

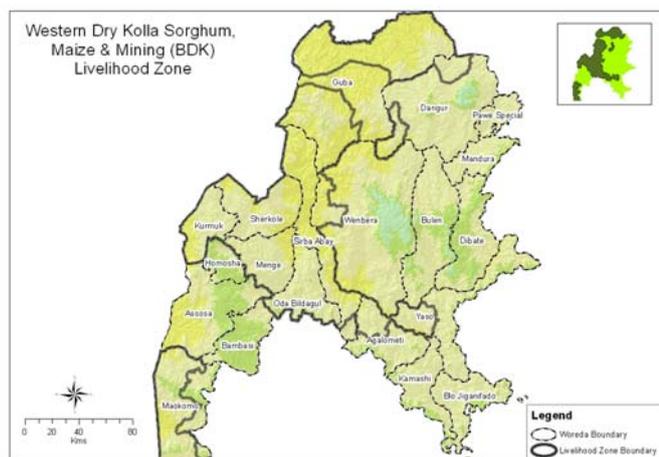
# Livelihood Profile Benishangul Gumuz Region, Ethiopia

Benishangul Gumuz Dry *Kolla* ( BDK) LZ

April 2009<sup>1</sup>

## Zone Description

The Benishangul Gumuz Dry Kolla (BDK) livelihood zone is located in the western part of the country bordering Sudan. The *woredas* included in this livelihood zone are Guba, Dangur and Wombera *woredas* in the Metekel zone, Yaso, Agalo and Sirba Abaye *woredas* in the Kemashi zone and Kurmuk, Sherkole, Oda Bildigilu and Mao Kome Special *woredas* in the Assosa zone. The main category of livelihood is crop and livestock production. The area is known for its gold mining, fisheries and wild food collection. Crop production is mainly dependant on hoe cultivation. Topography of the LZ is characterized mainly by undulating, hills and plains and riverine. The agro ecology of the zone is dry *kolla* with



altitude ranges of 500 – 900 meters above sea level. Maximum temperatures of 38-43 °C are reached in March and minimums of 26- 30 °C are reached in August. The vegetation coverage consists of tall trees (acacia, oak and baobab) and grasses. The rainy season spans May to mid-October during which time the livelihood zone receives 700-1100 mm of rainfall. Major roads from Addis to Guba, Addis to Kurmuk and Gizen and minor roads from Assosa to Mao Kome, Assosa to Shrekole Guba and Mendi to Koncho (Sirba) cross the livelihood zone. Perennial rivers include the Boka and Abay. This area is particularly endowed with natural resources including marble, gold, sandstone, wild game (Dick-dick, wild pig, gazelle, guinea fowl, partridges), fish, wild plants, seeds and fruits and Gum Arabic. The zone is sparsely populated, with population density estimated at about 11 person/ km<sup>2</sup>.

The soil type is sandy loam and clay with moderate fertility. The production potential of the area is moderate. Despite this potential the zone produces a food deficit each year and households turn to wild food collection and market gardening to meet food requirements. Agriculture is rain fed and crops are grown in only one season. The main food crops grown are sorghum, maize and pulses. Sesame, ground nuts and sorghum are the crops that are sold. Fields are prepared by hand digging using hoes. The agricultural activities that require most labor are land preparation, weeding and harvesting. Better-off and middle households hire men and women from poorer households to do weeding and harvesting. The main crop pests and disease are boll worm, stalk borers, termites, monkey, apes and wild pigs and leaf blight & smut. Striga weeds are also a problem. Striga, termites and stalk borer affect sorghum and maize. Blight and smut affect sorghum. Wild animals ravage sorghum and maize. The households protect their crops by using traditional techniques, crop rotation and guarding against wild animals.

The main livestock reared are cattle, goats, donkeys and poultry. Animals free graze on grass, browse and crop residue. Children look after goats and calves while men tend to cattle. Cows are the only animals milked and the milk is consumed within the household. Cattle are sold at age three and goats are sold when they are about 3-4 months old. Goats are slaughtered during the festivals celebration. Milking cows are replaced from the through own herd. The main livestock diseases are Trypanosomiasis, CCPP and PPR. Trypanosomiasis affects mainly cattle with PPCC and PPR affects goats. Households use both curative treatments and vaccinations including Trapamidium and Novidium (for trypanosomiasis) and Oxytetracycline (for CCPP and PPR). These drugs and vaccinations are supplied by the regional Bureau of Agriculture and Rural Development (BOARD) for purchase.

