclusive access to lucrative cross border markets in Zambia, particularly the Copper Belt.

The main hazards are floods which limit fishing activities and reduce crop, livestock and wild food production. The main coping strategies among poor group include relocation from lower to higher grounds and labor migration, while the better-off group normally increase the sale of livestock and engage in small scale business.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Seasons</u>												
dry season												
wet season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
vaccination												
<u>Other</u>												
fishing												
<u>Hazards</u>												
river floods												
Legend		land pr	eparati	on		sowing	g	we	eding		har	vest

SEASONAL CALENDAR, ZONE 12

The rainy season lasts from October until the end of April. The dry season lasts from May to September. The lean season is normally from December to February, before the start of green consumption in February. Land preparation takes place from July to September. This is mainly for sweet potatoes, beans, maize and vegetables and is followed by planting and sowing in October to November. Weeding takes place from November to December, providing employment for the poor group. Green maize consumption starts in January. Maize and other cereal crops are harvested in June. Activities related to cassava production take place throughout the year.

Other activities include lambing, kidding and calving during the rainy season and vaccination of livestock from June to September. Fishing by local inhabitants is an all year round activity in this zone.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
<u>Staple foods</u>												
cassava												
fish												
<u>Income</u>												
sale of fish												
agricultural labor												
Expenditures												
education-scholastic matierals												
high cost of health care												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind	!	gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 12

The poor group mainly depend on their own cassava and fish. They purchase some cassava from May to September. Green cassava is consumed from October.

Their main sources of cash income include sale of fish and agricultural labor during the rainy season. Cassava is not widely sold in this zone due to limited access to markets. The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally pick up during the rainy season from October to April.

COASTAL LIVESTOCK RANCHING (Livelihood zone 13)

Food security risk	
Moderate food security r	isk due to less cron
production.	
Main productive assets	
Poor	Better-off
Fewer goats	More goats
Fewer pigs	More pigs
Fewer poultry (chicken	More poultry (chicken
and ducks)	and ducks)
Occupants without land	Occupants with land
title.	title.
Hand tools (hoe, panga	Agricultural machinery
and axe)	(Cattle dip etc)
Bicycle	Motor vehicle
Dicycle	
Main foods consumed ar	nd sources
Poor	Better-off
Rice (MP)	Rice (MP)
Maize (MP/OP)	Maize (OP/MP)
Beans (OP/MP)	Beans (OP/MP)
Fish (G/MP)	Meat (OP/MP)
Vegetables (OP/MP)	Fish (G/MP)
Milk(IK/MP)	Milk (IK/MP)
	Vegetables (OP/MP)
	Fruits (OP/MP)
Main income sources	
Poor	Better-off
Wages from farm	Wages from unskilled
employment	and non-farm
Vending of own	employment
vegetable harvest	Sale of construction
Vending of household	materials such as sand
items.	and stones.
	Vending of household
	items.
Main markets	
The main market, which	regulates the local
economy is the city of Lu	
Main hazards and approx	
	one is drought conditions
	ch as dermatitis, anthrax,
scabies and trypanosomic	
affect cattle and goats wi	
ranches. It occurs throug	nout the year.
Main coping strategies	Duranum
Diversification of	Procurement of
income options.	veterinary services and
	I INACTOCK drugs
Labor migration in peri- urban and urban areas	livestock drugs

This livelihood zone lies along the coastal plain. It is concentrated in the rural parts of Luanda Province and stretches into Ilhéu dos Pássaros Natural Reserve, an area covered by mangroves and a habitat for marine birds. It is dominated by flatland plains with low lying areas. The main vegetation is savannah grassland and bush shrubs, suitable for rearing livestock. The Cuanza river and its tributaries such as Luando reserve and Luasso flow across the one. Other natural resources include grasses, fish and inland oil reserves.

Rainfall is unimodal, with average precipitation of approximately 300mm per annum. Temperatures range from a minimum of 18° Celsius in August to a maximum of 32° Celsius from January to February. There are two agricultural seasons with a rainy season from October to April and a dry season from May to September.

The soils are moderately fertile with a mixture of sandy soils closer to the coast and clay soils on the outer boundaries.., Compared with neighboring zones such as the Banana and Pineapple farming in Benguela and parts of Kwanza Sul Province these soils are less fertile. The zone is, however, highly suitable for rearing livestock.

This is a moderately populated zone due to the presence of cattle ranches and influence of urban areas. The population density is about 10-20 people per square kilometer (National Population Census-2000). The better off have landholdings of around 2 hectares; these are generally local inhabitants settled outside the commercial ranches. The poor have landholdings of around0.5 hectares and are mainly commercial farm workers who have limited access to land in the commercial ranches. Hand tilling is the main means of land preparation among the poor group, although mechanized and irrigated crop production is also carried out by owners of the commercial livestock ranches.

The main food crops grown are maize and vegetables. This is possible through access to water, provided by the commercial ranch owners. Livestock are only kept by the extremely well off, primarily as commercial ventures. The main livestock reared are cattle, goats and to lesser extent pigs.

