



Office for the Coordination of Humanitarian Affairs (OCHA)
Emergencies Unit for Ethiopia (EUE)

Drought prone areas in North-East totally dependent on coming rains

(Afar Region, East and South Tigray zones, North Wello zone)

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1 Introduction and background

The UN OCHA-EUE-mission assessed the humanitarian situation in Afar Region and the adjacent lowlands of East and South Tigray and North Wello and Oromiya zone of Amhara Region. Since May 2002, Afar and its neighbors have been confronted with a drought emergency and governmental bodies and national and international agencies provide relief and rehabilitation support. The assessment focused on agro-pastoral economic conditions, human and animal health, water issues and food aid targeting.

1.1 Pastoralists and Farmers without reserves, future rains only hope

In all areas visited, the situation remains fragile. Long-standing structural problems left farmers and pastoralists without reserves making them totally dependent on the performance of the coming rainy season. In Afar, delays in *karma* rains might again result in stress causing large numbers of animals to die. Animal diseases also cause problems particularly in zone 2. In the neighbouring zones of Amhara and Tigray, crop maturation depends largely on the main *kiremt* rain pattern. In Southern and Eastern Tigray zones, the upcoming planting season is already compromised by the absence of the short rains, (*Azmara*), normally used for land preparation. In all three regions, further assessments and **close monitoring** of early warning, food security and nutrition is necessary so that potentially serious local or regional emergency situations can be avoided.

1.2 Food aid targeting problems

The recent involvement of more NGOs in Afar Region and North Wello Zone, Amhara Region, who took over responsibilities for food aid distributions at woreda level has created segregation of differing entitlements within the beneficiary community. De facto “first class” woredas, where full food rations including vegetable oil are provided, contrast with government supplied “second-class” woredas where grain distribution are garnered only with a limited amount of supplementary food (CSB).

Food aid targeting and coordination of NGO-activities remain major problems. The quantity of oil distributed can vary from one NGO to another. Differences in the definition of a full ration within the same woreda highlight food aid targeting weaknesses that need to be addressed. More attention should be given to ensure that distributions provide more vulnerable groups with full rations.

Apart from relief, support should be given to specific drought rehabilitation projects, particularly for woredas with no strong NGOs presence and/or specific rehabilitation programmes.

2 Major Findings

2.1 Afar Region

2.1.1 Rain and grazing land condition

The situation in Afar Region has improved in some areas. The region received some rain during the two small rainy seasons, *Daada* in December and *Sugum* in March and April. Most of the Afar Region received only erratic and/or insufficient precipitation to regenerate grass. At this stage the amount of rain is difficult to assess due to lack of data but surveys on the ground found only poor grass cover. Last year's drought conditions have accentuated pressure on limited grass resources due to greater animal concentrations. After rains, movement of livestock, especially cattle, usually leads to overgrazing.

The April rains fell mostly near the escarpment stretching from Wello to Tigray, an area that boasts some of the best grazing grounds, for example around Chiffra, Zone 1. In Zone 4, pastoralists and officials reported fair rains but a lack of sufficient pasture due to overgrazing. Despite the rains, tensions among pastoralists remain high in the areas north of Zone 4 between Kalouan and Yalo. Here, local pastoralists are blocking access to some reserved grazing areas (Piguet, 2003). In early June untimely showers and rainstorms were recorded in Chiffra and in Assaita and these unusual rains reinforce a widespread feeling that rain patterns are changing. At this stage, the immediate future of Afar pastoralists depends mostly on *Karma* rains expected in July.

2.1.2 Security

Security concerns restrict movements in Zone 2, 3 and 5. For several months, Northern Afar, (Zone 2 and Terru woreda in zone 4), has been a "grey zone" on the map and the area is practically out of control of the regional government. The extremely remote Terru woreda has almost no road access and no market. In the Southern part of Afar Region, conflicts between opposing Afar and Issa pastoralists west of Yangudi Rassa National Park and the Allideghi plain limit pastoralists' movements. "Incidents" occur quite frequently along the highway between Adaitou and Gadamaitou, (Zone 3), where security is provided by federal authorities. Aside from clashes between the two pastoralist groups, banditry and exchange of gunfire is frequent with customs and police trying to stop smuggling in the area. The western outreaches of the Afar Region along Zone 5 are insecure as well following violent clashes between the Afar and Wello Oromo. The DPPB in Assaita has difficulties distributing food aid along the border with Amhara Region.

2.1.3 Humanitarian issues

Despite an easing of the situation due to the recent rains, the focus should remain on the major issues of humanitarian concern: water, human and animal health and education.

