

Office for the Coordination of Humanitarian Affairs (OCHA) Ethiopia

## SURPLUS PRODUCING EASTERN HIGHLAND PARTS OF EASTERN WELLEGA ZONE BADLY HIT BY CURRENT CRISIS

Assessment Mission: 30 August – 11 September 2003 By Dechassa Lemessa, Field Officer, UN OCHA Ethiopia

## 1 Introduction and background

East Wellega Zone of Oromiya Region is administratively divided in to 21 woredas hosting a total population of nearly 2 million. The area is agro-ecologically split into 11% highlands, 49% midland and 40% lowlands. The zone has one long rainy season extending from March to mid-October with annual rainfall ranging from 1000 - 2400mm.

Mixed agriculture (crop and livestock) is the main stay of the farming communities on which their livelihood is fully dependent. In fact, East Wellega zone is commonly known as one of the surplus producing areas. Small-scale farmers in the zone extensively use chemical fertilizers, improved seeds, herbicides and insecticides to maximize their crop



An introduced exotic weed, *Raphanus raphanistrum*, invades farmland, Saqala Kebele, Horro District of East Wellega Zone (Oromia) (Photo by Lemessa, UN OCHA Ethiopia, September 2003).

production. Major crops grown in the zone include cereals (barley, wheat, teff, maize and oat), pulses (field bean and peas), oil crops (niger seed, rapeseed and sesame), root crops (Irish potato and Oromo Dinch (Coleus edulis)) and vegetables (cabbage, onion and garlic). Coffee is grown only in some districts like Abe Dongoro (especially in an area called Laagee produces one of the best quality coffee), Guto Wayu, Sasiga, Diga and Sibu Sire of the zone. Niger seed and sesame are important cash crops grown in the high- and lowland areas of the zone respectively. Due to low prices and dwindling production of coffee coupled with lack of alternative income sources, khat is increasingly grown as an alternative

cash crop in the midlands. In fact, the expansion of khat is also partly coupled with the national resettlement programme, as people from khat-cultivating areas such as Hararghe are transporting and transplanting seedlings to their resettlement areas.

East Wellega zone is also acknowledged for its livestock breed known as Horro-breed<sup>1</sup> (derives its name from the sub-province of the former Horro Guduru) that has spread widely through Wellega, Illubabor and Keffa and on small scale to Shewa Zones of the region (Bako Agricultural Research Centre, 2003). The agricultural potential of the zone is, however, declining due to rapid land degradation (deforestation, soil erosion, decline in soil fertility), population pressure, land shortage and fragmentation, unreliable climatic conditions, spread of introduced exotic weeds such as *Raphanus raphanistrum* (*'gommane'* in Oromiffa), *Parthenium hysterophorus* (*'faramsisaa'* in Oromiffa) and striga, a parasitic weed, severely competing with crops and highly reducing crop harvest. Furthermore, trypanosomiasis, a livestock disease transmitted by tsetse flies, in the lowlands, liver fluke and pasteurellosis, especially in areas bordering Finchawa Dam<sup>2</sup> (Abay Chomen, Guduru, Jimma Rare and Jimma Ganati Woredas), are major animal production impediments.

Another potential of the zone that is not yet tapped is tourism, mainly because of inaccessibility of the area and undiscovered features of the Finchawa Dam. In the middle of the dam there are a number of "moving lands" (called *'sarmalee'* in Oromiffa) and islands (called *'cittuu'* in Oromiffa) where a number of people live on traditional farming. *Sarmalee* is a moving land segment, covered with vegetation and around one hectare in size, floating on the water and moving around on the lake depending on the wind direction.



