

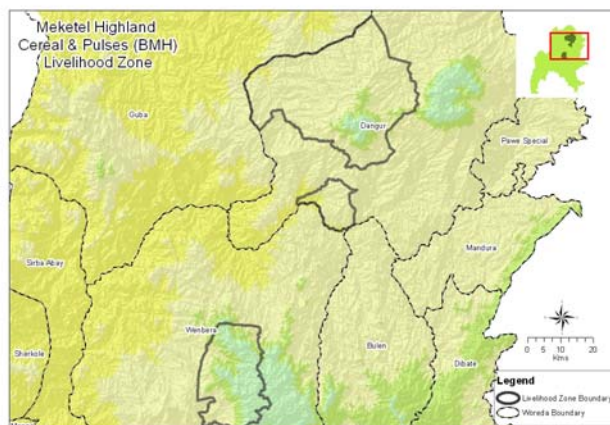
Livelihood Profile Benishangul-Gumuz Region, Ethiopia

Benishangul Metekel Highland Cereals (BMH) LZ

April 2009¹

Zone Description

Benishangul Metekel Highland Cereal (BMH) livelihoods zone in western Ethiopia crosses Wembera and Dangur *woredas* in the Metekel administrative zone. The main economic activities are crop and livestock production. The agro ecology is highland or with mountainous and hilly topography. Temperature range between minimums of 15-20°C (May to October) and maximums of 20-25°C (November to April). The area is densely populated. The vegetation is a mix of bush scrub with indigenous plants (*Hygenia abyssinica*) and eucalyptus and juniper plantations. Some of the mountains in the zone are Dangur, Belaya and Gesengessa. The main towns within the zone are Debrezeit and Sankura. Mambuck, Gublack and



Baruda towns border the zone and are important for trade and marketing. The main road runs from Chagni (in Awi zone in Amhara) through Gilgel Belese to Sudan runs along the boarder of the livelihood zone. The area receives on average 1200-1500mm of rainfall per year. Agriculture is rain fed and the main rainy season lasts from May to mid-October. This zone is a surplus producing area known for teff and wheat production characterized by moderately fertile red soils. Crops are grown in one season, the *meher*. Teff, wheat and barley are grown for both home consumption and sale. Maize is grown for home consumption alone. Eucalyptus trees are the major cash crop along with Niger seed (*nug*) and sesame. Fields are prepared with oxen plows and by hand digging. Weeding and harvesting demand are the most labor demanding agricultural activities. Better-off households hire labor (men and women from poorer households in the livelihood zone) and pay in cash for weeding and harvesting. The main crops pests and diseases are armyworm and rust. Armyworm affects sorghum and maize while rust targets wheat and barley. Pesticides (Malathion 50%E.C. and Sevin 85%WP) used to treat armyworm are supplied for purchase by the regional Bureau of Agriculture and Rural Development (BOARD). Households use inorganic fertilizer (Urea and Dap) which are available for purchase in the market and from BOARD.