The local determinants of wealth among households in this zone are size of land cultivated and access to gainful economic

activities.

The poor and better-off groups all consume their own crops, fish, wild foods and some milk from commercial farms and the market. They depend heavily on market purchase of staple foods for more than half of the year.

Income opportunities for the poor group are very limited and include wages from commercial farm employment, vending of vegetables and retail trade (household items). The better-off group relies on semi-skilled non-farm employment in urban areas such as Luanda, sale of construction materials (sand and stones) and to a lesser extent retail trade (household items).

Compared with neighboring zones, this area has very good access to lucrative markets (Luanda and other coastal areas), especially for local products such as vegetables, construction materials and unskilled labor.

The main hazards in this zone are livestock diseases such as dermatitis, anthrax, scabies and trypanosomiasis, coupled with drought and dry spell conditions. In years of poor rainfall, the poor maximize food access through migratory labor to gain income for staple food items; the better-off normally use this income to purchase livestock drugs.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Seasons												
dry season												
wet season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
<u>Livestock</u>												
lambing/kidding/calving												
milking												
vaccination												
Other												
<u>Hazards</u>												
livestock diseases												
Legend		land pr	eparati	on		sowing	g	we	eding		har	vest

SEASONAL CALENDAR, ZONE 13

The rainy season lasts from October until the end of April. The dry season starts in May and continues until September. The lean season is normally from December to February, before the start of green consumption in February.

The agricultural season starts with land preparation in July to September. This is mainly for maize and vegetables. This is followed by planting and sowing from November to December. Weeding takes place from November to December providing employment opportunities for the poor. Green consumption starts in January. The main harvest of maize and other cereal crops takes place in June.

Other activities include lambing, kidding and calving during the rainy season and vaccination of livestock in the months of June to September.

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize												
vegetables												
Income												
sale of sand and stones												
sale of agricultural labor												
Expenditures												
education-scholastic matierals												
high cost of health care												
Legend		own p	roductio	on	ma	rket pu	rchase		in-kind		gat	hering

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 13

The poor group mainly depend on the market for maize from August to April. Their own maize crop lasts from February to July, starting with green maize in early February. They consume vegetables throughout the year, partly cultivated with irrigation. The main sources of cash income includes sale of construction materials and agricultural labor. The main expenditures include purchase of scholastic materials required by children at school. Health care expenses normally pick up during the rainy season from October to April.

ANNEX 1: LIVELIHOOD ZONES AND ADMINISTRATIVE AREAS

LIVELIHOODS ZONE 1: 0	COASTAL FISHING, HORTICULT	URE AND NON FARM INCOME
Communes	Municipality	Province
Ambriz	Ambriz	Bengo
Baia Farta	Baia Farta	Benguela
Barra do Dande	Dande	Bengo
Benguela	Benguela	Benguela
Bentiaba	Namibe	Namibe
Віоріо	Lobito	Benguela
Cabinda	Cabinda	Cabinda
Cacongo	Cacongo	Cabinda
Calohanga	Baia Farta	Benguela
Canata	Lobito	Benguela
Canjala	Lobito	Benguela
Catumbela	Lobito	Benguela
Dombe Grande	Baia Farta	Benguela
Egipto Praia	Lobito	Benguela
Equimina	Baia Farta	Benguela
Gungo	Sumbe	Kuanza Sul
Кароlo	Porto Amboim	Kuanza Sul
Kelo	Soyo	Zaire
Kicombo	Sumbe	Kuanza Sul
Kinzau	Tomboco	Zaire
Lobito	Lobito	Benguela
Lucira	Namibe	Namibe
Malembo	Cabinda	Cabinda
Massabi	Cacongo	Cabinda
Musserra	Nzeto	Zaire
Namibe	Namibe	Namibe
Ngangula	Sumbe	Kuanza Sul
Nzeto	Nzeto	Zaire
Porto Amboim	Porto Amboim	Kuanza Sul
Soyo	Soyo	Zaire
Sumbe	Sumbe	Kuanza Sul
Tabi	Ambriz	Bengo
LIVELIHOODS ZONE 2: 1	RANSITIONAL BANANA AND I	PINEAPPLE FARMING
Communes	Municipality	Province
Assango	Amboim	Kuanza Sul
Atome	Cassongue	Kuanza Sul
Babaera	Ganda	Benguela
Balombo	Balombo	Benguela
Восоіо	Восоіо	Benguela
Botera	Seles	Kuanza Sul