Since late June and early July authorities have given greater attention to the settlement of people with additional irrigation schemes planned along all perennial rivers and a former state farm, south of Gewane, currently under rehabilitation to resume cotton production. At wereda level, officials focus on sustainable development programmes in the water, education and health sectors. Mobile service is widely viewed as essential to ensuring the sustainability of these sectoral programmes. The regional government is conducting an information and capacity building campaign for kebele and clan leaders in order to make them aware of governmental structures.

2.1.4 Water

Water remains the main issue particularly in Afdera and Eli Daar woreda. Water trucking is organized in several locations like Guyah and Guluble Af (Dubti north), two settlements along the road linking Sardo with Afdera. In the past, pastoralists who settled there, used to move with their caravans down to Dubti and to Terru and Dobi depression (Eli Daar woreda). With no permanent water source and a less than 50% chance of finding ground water, they are entirely dependent on water trucking. The Afar Water Bureau wants to initiate a new study on permanent water sources around those settlements. In zone 3, the Ethiopian authorities are providing water to some 15 Issa settlements along the highway from Adaitou up to south of Unxafoo.

Terru woreda representatives have reported water shortages. In some areas water can only be found only at depth of 12 meters and the local people find it difficult to dig through the hard surface. Another problem is posed by eroded gullies that are diverting seasonal waterways away from some of the best “*Kalu*” grazing areas. Elsewhere in Zone 4, distances to water points have increased during the dry season and people in some *mataro* (settlements) have to walk up to 6 hours to fetch water. In *Ayalo Mataro*, along the road to Aura, the women have to walk up to 6 hours daily to the Ragdain Well. The situation appears to be better in the Awash Valley, in Assaita, Dubti and Mille. The Ethiopian authorities are currently re-examining at the irrigation potential of this area although the level of the Awash River has considerably decreased.

2.1.5 Livestock situation and Animal Health

Livestock conditions seem to have improved following the recent rains and is greatly improved as compared with the drought year 2002. Milk production has resumed but in low quantities, an after effect of the drought. So far, no tests for milk-transmitted diseases have been made and the quality of milk has not been assessed to date.

A prolonged dry season resulting from late *karma* rains, combined with looming animal diseases may lead to a rapid deterioration of animal conditions. Already, livestock near Gewane (Zone 3) is in poor condition as pastoralist movements are restricted by the ongoing conflict between Afar and Issa. Animal diseases are also suspected to be rife. An increasing number of Issa pastoralists are settling along the highway between Adaitou, Unxafoo and Gewane and south of Buremodaitou up to Gadamaitou. Their herds are also under stress.

Livestock in Zone 2 and Terru woreda, (north of Zone 4), are highly affected by a skin disease called “agara” and other infections transmitted by ticks. The prevalent symptoms reported in livestock are paralysis and/or hepatitis. Goats are reported to have died in unusually large numbers. Afar regional authorities and veterinary services have been informed. A letter of concern has been sent to the Tigray Bureau of Agriculture with a request to work in collaboration with Zone 2.

2.1.5.1

This annual “agara” or mange epidemic is killing goats. The disease’s outbreak occurs every year at the start of the *karma* rains along with the seasonal grass regeneration period. Local treatments, like a mixture of engine oil or carbon together with local plants brings no relief. Ab Ala, Erebti and Megale woredas currently have large flocks that are affected and suffer high losses. Barahle, with fewer animals, is affected as well. An APDA, (Afar Pastoralist Development Association), assessment made in April 2003 estimates that 80% of the goats died in this Berhale (APDA, 2003). Further north, similar reports come from Koneba and Dallol woredas. During the OCHA-EUE assessment, Terru woreda representatives mentioned five northern kebeles¹, bordering Zone 2, that are also affected.

While goats are severely hit by “agara”, the disease affects camel and cattle as well. The skin disease is characterised by hair loss, or mange, itching and skin inflammation. It can be treated externally by acaricides. *Agara* is not a killer disease as such, but it causes production losses due to the fact that affected animals normally stop eating. It can also induce other diseases in animals weakened by drought. Zone 2 seems to be particularly affected by diseases transmitted by a new type of tick.

In 2002 many animals died in Ab Ala woreda where *agara* and *guera wodhe* have been endemic for 12 years. In a meeting with the woreda administrator elders reported that out of a flock of 1000 goats only a few dozen have survived the epidemic. Few animals remain in the hills and practically no goats were seen in Ab Ala town. This is an unusual and serious situation threatening the livelihood of Afar pastoralists.

Other diseases affecting cattle in Ab Ala are *Duduba* and *Gano* (*clostridia oedema*), characterised by head and stomach swelling and nostril effusion. *Guera Wodhe* is another killer disease currently affecting goats, causing trembling and collapse of herds. After slaughter, the colour of the meat of the diseased goats turns yellow and green and people do not consume it.