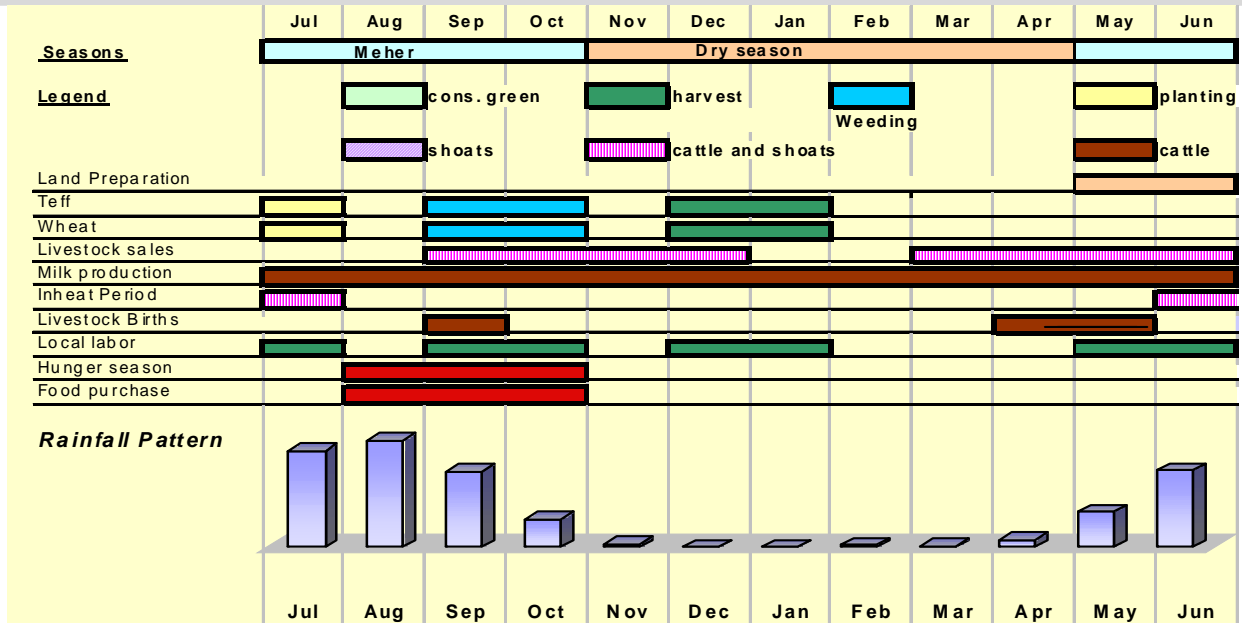
Livestock reared in the zone include cattle, sheep, goats, donkeys and chickens. Livestock freely graze on grasses, browse and crop residue. Animals drink from seasonal pools, springs and minor rivers during wet season and springs and deep wells during the dry season. Cow milk is used as a source of food. Cattle are sold at age three or four and shoats are sold once they reach 1-2 years. Butter, honey and eggs are the livestock product sold. Oxen and cows are replaced from within the herd and through purchase. Household will slaughter shoats at festivals and during holidays in September, January and April. Normally women look after milking cows, while men and children look after other livestock. The main diseases affecting livestock are Pasteurellosis, blackleg, CBPP and CCPP. Pasteurellosis affects cattle and donkeys, blackleg affects cattle, shoats and donkeys and CBPP and CCPP affects cattle and shoats. The main treatments available Pasteurellosis, black leg and CBPP and CCPP are oxytetracycline and Dimazyne. Livestock drugs are make available for purchase from BOARD.

¹Field work for the current profile was undertaken in March 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.

Markets

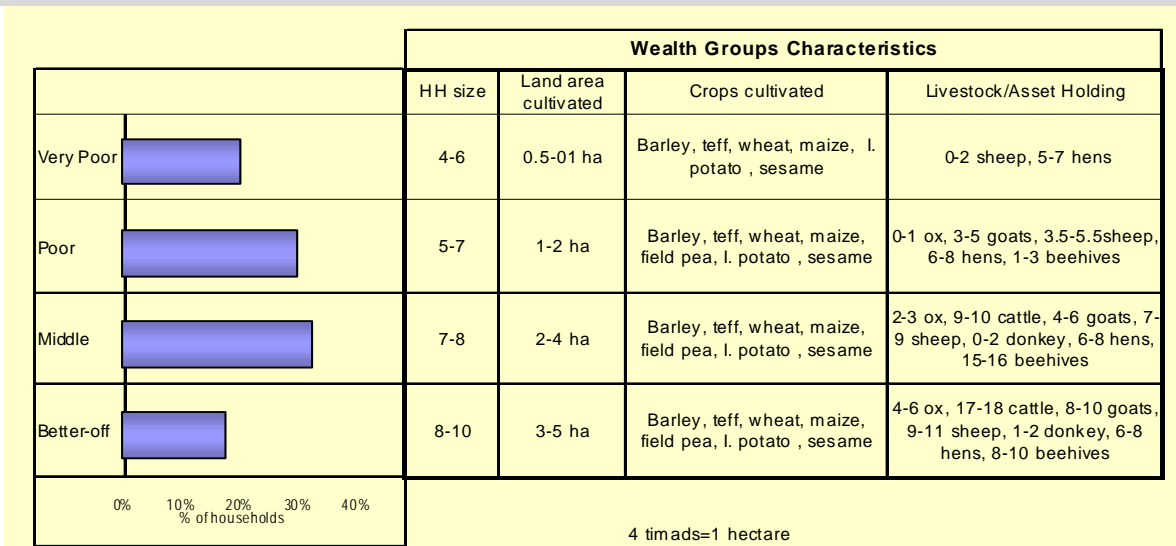
The market access is considered poor due to road conditions and the distance of PAs from large urban centers. Teff, wheat and sorghum are the food crops out of the livelihood zone. The trade route begins with local markets then crop are traded to Gublack→Mambuck and Debrezeit→Sankora from January to March. Cattle, goats and sheep are livestock sold as well and follow the same trade route as crops. The peak selling time for livestock is from March to June for cattle and April, September and January for shoats. Teff and sorghum are the main staple grains bought in the livelihood zone. These grains are mainly purchased during the hunger period from August to October in nearby markets of Gublack, Mambuck, Debrezeit and Sankora.