Caimbambo	Caimbambo	Benguela
Canhamela	Caimbambo	Benguela
Сарира	Cubal	Benguela
Casseque	Ganda	Benguela
Catengue	Caimbambo	Benguela
Cayave	Caimbambo	Benguela
Chicuma	Ganda	Benguela
Chila	Восојо	Benguela
Chindumbo	Balombo	Benguela
Chingongo	Balombo	Benguela
Conda	Conda	Kuanza Sul
Conde	Ebo	Kuanza Sul
Cubal	Cubal	Benguela
Cubal do Lumbo	Восоіо	Benguela
Cunjo	Conda	Kuanza Sul
Ebanga	Ganda	Benguela
Ebo	Ebo	Kuanza Sul
Gabela	Amboim	Kuanza Sul
Ganda	Ganda	Benguela
lambala	Cubal	Benguela
Kirimbo	Quilenda	Kuanza Sul
Monte Belo	Bocoio	Benguela
Passe	Bocoio	Benguela
Quilenda	Quilenda	Kuanza Sul
Tumbulo	Cubal	Benguela
Uku Seles	Seles	Kuanza Sul
Uya Ngombe	Caimbambo	Benguela
LIVELIHOODS ZONE 3: SOUTHER		
		Province
Baia dos Tigres	Tombua	Namibe
Bibala	Bibala	Namibe
Bolonguera	Chongoroi	Benguela
Bondo	Cuangar	Kuando Kubango
Cafima	Cuanhama	Cunene
Cahama	Cahama	Cunene
Cahinde	Virei	Namibe
Caitou	Bibala	Namibe
Calai	Calai	Kuando Kubango
Camucuio	Camucuio	Namibe
Chingo	Camucuio	Namibe
Chinquite	Camucuio	Namibe
Chitato	Curoca	Cunene
Chongoroi	Chongoroi	Benguela
Cuamato	Ombandja	Cunene
Cuandlu	Опранија	Cullene

Cuangar	Cuangar	Kuando Kubango
Cubati	Cuvelai	Cunene
Cuvelai	Cuvelai	Cunene
Dinde	Quilengues	Huila
Dirico	Dirico	Kuando Kubango
Evale	Cuanhama	Cunene
Humbe	Ombandja	Cunene
Humpata	Humpata	Huila
Impulo	Quilengues	Huila
Lola	Bibala	Namibe
Luiana	Rivungo	Kuando Kubango
Maue	Calai	Kuando Kubango
Melunga	Namacunde	Cunene
Mongua	Cuanhama	Cunene
Мисоре	Ombandja	Cunene
Mucusso	Dirico	Kuando Kubango
Munhino	Bibala	Namibe
Мира	Cuvelai	Cunene
Namacunde	Namacunde	Cunene
Nampala	Cuvelai	Cunene
Naulila	Ombandja	Cunene
Oncocua	Curoca	Cunene
Ondjiva	Cuanhama	Cunene
Otchinjau	Cahama	Cunene
Quilengues	Quilengues	Huila
Savate	Cuangar	Kuando Kubango
Tchimporo	Cuanhama	Cunene
Tombua	Tombua	Namibe
Virei	Virei	Namibe
Xamavera	Dirico	Kuando Kubango
Xangongo	Ombandja	Cunene
LIVELIHOODS ZONE 4: SUB HUM		
Communes	Municipality	Province
Cacula	Lubango	Huila
Caiundo	Menongue	Kuando Kubango
Capunda Cavilongo	Chibia	Huila
Cassinga	Jamba	Huila
Chiange	Gambos	Huila
Chibia	Chibia	Huila
Chinguanja	Cuchi	Kuando Kubango
Cuchi	Cuchi	Kuando Kubango
Cueio	Menongue	Kuando Kubango
Cutato II	Cuchi	Kuando Kubango
Dongo	Jamba	Huila

Folgares	Matala	Huila
Hoque	Lubango	Huila
Huila	Lubango	Huila
Jamba	Jamba	Huila
Jau	Chibia	Huila
Kuvango	Kuvango	Huila
Lubango	Lubango	Huila
Matala	Matala	Huila
Menongue	Menongue	Kuando Kubango
Mulondo	Matala	Huila
Quihita	Chibia	Huila
Quipungo	Quipungo	Huila
Tchibemba	Gambos	Huila
LIVELIHOODS ZONE 5: MID EA	STERN CASSAVA AND SA	VANNAH FOREST
Communes	Municipality	Province
Baixo Longa	Cuito Cuanavale	Kuando Kubango
Cangombe	Luchazes	Moxico
Cassamba	Luchazes	Moxico
Catuile	Mavinga	Kuando Kubango
Chiume	Lumbala Nguimbo	Moxico
Cuemba	Cuemba	Bie
Cuito Cuanavale	Cuito Cuanavale	Kuando Kubango
Cunjamba	Mavinga	Kuando Kubango
Longa	Cuito Cuanavale	Kuando Kubango
Luchazes	Luchazes	Moxico
Luengue	Mavinga	Kuando Kubango
Lumbala Nguimbo	Lumbala Nguimbo	Moxico
Lupire	Cuito Cuanavale	Kuando Kubango
Lutembo	Lumbala Nguimbo	Moxico
Luvuei	Lumbala Nguimbo	Moxico
Mavinga	Mavinga	Kuando Kubango
Muie	Luchazes	Moxico
Munhango	Cuemba	Bie
Mussuma	Lumbala Nguimbo	Moxico
Mutumbo	Chitembo	Bie
Nancova	Nancova	Kuando Kubango
Neriquinha	Rivungo	Kuando Kubango
Ninda	Lumbala Nguimbo	Moxico
Rito	Nancova	Kuando Kubango
Rivungo	Rivungo	Kuando Kubango
Sachinemuna	Cuemba	Bie
Sessa	Lumbala Nguimbo	Moxico
Soma Cuanza	Chitembo	Bie
Tempue	Luchazes	Moxico