Since 1993, in Ab Ala, animal vaccinations are provided for a fee. Due to the cost of vaccines², pastoralists make no prevention and mostly react only after the outbreak of animal diseases. Woreda level authorities are currently establishing animal health centers and conducting veterinary vaccination training sessions.

¹ Terru 5 kebeles: Qasaabax Kee Bukka Carri, Germaa Kee Dabayra, Abiidi, Barantu, Yewgedulul.

² Some examples of vaccine costs were given without specification of vaccine type and origin: One bottle of vaccine, which can immunise 50 goats, costs 30 ETB. For camels, one bottle costs 30 to 40 ETB and can immunise 3 to 4 adult camels. For cattle, vaccination costs 0.35 ETB per head.

Since last year's drought, regional authorities received some support from FAO, providing drugs and vaccines through the Ministry of Agriculture (MoA). CBPP, anthrax, pasteurulosis, and black leg vaccines were distributed to the zones, but the erratic electricity supply has raised concerns about refrigeration of the vaccines. Despite recommended use of the vaccines as soon as possible, veterinary services are constrained by a lack of budget and transport.

2.1.6 Relief and rehabilitation

In 2003 the Afar Region counted a total of 766,905 food aid beneficiaries³ with an additional 350,000 under close monitoring. Currently food distribution in the 29 woredas is shared between the Disaster Prevention and Preparedness Bureau (DPPB) and some NGOs. 24 woredas are covered by the DPPB while Afambo, Assaita and Dubti woredas get food through World Vision International (WVI) and Mille and Chiffra woredas through the Lutheran World Federation (LWF). In April 2003 the International Committee of the Red Cross (ICRC) stopped food distributions in zone 3 (Amibara, Argoba, Awash Fentale, Gewane woredas), where relief is again the responsibility of the DPPB.

Within the DPPB distribution network, the zonal authorities are in charge of dispatching food to woredas and kebeles. The actual distribution is under the responsibility of woreda relief committees. In January 2003, Ab Ala woreda, for example, had a total population of 48,057 people of which 10,900 were food aid beneficiaries. Every month, the woreda gets a consignment of 212 metric tons of wheat or maize together with some supplementary food (CSB).

WVI does not plan to phase out and is presently implementing rehabilitation projects. According to DPPB, everything will depend on the June *belg*-assessment. 85,700 people in the three WVI-woredas currently benefit from food relief. WVI is distributing wheat, CSB and BP 5 supplementary foods. With the June-distribution WVI also introduced US oil in cans of 4 litres. 35% of the beneficiaries will get 1.5 kg of oil each together with their monthly dry ration. The grain ration is set to increase from 12.5 to 15 kg. Although the decision to increase rations was made by the Federal DPPC in early June, it hasn't been officially communicated. In addition, BP 5 is provided to underweight children according to weight and height measurement. Overall, WVI has observed an improvement in nutrition compared to last year. New malnutrition figures will be issued in the coming weeks.

WVI nutritional assessments based on weight to height measurement show that the malnutrition rate, particularly in the lower Awash Assaita rural and Afambo woredas, had dropped in February-March from 30% GAM to 21% GAM. Some NGOs and regional officials dispute these figures as exaggerated.

Various woredas are getting support from rehabilitation programs. The Federal government has designed a pilot project (see box 1) for the three woredas: Ab Ala, Amibara, Eli Daar. Others are benefiting from a strong NGO presence. The development projects promote sustainable improvements for pastoralists' livelihood, water supply, education, and health services at woreda level. However, the present situation is creating large differences among the 29 woredas of the Afar Region.

³ Afar vulnerable population breakdown per zone: zone 1: 230,488; zone 2: 136,708; zone 3: 91,504; zone 4: 100,899; zone 5: 207,306.

Box 1: Pilot project in Ab Ala, Amibara and Eli Daar woredas

The pilot project was initiated by USAID and covers the three woredas Ab Ala, Amibara and Eli Daar, which were selected by the Region and the Federal government. The project aims to establish development-micro-projects in the areas of water, animal health, education, and income generation. The project is designed to last five years with a mid-term evaluation after three years. A regional office has already been set up in Assaita.

In Ab Ala woreda, the pilot project started in February 2003 with a preliminary study linked to the Dry Land Husbandry Project from Mekelle University and the Afar Integration Programme and Development Project. At present, project activities cover five of eleven kebeles. USAID shoulders all expenses except for salaries. Project staff is seconded from various administrations.

In the first three months the project focused primarily on capacity building with courses for 40 governmental staff and technical training for future trainers. So far, eight men have been trained in water harvesting, two in beekeeping, 36 in para-veterinary activities (CAHW), and 20 women and 10 men as community health workers. An excursion for project staff to observe the Tigray water harvesting systems was also organized.