Yecha, Mujua and Agangulesh (Baobab) are wild foods grown in the forest and typically consumed in the livelihood zone. The roots of Yecha and Mujua are eaten with Agangulesh is eaten for its seeds. Mujua is considered a famine

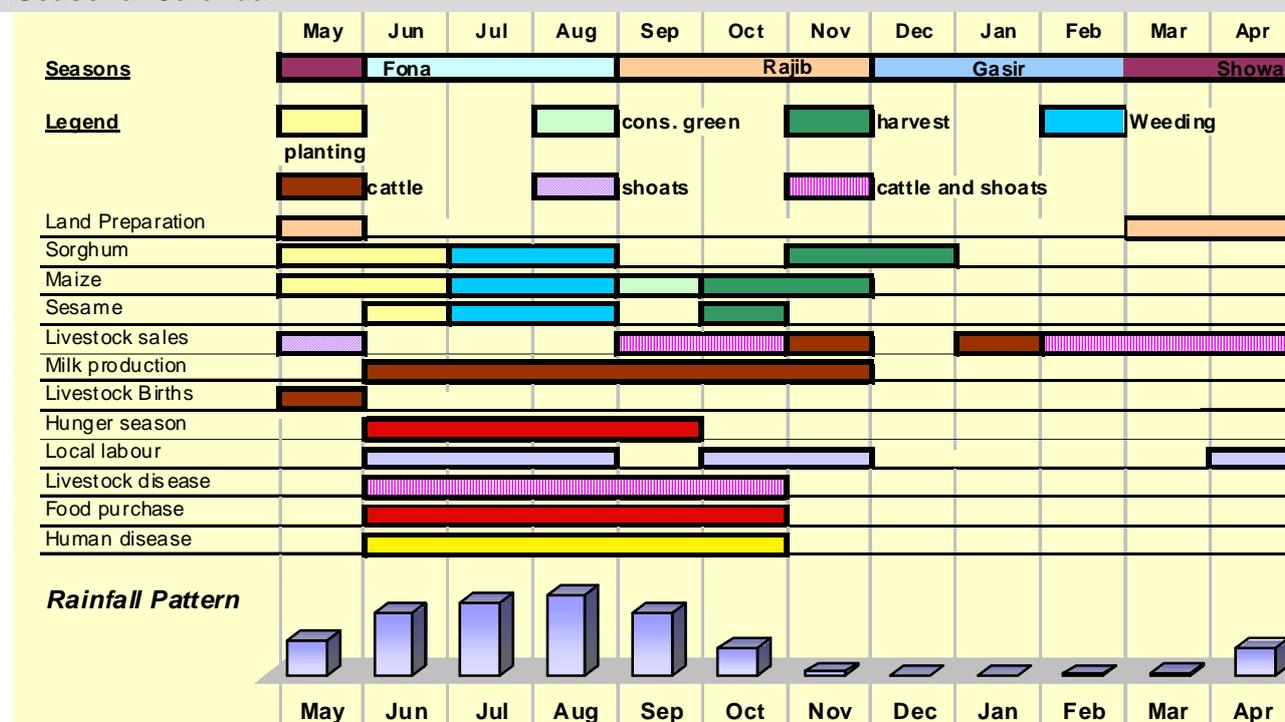
<sup>1</sup>Field work for the current profile was undertaken in April 2009. The information presented refers to Nov 2007-Oct. 2008 (EC Nov 2000 to Oct 2001), a normal/ good year by local standards. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five years (i.e. until 2014). The exchange rate January 2008 1USD = 9.43 ETB.

food. Yecha is sold locally and Agangulesh is sold and exported to Sudan. Other economic activities commonly practiced are fishing and gold mining which is done around river beds. Gold mining is particularly important and one of the main income sources in this zone.