Umpulo	Camacupa	Bie	
LIVELIHOODS ZONE 6: CENT	RAL HIGHLANDS POTAT	O AND VEGETABLES	
Communes	Municipality	Province	
Caala	Caala	Huambo	
Calenga	Caala	Huambo	
Cangote	Chinguar	Bie	
Catata	Caala	Huambo	
Chinguar	Chinguar	Bie	
Cutato	Chinguar	Bie	
Ekunha	Ekunha	Huambo	
Kuima	Caala	Huambo	
Quipeio	Ekunha	Huambo	
LIVELIHOODS ZONE 7: CENT	RAL HIGHLANDS MAIZE	AND BEANS	
Communes	Municipality	Province	
Alto Hama	Londuimbali	Huambo	
Amboiva	Seles	Kuanza Sul	
Andulo	Andulo	Bie	
Bailundo	Bailundo	Huambo	
Bambi	Chipindo	Huila	
Bimbe	Bailundo	Huambo	
Cachingues	Chitembo	Bie	
Caconda	Caconda	Huila	
Caiei	Nharea	Bie	
Caiuera	Catabola	Bie	
Calepi	Caluquembe	Huila	
Calima	Huambo	Huambo	
Calucinga	Andulo	Bie	
Calulo	Libolo	Kuanza Sul	
Caluquembe	Caluquembe	Huila	
Camacupa	Camacupa	Bie	
Cambandua	Kuito	Bie	
Cassongue	Cassongue	Kuanza Sul	
Cassumbe	Andulo	Bie	
Catabola	Catabola	Bie	
Cela	Waku Kungo	Kuanza Sul	
Chicala	Kuito	Bie	
Chicomba	Chicomba	Huila	
Chilata	Longonjo	Huambo	
Chipeta	Catabola	Bie	
Chipindo	Chipindo	Huila	
Chipipa	Huambo	Huambo	
Chitembo	Chitembo	Bie	
Chiuca	Catabola	Bie	
Chivaulo	Andulo	Bie	

Cuanza	Camacupa	Bie
Cunhinga	Cunhinga	Bie
Cusse	Caconda	Huila
Cutenda	Chicomba	Huila
Dando	Nharea	Bie
Dumbi	Cassongue	Kuanza Sul
Galanga	Londuimbali	Huambo
Galangue	Kuvango	Huila
Gamba	Nharea	Bie
Gungue	Caconda	Huila
Hengue	Bailundo	Huambo
Huambo	Huambo	Huambo
Hungulo	Tchikala Tcholohanga	Huambo
Kabuta	Libolo	Kuanza Sul
Kakoma	Ukuma	Huambo
Kambuengo	Mungo	Huambo
Kariango	Quibala	Kuanza Sul
Katavola	Longonjo	Huambo
Katchiungo	Katchiungo	Huambo
Kienha	Mussende	Kuanza Sul
Kissange	Ebo	Kuanza Sul
Kissongo	Libolo	Kuanza Sul
Kuito	Kuito	Bie
Kumbila	Londuimbali	Huambo
Lepi	Longonjo	Huambo
Londuimbali	Londuimbali	Huambo
Longonjo	Longonjo	Huambo
Lonhe	Quibala	Kuanza Sul
Lubia	Nharea	Bie
Lunge	Bailundo	Huambo
Luvemba	Bailundo	Huambo
Malengue	Chitembo	Bie
Mbave	Tchikala Tcholohanga	Huambo
Muinha	Camacupa	Bie
Mumbue	Chitembo	Bie
Mundundo	Ukuma	Huambo
Munenga	Libolo	Kuanza Sul
Mungo	Mungo	Huambo
Mussende	Mussende	Kuanza Sul
Ndala Cachibo	Quibala	Kuanza Sul
Negola	Caluquembe	Huila
Nharea	Nharea	Bie
Pambangala	Cassongue	Kuanza Sul
Quibala	Quibala	Kuanza Sul

