

ANGOLA Livelihood Zones and Descriptions

November 2013

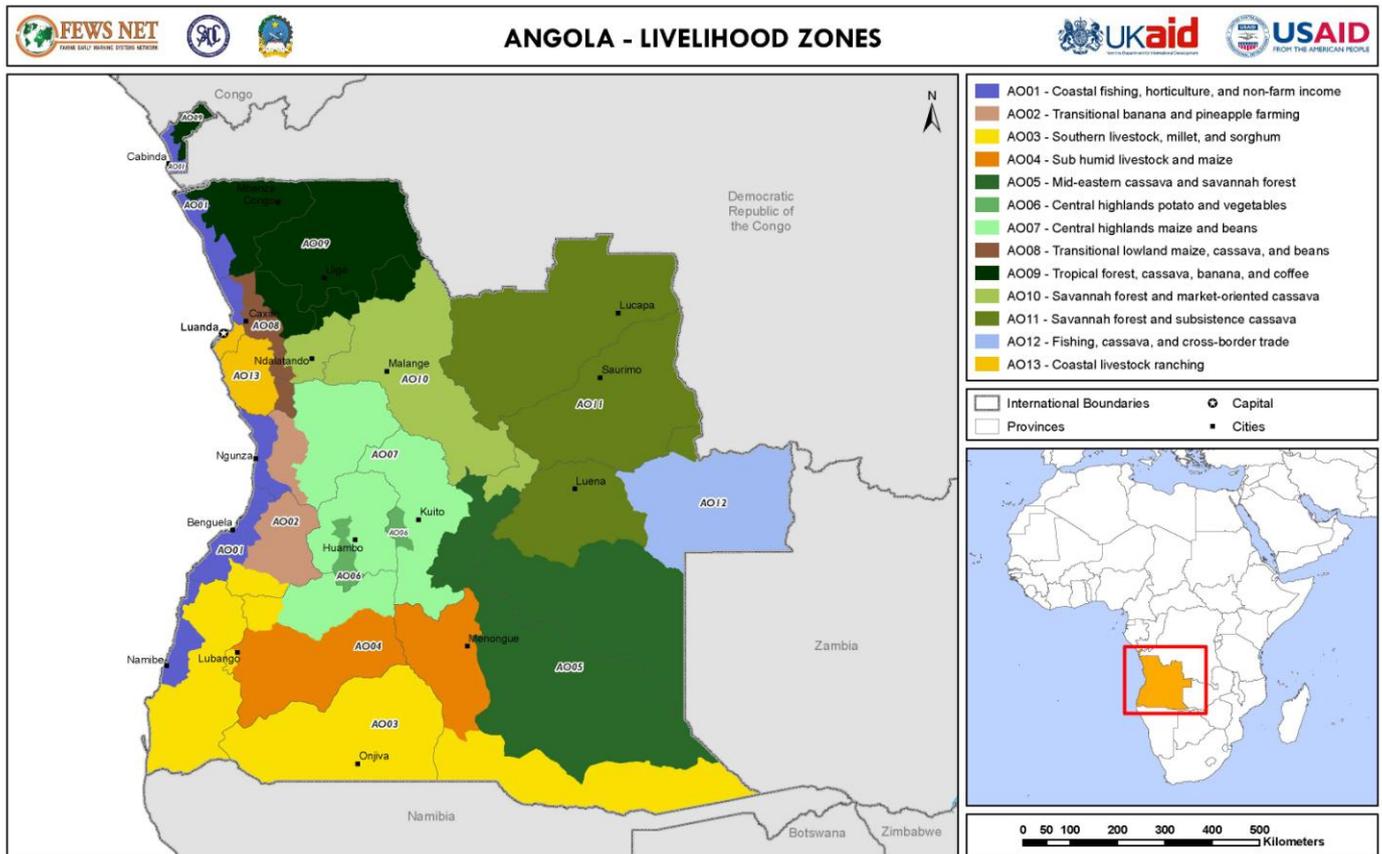


TABLE OF CONTENTS

Acknowledgements.....	3
Acronyms and Abbreviations.....	4
Introduction.....	5
Livelihood Zoning and Description Methodology.....	5
Livelihoods in Rural Angola.....	7
Recent Events Affecting Food Security and Livelihoods.....	9
Coastal Fishing Horticulture and Non-Farm Income Zone (Livelihood Zone 01).....	10
Transitional Banana and Pineapple Farming Zone (Livelihood Zone 02).....	14
Southern Livestock Millet and Sorghum Zone (Livelihood Zone 03).....	17
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).....	32
Tropical Forest Cassava Banana and Coffee (Livelihood Zone 09).....	35
Savannah Forest and Market Orientated Cassava (Livelihood Zone 10).....	38
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 1: Livelihood Zones and Administrative Areas.....	50
Annex 2: List of Participants.....	62

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 Caliegue, 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.

