

South Welo expects a bad *belg* season

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Introduction

South Welo Zone, in the eastern part of Amhara Region, is among those areas in Ethiopia where agricultural production from the short *belg* season contributes significantly to the local food economy. On average, the *belg* season's output makes up to 25 per cent of the total annual production in the zone. In certain highland areas however, dependency on *belg* production can reach as much as 70 to 90 percent. A harvest failure or a major yield reduction has therefore a severe impact on the food security in these *belg* areas, particularly if activities such as livestock keeping and marketing, labour and trade are rather limited. How people try to cope with situations of food stress has been described in an earlier UNDP-EUE report (*After the failed belg, how do people cope? Observations from South Welo – Field Report 18 – 23 August 1997*).

While in a few areas the *belg* harvest (mainly barley) was just about to start, the objective of the EUE mission at this time was to get a quick impression on the current season's outlook. Included in the field visit were the weredas of Kutaber, Desezurya, Legambo and Tenta which comprise some of the major *belg* growing areas.

Overall poor expectations in central weredas

In all four weredas visited representatives of the respective Bureaux of Agriculture were, to various degrees, pessimistic on the performance of the current *belg* season. Unfavourable rains (insufficient amount and erratic distribution) followed by infestation by pests (aphids) and fungal diseases (rust) are the main factors leading to a rather bleak outlook. None of the weredas expect a normal season. Yield estimates show figures much below average.

Fruit trees to improve food and income diversification

Kutaber, for instance, is expecting the "second worst *belg* season of the last five years", according to local agriculture experts. Under good conditions the wereda can reap a *belg* harvest of 4,000 tons (major crops: barley, wheat and oats). Whereas the last season, the *belg* 1997, yielded some 2,900 tons, this year "only something between 1,200 and 2,000 tons" can be expected, according to the wereda Bureau of Agriculture. While rain-fed agriculture continues to prevail, the wereda tries to counter soil degradation and deforestation. Through 25 extension centers farmers are supported in using fertilisers and improved seeds. Furthermore, near Kutaber town a nursery is producing Eucalyptus and Juniper seedlings. Located adjacent to the nursery is the "Highland Fruit Trees Trial and Seed Multiplication Center" which was established in January 1987 and recently expanded at a more significant scale to provide members of the local population with seedlings of apple, pear and plum varieties originating from Italy and Japan. Aiming at delivering fruit

seedlings also to other highland weredas in the zone and the region, Kutaber officials see the Fruit Tree Center (“the one and only of its kind in Ethiopia”) as a token of rural development, contributing to food and income diversification and eventually helping to reduce vulnerability. Kutaber extension experts are optimistic in trying to raise the people’s awareness about the nutritional value of these fruits hoping also that local demands will increase and marketing possibilities develop. Reportedly, already now some farmers, owning three to four plum trees, earn 400 to 500 Birr cash in a year by selling fruits.

Desperate farmers in Desezurya

Driving south-west out of Dessie, the zonal capital, the mission spoke in Desezurya wereda to a farmer who was ploughing his land prior to planting teff and wheat for the long *meher* season. As generally usual in these areas, he had sown *belg*-barley in January. However, due to rain shortages and leaf-rust, the crop was lost. Rather desperately the farmer said: “For me, the last *belg* season was already poor and also the last *meher* season was a failure. But this *belg* is the worst in the last five years – a complete loss.” For this farmer the current situation means also a loss of cash since he had invested on loan 175 Birr in fertilisers and selected seeds. Since he did not get any yield, he sold one ox to pay back his debts and to buy food grain on the market with the rest of the money. Because he is still left with one cow, which he will sell eventually, he was not eligible to benefit from the last relief food distribution, which took place in this kebele (some 14 kilometers from Dessie at an altitude of 2400 meters) in early May and during which “only the poorest of the poor, about 1000 people” were given a one month ration. “I give it a last try”, the farmer says pointing at the pair of plough oxen he borrowed from a richer farmer, “when the next *meher* also fails, I give everything up and do what many people in this kebele and in other kebeles around are doing: I will leave and look for work in Dubti [Afar Region, cotton plantations] or Jimma [Oromyia Region, coffee plantations]. I don’t want to suffer the same fate as other farmers who end up in jail because they cannot pay back their fertiliser loans.”