Practical activities include water-source and agro-pastoral development. At the beginning of June, Arkudi and Hedmon villages received a water line. Ponds and 3 deep birkads are also planned.

On-farm trials for yield comparison were initiated with various crop varieties. Local fodder seeds were collected and soil cleared and ploughed for seed multiplication of animal fodder grasses. Agro-pastoralists were organised into cooperatives in charge of selecting the seeds.

The project also provided small irrigation equipment. A revolving fund system is being organised for the para-veterinary-team that will follow the pastoralists' movements in addition to plans to purchase a camel for transport. Medicines and material for community health workers (CHW) and CAHW were also provided.

2.2 Tigray and Wello agro-pastoral areas: Lack of seeds, heavy debt burden

The adjacent agro-pastoral areas in Tigray and Wello were equally hard hit by last year's drought. Climatic and agricultural conditions are similar and most of the farmers are waiting for the coming rainy season. Around Bati (Oromiya zone, Amhara Region) most of the crops sown are at early stages of maturation and production will depend on moister conditions in the coming weeks. In north Wello, maize and sorghum sown in April are not performing well. Habru and Kobo lowlands are affected by erratic rain and weed infestation resulting in low yield. In neighbouring South Tigray unexpected rain in early 2003 helped lowlands farmers of Alamata and Raya Azebo woredas to produce some teff and sorghum. Aside from a lack of rain, most of the subsistence farmers have to face basic problems of small land size, uncertain land tenure, low soil fertility, weed infestation and limited access to agricultural inputs. Many farmers have the additional burden of old

unpaid credits from previous agricultural extension packages and would benefit from some sort of debt relief. .

The lowlands from North Wello and South Tigray are infested by *striga* or “*witchweed*”, a parasitic weed affecting mostly sorghum but also maize, teff and cowpeas. Another weed, *Parthenium hysterophorus*, that colonizes arable land and bare areas along roadsides and heavily grazed pasture (GISP), makes milk bitter when animals graze on it. Farmers in Ethiopia commonly lose up to 40% of their crops to weed infestations (Kebede Desta, 2000) and during the recent drought weed infestation has increased. *Striga* for example attaches itself to roots of crops, robbing the host of water and nutrients. The thousands of seeds a single *Striga* plant produces can remain dormant for many years (Shank, 1996).

In 2002, before sowing, Tigray farmers participated in an eradication campaign with uprooting and burning *striga* weeds but the area is still infested as eradication is very difficult (Shank, 1996). Recently, Sirinka Agricultural Research Centre, (North Wello), has developed *striga*-resistant new sorghum varieties and on-farm trials are expanding.

Information collected in the markets of Sembete and Bati (Oromiya zone), Alamata (South Tigray) and Assaita (Afar, zone 1) indicate that livestock condition and prices have improved but terms of trade remain unfavourable for pastoralists due to high grain prices countrywide. Except for wheat, largely supplied by international food aid, other grain prices remain at high levels. In Assaita and Bati markets, poor Ethiopian production of maize and sorghum drove prices over 110 ETB per quintal for maize and 150 ETB per quintal for sorghum. This forced pastoralists to sell, on average, two shoats for a quintal of grain.

2.3 Tigray (Eastern and Southern zones)

In 2002, Meher rains started end of July instead of mid-June and stopped end of August instead of mid-September. The drought situation in Tigray at this time was characterised by crop failure particularly in the lowlands (Sewonet, 2002). Farmers and authorities express fears of a continued change in rain patterns, which, in turn affects the seasonal cropping cycle. Following some exceptional rains in January-February 2003, the situation improved in the lowlands of South Tigray and in June, farmers in Alamata and Raya Azebo woreda were able to harvest some teff and sorghum. Nevertheless, most of the farmers still complain about low yields linked to a lack of moisture during crop maturation. In some places, cattle were allowed to graze on immature crops. Four woredas of the South Tigray highlands benefited from the *belg* rains, which were better than last year. A notable exception is Ofla woreda, which had good crop production in 2002.

Already affected by last year’s drought, the population in Eastern and Southern Tigray was anxiously awaiting the rains. Following a quick *belg* assessment late April, WFP concluded that 2003 short rains slightly improved, but remain bad compared to average years. Eastern Tigray zone and parts of Southern Tigray zone are particularly dry and farmers didn’t benefit from *Azmara* rains; light showers in April and May, which are important for field preparation for *keremt* crops. This will affect long-cycle crops and most of the farmers were shifting to short cycle crops.