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
IK	Payment for services in kind
MINADERP	Ministry of Agriculture and Rural Development
OP	Own produced crops
RVAA	Regional Vulnerability Assessment and Analysis Program
SADC	Southern African Development Community
USAID	United States Agency for International Development
M	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 (<http://www.feg-consulting.com/resource/practitioners-guide-to-hea/practitioners-guide-to-hea/>). It includes a traditional livelihoods zoning component (<http://www.feg-consulting.com/resource/practitioners-guide-to-hea/2%20Livelihood%20Zoning.pdf>). 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.](#)"¹

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

LIVELIHOODS IN RURAL ANGOLA

As a preparatory activity, FEWS NET completed a [Desk Review](#)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 mid-south 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

- 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 (AO07)-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. <i>Source- USAID/OFDA- Office of Food for Peace (Latest Angola Fact Sheet- Humanitarian Assistance in Review).</i>
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 to diversified livelihood options at household level.	
Main productive assets	
Poor	Better-off
Fewer goats, sheep, pigs and poultry Fishing equipment (wooden canoe, net, lines hook- "Muzuas") Bicycle Cultivable land- fewer hectares.	More goats, sheep and pigs in pens. Fishing equipment (motorized boat, net and hook) Motor vehicle Cultivable land- more hectares.
Main foods consumed and sources	
Poor	Better-off
Cassava (OP/MP) Vegetables (OP) Maize (OP/MP) Fish (G/MP) Meat (MP) Banana (MP)	Cassava (OP) Vegetables (OP) Maize (OP/MP) Fish (G/MP) Meat (OP/MP) Banana (OP/MP)
Main income sources	
Poor	Better-off
Sale of fish Sale of vegetables Small scale trade Sale of non-farm labor Sale of domestic fuel Sale of salt	Sale of fish Large scale-whole sale trade Formal employment Sale of vegetables Cash remittances
Main markets	
The strategic food markets include Locais, Luanda, and Benguela; meanwhile labor is traded in the growing formal and informal service industries (warehouses and fish process plants).	
Main hazards and approximate frequency	
<ul style="list-style-type: none"> • Rough seas during the rainy season • Invasion by large numbers of seals as pests during the rainy season • Sea floods with salty water flooding into fresh water during the period March to April • Oil spills occur throughout the year • Vegetable crop pests and diseases occur during the end of rainy season in March to April 	
Main coping strategies	
Labor migration to urban areas such as Luanda Increased reliance on self-employment	Increased trading in manufactured goods Increased reliance on cash remittances from relatives working elsewhere

This zone lies on the coast line, stretching along Namibe, Benguela, Kwanza Sul, Kwanza 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
Seasons												
dry season												
wet season												
lean season												
Cropping												
vegetable production												
land preparation												
planting/sowing												
weeding												
harvesting												
Other												
fishing												
Hazards												
gigantic ocean waves												
invasion by seals												
salty water-sea flooding												
oil spills												
Legend	land preparation				sowing			weeding		harvest		

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 01

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava												
maize meal												
Income												
sale of fish												
retail trade												
off farm-casual labor												
Expenditures												
education (learning materials)												
health care (higher cost)												
Legend	own production				market purchase			in-kind		gathering		