*"Sarmallee"*, floating islands on the Finchawa Lake, Jimma Ganati District, East Wellega Zone (Oromyia). (Photo by EFDA, 2003)

On some of these floating islands animals are grazing, shepherds are walking and grass harvesters are cutting grass for sale and domestic use. It is a unique phenomenon of the Finchawa Dam, created from pre-dam the formerly, swampy areas from where pieces of soil have been detached and are now floating on the lake. The islands are also of interest because harbour thev

- <sup>1</sup> The breed is characterized by uniform colour and body conformation; they are medium to large in size with small and finely shaped head, a straight profile and medium to large horns that are definitely larger than Ethiopian Zebu breeds. They have a fine skin and uniform brown colour, which is slightly lighter around the muzzle and on the flanks, abdominal floor, and perineum and in between the hind legs.
- <sup>2</sup> A dam (with an area of over 40km<sup>2</sup>) generating hydroelectric power for the country that farming communities surrounding the dam, however, are strongly condemning for its adverse effects and impacts on their livelihoods. Farmers reported, that it significantly competes for their grazing and farmlands and no compensation was and is made for this; that they have not benefited from the generated electric power-especially districts like Jimma Ganati situated at the edged of the dam (less than 5 km away) are without any electric light and service; risk of losing animals- drown in to the swampy edge of the dam while in search of grazing grasses mainly in dry season; that cost of transportation increased (using boat), to cross the dam- for every routine activities like travelling to and from schools and markets; increased risks of losing (drowned) their children going for schooling (every year at least one child is drown in to the dam while crossing it).

hundreds of people who have been living completely isolated during the last 33 years since the dam was constructed. The people on these islands are completely isolated and never benefited from any kind of support or help from neither government nor anybody else. Even local government structures have never reached these places because of lack of accessibility and facilities to cross to the islands due to the associated risks of crossing the water to the islands. The inhabitants of the islands use rafts to travel ashore. According to Jimma Ganati (bordering the dam) Woreda officials, it was not even known by government officials that, until recently, there are people living on these islands.

#### 1.1 Objective and methodology

This assessment mission was fielded from 30 August to 11 September 2003, by UN OCHA Ethiopia with the objective of assessing the over all food security situation of East Wellega zone. During this mission, however, two assessment teams, one from WFP and the second one from Federal and Regional DPPC, conducted assessments in the zone focusing on resettlement issues and verification of affected number of people (on request of the zone) in the zone. Thus, after having consulted and discussed with zonal officials and the team, this mission was slightly modified and focused on livestock condition due to critical feed and water shortage. The mission, therefore, gave more attention to the seriously affected



Picture 3: The assessor heading to one of the inaccessible and critically affected areas of Horro District, East Wellega Zone (Oromia). (Photo by Dechassa Lemessa, Field Officer, UN OCHA-Ethiopia, September 2003)

parts of the zone and visited eastern highland districts, namely: Ebantu, Jimma Ganati, Horro, Jarte Jardaga, Abay Chomen and Guduru.

During the assessment regional, zonal and district level DPP officials, NGOs and farmers were contacted and interviewed. Personal portraits and experience, field observations, review and analysis of information secondary were employed. The inaccessibility of some of the critically affected areas forced the assessor to enjoy horse back to reach the sites.

## 2 Mission findings

## 2.1 Food insecure population: An extended combination of a series of unfavourable factors

During the last three years, East Wellega Zone has been experiencing varieties of adverse conditions that undermined and threatened the over all food security of the zone. Firstly, in 2000 farmers were badly hit by the lowest record level of cereal and coffee prices. Secondly, the following year in 2001, farmers hesitated to use improved farm inputs due to very low grain prices that would not have allowed paying back credits for farm inputs. Furthermore, many farmers could not pay back credits anyway. Thus, they were forced to

sell productive assets, mainly livestock. 2001 therefore was a very unfortunate period to most farmers and the situation highly contributed to today's level of vulnerability and destitution. Thirdly, unfavourable climatic conditions with delayed on-set of rains by six weeks and early cessation by one month in 2002 aggravated farmers' livelihood situation. According to the Zonal Agriculture Desk, last year the total harvest was down by 41%. Consequently, 64,000 people (although zonal officials claim the figure to be much higher and hence an assessment team was already deployed to the zone for verification) from six woredas (Guto Wayu, Jimma Rare, Sibu Sire, Jimma Arjo, Leka Dulecha and Nunu Kumba) became food insecure and now receive relief food since March to end of October 2003.