At another location (23 kilometers west from Dessie at an altitude of 2,750 meters) the situation looked only slightly better. In this area, nearly entirely *belg* dependent, some farmers were harvesting barley. Whereas last year they were able to harvest 5 or 6 quintals per hectare (one quintal = 100 kg), this season they expect a yield of “maybe 2 quintals”. These farmers also complain that the current *belg* season “is the worst of the last five years”, pointing out that from year to year the yields were decreasing due to a combination of unfavourable rain and progressing soil degradation. Accordingly, “every year more and more strong young men are leaving their families to look for work in other parts of the country”, they say.

While the farmers at two locations of Desezurya cannot be representative for the entire wereda, the wereda’s Bureau of Agriculture confirms a generally alarming tendency for the current season. Referring to the main *belg* crop only, to barley (crops of secondary importance include wheat, teff and pulses), the bureau quotes as a good normal yield 11 quintals per hectare as a wereda average. For the two previous years the bureau’s records show a wereda barley-yield average of 10 and 10.6 quintals per hectare respectively for the 1996 and the 1997 *belg* seasons. For the current season, however, the bureau anticipates due to shortage of rain, rust damage and infestation by aphids a very meagre yield of 1.5 quintal per hectare. While 65 percent of the overall annual production of Desezurya wereda is attributed to the *meher* season and 35 per cent to the *belg* season, it is obvious that those communities located at high altitudes and therefore depending entirely on *belg* production are highly vulnerable and likely to be in need of significant relief support if final harvest results confirm the currently bleak outlook. “Already now”, says a wereda official, “the poorest people in highland kebeles like Harabolo and Atari Mesk are selling their homes and leaving the area.”

Situation looking better in Legambo

Reflecting the erratic rainfall patterns, some areas are also enjoying positive crop developments. In Legambo wereda, near Gimba (some 65 kilometers from Dessie at an altitude of 3200 meters), the mission met a landless farmer weeding the barley field owned by a female-headed household. Working the field from land preparation in January throughout to the harvest expected in mid-June, his salary consists of 50 percent of the yield. "This *belg* season we are lucky in this area," he says. "In a good, average year a yield of 9 to 10 quintals of barley per hectare can be expected. Last year we harvested 5 to 6 quintals but this year could be better than that – I think we get more than 6 quintals per hectare." Good and bad conditions are sometimes in close vicinity. As this farmer put it: "On the other side of the hill over there the situation is very different. Hardly any rain went down and I don't think people there can enjoy any yield." Similar statements could be heard from other farmers in the eastern part of Legambo wereda.

Between Gimba and Akesta, the capital town of Legambo wereda located 97 kilometers from Dessie at an altitude of 3000 meters, stretches a large high plateau grass plain, locally called "Chiro", which is providing good grazing land for livestock. Mostly sheep roam around here but also some cattle and equines can be seen. According to information obtained from the wereda's Bureau of Agriculture in Akesta, livestock ownership is concentrated in rather few hands: "Few local individuals own large numbers of animals", says an expert at the bureau, pointing out that the vast majority of people are depending on crop production having "only few animals or no animals at all". On average, the total annual production of the wereda is to 65 per cent derived from the *belg* season while the remaining 35 per cent is provided by the *meher* season, according to the bureau. Also in this wereda, barley is the most important *belg* crop (followed by some pulses) cultivated mainly in the agroclimatic altitude zones of *dega* and *wurch*. Local agriculture experts reported that the onset of the *belg* rains was timely in January, though later from February onwards interruptions and shortages occurred here and there. Most farmers sowed immediately with the first rains and are now looking forward to a decent harvest, according to the bureau. Taking as a reference the main crop, barley, with normal conditions Legambo could expect a yield of up to 8 to 9 quintals per hectare. According to the bureau's available records, the yield was 7 quintals per hectare in 1996 and (due to rain shortages) 5 quintals in 1997. For the current *belg* season local experts anticipate on an area of 13,790 hectares planted with barley an average yield of 5.5 quintals per hectare.