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 security risk	
Highly productive crop producing area, with low food security risk.	
Main productive assets	
Poor	Better-off
Cultivated land- fewer hectares. Fewer goats Fewer pigs Poultry (chicken and ducks)	Cultivated land-more hectares. Cattle More goats More pigs Poultry (chicken and ducks)
Main foods consumed and sources	
Poor	Better-off
Maize (OP/MP) Fish (G/MP) Vegetables (OP) Cassava (OP/MP) Meat (MP)	Maize (OP/MP) Bananas (OP/MP) Fish (G/MP) Meat (MP/OP) Milk (MP/OP) Fruits (OP)
Main income sources	
Poor	Better-off
Sale of vegetables Sale of maize Sale of agricultural labor Sale of goats Sale of pigs Sale of hand crafts Sale of local brew Sale of domestic fuel	Sale of bananas Sale of maize Sale of pineapples Sale of cattle Sale of goats Small scale trade such as mineral water
Main markets	
Main markets accessible in the zone include Caponte and Chapanguela. Local labor employment is mainly within banana and pineapple plantations. External employment is also accessible in neighboring peri-urban areas and cities with migrant labor along the coast.	
Main hazards and approximate frequency	
Seasonal floods occurs annually from November to December Livestock diseases occurs every second year from June to September Low crop prices during years of good harvest.	
Main coping strategies	
Poor	Better-Off
Increased labor migration Increased self-employment Increased cash remittance's	Increased sale of cattle Increased levels of self-employment

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°-30°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

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 02

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize	market purchase	market purchase	own production	own production	own production	own production	own production	own production	market purchase	market purchase	market purchase	market purchase
beans	market purchase	market purchase	own production	own production	own production	own production	own production	own production	market purchase	market purchase	market purchase	market purchase
Income												
sale of bananas	own production	own production									own production	own production
sale of pineapples	own production	own production	own production	own production	own production	own production	own production					
sale of maize and beans					own production	own production						
Expenditures												
education-scholastic materials		market purchase		market purchase	market purchase	market purchase	market purchase					
health care (peak months)	market purchase	market purchase	market purchase	market purchase						market purchase	market purchase	market purchase
Legend	own production	market purchase	in-kind	gathering								

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 risk	
High food security risk due to semi-arid conditions and low crop productivity.	
Main productive assets	
Poor	Better-off
Fewer goats Pigs Poultry Land cultivated- fewer hectares. Hand tools Natural products	Cattle More goats/sheep Poultry Land cultivated- more hectares. Hand tools Natural products
Main foods consumed and sources	
Poor	Better-off
Millet (OP/MP) Sorghum (OP/MP) Maize (MP) Milk (OP/IK/MP) Meat (OP/MP) Wild foods (G) Gifts	Millet (OP) Sorghum (OP) Maize(MP) Milk (OP) Meat(OP) Wild foods (G)
Main income sources	
Poor	Better-off
Sale of goats Sale of pigs Sale of poultry Sale of natural products	Sale of cattle Sale of livestock product sales (milk and meat) 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 collection of wild foods Migration in search of water and pasture Long distance movement in search of food	Increased sale of goats, sheep and incase of extreme crisis cattle. Increased self-employment

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 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 better-off group for herding livestock. Livestock sales are the most important source of cash income for both poor and better-off 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. External 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, coupled 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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
seasons												
dry season												
rainy season												
lean season												
Cropping												
land preparation												
planting/sowing												
weeding												
harvesting												
Livestock												
lambing/kidding and calving												
milking												
seasonal migration												
Hazards												
floods												
livestock diseases												
low crop prices												
Legend												

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 03

	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												
Other												
wild foods												
Expenditure												
health care (peak months)												
Legend												

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 materials and school fees) is mainly covered by the government.

SUB HUMID LIVESTOCK AND MAIZE (Livelihood zone 04)

Food security risk	
Low food security risk, due to high agricultural productivity.	
Main productive assets	
Poor	Better-off
Fewer cattle Poultry Land cultivated- fewer hectare's Hand tools	More cattle Goats Sheep Pigs Land cultivated- more hectare's Animal traction
Main foods consumed and sources	
Poor	Better-off
Maize (OP/MP) Millet (MP) Sorghum (MP) Rice(MP) Meat (OP/MP) Milk (OP/MP) Fish (G/MP) Cassava (MP) Beans (MP) Wild foods (G)	Maize (OP) Millet (MP/OP) Sorghum (MP/OP) Rice (MP) Cassava (MP) Beans (MP) Meat (OP) Milk (OP) Fish (MP)
Main income sources	
Poor	Better-off
Sale of labor (agriculture and coal mines) Sale of maize Sale of fish Sale of cattle Sale of natural products Hunting.	Sale of cattle Sale of livestock products (milk and meat) Formal Employment Formal/informal trade Minerals- i.e. Granite
Main markets	
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 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 Increased collection of wild foods Increased sale of livestock Migration in search of water and pasture	Irrigation Distant purchase of food/adequate stocks. Increased sale of livestock Purchase of livestock drugs

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 program 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.