Following the ongoing resettlement programme in the region, currently (until 20 August 2003), there are 37,879 people (out of 40,641 people who were initially resettled and later evacuated for various reasons) who have been moved from Hararghe and North Shewa Zones and resettled this year in six districts (Sasiga, Guto Wayu, Diga, Jimma Arjo, Sibu Sire and Gida Kiramu) of East Wellega Zone.

# 2.2 Delayed rains: forced late planting, resulted in critical shortage of animal feed and water supply

This year rains were delayed by 6-8 weeks (mid September 2002 to end of May/June 2003 no rain was received) in the zone and consequently natural grasses did not regenerate and this led to critical feed shortage; many springs dried up and water resources did not adequately replenish and hence, water shortage was the consequence. Other setbacks were inadequate and poor land preparation, overlapping of agricultural activities (planting of long cycle crops and land preparation of short cycle crops) very much delayed planting of crops. During this assessment mission most crops were at their early growth stage. Maize, for instance, was at knee-height (about 50 cm) stage instead of being at flowering stage in September. Therefore, and to enable all late planted crops to mature for a reasonable harvest, the rains should continue to the end of October. If in case like last year the rains cease earlier in mid-September, the harvest will be poor and the people could potentially face serious food shortage next year.

On the other hand, hailstorm incidence in pocket areas of Guduru and Ebantu Woredas damaged agricultural crops in August 2003. At the same time, an insect pest known as teff shoot fly infested teff in Abay Chomen and Jimma Ganati districts and damaged 178 and 960 hectares of teff, respectively.

Normally Irish potato, barley, 'samareta' - a short duration variety and 'bonee'<sup>3</sup> maize would be available for harvest in August, September and June/July, respectively. They are also important in supplementing the food economy and filling the food gap during these periods. Due to the delayed onset of the rains and moisture stress, however, complete failure of vegetable crops, mainly Irish potato and local cabbage in the highlands, and unsuccessful production of *bonee* maize was reported and observed.

According to the Zone Agriculture Desk, this year distribution and utilisation of commercial fertiliser has declined due to the delayed on-set of the rain, lack of oxen, lack

<sup>&</sup>lt;sup>3</sup> '*Bonee*' maize is a variety planted in December on swampy and wet lands and is harvested in June for green consumption. It is used as a transition food gap filler.

of adequate marketing facilities and lack of access to credit due to the unpaid debts from previous years.



### death rate and emaciated livestock

water supply in the zone caused emaciation and deaths of al shortage of oxen in the eastern highland woredas (former . The animals were even consuming unpalatable and s plastic bags damped recklessly everywhere. The change in tively affected physiological metabolism and rumen activity lication of intestinal digestion.

farmers have taken measures such as feeding tree branches ich contributes to further environmental degradation. At the by Finchawa Dam, were forced to move their animals from he dam in March and April for grazing. Unfortunately, this l parasites, mainly liver fluke. Some animals also drowned imals were lost due to lack of feed and to pasteurellosis

(bacterial infectious disease), which is stress induced. Milk, butter and other animal products became scarce in the affected areas. Oxen died or became too weak for ploughing. Therefore, many farmers left their land fallow. In June when the rains started, many animals perished in the heavy rains and the subsequent temperature decrease.