Disastrous harvest anticipated in Tenta wereda

Driving from the Dessie – Akesta road 40 kilometers north from the intersection to Ajibar, the capital town of Tenta wereda, the mission noted only in the south-eastern part of the wereda promising yellow barley crops approaching harvest with heavy panicles. A few kilometers further north an entirely different picture could be seen: Stunted green stems with hardly any panicles at all. "We have lost completely the *belg* crops", farmers in the area between Fito and Amba Maryiam say. Some farmers, after having cut the stunted barley plants as animal feed, were ploughing their land anew hoping for the *meher* season's wheat and teff cultivation. Rain shortages followed by infestation of aphids, called "*cish-cish*" in Amharic, were mentioned as the main reasons for the *belg* failure. On the southern outskirts of Fito village a young farmer, married with two children, complains that after the 1997 *belg* season had failed also the last *meher* season had been meagre. To feed his family, he sold his few sheep to buy food grain. Once these supplies are consumed, he would sell-off his last remaining animal, a cow. After that, eventually, he might become eligible to receive food relief support.

In Ajjibar, experts of the wereda's Bureau of Agriculture estimate that Tenta's overall annual production is derived to 65 per cent from the *meher* output and to 35 per cent from the *belg*. They emphasise, however, that in the central and southern parts of the wereda dependency on *belg* production is much higher. While the planning figure for a normal average *belg*-barley yield is 9 quintals per hectare, the bureau's records show a yield of 7.5 quintals per hectare in 1995, of 9.5 quintals in 1996 and of 4.5 in 1997. This season the bureau, which is "assessing the crop development in the field twice a month", expects on a total area of 8,208 hectares planted with barley only a yield of 1.4 quintals per hectare. Very late onset, insufficient amount and uneven distribution of rains are the main reasons for this pessimistic anticipation. As a secondary detrimental effect pest infestation (aphids and later lady bird beetles) was mentioned. The bureau confirmed that only in the south-eastern areas of the wereda along the boundary with neighbouring Legambo crops are performing well while in the majority of the other *belg* areas farmers have nothing to harvest.

Pointing at the population pressure - currently about 150,000 people are living in Tenta - local experts say that even in years with both satisfactory *belg* and *meher* seasons the wereda was hardly in the position to feed its people. An agronomist: "90 to 95 per cent of our population depend on crop cultivation for their livelihood. Now this year, after a modest *meher* and facing a very bad *belg* season many people will suffer from food shortages. Relief needs will see a big increase but resources are scarce."

A road rehabilitation project was until recently providing labour opportunities to some members of the population. But soon, with works progressing northbound out of the wereda, this local labour opportunity will cease to be available. In order to reduce the chronic vulnerability, the wereda needs, as mid- and long-term perspectives, "more agricultural infrastructure inputs", local experts recommend: "We need projects like dams for irrigation, animal husbandry support, bee-keeping programmes and the like in order to diversify and secure the livelihoods of the population."

Toxic Grass Pea leading to crippling effects

How dangerously unhealthy life in parts of Tenta wereda currently is, was illustrated during a visit to Amba Maryiam where the mission met with farmers in the field. Focusing on their "complete harvest loss", the farmers said most people around the locality were already now suffering severe food shortages. While reportedly some people were migrating out of the area, those remaining have forcibly to reduce their number and quality of meals. In April, they say, a distribution of relief food was carried out in Amba Maryiam but only "very few people, those having absolutely nothing and being to weak to walk properly" received a one month ration. Meanwhile, according to the farmers, more and more people started to eat Grass Pea (also called Chickling Pea or Vetch - *Lathyrus sativus*), a plant which is called *Guaya* in Amharic. Because of its drought resistance and relatively high yield, apparently many farmers cultivate this potentially poisonous plant which, if consumed excessively and not carefully prepared, leads to neurotoxic disorders with finally irreversible crippling effects (*Lathyrism*). UNDP-EUE has mentioned this plant as an indicator for serious food stress in an earlier report (*Beneficiary numbers to be increased: Amhara Region after the failed Belg - Field Report July 1997*).