## Markets

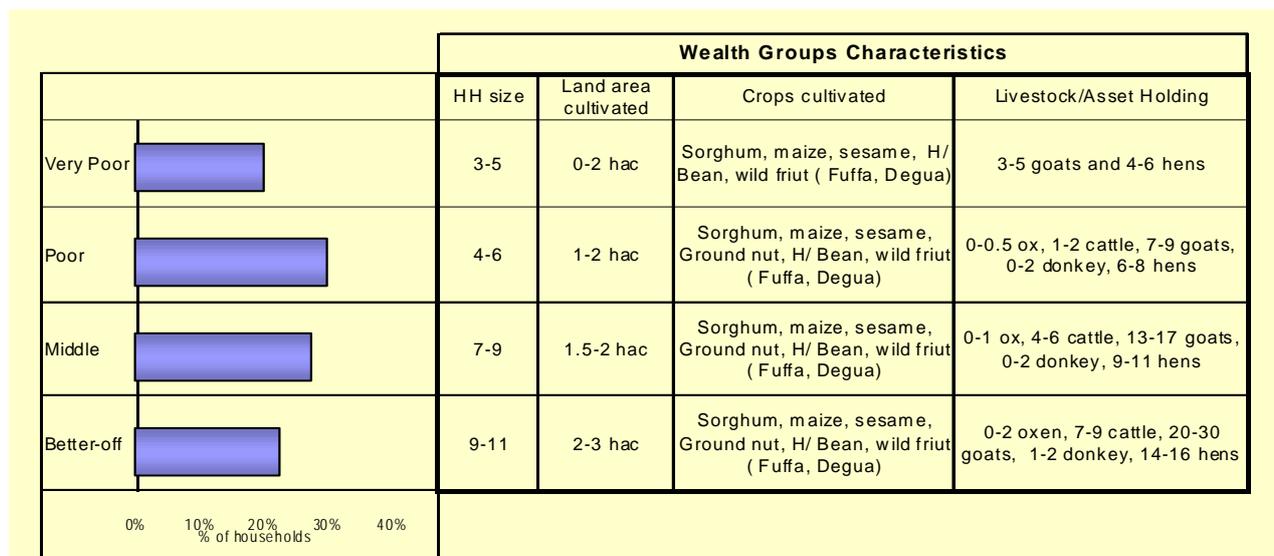
The market access considered poor because of the long distances to urban center coupled with a lack of set market places or market days. Despite these constraints, sesame, pulses and sorghum are sold out of the zone. The trade route for sesame is from local markets to *woreda* towns to Guba, koncho, Sherkole and Kurmuk. Sesame is also traded to Chagni, Mendi and finally Assosa as well as to Addis Ababa. The peak time for sesame trading is from October to February. The trade route for pulses is from local markets → *woreda* towns on to Guba, koncho, Sherkole and Kumruk. The peak time for pulse sales is from October to November. Yecha and Agangulish are the two wild foods sold. Yecha is sold from local markets to *woreda* town then to Guba, koncho, Sherkole and finally Kurmuk. Agangulish is sold from local markets to *woreda* towns then to Guba, koncho, Sherkole, Kumruk and then to Sudan. Sorghum is the only main staple foods purchased from the neighboring BCK livelihood zone. It is traded into *woreda* towns and to local markets as well as from neighboring Sudan from June to August. Goats, cattle and poultry are livestock types most traded. Livestock like crops are generally traded from local markets to *woreda* towns to Guba, koncho, Sherkole and Kurmuk. Goats and cattle are sometimes traded to Sudan. The exchange rate during the time under consideration 1 USD is equivalent to 9.43 Ethiopian Birr.

## Seasonal Calendar



There are four seasons: *Fona* from June-August; *Rajib* from September-November; *Gasir* from December-February; and *Showal* from March to May. The consumption year starts in November and ends in October. Agricultural activities begin in May with the clearing and preparation of fields for planting. Sesame is a short cycle crop grown from June to October. Sorghum and maize are long cycle crops grown from May to December. The planting and weeding period for sorghum and maize are the months of May to June and July to August respectively. The harvesting period for sorghum and maize is November-December. Cattle and goats sales peak in September to October and February to March during holidays and New Year celebrations. Cow milk is available from May to November. Food purchases are most common from June to October when stocks run low in advance of the coming harvest. This time also coincides with the hunger season and human and livestock diseases prevalence. Wild foods are collected in May and from September to April. Mining is done year round. The agricultural labor is available during June to August and October to November.