SEASONAL CALENDAR, ZONE 04

	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												
Livestock												
lambing/kidding/calving												
milking												
seasonal livestock migration												
Other												
Hazards												
drought and dry spells												
floods												
livestock diseases												
low crop prices												
Legend												

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 04

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize	market purchase	market purchase	market purchase	own production	market purchase	market purchase	market purchase	market purchase				
beans	market purchase	market purchase	market purchase	own production	market purchase	market purchase	market purchase	market purchase				
fish	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Income												
sale of maize						in-kind	in-kind	in-kind	in-kind			
sale of fish										in-kind	in-kind	in-kind
sale of charcoal						in-kind	in-kind	in-kind	in-kind			
sale of labor	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Expenditures												
education- learning matierals		in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
health care (peak months)		in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Legend												
	own production	market purchase	in-kind	gathering								

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	
Low food security risk, due to crop diversification and agricultural productivity.	
Main productive assets	
Poor	Better-off
Fewer cattle Fewer pigs Poultry Land cultivated- fewer hectares Tractors Motor cycle	More cattle Goats More pigs Poultry Land cultivated- more hectares Bicycle Hand tools
Main foods consumed and sources	
Poor	Better-off
Cassava (OP) Maize (OP/MP) Beans (OP/MP) Dry fish (MP) Cooking oil (MP) Maize and Beans (Food Assistance)	Cassava (OP) Maize (OP/MP) Beans (OP) Rice (MP) Dry fish (MP) Cooking oil (MP)
Main income sources	
Poor	Better-off
Sale of crops Sale of firewood and charcoal Sale of sand/ rocks Sale of wild foods	Sale of crops Sale of cattle Sale of fish Sale of timber/wood
Main markets	
The key strategic markets in this zone are Chitembo, Cuemba, Rivungo, Nancova e Mavinga. Most of the labor is seasonal and takes place within the zone from November- February.	
Main hazards and approximate frequency	
Crop pests and diseases occurs during the rainy season Livestock diseases occurs during both dry and rainy seasons Human wild life conflict occurs 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 collection of wild foods Increased sale of firewood and charcoal Labor migration Cleaning other people's fields.	Increased sale of livestock

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.

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.

SEASONAL CALENDAR, ZONE 05

	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												
Livestock												
lambing/kidding/calving												
milking												
Other												
Hazards												
crop pests and diseases												
livestock diseases												
human wild life conflict												
low crop prices												
Legend	land preparation			sowing			weeding			harvest		

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 05

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize	market purchase	market purchase	own production	market purchase	market purchase	market purchase	market purchase					
cassava	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production
fish	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Income												
sale of maize									own production	own production		
sale of fish	own production	own production				own production	own production	own production	own production	own production	own production	own production
sale of livestock	own production	own production									own production	own production
sale of charcoal						own production	own production	own production	own production			
Expenditures												
education- learning materials		own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production
health care (peak months)		own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production
Legend	own production	market purchase	in-kind	gathering								

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 risk	
Low food security risk, due to high agricultural productivity.	
Main productive assets	
Poor	Better-off
Fewer goats Poultry (chicken and ducks) Land cultivated-fewer hectares. Bicycle Hand tools (hoe, axe and panga)	Cattle More goats Pigs Poultry (chicken and ducks) Land cultivated-more hectares. Motor vehicle Tractor Animal traction
Main foods consumed and sources	
Poor	Better-off
Potatoes (OP/MP) Vegetables (OP) Maize (MP) Rice (MP) Beans (MP) Cassava (MP)	Potatoes (OP) Vegetables (OP) Maize (MP) Rice (MP) Beans (OP/MP) Cassava (MP)
Main income sources	
Poor	Better-off
Sale of potatoes Sale of labor Sale of natural products (charcoal and firewood) Sale of fish Sale of hand crafts Sale of wild foods	Sale of potatoes Sale of cattle Formal employment Trade
Main markets	
The main markets both for buying and selling of local products including labor are located within the livelihood zone. The peak local employment periods are from November to December and May to June.	
Main hazards and approximate frequency	
Crop pests and diseases occur from September to March. Livestock diseases occur throughout the year. Human wild life conflict occurs during the harvest period (February-April) Low crop prices occur immediately after the main harvest (May to June)	
Main coping strategies	
Poor	Better-off
Labor migration Increased search for employment Increased collection of wild foods	Increased reliance on cash remittances Increased sale of cattle

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°C. This 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