Ringoma	Camacupa	Bie
S. Lucas	Mussende	Kuanza Sul
Sambo	Tchikala Tcholohanga	Huambo
Sanga	Waku Kungo	Kuanza Sul
Tchiaka	Tchinjenje	Huambo
Tchikala Tcholohanga	Tchikala Tcholohanga	Huambo
Tchinhama	Katchiungo	Huambo
Tchinjenje	Tchinjenje	Huambo
Tchiumbu	Katchiungo	Huambo
Trumba	Kuito	Bie
Uaba	Caconda	Huila
Ukuma	Ukuma	Huambo
Ussoke	Londuimbali	Huambo
Vicungo	Kuvango	Huila
Waku Kungo	Waku Kungo	Kuanza Sul
LIVELIHOODS ZONE 8: TRANSITIC		
Communes	Municipality	Province
Bela Vista	Ambriz	Bengo
Caxito	Dande	Bengo
Cazua	Pango Aluquem	Bengo
Dondo	Cambambe	Kuanza Norte
Mabubas	Dande	Bengo
Quicabo	Dande	Bengo
Quixinge	Quissama	Bengo
Ucua	Dande	Bengo
Zenza do Itombe	Cambambe	Kuanza Norte
LIVELIHOODS ZONE 9: TROPICAL Communes	FOREST, CASSAVA, BANAN Municipality	A AND COFFEE Province
Alfandega	Sanza Pombo	Uige
Alto Zaza	Quimbele	Uige
Belize	Belize	Cabinda
Bembe	Bembe	Uige
Bengo	Cangola	Uige
Beu	Maquela do Zombo	Uige
Bindo	Camabatela	Kuanza Norte
Bolongongo	Bolongongo	Kuanza Norte
Buco Zau	Buco Zau	Cabinda
Buela	Cuimba	Zaire
Bula Atumba	Bula Atumba	Bengo
Bungo	Bungo	Uige
Cage	Nambuangongo	Bengo
Caiongo	Cangola	Uige
Camabatela	Camabatela	Kuanza Norte
Cambambe	Quitexe	
Cambambe	Quitexe	Uige

Camboso	Nova Esperanþa	Uige
Canacassala	Nambuangongo	Bengo
Cangola	Cangola	Uige
Cuango	Quimbele	Uige
Cuilo Pombo	Sanza Pombo	Uige
Damba	Damba	Uige
Dimuca	Negage	Uige
Dinge	Cacongo	Cabinda
Gombe	Nambuangongo	Bengo
Ісоса	Quimbele	Uige
Inhuca	Buco Zau	Cabinda
Kibocolu	Maquela do Zombo	Uige
Kiende	Mbanza Congo	Zaire
Kihuhu	Massango	Malanje
Kindege	Nzeto	Zaire
Kingombe	Tomboco	Zaire
Kinvuenga	Songo	Uige
Kisseke	Negage	Uige
Кохе	Dembos	Bengo
Kuilu Futa	Maquela do Zombo	Uige
Lemboa	Damba	Uige
Luali	Belize	Cabinda
Lucunga	Bembe	Uige
Lufico	Noqui	Zaire
Luinga	Camabatela	Kuanza Norte
Luvo	Mbanza Congo	Zaire
Mabaia	Bembe	Uige
Macocola	Santa Cruz	Uige
Macolo	Santa Cruz	Uige
Madimba	Mbanza Congo	Zaire
Maquela do Zombo	Maquela do Zombo	Uige
Massango	Massango	Malanje
Massau	Santa Cruz	Uige
Maua	Camabatela	Kuanza Norte
Mbanza Congo	Mbanza Congo	Zaire
Miconge	Belize	Cabinda
Mpala	Noqui	Zaire
Muxiluando	Nambuangongo	Bengo
Necuto	Buco Zau	Cabinda
Negage	Negage	Uige
Nkama Ntambu	Damba	Uige
Nkuso	Damba	Uige
Noqui	Noqui	Zaire
Nova Caipemba	Ambuila	Uige

Nova Esperanþa	Nova Esperanþa	Uige
Nsoso	Damba	Uige
Pango Aluquem	Pango Aluquem	Bengo
Paredes	Dembos	Bengo
Pedra de Feitico	Soyo	Zaire
Piri	Dembos	Bengo
Puri	Puri	Uige
Quiage	Bula Atumba	Bengo
Quibala Norte	Nzeto	Zaire
Quibaxe	Dembos	Bengo
Quicunzo	Nambuangongo	Bengo
Quifuafua	Quitexe	Uige
Quimbele	Quimbele	Uige
Quimbianda	Nova Esperanþa	Uige
Quinzala	Mucaba	Uige
Quipedro	Ambuila	Uige
Quiquiemba	Bolongongo	Kuanza Norte
Quitende	Quitexe	Uige
Quitexe	Quitexe	Uige
Quixico	Nambuangongo	Bengo
Quiximba	Tomboco	Zaire
Sakandika	Maquela do Zombo	Uige
Santa Cruz	Santa Cruz	Uige
Sanza Pombo	Sanza Pombo	Uige
Serra da Kanda	Cuimba	Zaire
Songo	Songo	Uige
Sumba	Ѕѹѻ	Zaire
Tando Zinze	Cabinda	Cabinda
Tango	Camabatela	Kuanza Norte
Terreiro	Bolongongo	Kuanza Norte
Tomboco	Tomboco	Zaire
Uamba	Sanza Pombo	Uige
Uando	Mucaba	Uige
Uige	Uige	Uige
Zala	Nambuangongo	Bengo
LIVELIHOODS ZONE 10: SAVANN		
Communes	Municipality	Province
Aldeia Nova	Banga	Kuanza Norte
Banga	Banga	Kuanza Norte
Bange Angola	Cahombo	Malanje
Caculo	Ndalatando	Kuanza Norte
Caculo Cabaþa	Banga	Kuanza Norte
Cacuso	Cacuso	Malanje
Cahombo	Cahombo	Malanje

