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FIELD TRIP REPORT
East and West Hararghe zones
Region 4 (Oromia)
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SUMMARY

The topography of Hararghe is characterised by steep slopes in the highlands and mid-highlands and large plains in the lowland areas. The highlands and mid-highlands are normally extensively cultivated but only partially protected by soil conservation structures and practices such as grass strips, alley cropping and bench terraces. In these areas, land scarcity leads farmers to destroy the few remaining forests in order to cultivate on steep slopes, resulting in additional erosion. The lowlands are part cultivated and part used for pasture. These areas are also subject to erosion, which is exacerbated by extensive charcoal production in certain parts.

The East and West Hararghe zones of Region 4 (Oromia) are predominantly cereal producing areas with sorghum and maize as main staple crops, followed by barley, wheat, teff and different pulses. In addition, the zones are important for cash crops of *chat*, coffee, vegetables and fruits, and have good export links with neighbouring Djibouti and Somalia.

Rainfall in the eastern highlands is usually not as consistent as in central and western areas of Ethiopia. Also, the population density and farm size requires intense cropping and leave a measure of food insecurity. However, because of the possibilities of root, vegetable and fruit crop cultivation both for consumption and trade along with *chat*, coffee and cattle, sufficient coping mechanisms are present. The vulnerable population are mostly the lowland farmers and pastoralists where perennially insufficient rainfall causes competition and conflict among various ethnic groups and agrarian peoples for the limited potential of the environment. Long-term solutions to the problems of these people undoubtedly need to include employment generating schemes and FFW programmes to cover the less productive years.

With a below average harvest for the 1993 *Meher* season, followed in 1994 by late and insufficient *Belg* rains and a heavy armyworm infestation, a mission was carried out with the aim of assessing the actual crop stand and general food situation in East and West Hararghe zones.

The first quarter of 1994 was characterised by insufficient and late *Belg* rains starting in April, resulting in a failed *Belg* harvest. The failed short rains caused a delay in land preparation for long cycle crops, such as sorghum and maize, as well as stress on livestock due to poor grazing conditions. This was followed by a heavy armyworm infestation in May and June throughout the zones, destroying large

parts of the still young cereal crops. Therefore, the prospects for the second half of the year did not look very promising and the possibility of a serious emergency seemed eminent.

The *Kremt* rains, which started at the beginning of July, have been very satisfactory both in amount and distribution. Joint operations were undertaken by different ministries, the RRC and NGOs to combat the armyworm infestation and in obtaining seeds for replanting. Together with these efforts and control methods employed by local farmers, the infestation was contained and much of the damaged area was replanted with alternative short cycle crops. The remaining fields are now being planted with teff and chick peas.

The mainly mixed sorghum/maize fields show a typical, heterogeneous picture resulting from the mixture of the remaining long cycle, long stem and re-seeded short cycle, short stem crops. In general, as seen at the end of August, the crops are in good condition and with sufficient rains lasting through the month of September, harvest prospects are promising.

Some sorghum/maize fields were replanted very late and might not reach maturity, if rains stop before the end of September. An endemic stalk borer infestation has been detected which may result in 20% to 30% sorghum and maize pre-harvest loss. Pesticides sold at cost price to control the outbreak are not affordable by farmers and the different indigenous methods used to combat the disease are not very effective.

According to information obtained from different agencies in the area and local farmers, food availability is generally satisfactory and farmers should be able to survive until the main harvest commences in late October, using available household stocks, sale of cash crops and, in some problem areas, through free food distributions.

Toward the end of September a follow-up mission should be carried out to make a final assessment on the prospects of 1994 *Meher* harvest.

GENERAL OBSERVATIONS

The densely populated *dega* (highland) and *weyna dega* (mid-highland) agro-ecological zones of Hararghe are highly vulnerable to erosion. Few forested areas remain in these altitudes and those still existing risk being destroyed to make way additional farm land in the near future. Except in some marginal areas, there is practically no space left for reforestation and emphasis has to be put on agro-forestry. It is interesting to note that some *chat* producers are already using alley cropping method, planting their *chat* hedges along contour lines and cultivating their food crops between the hedges.

These practises could easily be encouraged and expanded among the *chat* producing farmers and thus contribute substantially to a successful soil and water conservation programme.