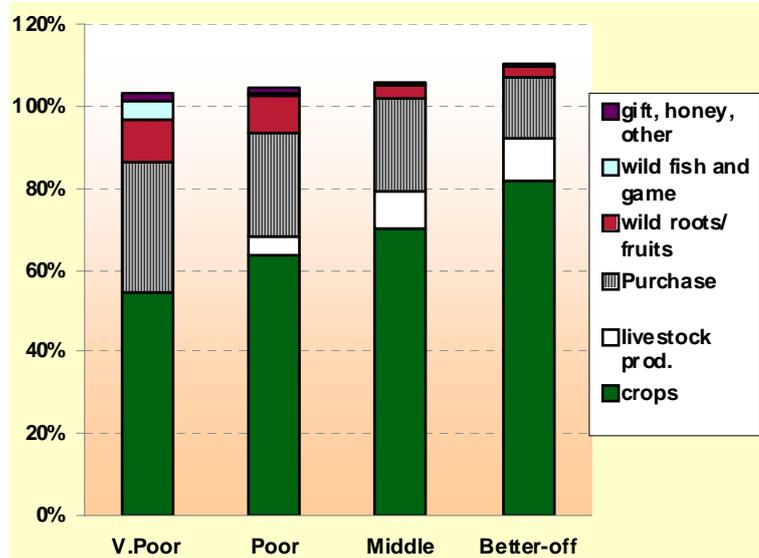
## Wealth Breakdown



Wealth is differentiated by livestock ownership as well as household size. All wealth groups cultivate sorghum, maize, sesame and haricot beans. All but the very poorest households also cultivate ground nuts. There is no experience of land rented in/out in this zone. All wealth groups collect wild food (fruits) called *Futta* and *Degue*. Oxen, cattle, goat, donkey and chicken ownership increase across wealth groups. All but the very poorest households may own oxen, cattle and donkeys. All households own goats and chickens. Household size increases with relative wealth meaning that middle and better-off households have more working family members. Better-off household size ranges from 9-11 member while the poorest households may have as few as 3 members.

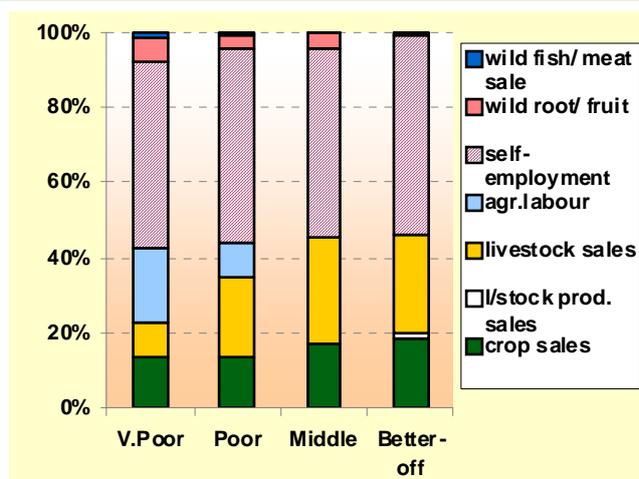
## Sources of Food – Normal (2007-2008)

The main source of food is from own crop production with all households meeting more than half of total food need from their own fields. Purchase, then wild food collection, livestock products and wild fish and game also contribute to household diet. The main crop produced for consumption is sorghum. This is complemented by some maize, haricot beans and sesame. The annual food need covered through purchase decreases across wealth groups and is found in the range of 20-35% for poorer households. The main staple purchased by all wealth groups is sorghum. Other non-staple purchases are sugar and oil. The poor and very poor cover 5-15% of their annual food requirement through wild roots/fruits collection. There is small contribution of annual food that comes from livestock products for all wealth groups except the very poor groups. Wild fish and game is contributes 2-6% annual food for the very poor households.