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 06

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
sweet potatoes												
barter trade												
Income												
sale of potatoes												
sale of maize												
sale of livestock												
sale of charcoal												
Expenditures												
education- learning matierals												
health care (peak months)												
Legend												

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	
Poor	Better-off
Land cultivated- fewer hectares. Fewer goats Fewer pigs Hand tools (hoe, axe and panga). Bicycle	Land cultivated- more hectares. Cattle More goats More pigs Animal traction equipment Motor cycle
Main foods consumed and sources	
Poor	Better-off
Maize (OP/MP) Beans (OP/MP) Vegetables (OP) Fresh and dry fish (G/MP) Wild foods (G)	Maize (OP) Beans (OP) Vegetables (OP) Fresh and dry fish (G/MP) Wild foods (G)
Main income sources	
Poor	Better-off
Sale of goats Sale of labor Sale of charcoal Sale of forest products, i.e. wild berries, mushroom, honey etc.	Sale of crops Sale of cattle Sale of goats Sale of pigs Trade
Main markets	
Informal labor opportunities are available within the zone, mainly provided by the better-off households. These include both agricultural work and non-farm income activities. The majority of workers are paid in cash on completion of a specific contract.	
Main hazards and approximate frequency	
Floods which affect crops due to excessive rainfall in late September and early October in the lower drainage areas of the livelihood zone. Drought conditions are also sometimes experienced.	
Main coping strategies	
Poor	Better-off
Increased search for casual labor work. Increased sale of local products, e.g. firewood, charcoal and switch to a cheaper diet	Increased trade turnover. Increased search for formal employment 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 °Celsius and minimum temperatures of 11-13°Celsius. 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, formal employment and sale of livestock.

SEASONAL CALENDAR, ZONE 07

	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			■									
Livestock												
lambing/kidding/calving	■								■			
milking	■								■			
Other												
Hazards												
floods									■			
drought conditions	■											
Legend	■ land preparation			■ sowing			■ weeding		■ harvest			

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 07

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
maize and beans												
barter trade												
Income												
sale of livestock												
sale of mushrooms												
sale of honey												
sale of charcoal												
Expenditures												
education- learning materials												
health care (peak months)												
Legend												

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.	
Main productive assets	
Poor	Better-off
Land cultivated- fewer hectares Fewer goats Bicycle Hand tools (hoe, panga and axe) Poultry (chicken and ducks)	Land cultivated- more hectares Cattle More goats Vehicles Motor cycle Bicycle Fishing equipment Hand tools (hoe, panga and axe) Poultry (chicken and ducks)
Main foods consumed and sources	
Poor	Better-off
Cassava (MP/OP) Maize (MP/OP) Sweet potatoes (OP) Fish (G)	Cassava (OP) Maize (OP/MP) Sweet potatoes (OP) Fish (G)
Main income sources	
Poor	Better-off
Sale of maize Sale of goats Sale of fish Sale of labor Retail trade	Sale of maize Sale of cassava Sale of sweet potatoes Sale of fish Sale of goats Retail trade
Main markets	
The main markets accessible in this zone are Saurimo, Luena and Chitato.	
Main hazards and approximate frequency	
Hailstorms which occur during rainy season Human and wild life conflicts occur during the harvest season.	
Main coping strategies	
Poor	Better-off
Increased collection of wild foods Increased labor migration Increased sale of livestock.	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.

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

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production
maize	market purchase	market purchase	own production	market purchase	market purchase	market purchase						
Income												
agricultural labor	in-kind	in-kind						in-kind	in-kind	in-kind	in-kind	in-kind
retail trade			in-kind	in-kind	in-kind							
Expenditures												
education-scholastic materials	in-kind	in-kind				in-kind	in-kind					
high cost of health care	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Legend	own production	market purchase			in-kind	gathering						