Calandula	Calandula	Malanje
Camame	Ngonguembo	Kuanza Norte
Cambaxe	Malanje	Malanje
Cambo	Cahombo	Malanje
Cambondo	Golungo Alto	Kuanza Norte
Cambondo	Malanje	Malanje
Cambundi Catembo	Cambundi Catembo	Malanje
Cangandala	Cangandala	Malanje
Capenda Camulemba	Capenda Camulemba	Lunda Norte
Cariamba	Banga	Kuanza Norte
Caribo	Cangandala	Malanje
Catala	Mucari	Malanje
Caxinga	Mucari	Malanje
Cerca	Golungo Alto	Kuanza Norte
Cuango	Cuango	Lunda Norte
Dala Samba	Marimba	Malanje
Dange la Menha	Cambambe	Kuanza Norte
Dombo	Luquembo	Malanje
Dumba Kabango	Cambundi Catembo	Malanje
Golungo Alto	Golungo Alto	Kuanza Norte
Kangando	Malanje	Malanje
Kapunda	Luquembo	Malanje
Kassanji	Xa Muteba	Lunda Norte
Kateco Kangola	Calandula	Malanje
Kiangombe	Lucala	Kuanza Norte
Kiluanje	Golungo Alto	Kuanza Norte
Kimbamba	Malanje	Malanje
Kimbango	Luquembo	Malanje
Kinge	Calandula	Malanje
Kinguengue	Massango	Malanje
Kiwaba Nzoji	Kiwaba Nzoji	Malanje
Kizenga	Cacuso	Malanje
Kota	Calandula	Malanje
Kuale	Calandula	Malanje
Kulamagia	Cangandala	Malanje
Kunda Dia Baze	Kunda Dia Baze	Malanje
Lemba	Kunda Dia Baze	Malanje
Lombe	Cacuso	Malanje
Longo	Xa Muteba	Lunda Norte
Luando	Cuemba	Bie
Lucala	Lucala	Kuanza Norte
Luquembo	Luquembo	Malanje
Luremo	Cuango	Lunda Norte
Malanje	Malanje	Malanje

Mangano	Marimba	Malanje
Marimba	Marimba	Malanje
Mbembo	Cangandala	Malanje
Mikanda	Cahombo	Malanje
Milando	Kunda Dia Baze	Malanje
Moma	Quela	Malanje
Mucari	Mucari	Malanje
Mufuma	Kiwaba Nzoji	Malanje
Muquixi	Mucari	Malanje
Ndalatando	Ndalatando	Kuanza Norte
Ngola Luije	Malanje	Malanje
Pungo Andongo	Cacuso	Malanje
Quela	Quela	Malanje
Quiculungo	Quiculungo	Kuanza Norte
Quilombo dos Dembos	Ngonguembo	Kuanza Norte
Quirima	Quirima	Malanje
Quitapa	Xa Muteba	Lunda Norte
S. Pedro da Quilemba	Cambambe	Kuanza Norte
Samba Caju	Samba Caju	Kuanza Norte
Samba Lucala	Samba Caju	Kuanza Norte
Sautari	Quirima	Malanje
Tala Mungongo	Cambundi Catembo	Malanje
Xa Muteba	Xa Muteba	Lunda Norte
Xandele	Quela	Malanje
Xinge	Capenda Camulemba	Lunda Norte
LIVELIHOODS ZONE 11: SAVANN		
Communes	Municipality	Province
Alto Chicapa	Cacolo	Lunda Sul
Cachimo	Cambulo	Lunda Norte
Cacolo	Cacolo	Lunda Sul
Caluango	Cuilo	Lunda Norte
Camanongue	Camanongue	Moxico
Camaxilo	Caungula	Lunda Norte
Cambulo	Cambulo	Lunda Norte
Camissombo	Lucapa	Lunda Norte
Cangumbe	Luena	Moxico
Canzar	Cambulo	Lunda Norte
Сараіа	Lucapa	Lunda Norte
Cassai Sul	Muconda	Lunda Sul
Caungula	Caungula	Lunda Norte
	-	Lundo Cul
Cazage	Dala	Lunda Sul
Cazage Chiluage	Dala Muconda	Lunda Sul