Seasonal Calendar



There are two main seasons: the *Meher*, the rainy season from May to October and the dry season which from November to April. The consumption period begins in the month of November and end in October. Wheat, Barley, Tef, Sorghum and Maize are grown as long cycle crops from May up to December. The planting, weeding and harvesting period for teff and wheat is the months of July, September to October and December to January respectively. Cattle and shoats sale runs from September to December and March to June. June to July is the in-heat periods and birth takes place in September and April to May while milk production received throughout the year. Local labor (weeding and harvesting) is available from May to July, September to October and December to January. August to October is the hunger season when stocks run low and households purchase food. Haricot beans are intercropped with maize. Other crops are grown separately in single stands.

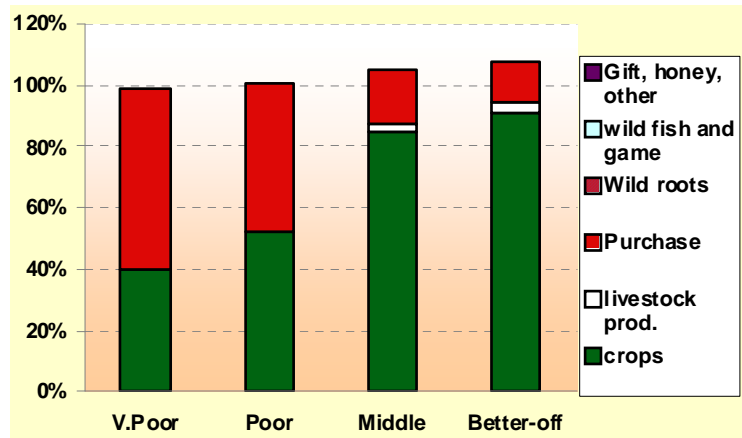
Wealth Breakdown



Land area cultivated and livestock holdings are major source of wealth difference. The land holding cultivated by better-off and middle households is about 3-5 hectares and 2-4 hectares respectively, which is more than double that of the poorer household. Livestock ownership increases across the wealth group. The better-off, middle and poor households owned 4-6, 2-3 and 0-1 oxen respectively. Whereas the better off and middle HHs possesses 17-18 and 9-10 cattle. Very poor households do not own oxen, cattle, goats or beehives. Poor households do not own cattle. All wealth groups cultivate barley, *teff*, wheat, maize, Irish Potato, sesame and *nug*. Household size increases across the wealth groups with the better-off having between 8-10 people in the households. On top of having more labor in the household, the better-off and middle households are also able to hire labor in their fields.

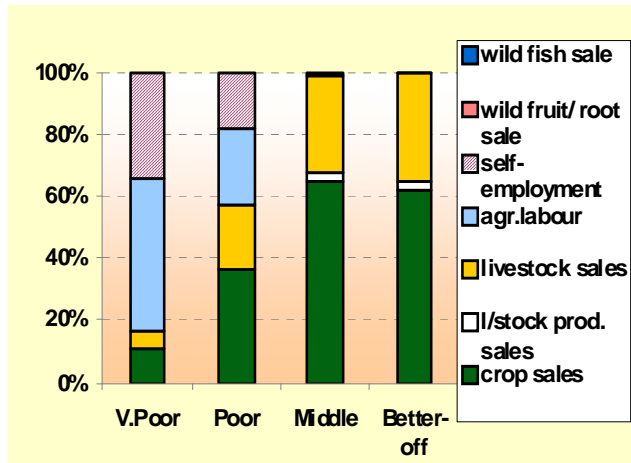
Sources of Food – Good (2007-2008)

The main sources of food are own crop production, purchase and livestock products. All wealth groups (except the very poor) produce more than half of their annual food requirement from their fields. Teff, wheat, maize, barley and Irish potatoes are crops cultivated and consumed by all wealth groups. Green maize too is consumed by all wealth groups. All households purchase food, though the amount decreases as wealth increases. All wealth groups with the exception of the better-off purchase sorghum. Only poorer households purchase maize and wheat. Non-staple foods purchased by all households are pulses, sugar and oil. Middle and better-off households also purchase a small amount of meat. Livestock products account for 1-5% of food needs for better-off and middle households. This refers to the consumption of cow's milk and meat.