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 to high agricultural productivity.	
Main productive assets	
Poor	Better-off
Land cultivated- fewer hectares Poultry (chicken and ducks) Bicycle Hand tools (hoe, panga and axe)	Land cultivated- more hectares Cattle, goats and pigs Poultry (chicken and ducks) Motor cycle Power driven saws Motor pumps.
Main foods consumed and sources	
Poor	Better-off
Cassava (OP) Banana (OP/MP) Beans (MP) Cow peas (OP/MP) Vegetables(OP/MP) Meat (MP/OP) Fish (G/MP) Cooking oil (MP) Wild foods (G)	Cassava (OP) Banana (OP) Beans (MP) Cow peas (OP) Vegetables(OP) Meat (MP/OP) Fish (G/MP) Cooking oil (MP)
Main income sources	
Poor	Better-off
Sale of cassava Sale of natural products (charcoal and firewood) Sale of labor Sale of hand crafts Sale of fish	Sale of cassava Sale of banana Sale of coffee Sale of timber Sale of goats Sale of fish
Main markets	
The main markets in the zone include Malanje, Ndalatando, Uige and Cabinda. Most of these markets link with Luanda.	
Main hazards and approximate frequency	
Excessive rainfall and flooding occurs during the rainy season Strong winds and storms occur during the dry season Human and wild life conflict occurs during the dry season Crop pests and diseases such as cassava mosaic and banana wilt occur annually throughout the year. Low crop prices especially for coffee during harvest season.	
Main coping strategies	
Increased collection of wild foods Increased sale of local crafts Increased reliance on external cash remittances	Increased sale of livestock Increased reliance on self-employment such as trade

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 09

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava												
banana												
Income												
sale of cassava												
sale of banana												
Expenditures												
education-scholastic materials												
high cost of health care												
Legend												
		own production		market purchase				in-kind		gathering		

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

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.

SEASONAL CALENDAR, ZONE 10

	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												
Livestock												
lambing/kidding/calving												
milking												
vaccination												
Other												
Hazards												
floods												
crop pests and diseases												
human wild life conflict												
Legend												

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 10

	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 materials												
high cost of health care												
Legend												
		own production		market purchase				in-kind		gathering		

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 risk, due to subsistence level of production.	
Main productive assets	
Poor	Better-off
Land cultivated- fewer hectares. Fewer goats Poultry (Chicken and ducks) Bicycle Hand tools (hoe, axe and panga)	Land cultivated- more hectares. Cattle More goats Poultry (Chicken and ducks) Motorcycle Bicycle Hand tools (hoe, axe and panga)
Main foods consumed and sources	
Poor	Better-off
Cassava (OP/MP) Maize (MP) Sweet potatoes(OP/MP) Fish (G/MP) Meat (OP/MP) Vegetables (OP/MP) Citrus fruits (OP/MP) Wild foods (G)	Cassava (OP) Maize (OP/MP) Sweet potatoes (OP) Fish (MP) Meat (OP/MP) Vegetables (OP/MP) Citrus fruits (OP/MP) Wild foods (G)
Main income sources	
Poor	Better-off
Sale of cassava Sale of charcoal Sale of local brew Sale of labor	Sale of cassava Sale of cattle and goats Sale of charcoal Trade
Main markets	
The main internal markets in the zone are Saurima, Luena and Chitato, linking with external markets across in DRC and Zambia.	
Main hazards and approximate frequency	
Increase in food prices occur during the lean season Human wild life conflicts occur during dry season (harvest period) Hailstorms occur during the rainy season	
Main coping strategies	
Increased sale of livestock Increased labor migration Increased sale of wild foods Increased self-employment	Increased sale of livestock

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-ferralitic, psamo-hydromorphic 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.

SEASONAL CALENDAR, ZONE 11

	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												
Livestock												
lambling/kidding/calving												
milking												
vaccination												
Other												
Hazards												
human and wild life conflict												
hailstorms												
increase in food prices												
Legend	land preparation				sowing			weeding		harvest		

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 quantities 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

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production	own production
sweet potatoes	own production	own production	market purchase	market purchase	own production	own production	market purchase					
Income												
sale of cassava	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
agricultural labor	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Expenditures												
education-scholastic materials	in-kind							in-kind				
high cost of health care		in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind
Legend	own production	own production	market purchase	market purchase	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind	in-kind

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

SEASONAL CALENDAR, ZONE 12

	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												
Livestock												
lambing/kidding/calving												
milking												
vaccination												
Other												
fishing												
Hazards												
river floods												
Legend	land preparation				sowing			weeding		harvest		

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 12

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Staple foods												
cassava												
fish												
Income												
sale of fish												
agricultural labor												
Expenditures												
education-scholastic materials												
high cost of health care												
Legend												
		own production			market purchase			in-kind		gathering		