Despite the lack of rain, farmers in East and South Tigray have prepared their fields. According to Adigrat Diocese Catholic Secretariat (ADCS), two thirds of them don't own draught animals anymore as many oxen had to be sold to repay credits. Destitute farmers should get new oxen on loan so that they can plough their plots.

In Wukro woreda, in 2002, farmers sowed two and three times in order to take advantage of any rain. As a result most of them are now out of seeds. However, the Bureau of Agriculture, REST and WVI readied 2000 quintals of seed for distribution. Funds were also allocated to improve farmers' access to seeds. ADCS initiated a seed distribution program for a total of 4,500 farmers. This project aims to provide cash to the peasants so that they can purchase the seeds they want. It is expected that this activity will help create a real market at PA level.

2.3.1 Water

Shortage of water is affecting both animal and human consumption. Eastern and Central Tigray Zones are also facing shortage of animal fodder. Since the beginning of the year, Tigray Region is implementing an ambitious water-harvesting programme, which is integrated in the relief food programme through Employment Generating Schemes (EGS). Beneficiaries are paid for digging individual water ponds, which are then concreted. According to the plan of the Tigray Regional Authorities, 40,000 water ponds are to be constructed. The project aims to exploit the water harvesting potential in the region and minimize dependency on food aid. Already 2-3000 "Horeye" or household water ponds have been dug and except for the handicapped and elderly, there is no more free food distribution.

Wukro woreda is facing a severe water shortage as most of the wells dug by the Water Bureau are dry. The remaining wells and ponds have very little water. People living in the kebele bordering Mekelle and Tembe have to walk up to 6 hours to fill their jerry cans. South of the woreda many wells are dry and 10 villages suffer under a severe shortage of water. Boreholes drilled up to a depth of 200 m yielded no water. As an emergency measure, woreda authorities requested water trucking but up to now no action has been taken.

2.3.2 Livestock situation and animal health

Although WFP monitoring showed no outbreaks of animal disease most of the livestock is suffering from shortage of pasture and water particularly in Enderta, Samure and Hintalo Wajirat woredas (Southern Tigray zone) and in most of the woredas in Central and Eastern Tigray zones.

In Wukro woreda, an important grazing and transit area in the Region, animals are reported to be in poor condition due to lack of grazing. Shortage of rain is likely to bring an increased risk of diseases. Last December, Wukro experienced an outbreak of pasteurolosis and lambskin diseases. At the moment, animals are grazing on rather barren crop fields and most farmers want to sell their animals. Compared to the same time last year oxen prices in the area declined from an average of 1200 ETB down to some 500 ETB. However in South Tigray, particularly in the lowlands, where they benefit from crop residues and/or non-mature dry crops, the animals recover.

2.3.3 Relief and Rehabilitation

At the time of the mission 1.8 million people in Tigray received food aid and 300,300 were under close monitoring. In April, Tigray authorities requested food for 374,831 additional beneficiaries but received no answer as of mid June. A total of 2,206,190 people will need assistance for the next four to five months .

The authorities complain that allocated relief resources are insufficient. Each individual receives rations of 12.5 kg of grain, garnered with a small amount of supplementary food, (CSB only). Due to scarcity of oil, food rations are incomplete. Actual food consignments are generally smaller than the promised allocations. This leads to food shortage at woreda level. Timeliness of relief delivery is also a problem.

Woreda authorities complained that due to sharing of distributed food all people might become very weak soon. In contrast to Afar Region and North Wello zone, differences in food rations among the woredas are not so high. Only 10,000 IDPs in Adigrat and the population of Irob Woreda (27,000 beneficiaries) are currently receiving complete rations of 12.5 kg wheat, 4.5 kg beans and 1 litre oil provided by ICRC.

In Eastern and Southern Tigray, most of the woredas have requested supplementary food. According to several agencies, Regional DPPC and REST, malnutrition is a major problem in Wukro (East Tigray zone) and Tahtay Adiyabho (West Tigray zone) Woredas. Malnutrition screening takes place in urban health centres and dispensaries. According to ADCS, which is in charge of supplementary food preparation and distribution in Mekelle and Wukro, the causes of malnutrition are mainly structural and/or related to chronic infections, HIV and diseases linked to it, such as TB. Poverty and population movements from rural to urban areas as far as Gondar in Amhara Region compound the problems of malnutrition caused by food shortage. .

In Wukro and Mekelle malnutrition is primarily found among destitute people who are dependent on feeding centres run by the Catholic Church. According to ADCS, the number of destitute people and of children with signs of malnutrition is increasing. According to ICRC, children with malnutrition are also found in Shiraro Tahtay Adiyaho woreda, West Tigray.