With its important cash crop and trade potential, the Hararghe region can be considered as a favoured area with good development prospects. Still there seems to be an imbalance between relief and development

activities, very much in favour of the first, with free food distributions going on since the 1984/85 drought in some areas. If it is important to quickly and adequately help people in distress, relief activities should be limited in time and followed by specific rehabilitation and development efforts in order to prevent future emergencies and contribute to general development.

Provided the *Meher* season yields a good harvest, CARE International intends to switch from its mainly relief oriented programme to development activities.

The severe armyworm outbreak and the problems encountered in controlling the infestation i.e. delays in delivery and lack of adequate pesticide stocks and spraying equipment, has clearly shown the persisting vulnerability to natural disasters and the still insufficiently developed early-warning and control network.

Seed distributions carried out by the Ministry of Agriculture, the RRC and NGOs have helped ease the situation and together with seed stocks held by local farmers, most of the damaged crops have been replanted. The possibility of an annual recurrence of armyworm infestation can not be excluded and, as the regional short cycle seed production is not sufficient to meet needs, regional seed multiplication should be promoted.

ARMYWORM INFESTATION AND SEED DISTRIBUTION

The heavy armyworm infestion which affected vast areas of crop and pastureland could have initiated a severe emergency situation by the end of 1994. The extend of cropland damaged by this outbreak exceeded the coping capacity of the farmers, mainly due to lack of adequate stocks of short cycle crop seeds. The situation was saved by the quick response of both governmental and non-governmental agencies which distributed total of 3,684 tons of seeds in the zones, with 1,303 tons in Eastern Hararghe zone and 2,381 tons in Western Hararghe. Sufficient seed was distributed for replanting an area of about 60,000 hectares, roughly equivalent to the total cropland destroyed by the outbreak.

Detailed figures on armyworm infestation, control operations and seed distributions in Eastern and Western Hararghe zones are outlined in the tables annexed to this report.

EAST HARARGHE

The following weredas were visited in Eastern Hararghe during the field trip:

Fedis (Boku): This wereda includes *weyna dega* (mid-highland) and *kola* (lowland) agro-ecological zones. Crop prospects for the *Meher* season are good. Due to the armyworm attack and lack of oxen, only 80% of the expected 21,300 hectares have been planted. The main crops are sorghum and maize, followed by onion as a cash crop. Some late sown sorghum and maize fields would need rain up to the end of October in order to mature.

Due to the late and insufficient *Belg* rains, there is less than normal green maize in the wereda, whereas the harvest of haricot beans has started. Catholic Relief Society (CRS) has held free food distribution for targeted households for the past one year. Through this project, CRS has observed the development of relief dependency and the negative impact of free food distributions on farmer productivity in cases where farmers are no longer cultivating due to relief programmes. Based on this experience, CRS is planning to switch from free food distribution to food for work activities.

Babile (Babile): Situated in the *weyna dega* and *kola* agro-ecological zones, this wereda mainly grows sorghum and maize as staple crops, and groundnuts and mangos as cash crops. In order to improve food security, farmers in the wereda are planting sweet potatoes. The well distributed *Kremt* rains and timely seed distributions have helped overcome the damage caused by late and insufficient *Belg* rains and armyworm infestation. Also, the area cultivated during the *Meher* season has increased by 2,000 hectares as compared to last year. The season has progressed satisfactorily and despite the onset of a serious stalk borer attack, a good harvest is expected.

With the delay of the green maize harvest, some food shortage is expected for one to two months. CARE International is currently conducting free food distributions for around 20,000 beneficiaries. CARE are also implementing food for work programmes for soil and water conservation, construction of check dams and shallow wells, road construction and maintenance.
Problems between farmers and pastoralists regarding land issues, which caused the displacement of population from 17 PAs in 1993, has been solved and the people have returned.

Jarso (Ejersa Goro): With 7 PAs in the *dega*, 16 in the *weyna dega* and 7 in the *kola*, this wereda covers the three major agro-ecological zones. In the highlands and part of the mid-highland area, the *Belg* season is considered the main production time with barley, wheat and potatoes as main staple crops. Due to the late *Belg* rains, the *Belg* harvest of this year was very low. In the mid-highland and lowland areas of the wereda maize and sorghum are the main staple crops and coffee is cultivated in 5 PAs.

In the *dega* and *weyna dega* zones the actual crop stand is good, needing rain until end of September to yield a good harvest. However, the *kola* crops are not advanced in maturity and have not developed

enough. In the lowland areas rainfall would be needed up to mid-October to ensure a good harvest.