In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

## Sources of Cash – Normal (2007-2008)



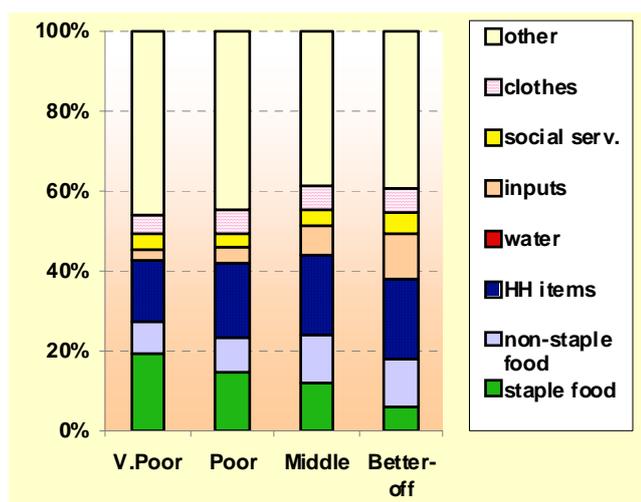
The most significant source of annual income for all wealth groups come from gold mining (self employment). After mining, livestock and crop sales are key sources of income for all households. Employment is important for poorer households. All but the very poorest households sell cattle; all households sell goats and chickens. All households sell sesame, and all but the very poor also sell ground nuts. Very poor and poor households depend on the better off and middle households for their income by working on their field. Annual income is derived from the sale of wild roots and fruits. The better-off sell butter; all households sell eggs.

The graph provides a breakdown of total cash income according to income source.

Annual income (ETB)	2500-3500	3700-4200	5400-6200	8200-9000
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## Expenditure Patterns Normal (2007-2008)

Expenditure on staple food (sorghum) decreases across the wealth groups, but all household depend on the purchase of grains. All wealth groups purchase non-staple foods, sugar, oil and pulses. The expenditure on inputs increase with the wealth. All household purchase seeds and all but the very poorest households pay for land preparation. Middle and better-off spend on the purchase of agricultural labor for weeding and harvesting. Only the better-off invest in animal restocking. Fertilizer is not commonly purchased in this livelihood zone. Expenditure on clothing for the family members increases across the wealth groups. All wealth groups paid for social services (health and education). Expenditure on 'Other' is the main expenditure category for all wealth groups.



The graph provides a breakdown of total cash expenditure according to category of expenditure.

## Hazards

Chronic hazards affecting the livelihood zone every year are livestock disease, crop pests and erratic rainfall. Crop pests include boll worm, stalk borers, termites as well as wild animals (monkeys, apes and wild pigs). Striga weed, termites and stalk borer affect sorghum and maize. Wild animals attack sorghum and maize. Livestock diseases include Trypanosomiasis, CCPP and PPR.

## Coping Strategies

All wealth groups in the BDK livelihood zone respond to hazards by increasing wild food collection, intensifying gold mining and fishing activities. Better-off households will increase animal sales while poorer households will see out additional local labor opportunities. All wealth groups will switch expenditures to buy only crucial items including staple foods.

### Indicators of imminent crises:

- Erratic rainfall and uneven distribution
- Poor physical condition of animals
- Increase sale of livestock at very low prices
- Increase in number of people engaged in labor

## Summary

Benishangul Gumuz Dry Kolla (BDK) livelihood zone is located in Metekel, Kemashi and Assosa administrative zones of Benishangul Gumuz region found in the west part of the country bordering with Sudan. The area is known for its gold mining, fisheries and wild food collection. The soil type is sandy loam and clay with moderate fertility. The production potential of the area is moderate. Crop production is mainly dependant on hoe cultivation. This lack of draft power coupled with pest infestations are factors contributing to the fact that each year the livelihood zone faced a food deficit. As there is no food aid in this zone, households turn to wild food collection and market gardening to meet food requirements. Agriculture is rain fed and crops are grown in only one season. The main food crops grown are sorghum, maize and pulses. Sesame, ground nuts and sorghum are the crops that are sold. Yecha, Mujua and Agangulesh (Baobab) are wild foods grown in the forest and typically consumed. The main livestock reared are cattle, goats, donkeys and poultry. Animals free graze on grass, browse and crop residue. The market access considered poor because of the long distances to urban center coupled with a lack of set market places or market days. Wealth is differentiated by livestock ownership as well as household size. The main source of food is from own crop production with all households meeting more than half of total food need from their own fields. Purchase, then wild food collection, livestock products and wild fish and game also contribute to household diet. The most significant source of annual income for all wealth groups come from gold mining. After mining, livestock and crop sales are key sources of income for all households. Employment is important for poorer households. Expenditure on 'Other' is the main expenditure category for all wealth groups. Chronic hazards affecting the livelihood zone every year are livestock disease, crop pests and erratic rainfall. Households respond to hazards by increasing wild food collection, intensifying gold mining and fishing activities. Better-off households will increase animal sales while poorer households will see out additional local labor opportunities.