WFP recently initiated a new program aimed at sustainable development called MERIT (Managing environmental resources to enable transition to more sustainable livelihood). MERIT, which means “land” in tigrigna, makes funds available for water harvesting, soil conservation, compost making, construction of community ponds and FFW. EGS has been, until now, the only channel for relief food (households micro water ponds) but MERIT activities are expected to start soon and complement EGS activities.

Aside from emergency interventions, like food distribution and supplementary feeding, ADCS focuses on natural resource management, supply of potable water and provision of health facilities. The projects are run in collaboration with CRS and with support from Caritas Germany and Switzerland. The goal is to mitigate the effects of drought, which occurs every year in Tigray, and moving people from relief towards recovery and sustainable development using small-scale irrigation schemes as an initial activity. .

Box 2) Wukro woreda: a drought prone area

Wukro is one of the most drought-affected woredas in Eastern Tigray. In 2002 rains started late on July 23 and stopped early on August 28. Crops, which were sown in mid-June, could only be used as animal fodder. In 4 kebeles the agricultural production amounted to only 2000 MT of wheat and barley. 11 kebeles had no production at all. The total harvest was just sufficient for the consumption of 11,000 people out of a population of 106,168.

Wukro Woreda is currently suffering from a serious food shortage, with adverse effects on the nutritional status of the population. Until November 2002 only 34,000 people received food aid. Beneficiary figures had to be revised continuously, first, to 63,000 then upwards to 75,900 in January 2003. Individual food aid rations are made up of 12.5 kg grain and - irregularly – some CSB, according to woreda authorities. Requests to increase the ration have been forwarded to the federal DPPC.

According to Wukro health centre staff, from an average of 20 to 30 children under 5 years of age screened daily, about half show signs of malnutrition. In the health centre compound, the Catholic Church currently distributes supplementary food to 1053 people of which 250 are children. While that number is increasing, it is difficult to make a distinction between malnutrition, which is induced by drought malnutrition caused by poverty.

Box 3) Alamata woreda: new credits for agricultural packages

In Alamata woreda, a food security working group attached to the rural development office is in charge of selecting drought prone households unable to support themselves for more than six months with their own production. The administration is offering them various credit packages, for animal husbandry, crop production, horticulture, bee keeping, etc. Interest is 9% and the period of credit extended is 2 to 4 years.

Learning from past difficulties with the agricultural extension package promoted by the agricultural offices, the new food security program includes some new measures aimed at providing farmers with a safety net. For example, food security officers are put in charge of individual follow-ups and should there be a failure at household level not caused by the negligence of the debtor the programme enables part of the principal and interest to be frozen. Already some 1,300 households are benefiting from this new programme.

2.4 North Wello zone (Amhara Region)

The *meher* rainy season was supposed to start by mid-June and last until September. Already, the *belg* season has been delayed and some farmers did not sow crops. According to SC/UK in Woldyia, maize and sorghum sown in April did not perform well and field observations confirm this. At the time of this mission, farmers in the lowland, mainly in Harbu and Kobo woreda were preparing their plots and sowing sorghum and maize, the two main crops together with pearl millet. The lowlands are mostly affected by erratic rain, low crop yield and infestations of *parthenium* and the parasitic weed *striga*. There is also a lack of improved germplasm compounded by abortive stress due to drought. A recurrence

of pests is also affecting the crop such as the stock borer infestations, that affected maize production in 2002

Seed shortage remains a major problem and SC/UK is involved in seed distribution and seed bank projects. As an emergency measure, SC/UK provides cash to farmers to enable purchase of seeds at the local market.

2.4.1 Relief and Rehabilitation

Distribution of relief in North Wello is hampered by delays as woredas don't receive the supplies in time. Rations have recently been increased from 12.5 kg to 14 kg of grain per person/month. The food basket consists of mostly wheat, plus 4.5 kg CSB and, since January 2003, in 4 woredas, 600 grams of oil per head/month.

Food allocation is the responsibility of the woreda DPPC committee. The involvement of NGOs and major donors (USAID, European Union) in relief at woreda level resulted in disparities in ration size and composition. From 8 woredas in the zone, half do not get oil including the most affected lowland woredas of Kobo and Habro. This might lead to further, relief-motivated stress migration.

Box 4) Experiments with weed resistant seeds

The Sirinka Agriculture Research Centre developed three composite sorghum seed varieties (Gopiye, Abshir and Birhan) that are resistant to the parasitic weed *striga*. The early varieties mature in 100 to 120 days with expected yields of 30 to 50 quintals per hectare. They need a minimum of 500 to 960 mm rain, which is more than the average in Kobo. Farmers can multiply these composite seeds themselves. Last year, only a few dozens farmers were included in trials in Gubalafto and Kobo woredas. Onfarm trials were hampered by moisture stress in Kobo and shortage of land in Gubalafto. The farmers also reported problems with seed selection and complained of failures due to seed impurity.