The population of this wereda has been receiving free food distributions since 1985. Current there are 50,000 beneficiaries registered, but with re-numeration this figure is expected to decrease to 30,000. Furthermore the Harar Catholic Secretariat (HCS) is planning to switch to food for work activities.

Kombolcha (Melkarafu): Approximately 75% of the total area of Kombolcha is situated in the mid-highlands, followed by 15% of agro-pastoral land and 10% of highlands. The main crops are sorghum, maize, barley and wheat, and the cash crops are *chat* and vegetables. Irrigation is common for vegetable production as water is manually extracted from shallow wells with a water tables of around 2 metres depth.

Due to insufficient rains, *Belg* harvest has been very low. Fields damaged by armyworm have been mainly replanted with barley and wheat. The crop stand of sorghum and maize is generally quite poor due to heavy stalk borer infestation and a low harvest is expected. Wheat and barley crops are in good condition and promise a good harvest, if rains continue normally.

The food situation is critical and many farmers have to purchase food to fill the gap until next harvest, which they manage through cash crop sales and occasional employment in nearby Harar town. CRS is distributing free food to 9 PAs in the lowland. In the area of Kamisa, 200 hectares of farmland has been destroyed by flood. These fields will be replanted and irrigated after the main rains. In addition to the floods, hailstorms have damaged around 30 hectares of cropland.

Kersa (Gersa): 20% of the wereda is situated in the *dega*, 75% in the *weyna dega* and 5% in the *kola* zone. Out of a total 59 PAs, 20 rely on the *Belg* season for their main production and therefore, have had practically no harvest this year. The failed *Belg* crops (wheat, barley and oat) have been replaced by sorghum and maize. The actual crop stand is satisfactory and with the continuation of the current pattern of normal rainfall up to the end of the *Meher* season, harvest prospects are good but lower than last year, when the rains were better and crops were not infested by armyworms.

Heavy rains and hailstorms in mid-August provoked flooding, killing two people and several animals and damaging 2,656 hectares of crop land, part of which is now recovering.

Cash crop sales and employment in nearby towns have enabled farmers to fill the gap until next harvest.

Alamaya (Alamaya): With 38 PAs in the mid-highlands and 6 PAs in the lowlands, the main crops are sorghum and maize inter-cropped with beans. The cash crops are *chat*, vegetables and, to a lesser extent, coffee. Farmers of this wereda are applying chemical fertilizers to their farms when available.

Sorghum seems to have recovered better from stress caused by insufficient *Belg* rains and armyworm infestation than maize, but

general crop conditions are deteriorating in the lowlands. Stalk borer infestation is common in this area and an estimated 30% of sorghum and maize crops have been affected. The *Meher* harvest is expected to be lower than last year and farmers are planting sweet potatoes for food security. Nevertheless, the overall food situation seems satisfactory for this year, whereas the situation into 1995 would depend on extended *Meher* rains.

Meta (Chelenko): Approximately 24% of the highlands as well as 43% of mid-highlands and 33% of the lowland areas registered a low *Belg* harvest of wheat and barley this year. Although in the mid-highlands and lowlands, sorghum and maize crops have also suffered from calamities, they are still considered to be in good condition, and with continued normal rainfall a good harvest is expected.

Food availability in the *dega* and *weyna dega* zones is perceived as satisfactory and has been supported by a small *Belg* harvest as well *chat* sales. However, the presence of food stress has been reported by lowland farmers who are now beneficiaries of free food distributions carried out by the RRC.

Deder (Deder): This wereda consists of a 22% highland, 70% mid-highland and 8% lowlands. Staple crops are barley and wheat in the highlands and sorghum and maize in other zones. The main cash crop is *chat*, followed by coffee, vegetables and fruits.

This year's *Belg* production in the wereda has been low, but the overall condition of the *Meher* crops seems favourable. Sorghum and maize have been infested by stalk borer, which has had a higher concentration in the lowland areas.

Due to last year's low production, the food situation is not satisfactory. Over the last two months RRC has distributed more than 500 tons of maize and is planning to continue with a food for work programme. Oxfam also has some food for work activities in different areas of the wereda.