Cuilo	Cuilo	Lunda Norte
Dala	Dala	Lunda Sul
Leua	Leua	Moxico
Liangongo	Leua	Moxico
Lovua	Chitato	Lunda Norte
Luachimo	Chitato	Lunda Norte
Luangue	Lubalo	Lunda Norte
Luau	Luau	Moxico
Lubalo	Lubalo	Lunda Norte
Lucapa	Lucapa	Lunda Norte
Lucusse	Luena	Moxico
Luena	Luena	Moxico
Luia	Cambulo	Lunda Norte
Luma Cassai	Dala	Lunda Sul
Lutuai	Luena	Moxico
Mona Quimbundo	Saurimo	Lunda Sul
Muconda	Muconda	Lunda Sul
Muriege	Muconda	Lunda Sul
Muvulage	Lubalo	Lunda Norte
Saurimo	Saurimo	Lunda Sul
Sombo	Saurimo	Lunda Sul
Xa Cassau	Lucapa	Lunda Norte
Xassengue	Cacolo	Lunda Sul
LIVELIHOODS ZONE 12: FISHING,	CASSAVA AND CROSSBORI	DER TRADE
Communes	Municipality	Province
Caianda	Alto Zambeze	Moxico
Calunda	Alto Zambeze	Moxico
Cameia	Cameia	Moxico
Cazombo	Alto Zambeze	Мохісо
Kavungo	Alto Zambeze	Moxico
Lago Dilolo	Luacano	Moxico
Lovua	Alto Zambeze	Moxico
Lovua Luacano	Alto Zambeze Luacano	Moxico Moxico
Luacano	Luacano	Moxico
Luacano Lumbala	Luacano Alto Zambeze	Moxico Moxico
Luacano Lumbala Lumbala Kaquengue	Luacano Alto Zambeze Alto Zambeze Alto Zambeze	Moxico Moxico Moxico
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes	Luacano Alto Zambeze Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality	Moxico Moxico Moxico Moxico Province
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes Barra do Kuanza	Luacano Alto Zambeze Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality Viana	Moxico Moxico Moxico Moxico Province Luanda
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes Barra do Kuanza Bom Jesus	Luacano Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality Viana Icolo e Bengo	Moxico Moxico Moxico Moxico Province Luanda Bengo
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes Barra do Kuanza Bom Jesus Cabiri	Luacano Alto Zambeze Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality Viana Icolo e Bengo Icolo e Bengo	Moxico Moxico Moxico Moxico Province Luanda Bengo Bengo
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes Barra do Kuanza Bom Jesus Cabiri Cacuaco	Luacano Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality Viana Icolo e Bengo Icolo e Bengo Cacuaco	Moxico Moxico Moxico Moxico Province Luanda Bengo Bengo Luanda
Luacano Lumbala Lumbala Kaquengue Mucondo LIVELIHOODS ZONE 13: COASTA Communes Barra do Kuanza Bom Jesus Cabiri	Luacano Alto Zambeze Alto Zambeze Alto Zambeze LIVESTOCK RANCHING Municipality Viana Icolo e Bengo Icolo e Bengo	Moxico Moxico Moxico Moxico Province Luanda Bengo Bengo

Catete	Icolo e Bengo	Bengo
Dembo Chio	Quissama	Bengo
Luanda	Luanda	Luanda
Mumbondo	Quissama	Bengo
Muxima	Quissama	Bengo
Viana	Viana	Luanda

ANNEX 2: LIST OF PARTICIPANTS

Benguela Regional Workshop					
No.	Names of participants	Function or Post	Institution		
1.	Gabriel Martinho	Chefe Depart. Agricultura- Benguela	Department of Agriculture-Benguela Province		
2.	Lucas Pinto	DPADR-Benguela Province	Benguela Province		
3.	Fernando André		Ministry of Agriculture (MINAGRI)- Luanda		
4.	Alves Victor		Ministry of Agriculture (MINAGRI)- Luanda		
5.	Dulce Rebeca Sakala	TIDA	Namibe Province		
6.	João Luiz Abel	DPADR	Namibe Province		
7.	Martinho Wimbu		Directorate of Health-Benguela Province		
8.	Antonio F. Canjo	EDA	Lobito- Huila Province		
9.	Lourenço J. Matanda		Ministry of Agriculture (MINAGRI)- Luanda		
10.	Jõao Vicente		Ministry of Agriculture (MINAGRI)- Luanda		
11.	Julieta M.F. da Cunha	Chief of Education	Benguela Province		
12.	Manuel Chitumba	EDA	Ganda Commune		
13.	Julia Maria Mussungo	Director of Education	Namibe Province		
14.	Lidia Nataniel	Director of Education	Cunene Province		
15.	Dilson M. F. Velho	Director of Education	Cuando Cubango Province		
16.	Antonio F. dos Santos	Ministry of Agriculture (MINAGRI)			
17.	Domingos Raimundo Ngonga	IDA	Cuando Cubango Province		
18.	Joao I. Sousa	Director of Agriculture	Namibe Province		
19.	Justino Xili	Director of Education	Cunene Province		
20.	Adriano Moso	Supervisor for Nutrition			
21.	Santos Félix Pedro		Ministry of Agriculture (MINAGRI)- Luanda		
22.	Manuel Pinto José	Chief of Department	Luanda Province		
23.	Euclides José	Director of Education	Huila Province		
24.	João C. Muluta	GEPE	Benguela Province		
25.	Valdemar Simões Morais	Chief of Department	Ministry of Agriculture Luanda		
26.	Odete Rochete		Ministry of Agriculture- Luanda		
27.	Arlete Alzira	Director of Health	Bie Province		
28.	Celestino E. Quididi	GEP	Cuando Cubango Province		
29.	Jose Faustino	IDA	Huambo Province		