Farmers spoken to said that in and around Amba Maryiam some 90 people became recently crippled after over consuming Grass Pea. In one family alone both parents and two children had suffered polio-like symptoms, they reported. Furthermore, since leftovers of the plant were used as fodder, animals were also being affected. The mission returned to Amba Maryiam town to get this information confirmed at the local clinic. The health assistant present was well aware of the problem but unable to provide figures on people actually affected by *Lathyrism*. "Once people become crippled, they hide at home and they don't

come to the clinic because they know that there is no cure.” Out of the 4,166 households of the Amba Maryiam kebele, the health assistant estimates that 75 per cent are consuming *Guaya*. According to his informal information, also in other kebeles of the wereda the toxic plant is being consumed. Furthermore, the health assistant told the mission that 10 per cent of all children under five seen at the clinic were suffering from moderate malnutrition. “The trend is increasing”, he concluded.

Reportedly *Guaya* consumption affecting human and animal health is also taking place in other areas of South Welo since two or three years. This year, however, the problem seems to spread. For Desezurya wereda the respective Bureau of Agriculture confirmed the occurrence of the problem in two peasant associations: Abaso Kotu (No. 04) and Asgido (No. 06). Apparently many people, although aware of the toxic effects, don't remove the husks from the Grass Pea seeds and, furthermore, consume them raw rather than boiling first. As one official in Dessie put it: “Some of the poorest people, trying to fill their stomachs with just something, make the maximum use of the plant – and become crippled.”

Conclusion: Lack of relief resources posing serious problems

In Dessie, the zonal Disaster Prevention and Preparedness Bureau (DPPB) announced that a pre-harvest *belg* assessment covering the zone was scheduled to take place around the end of May. The Bureau, however, confirmed that based on preliminary reports after an insufficient *meher* also this year's *belg* season in South Welo Zone “looks overall not good”. This view is generally shared by Save the Children (SCF/UK) which is currently preparing a report on the zone. Beyond the weredas visited by the EUE mission, reportedly also other weredas, partly being located in lowland areas and *meher* dependant, such as Kalu, Werebabu and Ambassel are facing severe problems affecting the food security of the population. Preliminary findings of SCF/UK indicate that in the eastern areas affected by major *meher* shortcomings the nutritional status of people is deteriorating significantly. From western weredas like Sayint and Mekdela the DPPB obtained indications that – while the actual scale is not known - “entire families” were migrating. Other sources point at major price increases on cereals.

One of the main problems of the DPPB is the lack of relief resources. Except for some small amounts in Sayint, no relief stocks are currently available or prepositioned in the zone. So far this year, the zone received minimal relief resources sufficient for a one month distribution to a very limited number of beneficiaries only. While “people are suffering” as the early warning department said, the bureau was, due to lack of resources, forced to review downwards the numbers of relief beneficiaries. While the central DPPC's “Relief Plan of Operation for 1998” indicated – not yet taking into account the possible outcome of the current *belg* season – a beneficiary number of 616,486 for South Welo this year, the zonal DPPB came under pressure in April to cut that figure down almost by half. Subsequently, the bureau, refusing to comply with that radical demand, submitted to the regional authorities a revised figure of a total of 511,404 beneficiaries for all of the zone's 15 weredas. The zonal bureau feels that the minimised figure is likely to be increased again after the full impact of the current *belg* season becomes to be felt.

Whichever figure might finally be officially valid: A general scepticism prevails in Dessie whether available relief resources can adequately address the actual needs. Like last year, the current constraints force very strict criteria upon those in charge (ultimately at kebele-level) of determining the eligibility of potential relief beneficiaries. Given the very limited resources, only the poorest of the poor can get relief food – with the exception of some kebeles, where local bias and kinship might lead to irregularities. Generally, anybody owning any animals is not eligible. This forces many farmers in need to sell living farm assets in order to buy market grain. The DPPB acknowledges that this is initiating a vicious circle,

where agricultural productivity, already hampered by unfavourable rains, soil degradation and pest infestation, is further lowered in many cases by lack of one own's draught animals which have to be rented - if cultivation is to continue at all. Generally, the erosion of productive assets is a serious problem further aggravating the vulnerability of low income population groups. Equally, the DPPB is well aware of the problem that more and more people are consuming the toxic *Guaya*, pointing at neighbouring North Welo where last year reportedly some 1,000 people were crippled. "How can we stop this", says the head of the DPPB, "if we don't get sufficient relief resources?"

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