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 risk, due to less crop production.	
Main productive assets	
Poor	Better-off
Fewer goats Fewer pigs Fewer poultry (chicken and ducks) Occupants without land title. Hand tools (hoe, panga and axe) Bicycle	More goats More pigs More poultry (chicken and ducks) Occupants with land title. Agricultural machinery (Cattle dip etc) Motor vehicle
Main foods consumed and sources	
Poor	Better-off
Rice (MP) Maize (MP/OP) Beans (OP/MP) Fish (G/MP) Vegetables (OP/MP) Milk(IK/MP)	Rice (MP) Maize (OP/MP) Beans (OP/MP) Meat (OP/MP) Fish (G/MP) Milk (IK/MP) Vegetables (OP/MP) Fruits (OP/MP)
Main income sources	
Poor	Better-off
Wages from farm employment Vending of own vegetable harvest Vending of household items.	Wages from unskilled and non-farm employment Sale of construction materials such as sand and stones. Vending of household items.
Main markets	
The main market, which regulates the local economy is the city of Luanda	
Main hazards and approximate frequency	
The main hazard in this zone is drought conditions and livestock diseases such as dermatitis, anthrax, scabies and trypanosomiasis, which normally affect cattle and goats within the commercial ranches. It occurs throughout the year.	
Main coping strategies	
Diversification of income options. Labor migration in peri-urban and urban areas	Procurement of veterinary services and 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 around 0.5 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.

SEASONAL CALENDAR, ZONE 13

	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												
Livestock												
lambing/kidding/calving												
milking												
vaccination												
Other												
Hazards												
livestock diseases												
Legend	land preparation				sowing			weeding		harvest		

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.

CONSUMPTION CALENDAR FOR POOR HOUSEHOLDS, ZONE 13

	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 materials												
high cost of health care												
Legend		own production		market purchase				in-kind		gathering		

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: COASTAL FISHING, HORTICULTURE 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
Biopio	Lobito	Benguela
Cabinda	Cabinda	Cabinda
Cacongong	Cacongong	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
Kapolo	Porto Amboim	Kuanza Sul
Kelo	Soyo	Zaire
Kicombo	Sumbe	Kuanza Sul
Kinzau	Tomboco	Zaire
Lobito	Lobito	Benguela
Lucira	Namibe	Namibe
Malembo	Cabinda	Cabinda
Massabi	Cacongong	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: TRANSITIONAL BANANA AND PINEAPPLE FARMING		
Communes	Municipality	Province
Assango	Amboim	Kuanza Sul
Atome	Cassongue	Kuanza Sul
Babaera	Ganda	Benguela
Balombo	Balombo	Benguela
Bocoio	Bocoio	Benguela
Botera	Seles	Kuanza Sul

Caimbambo	Caimbambo	Benguela
Canhamela	Caimbambo	Benguela
Capupa	Cubal	Benguela
Casseque	Ganda	Benguela
Catengue	Caimbambo	Benguela
Cayave	Caimbambo	Benguela
Chicama	Ganda	Benguela
Chila	Bocoio	Benguela
Chindumbo	Balombo	Benguela
Chingongo	Balombo	Benguela
Conda	Conda	Kuanza Sul
Conde	Ebo	Kuanza Sul
Cubal	Cubal	Benguela
Cubal do Lumbo	Bocoio	Benguela
Cunjo	Conda	Kuanza Sul
Ebanga	Ganda	Benguela
Ebo	Ebo	Kuanza Sul
Gabela	Amboim	Kuanza Sul
Ganda	Ganda	Benguela
Iambala	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: SOUTHERN LIVESTOCK, MILLET AND SORGHUM ZONE		
Communes	Municipality	Province
Baia dos Tigres	Tombua	Namibe
Bibala	Bibala	Namibe
Bolonguera	Chongoroi	Benguela
Bondo	Cuanger	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

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
Mucope	Ombandja	Cunene
Mucusso	Dirico	Kuando Kubango
Munhino	Bibala	Namibe
Mupa	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 HUMID LIVESTOCK AND MAIZE		
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 EASTERN CASSAVA AND SAVANNAH 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: CENTRAL HIGHLANDS POTATO 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: CENTRAL HIGHLANDS MAIZE AND BEANS		
Communes	Municipality	Province
Alto Hama	Londumbali	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
Tchinhamo	Katchiungo	Huambo
Tchinjenje	Tchinjenje	Huambo
Tchiumbu	Katchiungo	Huambo
Trumba	Kuito	Bie
Uaba	Caconda	Huila
Ukuma	Ukuma	Huambo
Ussoke	Londumbali	Huambo
Vicungo	Kuvango	Huila
Waku Kungo	Waku Kungo	Kuanza Sul
LIVELIHOODS ZONE 8: TRANSITIONAL MAIZE, CASSAVA AND BEANS FARMING		
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 FOREST, CASSAVA, BANANA AND COFFEE		
Communes	Municipality	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	Nambuanguongo	Bengo
Caiongo	Cangola	Uige
Camabatela	Camabatela	Kuanza Norte
Cambambe	Quitexe	Uige