30.	Miguel Dambi		Ministry of Agriculture (MINAGRI/GSA)
31.	Paula Tunga		Ministry of Agriculture (MINAGRI/GSA)
32.	Pinto Basilio	DPA	Huambo Province
33.	Ermelinda Caliengue		Ministry of Agriculture (MINAGRI/GSA)
34.	Elsa Gaspar		Ministry of Agriculture (MINAGRI/GSA)
35.	Jorge Manuel Eli Sanjala	Director for Planning	Bie Province
36.	Jose Solino Joel	Director for Planning Huambo Province	
37.	José Felisberto Kalomo	GEP	Cunene Province
38.	João Gonçalves	Directorate of Agriculture	Benguela Province
39.	Jose Niangassa Zeca	Directorate of Agriculture	Cunene Province
40.	Agostinho Pedro	Independent Consultant	-
40.	Claire Bea	Chemonics Associate- Southern Africa	FEWS NET Head Office/Washing ton
41.	Phumzile Mdladla,		FEWSNET Regional Office- Pretoria, South Africa
42.	Antonio Mavie	Deputy Technical Manager	FEWS NET- Mozambique
43.	Masozi Kachali	Technical Advisor	SADC-RVAA Programme
44.	James Acidri	Livelihood Consultant	Evidence for Development

No.	Names	Institution	Telephone	E-mail Address
1.	Ambrosio Joaquim	GEPE Malange	946839210	ambrosiojoao@live.com.pt
	João			
2.	Ermelida Caliengue	GSA Luanda	921110567	ercaliengue@gmail.com
3.	Odete Rochete	GSA Luanda	936137097	odetebacalhau@hotmail.com
4.	Andrade dos santos	GSA Luanda	923306631	andraderodriguessantos@gmail.com
5.	Hermenegildo Barbosa	GEPE Lunda Norte	923696805	hermenegildobarbosa@hotmail.com
6.	Carla Monteiro	SADC Consultora		
7	Evance Chapasuka	SADC RVAC Programa		echapasuka@sadc.ins
8.	James Acidri	FEWS NET		janesacidi@gmail.com
9.	Masozi Kachale	SADC RVAC Programa		makachale@sadc.com
10.	Gary Sawdon	FEWS NET		gsawdon@fews.net
11.	Duncan Samikwa	SADC RVAC Programa		dsamikwa@sadc.int
12.	Antonio Mavie	FEWS NET		amavie@fews.net
13.	João Manuel	DPA- Malanje		
14.	Catembue Camunaga	IDA Lunda Norte	932906167	
15.	Nsimba Domingos	Secretaria Geral (DIII)	924677661	nsibadomingos84@atlook.com
	Quianelundo			
16.	Paulo Bungo	IDA Lunda Norte	923714661	paulobungo18yahoo.com.br
17.	David Tunga	Director GSA	923402290	tunga100565@gmail.com
18.	José Alves	Tradutor	924518027	alvesbocolo1@hotmail.com
19.	Maria Eugenia da Silva	GSA RVAC		

20.	Honorato Bartolomeu	GGTA/MINAGRI	923626411	honoratoferreira@yahoo.com.br
21.	João José	Chefe Depat. INCER	946839210	ambrosiojoao@live.com.pt
22.	Fernanda D.S Guerra	GEPE Zaire	923823631	
23.	Pedro Makunde	Direcção provincial Zaire	922895731	
24.	Tomais Manuel Inacio	MINAGRI Moxico		
25.	José pereira Brito paulo	DPA Bengo	927137933	josebritopaulo25@hotmail.com
26.	Jorge pina	IDA Zaire	936483363	
27.	Brigitte Caferro	GEPE Lunda Sul	947222010	brigittecaferro@hotmail.com
28.	Moises maquiniche	DPA Lunda Sul	936683146	
29.	Jose Mateus	DPA Lunda Norte	925217097	
30.	Santos Felix Pedro	GSA Luanda	918078499	luzidalalu-kiese@yahoo.com.br
31.	Isidro Jorge Tomais	IDA MOXICO	923864736	
32.	Campos Zenga dos Santos	IDA Uige	923229334	campos78@live.com.pe
33.	Domingos Muaiuma	IDA Lunda Sul	923482594	dmuaiuma@hotmail.com
34.	Manuel Gomes	IDA Cabinda	923667168	magomes20@yahoo.com.br
35.	Antonio Mieze Quicosa	IDA Luanda	923770535	
36.	Jose Leão Chiquito	DPA	933167870	
37.	Joy Francisco Alberto Mulemba	GEPE Luanda	935712681	mulemba2008@hotmail.com
38.	Pascoal Manuel Castro	DPA Luanda	925144362	pascoalcastro07@gmail.com
39.	Inacio Chindongo Pedro	DPA Malange	936793824	chindoinacio@yahoo.com.br
40.	Isaac Bernardo Delgado	IDA Malange	9244015584	
41.	Joaqui Pedro	DPA Uige	924831278	joaquimpedro76@yahoo.com.br
42.	Eduardo Gomes	IDA Uige	925408038	