Following the on-set of rains in June pasture replenished. But apparently grazing cattle suffered from stomach bloating due to high rate of fermentation that generates gas (nitrogen). Farmers in the investigated areas termed this cattle stomach bloating as "bloating storm". It seems that nearly every farmer who owns cattle in the area experienced this problem. Farmers took local measures to "cure" the animals. They combine local alcohol (areke), a mixture of soap and water solution, edible oil, diesel fuel and some other unknown ingredients and administer this mixture orally to the animal. When this is unsuccessful the belly of the animal is pierced with a knife to let out the pressured air from the belly. The assessor personally witnessed piercing of animals and saw many pierced cattle. In fact stomach bloating is not a new phenomenon to the area. But what makes the current bloating problem different is the timing, type of pasture creating the problem and its dimension. Normally bloating is a problem only due to specific kind of vegetation, specifically leguminous plants like clover (Trifolium sp) and *Plantago lanceolata*, which are said to be high in their nitrogen content, especially at their early growth stage. So farmers from their experience keep their animals away from these types of pasture at regrowth stage early in the rainy season until this type of plants matured, usually in mid-September. At the mature stage the plant contains less nitrogen. The current bloating problem started in June and continued up to end of September and may even continue further according to farmers. The current problem has been aggravated due to prolonged feed shortage that caused a change in feeding and eating habits and also in quantities consumed. Livestock started to consume normally unpalatable feed and even ate plastic bags and other garbage recklessly dumped. This feed habit change might have disturbed and complicated the intestinal digestion process of the animals and further subjected them to associated problems including this current bloating problem. Further indepth studies of this phenomenon by veterinarians and other animal health experts might be important to find out about the proper treatment and other measures to be introduced to prevent or minimise this unpleasant stomach bloating.

Apparently 24,217 animals died since May until the end of August 2003. And still today many cattle are weak and emaciated and more cattle deaths are anticipated in the coming weeks. As a matter of fact the UN OCHA mission only observed very few cattle that look physically healthy and strong but found numerous carcasses in the fields and along roads.

Due to the heavy losses of draft oxen, EFDA (Education for Development Association), a local NGO funded by the Swiss Government, started to train farmers in using horses for traction in two woredas (Horro and Jimma Ganati). Many farmers have, for the first time, started to use horses as track animals for ploughing and hence, more fallowing of useful farmland could be prevented. Farmers also lack experience on how to properly store feed for animals to be used during dry periods. In all the visited areas a portion of land that usually is under crop is left fallow this season. This could reduce the annual crop harvest. For instance, in Horro district 924.5 hectares of farmland was left uncultivated due to lack of traction animals. Local officials at all levels and the farming communities themselves have confirmed this fact.

<u>Cattle carcass</u> in Horro District, East Wellega Zone (Photo by Lemessa, UN OCHA <u>Ethiopia</u>, September 2003)

> study in August on the deaths. requested

> Desk, was Limmu, Amuru



Horses replacing oxen in ploughing after mass death of cattle in Horro District of East Wellega Zone (Photo by\_Lemessa, UN OCHA\_Ethiopia, September 2003)

Bedelle The Regional Veterinary Laboratory conducted а June and the causes of massive cattle The study, by the Zonal Agriculture conducted in Jarte Jardaga, Nunu and

Kumba Woredas. The reason for the deaths was critical feed shortage caused by a prolonged dry

spell and pasteurellosis- induced due to stress.

Woreda	Number of dead animals (cattle, shoat and equine)	
Jarte Jardaga	2,050	
Horro	8,792	
Jimma Ganati	2,644	
Abay Choman	2 731	

Table: Table 1: Number of	<sup>•</sup> dead animals in East <sup>v</sup>	Wellega Zone (from	May to August 2003)
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Guduru	8,000
TOTAL	24,217

Source: Zone DPP and Agriculture and respective district level Agriculture Desks reports, August/September 2003.

This animal death crises in East Wellega Zone did not receive yet adequate attention, neither from the zonal nor from the federal level. No reporting documented or attracted yet attention to the problem. Therefore, no significant countermeasures have been initiated until now to face and mitigate this crisis. On the other hand East Wellega Zone did neither receive adequate agricultural supervisory nor service support for more than one year. Woreda offices are understaffed and lack capacity at all levels and in all areas. Therefore, information exchange and early warning does not work properly and hence no appropriate measures can be taken and implemented in time to prevent crisis dimensions.