Although the following weredas were not included in the field trip, some information was obtained from the zonal authorities and NGOs operating in the area:

Gursum (Funyanbira): According to CARE office in Babile, the crop stand and livestock condition in Gursum are good. Cash crop sales and sweet potato production in the highlands and livestock products in the lowlands have contributed significantly in maintaining a satisfactory food availability.

A land dispute, which resulted in the displacement of people in 17 PAs during 1993, has been partially settled, resulting in a 30% increase in the area cultivated.

Kurfachale (Kurfachale): This wereda includes 31% highlands, 19% mid-highlands and 50% lowlands. The main staple crops are sorghum and maize, whereas cash crops are *chat*, coffee and potatoes. After initial moisture stress observed earlier in the season, the actual crop has been improving and now seems to be satisfactory.

Burka: This wereda is situated in the lowland area and includes 2 PAs of farmers, 12 PAs of agro-pastoralists and 5 PAs of pastoralists. The crop stand was reported to have been poor in July, growth has improved but yield levels may not be high. Livestock conditions are good.

Bedeno (Bedeno): This wereda includes 19 PAs in the highland, 28 PAs in the mid-highland areas and 22 PAs in the lowlands. The staple crops are maize and sorghum. The cash crops are *chat*, vegetables, fruits and coffee. There have been no recent reports on the actual crop stand situation in the wereda but livestock physical condition are considered to be satisfactory.

Garamuleta (Girawa): Situated east of Bedeno, this wereda includes the same agro-climatic zones of Bedene consisting of 19 Pas in the highland,23 in mid-highland and 30 PAs in lowland zones. Staple crops are maize, sorghum, wheat and barley, and cash crops are *chat*, coffee and potatoes. Livestock condition seem to be good, but there are no reports on the crop situation in the wereda.

WEST HARARGHE

The following weredas were visited in Western Hararghe during the field trip:

Darolebu (Micheta): This wereda has 12% of its area in the *dega*, 44% in the *weyna dega* and 44% in the *kola* zone. According to the land use pattern established by MCTD, nearly 80% of the total area is still covered with forest and bushland, whereas farmland accounts for only 9%. The main staple crops are maize and sorghum, with barley and wheat in the highlands, and cash crops of coffee and *chat*.

The actual crop stand is considered favourable in all agro-climatic zones, but the crops in the lowland are only knee high. If the rainy season continues normally, a good harvest is expected except for maize crops in these lowland areas. Livestock is in good condition and the existing veterinary service is working well.

Free food distributions are still going on in the lowlands, mainly carried out by CARE and CRS. The RRC, in addition to seeds, has also distributed 514 oxen, 287 plough tips and iron rings (wogel) and 2,338 spades to previously displaced people (see under Habro wereda).

Habro (Gelemso): 80% of the area is situated in the mid-highlands, 5% in the highlands and 15% in the lowlands. The land use pattern shows 35% of the area covered by woodland and 47% by food and cash crops. The main staple crops are maize and sorghum, with the cash crops of coffee and *chat*. Whereas *chat* production is concentrated along the main road, coffee is planted in the less accessible areas. Farmers of this wereda are using chemical fertilizers acquired either through cash or credit schemes.

With the exception of long cycle maize, which has not recovered as well as sorghum, the actual crop stand is good. Planting is continuing in the remaining open fields which have been allocated to tef and chickpea production.

In the areas bordering Darolebu, *Striga* infestation has been observed in some maize fields. Although only partly cultivated, this farming land has been left fallow for three years due to ethnic conflicts. The problem having been solved, people are gradually re-cultivating their land. In Darolebu, the RRC has helped the previously displaced farmers of Habro, providing them with 517 oxen, 287 ploughs and iron rings (wogel) and 2,245 spades.

A recent hail storm damaged some crop land, but the extent of damage has not yet been evaluated.

In this area, free food distribution is carried out by CARE.

Doba (Doba): This wereda is situated in the *weyna dega* and *kola* zones, with 22 PAs in the mid-highlands and 12 in the lowlands. The main staple crop is sorghum, followed by maize. Cash crops are only produced by farmers in 4 PAs, who concentrate on coffee and *chat* crops and irrigated production of sugar cane.

With the exception of 4 PAs in the lowland, which have lost part of their livestock and do not maintain good crops due to ethnic conflicts, the overall crop stand is satisfactory. The general food situation is reported as good, except in parts of the lowland, where the RRC and CARE have started free food distributions to targeted people until the next harvest.