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 – Good (2007-2008)



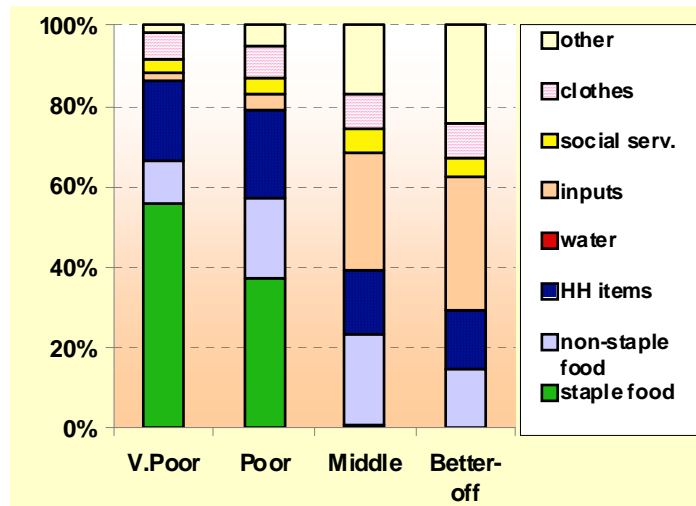
The graph provides a breakdown of total cash income according to income source.

Annual income (ETB)	3750-4750	5200-6200	12500-13500	20700-21700
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Crop sales, livestock and livestock product sales, labor (weeding, harvesting and construction), and self-employment (firewood collection) are the main sources of income. The most income comes from the sale of eucalyptus trees. Besides trees, income is generated from the sale of wheat, teff, barley *nug* and sesame. The very poor do not sell trees or teff. Middle and better-off households also earn from the sale of Irish potatoes. Livestock sales are predominately the sale of cattle for middle and better-off. Goats are sold by all but the very poor and all households sell sheep and chickens. The poor and very poor are particularly dependant on labor and self-employment (sale of firewood). Butter is by only middle and better-off households; while all wealth groups get some income from egg sales.

Expenditure Patterns Good (2007-2008)

All wealth groups purchase non-staple food, household items, inputs, social services and clothes. The very poor and poor households spend the greatest proportion of the income on the purchase of staple food (sorghum, teff, maize, wheat). Middle households purchase a very small amount of wheat and the better-off do not purchase any staple food at all. Middle and better-off spend the greatest proportion of their income on the purchase of inputs, including fertilizer, agricultural labor, livestock drugs and investment in animal restocking. The only input purchased by poorer households is fertilizer and animal drugs (poorer households). Expenditure on household items, social services like health care and education and clothing increases across the wealth group.



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

Hazards

Crop and livestock diseases, weeds and hailstorm are chronic hazards affecting the livelihood every year. Land slides affect the livelihood zone every three years. Army worm affects sorghum and maize while rust affects wheat and barley. Pasteurellosis, black leg and CBPP are the main disease affecting livestock. Pasteurellosis affects cattle and donkeys, black leg affects cattle, shoats and donkeys and CBPP and CCPA affects cattle and shoats.

Coping Strategies

To overcome these hazards, all wealth groups maximize their income by increasing the volume of livestock sales. The poorer households increase their sales of shoats, chickens and eggs and will increase the amount of firewood they collect for sale in nearby towns. Another coping strategy employed is switching expenditures from household items, clothes and other items to purchase additional staple foods.

Indicators of imminent Crises

- Unsustainable / Increased sales of livestock
- Heavy rain
- Weed infestations
- Stocks run out
- Increase in the number of people engaged in self-employment

Summary

A densely populated highland, food surplus livelihood zone is dependant on crop production and livestock production (cattle, sheep and goats). It has two seasons, the main rainy season from May to mid October with an annual rainfall of 1200-1500mm. The BMH livelihood zone is characterized by red soil and in terms of production it is moderately fertile. The main crops grown for consumption and sale are teff, wheat and barley. Eucalyptus, *nug* and sesame are the main cash crops. Maize is grown for home consumption only. The market access is considered poor due to road conditions and the distance of PAs from large urban centers. Land area cultivated and livestock holdings are major source of wealth difference. The main sources of food are own crop production, purchase and livestock products. All wealth groups (except the very poor) produce more than half of their annual food requirement from their fields. Teff, wheat, maize, barley and Irish potatoes are crops cultivated and consumed by all wealth groups. Crop sales, livestock and livestock product sales, labor (weeding, harvesting and construction), and self-employment are the main sources of income. The most income comes from the sale of eucalyptus trees. The poor and very poor are particularly dependant on labor and self-employment (sale of firewood). Very poor and poor households spend the greatest proportion of the income on the purchase of staple food, while the middle and better-off spend the greatest proportion of their income on the purchase of inputs. Crop and livestock diseases, weeds and hailstorm are chronic hazards affecting the livelihood every year. Land slides affect the livelihood zone every three years. Coping strategies include increasing livestock sales, seeking additional labor opportunities and minimizing and switching expenditures.