Camboso	Nova Esperana	Uige
Canacassala	Nambuanguongo	Bengo
Cangola	Cangola	Uige
Cuango	Quimbele	Uige
Cuilo Pombo	Sanza Pombo	Uige
Damba	Damba	Uige
Dimuca	Negage	Uige
Dinge	Cacongo	Cabinda
Gombe	Nambuanguongo	Bengo
Icoca	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
Koxe	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	Nambuanguongo	Bengo
Necuto	Buco Zau	Cabinda
Negage	Negage	Uige
Nkama Ntambu	Damba	Uige
Nkuso	Damba	Uige
Noqui	Noqui	Zaire
Nova Caipemba	Ambuila	Uige

Nova Esperana	Nova Esperana	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	Nambuanguongo	Bengo
Quifuafua	Quitexe	Uige
Quimbele	Quimbele	Uige
Quimbianda	Nova Esperana	Uige
Quinzala	Mucaba	Uige
Quipedro	Ambuila	Uige
Quiquiemba	Bolongongo	Kuanza Norte
Quitende	Quitexe	Uige
Quitexe	Quitexe	Uige
Quixico	Nambuanguongo	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	Soyo	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	Nambuanguongo	Bengo
LIVELIHOODS ZONE 10: SAVANNAH FOREST AND MARKET ORIENTED CASSAVA		
Communes	Municipality	Province
Aldeia Nova	Banga	Kuanza Norte
Banga	Banga	Kuanza Norte
Bange Angola	Cahombo	Malanje
Caculo	Ndalatando	Kuanza Norte
Caculo Cabapa	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: SAVANNAH FOREST AND SUBSISTENCE CASSAVA		
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
Capaia	Lucapa	Lunda Norte
Cassai Sul	Muconda	Lunda Sul
Caungula	Caungula	Lunda Norte
Cazage	Dala	Lunda Sul
Chiluage	Muconda	Lunda Sul
Chitato II	Chitato	Lunda Norte
Cucumbi	Cacolo	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 CROSSBORDER TRADE		
Communes	Municipality	Province
Caianda	Alto Zambeze	Moxico
Calunda	Alto Zambeze	Moxico
Cameia	Cameia	Moxico
Cazombo	Alto Zambeze	Moxico
Kavungo	Alto Zambeze	Moxico
Lago Dilolo	Luacano	Moxico
Lovua	Alto Zambeze	Moxico
Luacano	Luacano	Moxico
Lumbala	Alto Zambeze	Moxico
Lumbala Kaquengue	Alto Zambeze	Moxico
Mucondo	Alto Zambeze	Moxico
LIVELIHOODS ZONE 13: COASTAL LIVESTOCK RANCHING		
Communes	Municipality	Province
Barra do Kuanza	Viana	Luanda
Bom Jesus	Icolo e Bengo	Bengo
Cabiri	Icolo e Bengo	Bengo
Cacuaco	Cacuaco	Luanda
Calomboloca	Icolo e Bengo	Bengo
Calumbo	Viana	Luanda

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.	Jão 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	Quando Cubango Province
16.	Antonio F. dos Santos	Ministry of Agriculture (MINAGRI)	
17.	Domingos Raimundo Ngonga	IDA	Quando 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	Quando 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 Caliegue		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/Washington
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

Malanje Regional Workshop				
No.	Names	Institution	Telephone	E-mail Address
1.	Ambrosio Joaquim João	GEPE Malange	946839210	ambrosiojoao@live.com.pt
2.	Ermelida Caliegue	GSA Luanda	921110567	ercaliengue@gmail.com
3.	Odete Rochete	GSA Luanda	936137097	odetebacalhau@hotmail.com
4.	Andrade dos santos	GSA Luanda	923306631	andraderodriguesantos@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 Quianelundo	Secretaria Geral (DIII)	924677661	nsibadomingos84@atlook.com
16.	Paulo Bungo	IDA Lunda Norte	923714661	paulobungo1@yahoo.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 Mize 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	