

Field Trip Report: Eastern Amhara Region & South Tigray Zone (9-18 December 1997)

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Summary

Recall: As mentioned in the DPPC Appeal Documents for 1998, the area under consideration has suffered from three consecutive unsatisfactory to bad agricultural seasons (*meher '96, belg & meher '97*), caused by climatic hazards. In addition, the abundant untimely rains of October/November 1997 have inflicted heavy damage on matured crops in the field. Already receiving food assistance since the second quarter of 1997, relief support in the area will have to continue uninterrupted until the 1998 harvests (*belg* and/or *meher*).

Current Situation in the Agricultural Sector: Since the cessation of the untimely rains at the end of November, practically all crops have been harvested and partially threshed. Many farmers in all agroclimatic zones have taken advantage of the untimely rains to plant, especially in the most drought affected areas of the northern lowlands. Pulses are predominant in the higher elevations, whereas maize and sorghum are found in the lowlands, mainly from Kobo northwards. Short cycle maize has been planted with the beginning of the rains on part of the bare fields, where *meher* crops have failed. The plants are now slowly reaching flowering stage and farmers are doubtful on its performance unless some rain occurs before the end of the year. With no additional rains, the maize crops are likely to be used as fodder. Long cycle sorghum has been seeded later, using the remaining soil moisture. These crops, as well as later seeded pulses in higher elevations are likely to profit from the coming *belg* rains and farmers are rather positive on its outcome.

The untimely October/November rains caused various effects on the natural environment in general and on the agricultural sector in particular. The natural vegetation, like trees, shrubs and to a lesser extent pasture, recovered, to show an unusual green scenery for the time of year. Renewed fodder production and improved availability of drinking water has consequently helped the recovery of livestock, especially in the lowland areas, where previously animals had to migrate in search of feed.

Heavy damage has occurred on maturing crops in the field. The highest yield losses were registered on *teff*, which shattered in the field. As many farmers had to resort to short cycle crops for lack of adequate *belg* rains, losses are thought to be considerable.

Harvested crops piled up in the field for threshing, especially if harvested under wet conditions, showed signs of mould damage and germination. Even the standing crop suffered from various fungus attacks due to excessive moisture (mainly sorghum & pulses), and some germination on the stalk has been observed (sorghum). All in all, the direct losses due to untimely rains are estimated to amount to 10-20 percent of the total *meher* harvest.

But damage is not only limited to direct losses; the quality of crop products harvested during or shortly after the untimely rains was somewhat poor, having several negative impacts. Due mainly to fungus infestation, grains have a reduced storage capacity. Also, grains are unlikely to be used as seeds due to a low germination rate and other related problems. Physical, chemical and microbial processes induced by untimely moisture have partially changed the character of grains (e.g. changed consistency of *ingera*), caused colour and aroma changes (unusual or bad taste) and eventually decreased its nutritional value (loss of vitamins). Finally, partially rotten crop residues like straw and stalks, are not palatable for livestock.

Human Conditions, Market Situation and Relief Activities: With an unsatisfactory 1996 *meher* season and bad to failed *belg* and *meher* 1997 harvests, people are under increasing stress. While human conditions may be satisfactory right after harvest and although improved livestock conditions may help for a time, the situation can be expected to worsen quite soon. The current poor harvest will not carry people very far and as market trends continue to be unfavourable, coping strategies are becoming more and more limited.

While cereal prices might be stabilised through relief food inputs and other regulatory measures, livestock prices are fluctuating freely and even when reaching a normal level, demand might be lacking. When interviewed, farmers in the northern lowlands stated that livestock prices have started to recover following the untimely rains, but with no real demand, the attendance of markets merely results in a loss of money through the payment of sales tax for each animal registered for sale.

Ethiopia's high potential for livestock production and its ability to cope with averse situations could be enhanced through a more proactive market support strategy. Improved domestic supplies and increased export sales based on fair and stable prices at local markets could stimulate not only production and productivity in the livestock sector, but simultaneously promote destocking and turnover, while assuring increased income to farmers and herdsmen.

Relief supplies during the third and fourth quarter of 1997 continued at a low level and with reduced rations, according to the limited availability of relief food resources. If, with the incoming harvest and improved livestock conditions, the situation can be somewhat eased in the short term, relief needs can be expected to rise again to a high level, as can be understood from the chronology of recent events and concomitant factors. After a slow response to the different appeals from end of 1996 onwards, it is of utmost importance that the international donor community gives a quick and adequate response to the DPPC 1998 Appeal, in order to prevent unnecessary hardship.

South Welo

The 1997 *belg* failure is mainly evident in eight out of ten *belg* dependant weredas, causing an estimated yield reduction in some areas of up to 60 percent and bringing between 10-20 percent of its population under relief needs.

According to the zonal pre-harvest assessment, a net *meher* yield reduction of around 30 percent is anticipated, not taking into account the full extent of the unseasonal rains, which might have caused an additional 10-15 percent loss. Out of 15 rural weredas, five register from 40 percent up to 60 percent of total population as in need of relief (Ambassel, Wegedi, Werebabu, Kelala and Kalu), four over 30 percent (Jama, Tenta, Mekdala and Dessie Zuria) and the remaining four weredas over 20 percent (Debre Sina, Sayint, Legambo and Kutaber), including needs arising from the failed *belg* harvest in 1997.