#### 2.4 Human health: Malaria outbreak to claim lives

The Zonal Health Office in Nekemte reported increased malaria incidence in



Ox with bloated stomach, Gitilo Najo Kebele, Horro District, East Wellega Zone (Photo by Lemessa, UN OCHAEthiopia, September 2003).



Emaciated lactating cows suffering from lack of feed and diseases, Gitilo Najo Kebele, Horro District, East Wellega Zone (Photo by Lemessa, UN OCHA Ethiopia, September 2003)

lowland parts of the zone. According to the office, the disease broke out in 13 out of 21 woredas. Nunu Kumba, Guduru, Abay Chomen, Leka Dulecha, Abe Dongoro, Gida Kiramu, Wama Boneya, Gudaya Bila and Guto Wayu Woredas are among the worst hit. The Zonal Health Office sprayed the malaria prone woredas and over 15,000 people have been treated with anti-malaria drugs since mid-

August to the first week of September. Laboratory results indicate that 54% of the blood samples taken were found to be positive. Reportedly, over 1,500 cases could result in death. Other than malaria no other significant outbreak of human disease was reported.

#### 3 Conclusions and recommendations

Generally, the zone does not foresee a promising *meher* harvest and even anticipates the forthcoming harvest to be lower than last year. All the visited agricultural desks at zonal and woreda level are unanimous that the harvest will be bad due to cumulative effects of all the issues cited in this report, i.e. unfavourable climatic conditions in the last three consecutive years, the effects of unacceptably low cereal prices in 2000 and 2001, followed by diminished use of farm inputs, loss of traction animals and hence poor land

preparation and reduction of cultivated farmland (fallowed). Other uncertainties like early cessation of *meher* rains, the common hailstorm incidences, usually in October, and crop pests could further jeopardize this season's *meher* harvest. The numerous animal deaths have not received adequate attention even at regional, zonal and woreda levels, largely due to lack of information on the issue at all levels. Thus taking the zone as one of the sensitive areas and giving it better attention and making regular monitoring and close follow up of the food security situation of the zone is crucial.

Poor governmental extension services and poor livestock management and care practices and improper utilisation of crop residues worsened the severity of feed shortage and increased death of animals. Provision of proper agricultural extension services (feed improvement and conservation, housing, minimizing size of livestock/efficiency improvement) is essential to avoid the same kind of crisis in the future. Farmers should allocate land for pasture and grazing that commensurate the size of their household livestock size and adapt the skill of conserving hay for their animals. Herd sizes should also be reduced emphasising more on quality than quantity. Thus, more and bettercoordinated and -planned agricultural extension services need to be supplied. Farmers feel and express that more active support should come from the various development partners active in the area.

An important lesson learned for farmers who lost substantial numbers of livestock during the current crisis, is that they realised the importance of keeping their herds at a manageable size in order to lose less animals and money in future and similar such crisis. This was a lesson farmers drew from observing households with fewer animals who managed to better house, feed and care for their animals and hence reported fewer deaths.

The EFDA initiative to train farmers to use horses as track animals and substitute oxen should be encouraged and replicated. Addressing and improving the problem of accessibility in the remotest parts of the zone is imperative as poor accessibility and lack of experience in early warning at woreda level created an information gap and constrained attention and action at higher levels.