Seed production always represents the main bottleneck preventing a smooth transition from relief to recovery. This year, agricultural offices were guaranteed to get pure seeds and about 2000 farmers are expected to be involved in on-farm-trials with the new varieties. The new seed varieties will be part of the general extension package for farmers in the region. The Bureau of Agriculture in Bahar Dar has requested seeds for comparative on-farm-trials in Metemma (North Gondar zone). However delivery may prove difficult since seed multiplication remains difficult due to lack of funds. Agriculture experts in Kobo expect farmers to share the new resistant seeds to accelerate the dissemination of the new variety.

Box 5) Compost instead of chemicals

In response to the negative experiences of the recent agricultural "extension package", (the heavy debt burden of farmers caused by the steep fall in cereals prices below production costs), a mini pilot package has been designed for subsistence farmers. The new package includes small scale agro-businesses like animal husbandry, agro-forestry, bee keeping, compost preparation, fruit and poultry production and water harvesting. In

Gubalafto woreda, six of the 34 kebeles with 120 households are already involved in the new program. Improved hybrid seed varieties – which previously were part of the agricultural extension package - are no longer easily sellable in the area due to their high price (about ETB 300 per quintal). Compost on the other hand becomes quite popular in the zone and farmers are happy to use free organic compost instead of expensive chemical fertilisers. UREA currently costs ETB 220 per quintal, DAP ETB 260 ETB per quintal. These agricultural inputs are unaffordable for subsistence farmers.

3 Conclusions and recommended actions

In all zones of the three regions visited by the UN-OCHA-EUE mission the situation remains fragile. Long-term structural problems make farmers and pastoralists entirely dependent on the starting rainy season. Further assessments and **constant monitoring** of the area, focussing on EWS, food security and nutrition remains imperative in order to prevent the deterioration of the current situation into a severe local or regional emergency.

Afar

In Afar, with herds already extremely vulnerable after the 2002 drought, any delays in **the karma** rains may renew livestock stress and result in high rates of animal deaths particularly in zone 2 and 3, where animal disease is widespread. **Basic veterinary services** in these extremely remote areas would help to minimise the spread of animal diseases such as *agara* and other diseases transmitted by ticks. Widespread loss of livestock would compromise the recovery of already vulnerable pastoralists and without adequate action livelihoods of pastoralists in zone 2 are in danger. Such is the severity of the situation that Zone 2 and Terru are areas recommended for security risk status to be reassessed in order to evaluate whether agencies can go there within limits.

Shortage of water in Eli Daar Woreda, (north of zone 1), and in zone 2, raises questions of **water storage** and **new water sources**. The search for water, **drilling of boreholes** and the **maintenance of water points**, needs clear priority in order to minimize expensive water trucking during and after the dry seasons.

Tigray

The Ethiopian water-harvesting program, which was launched on a nationwide scale, has the aim of constructing 40,000 water ponds in Tigray Region alone. It is carried by food aid in the form of EGS. Implementation of EGS programs often faces difficulties linked with the food-for-work system. Implementation of **standards** and **work norms** and pursuit of **project sustainability** should have priority over the volume of work achieved and amount of food delivered. Crop seasonality should be respected in order not to divert the work force from essential farm work when it is timely and necessary. Age limits should be respected in order to avoid school dropouts caused by the program as was reported in some places. Rather than just fulfilling imposed quotas, more care should be given in the choice of construction sites for EGS water-harvesting schemes.

The coming agriculture season is already compromised **by a lack of short rains** in Eastern and Southern Tigray. This was affecting land preparation.

Access to agricultural inputs must be improved. Farmers unable to repay credits from former extension packages must be supported – favourably with **subsidies in kind**. In all agricultural areas **shortage of seeds** remains the major problem. Seeds available in local markets are mostly of uncertain origin, type and variety and are sometimes mixed with hybrid seeds, which were intended for consumption only and are sure to produce sterile corn ears.

To upgrade local seed quality, **seed multiplication projects** and **seed bank schemes** should be initiated specially for lowland areas in order to upgrade local seed quality. Risk of mixing and crosspollination at multiplication sites should be kept to a minimum, particularly for the new, *striga* resistant, sorghum varieties.

Co-ordination and Targeting

Concerning relief, the recent involvement of more NGOs in Afar Region and North Wello zone (Amhara Region), who took over responsibilities at woreda level, is creating disparities between “first class” woredas receiving full rations and “second-class” woredas with grain and CSB distribution only. **Food aid targeting** and coordination of NGO activities remain major problems. For example the oil quantity distributed can vary from one NGO to another. Differences in the definition of what is a full ration highlight weaknesses in food aid distribution. More attention should be given to more **vulnerable groups** who need full rations.