Kuni (Bedesa): Situated in the three agroclimatic zones, with 45% of the areas in the *dega*, 40% in the *weyna dega* and 15% in the *kola*, this wereda normally accounts for a reasonable *Belg* production, which was quite low this year. Main staple crops are sorghum, maize and barley, and cash crops are coffee, *chat*, onion and teff which is partially used for home consumption.

The land use pattern in the wereda shows 35% of the area covered by forest and bushland and 21% by food and cash crops. With this division of the total area, approximately 43% can be considered as unproductive.

Food crops have maintained an average growth and prospects for a normal harvest are good, if the rains continue normally. The food situation is reported to be satisfactory in most areas, however, free food distribution is carried out by CARE in a total of 6 PAs.

Mieso (Mieso): This wereda is situated in the lowlands. The population is comprised of farmers in 40 Pas, agro-pastoralists in 12 PAs and pastoralists. The main staple crop is sorghum, and cash crop production is limited to some small areas. About 20 years ago, the area was known for its sesame oil production. Nowadays, sesame is only grown for home consumption. Livestock production is considered important as it contributes substantially to general food consumption.

The crop stand, which was observed as heterogenous with its mixture of long and short cycle crops, is generally satisfactory and if the rainy season continues normally, an average harvest is expected. Stalk borer infestation is endemic in the area and Quelea birds are immigrating every year, but measures are taken to limit their

damage. Livestock is in good condition and the existing veterinary office provides necessary services on a regular basis.

With as yet unresolved land tenure issues persisting between farmers and pastoralists in one area of the wereda, about 800 hectares of land remains uncultivated.

CARE is distributing a large amount of free food in this wereda.

Chiro (Asebe Teferi): From a total of 68 PAs in the wereda, 14 are situated in the highlands, 26 in the mid-highlands and 28 in the lowlands. The main staple crops are maize, sorghum and barley, with cash crops of *chat*, coffee, onion, potatoes and teff which is partially used for home consumption.

The crop situation is generally good as nearly all arable land has been cultivated. With continued rains until October, a good harvest is expected in the area. Livestock seem healthy and in good physical conditions. Nevertheless, 8 PAs have especially suffered from the late and insufficient *Belg* rains and heavy armyworm infestation and in these PAs part of the damaged fields have not yet been replanted. In the same areas a recent hailstorm also damaged some 400 hectares of crop land.

RRC and CARE are carrying out free food distributions in the wereda.

Settlers inhabit very slopes once covered by natural forest. After deforestation, the land was cultivated, resulting in extensive erosion. It is only a question of some 2 to 3 years, until this land will have been completely lost, forcing people to resettle to lower areas, thereby creating additional problems for the lowland farms. It is important to address this problem as soon as possible together with the concerned population, and to find a long-term solution to the situation.

Tulo (Tulo): This wereda is situated in the *dega* and *weyna dega* zones with 30% in the highlands and 70% in the mid-highlands. The *Belg* production of barley, wheat, haricot and field beans was low this year. *Meher* crops such as sorghum and maize intercropped with haricot beans, barley and wheat are in good condition and about 25% of the remaining fields have been planted with teff and chickpeas. Cash crops planted in the wereda are *chat*, coffee and sugar cane. There is no free food distribution in this wereda.

Although the following weredas were not included in the field trip, the following is information obtained from the zonal authorities and NGOs operating in the area:

Mesala (Mesala): This wereda includes 27 PAs, the *Belg* and *Meher* crops are maize, sorghum, wheat, teff, barley and pulses.

Information on armyworm infestation and seed distribution are included in the tables annexed to this report.

Boke: In this wereda, which consists of 27 PAs, *Belg* and *Meher* crops are maize, sorghum, small cereals, pulses, groundnuts and sesame. The general crop conditions have been reported as average. There has been no seed distribution in this wereda. Free food distribution

is carried out by CARE. Due to bad road conditions, this area could not be visited.

Afdem: This wereda has 6 PAs, and a large group of semi-nomads. Situated in the lowlands, the wereda produces main crops of sorghum and maize. The condition of the people, the actual crop stand and the condition of livestock has been reported to be satisfactory. CARE is currently distributing free food in the wereda.

Gubakorcha & **Anjar**: These two weredas were not visited and information regarding their present situation is unavailable, as neither The Ministry of Agriculture nor the Ministry of Coffee and Tea Development is present in the area. CARE is conducting free food distribution in Gubakorcha wereda.