#### Annex

#### Abbreviations

СМ	Centimetre
DPPC	Disaster Prevention and Preparedness Commission (Federal
	Government level)
DPPB	Disaster Prevention and Preparedness Bureau (Regional level)
DPPD	Disaster Prevention and Preparedness Department (Zonal level)
EFDA	Education for Development Association
ML	Millilitre
NGO	Non-Governmental-Organisation
UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
WFP	World Food Programme

#### Glossary

dega	Expression for one of the altitudinal agroecological belts in Ethiopia. In Tigray between
	2500  to > 3400  m a.s.l.
kebele	Smallest administrative unit in Ethiopia
kolla	Expression for one of the altitudinal agroecological belts in Ethiopia. In Tigray between
	~1400 to ~1800 m a.s.l.
tabia	is the Tigrigna language name for 'kebele' that is the smallest administrative unit of the
	Ethiopian Federal Government.
woreda	Local administrative unit
weyna dega	Expression for one of the altitudinal agroecological belts in Ethiopia. In Tigray between
	~1800 to ~2400 m a.s.l.

#### Glossary of important meteorological and seasonal terms used in Ethiopia

#### Ethiopia's Keremt or Meher Rains Defined

Since Ethiopia and Eritrea are in the tropics, physical conditions and variations in altitude have resulted in a great diversity of climate, soil, and vegetation. Rainfall is seasonal, varying in amount, space, and time. There is a long and heavy summer rain, normally called the big rain or *Keremt*, which falls from June-September in most parts of the country. In some western and north-western parts, the *Keremt* rain starts earlier in April and extends up to October/November. It is followed by the *Baga* hot, dry period from October through February (see below for definition).

#### Ethiopia's Belg Rains Defined

In spring, a strong cyclonic centre develops over Ethiopia and Sudan. Winds from the Gulf of Aden and the Indian Ocean highs are drawn towards this centre and blow across central and southern Ethiopia. These moist, easterly and south-easterly winds produce rain, known as the *Belg* short season rains in most crop growing areas of the east central part of the north-western highlands and it is also producing the main (Gu) rains in south-eastern Ethiopia. This rain extends from February to May.

#### Ethiopia's Baga Season Defined

The *Keremt* rains or the *Meher* season (see above for definition) is followed by the predominantly hot and dry *Baga* season from October through January in the highland cropping areas.

### Ethiopia's Somali Region's Gu' Rainy Season Defined

Rainfall in southern Somalia is bimodal, that is, there are two rainy seasons. Rainfall from March through early June is called the Gu rains. Sometimes these are also referred to as the "long rains."

#### Ethiopia's Somali Region Deyr Season Defined

Rainfall in southern Somalia is bimodal, that is, there are two rainy seasons. Rainfall from late September through to early December is called the *Deyr* rains. Sometimes these are also called the "short rains". A fair amount of the *Deyr* crop is recessional or irrigated.

#### Ethiopia's Somali Region Hagaa Season Defined

The time between late June and early September, which is dry and windy with clouds in the sky but rarely with rain. In southern Somalia light coastal showers may fall after the gu' and before the *deyr* from July through October.

#### Ethiopia's Somali Region Jilal Season Defined

*Jilal* is the hottest and driest season in the Somali Region between late December and early March.

## Literature list of referred papers

- Dechassa Lemessa (1999). Field Assessment Report: Prosperity fades: Jimma and Illubabor Zones of Oromia Region. UN Emergencies Unit for Ethiopia (EUE), October 1999, Addis Ababa
- Dechassa Lemessa (2000). Field Assessment Report: Jimma Zone of Oromia Region. UN Emergencies Unit for Ethiopia (EUE), August 2000, Addis Ababa
- Dechassa Lemessa (2001). Field Assessment Report: Maize price crisis badly hits farmers in Western Oromia, Ethiopia. UN Emergencies Unit for Ethiopia (EUE), June 2001, Addis Ababa
- Dechassa Lemessa (2002). Field Assessment Report: Expectation for Western Oromia agriculture zones to produce surplus cereals highly unlikely. UN OCHA- Emergencies Unit for Ethiopia (EUE), September 2002, Addis Ababa
- Bako Agricultural Research Centre (2003). Bako Agricultural Research Centre Bako Agricultural Research Centre, Animal Production Division. Horro Cattle Breed Characterization and Evaluation. Leaflet No. 1.February 2003

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