Support should be given to **rehabilitation projects**, with a particular attention on woredas without strong NGOs presence and/or specific rehabilitation programs. Good examples are in Afar the USAID funded pilot project covering Ab Ala, Amibara and Eli Daar woredas or the SCF/UK Relief to Development Initiative covering Gubalafto and Sekota woredas in North Wello zone (Amhara Region).

DISCLAIMER

The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever of the UN concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

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4 Annexes

Areas Visited by the Assessment Team

AFAR REGION
Zone 1 – Chiffra woreda
Zone 2 – Ab Ala woreda
Zone 3 – Gewane woreda
Zone 4 – Kaluan & Aura woredas
TIGRAY REGION
East Tigray zone - Wukro woreda
South Tigray zone - Alamata - Raya Azebo woredas
AMHARA REGION
North Wello zone - Kobo & Guba Lafto woredas

Abbreviations

ACDS	Adigrat Diocese Catholic Secretariat
ACF	Action Contre la Faim
AIDS	Acquired Immune Deficiency Syndrome
ANRS	Afar National Regional State
APDA	Afar Pastoralist Development Association
CAHW	Community Animal Health Worker
CARE	Cooperatives for Assistance and Relief Everywhere
CBPP	Contagious Bovine Pleuropneumonia (in Afarigna: GUBLO)
CCPP	Contagious Caprine Pleuropneumonia
CIRAD	Centre International de Recherches sur l'Agriculture et le Développement
CSB	Corn Soya Blend
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)
ETB	Ethiopian Birr
FAO	Food and Agricultural Organisation
FEWS	Famine Early Warning System
GAM	Global Acute Malnutrition
GISP	Global Invasive Species Programme
ICRC	International Committee of the Red Cross
ILRI	International Livestock Research Institute
LWF	Lutherian World Federation
MSF	Médecins Sans Frontières
MT	Metric Ton
NGO	Non-Governmental-Organisation
OXFAM	Oxford Committee for Famine Relief
PA	Peasant association
REST	Relief Society of Tigray
SC-UK	Save the Children Fund United Kingdom
SF	Supplementary Feeding
TB	Tuberculosis
TF	Therapeutic Feeding
ToT	Terms of Trade
UNDP	United Nations Development Programme

UN-EUE	United Nations Emergencies Unit for Ethiopia
UNICEF	United Nations Children Fund
USAID	United States Aid for International Development
WFP	World Food Programme
WV	World Vision

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 agro ecological belts in Ethiopia. In Tigray between ~1800 to ~2400 m a.s.l.

Glossary of important meteorological and seasonal terms used for Ethiopian highland areas

Meteorological Drought Defined

Drought is a period of insufficient water initiated by reduced precipitation. The impact of drought on crops and society is critical but not easily quantified. The result is that "drought" does not have a universal definition. "Meteorological drought" is defined as a sustained period of deficient precipitation with a low frequency of occurrence. While crops may be damaged by lack of precipitation and high temperatures in just a few days, such short periods are not considered to be meteorological droughts. A three-month period is defined by the American Meteorological Society to be the shortest period that can be defined as a drought. (Source: *The American Meteorological Society*)

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. It is followed by the *baga*, hot, dry period from October through February (see below for definition). In some areas there are short and moderate spring rains in March and April known as the small rains or *belg*. These rainy periods correspond to Ethiopia's primary and secondary agricultural seasons, known as the *meher* and *belg*. (Source: *FEWS*)

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 southeasterly winds produce the main rain in southeastern Ethiopia and the small spring rains to the east central part of the north-western highlands. The small rains of the highlands are known as *belg* rains, referring to the second most important sowing season of the region. (Source: *FEWS*)

Ethiopia's 'Baga' Season Defined

Since Ethiopia is 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. It is followed by the *baga*, hot, dry period from October through February. In some areas there are short and moderate spring rains in March and April known as the small

rains or *belg*. These rainy periods correspond to Ethiopia's primary and secondary agricultural seasons, known as the *meher* and *belg*. (Source: FEWS)

Afar Rainy Seasons

The small rains *sugum* normally occur in March – April and the heavy rains *karma* take place in July – August. Some areas along the escarpment (Tigray – Wollo) as well as the southern part of Afar near Awash town additionally could benefit from a slight shower period in December, called *dadaa*. In all these seasons, the occurrence of rainfall is highly erratic. The total amount of rain varies greatly from year to year resulting in severe droughts in some years. Moreover, temperatures are high throughout the region and throughout the year. The hottest months are May to August coinciding with the rainy months, which entail a deterrent effect on the effectiveness of moisture (UN-EUE, Sept 2001).

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