North Welo

After a bad *belg* the following *meher* season failed almost completely, particularly in the lowland weredas and Meket. According to the zonal administration, the most affected wereda is Kobo with over 70 percent of people in need of relief, followed by Guba Lafto with 41 percent and Habru with 35 percent. The unseasonable rains in October/November caused the most significant damage in the better-off weredas of the highlands. For the whole zone, over 50 percent harvest losses are anticipated, including damage from the untimely rains.

Due its agroclimatic similarity, the specific situation in Kobo wereda will be described together with the eastern lowlands of South Tigray (see attached map).

South Tigray

Following an unsatisfactory *belg* season in higher elevations and poor performance in the eastern lowlands, the situation was further aggravated by a low *meher* harvest in the highlands and a nearly complete harvest failure in the eastern and north-western lowland areas.

The Lowland Area of Kobo (North Welo), Alamata, Raya Azebo & Hintalo Wajerat: Separated from the Danakil depression by a narrow mountain chain (see attached map), this flat and fertile land normally profits from both seasons. In addition, an extensive network of irrigation channels, using water from river diversion, allows complementary irrigation of crop fields whenever it rains in the highlands. Water distribution is organised by committees at *tabia* level, who see to the fair distribution of water between and within the *tabias*.

However, despite these positive attributes, the 1997 *belg* harvest was very low, and the *meher* season failed almost completely. Livestock production, equally important in this area, suffered from lack of pasture and water, forcing animals to migrate in search of feed. Resulting stress increased the susceptibility of animals to endemic diseases like Anthrax and Blackleg. According to farmers of Raya Azebo, up to six cattle died daily during the peak season of epidemic (between the end of *meher* until the beginning of the unseasonal rains in October/November).

Conditions finally improved with the occurrence of the unseasonal rains, which led to the recovery of fodder production, replenishment of water points, improved animal health and livestock prices and the establishment of soil moisture conducive for unseasonal planting of crops.

Farmers profited from the occasion to quickly seed short cycle crops (mainly maize) on parts of the bare fields. However, with no continuation of the rain to the end of the year, these early seeded crops are likely to be useful only for fodder, as they are already reaching flowering stage. On the other hand, late sown long cycle sorghum is likely to profit from the coming *belg* rains and with additional irrigation will hopefully reach maturity.

Wag Hamra

The zone is mainly *meher* dependant. The 1997 agricultural season ended with an unsatisfactory harvest for Dehana and a bad to failed harvest for Sekota and Zequala weredas. As in other zones, it was mainly the lowlands that suffered most.

The unseasonal rains were mainly evident in the southern highlands of Dehana wereda, causing an estimated harvest loss of 8 percent, according to the zonal office of agriculture. According to the post-harvest assessment conducted by the zone in early December, the overall yield reduction due to erratic rains, short *meher* season and untimely rains reportedly amounted to over 70 percent.

The condition of livestock improved with the unseasonal rains, together with a slight increase in market prices.

According to the initial pre-harvest figures, relief food was being distributed by the DPPC to 139,817 people. In addition, SCF (UK) has donated 816 tons of wheat grain to be distributed in Sekota and Zequala weredas. Despite these ongoing relief efforts, people were reported to be migrating to the Gonder area. The zone has formed a committee to assess the underlying causes of the movement.

Major parts of Wag Hamra Zone are not suitable for agriculture, due to aridity and rudimentary soils. Livestock production has therefore always been an important element of the rural economy. Progressive aridity and consecutive droughts have caused major damage to the natural environment and with additional hardship arising from the civil war and the concomitant depletion of productive assets. Farmers in the locality remain highly vulnerable, and following the recent series of poor harvests, which have further eroded assets, rehabilitation needs have reached such an extent that an immediate and adequate response is essential.

Despite its aridity and rudimentary soils, Wag Hamra has good potential for forestry development and livestock rearing, especially if conceived in combination. Apart from regular relief interventions, it is recommended that appropriate long-term actions be taken to restore subsistence of the people in a sustainable way. Some agencies are already active in the forestry sector, like NCA/EOC (Ethiopian Orthodox Church & Norwegian Church Aid) and ORDA (Organisation for Relief & Development in

Amhara) and in animal health, like SCF (UK), but efforts have to be intensified and widened in scope, in order to bring about a substantial and lasting impact on people's lives.

Oromiya Zone

The zone has three weredas out of which two are both *belg* and *meher* dependant. The *belg* contribution generally makes up to 15 percent of the total annual crop production. However, this year, due to a late onset of the *belg* rains and subsequent moisture stress, production reportedly reached only around 15 percent of expected yield. The main season was late in starting, while shortage of rain during crop germination and flowering stages substantially reduced the final harvest. All in all, 1997 was reported to be the worst of the last five years with harvest losses estimated to have reached up to 80 percent, according to zonal departments of the Ministry of Agriculture and DPPC. According to the zonal early warning pre-harvest assessment, the most affected wereda is Artuma Jile, followed by Bati and Dewere Himeno/Chefe.

Livestock suffered from lack of pasture and water until the occurrence of the unseasonal rains. Following these rains, the condition of livestock has improved together with the recovery of market prices and demand.

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