

2001 Belg Season in North-Central Ethiopia:

Rains late but farmers remain optimistic

(Report of a joint UN-EUE/MoA/FAO mission undertaken from 19–29 March 2001)

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Overview

The *belg* (short season) rains in Ethiopia have been erratic during the past 3 to 5 years occurring very late or failing altogether in most regions. Consequently, the *belg* harvests of the past years wrought nothing or only minimal production. The negative impact of the poor rains on grazing and water supplies have also had serious implications for livestock in areas where mixed farming is important.

The *belg* is the short rainy season, which extends from February to May. Although *belg* crops contribute less than 10% of the total grain production *belg* rains are crucially important for:

- Growing *belg* crops in the central, southern and eastern areas;
- Seed-bed preparation for short and long-cycle *meher* crops;
- Planting of long-cycle cereal crops (Maize, Sorghum, Millet);
- Replenishment of pasture and drinking water for livestock in both crop dependent, pastoralist and agro-pastoralist areas;
- Formation and development of the inflorescence of coffee crop;
- Crop and livestock production in south and south-eastern parts of the country (for these areas the period from March to May is the main rainy season).

In 2001 it seems the weather pattern is back on a more normal track with most regions reporting rains since early February. From March 19 to March 29, 2001 FAO/MoA/EUE fielded a team to the *belg* producing north-central parts of the country¹ (see map). This area is relatively densely populated with more than 8 million people living in the seven zones visited. The dependency on *belg* rains is above average.

Mission Objectives

The main purpose of the mission was twofold:

- To evaluate the influence of the past drought years on the capacity of farmers to plant this year;
- To predict and/or identify the likely negative and/or positive effects of the late onset of the *belg* season followed by normal rainfall patterns.²

¹ Southern Zone of Tigray, North and South Wello, North Shewa, Oromiya Zone of Amhara Region and North-West Shewa Zone of Oromiya Region. Also visited was the *meher* producing zone Wag Hamra that depends economically on *belg* producing areas.

² The team obtained information on weather condition, land preparation both for *belg* and *meher* crops, planting of *belg* and long-cycle cereal crops, crop performance, market prices, pasture, drinking water and livestock conditions, inputs supply and utilisation, pest occurrences and drought-induced changes in farming systems from Wereda and Zonal Agricultural Departments. This information was cross-checked with the views of farmers, traders, NGOs operating in the visited areas. In addition, field inspections, windscreen and market surveys and livestock conditions observations were conducted.

Mission Observations and Findings

Rainfall

An onset of the *belg* rains in north-central Ethiopia during last week of January/first week of February usually creates optimal conditions for the planting of *belg* crops. This year the *belg* rains arrived comparatively late. Farmers in most zones complained of a delay of up to two months – depending on the geographical location. North-West Shewa and some parts of North Shewa were exceptions where only a delay of two weeks was noted.

Though the rains were initially inadequate and erratic, an improvement in rainfall patterns since early March over most areas was observed³. North and North-West Shewa zones reported excessive/continuous rains in some pocket areas, which caused water logging and flash flooding.

Seed-Bed Preparation

Usually farmers plough twice before planting their *belg* crops. With the relatively late onset of the *belg* rains it could be expected that preparation of the fields would suffer a delay as well. In most areas this was not the case this year as favourable weather conditions at the end of the *meher* season 2000 and untimely rains since then have maintained soil moisture levels thus making it possible for farmers to prepare their land before *belg*-planting season. In addition, despite the late onset, in some areas farmers have reportedly carried out dry ploughing on light soils.

In some of the areas where crop failures have occurred due to poor *belg* rains in recent years farmers apparently were reluctant to use the first *belg* rains for planting. Only when it became apparent that the *belg* season was shaping up positively did they decided to make use of the rains. This was reported repeatedly in North-West Shewa Zone of Oromiya region.

Planting and Harvesting Prospects

In most areas visited, the planting of *belg* crops that began around the first week of March has continued through to the last week of the same month. This is, parallel to the late onset of the *belg* rains, a delay of two weeks (North-West Shewa) to two months. Generally, the delay was more distinct in the northern parts of the area visited and also more pronounced in planting areas at higher altitudes.

Consequently, for much of the *belg* crop producing area there is a high risk that the harvest will coincide with the peak of the *meher* rainy season. This might result in smaller yields and in problems threshing cereals that are not dry enough.

For these reason, the wereda and zonal agricultural departments have discouraged late planting of traditional *belg* crops in highland areas particularly where *meher* crops can also be grown. However, farmers claim that in order to cover likely food gaps during the coming *meher* season they are forced to plant *belg* crops and take the risk that the harvest might suffer from heavy rains in July/August.

Pests infestation

The only non-migratory pest noted was grasshopper in some low-lying areas of the Southern Zone of Tigray and the Oromiya and North Shewa zones of Amhara region. During the visits some farmers in these pocket areas were replanting damaged fields with either teff or chick pea.

The danger of more serious pest damage however is not over for this year. At the time of the visit crops were barely out of the ground and in germination state.

³ The monthly report of the Ethiopia Food Security Network, published by USAID's Famine Early Warning System Network (FEWSNet) in mid-April mentions that after good *belg* rains in March, the first two weeks in April did not bring any more rains. For the crops in germination stage the time until the end of April will thus be crucial.

Inputs

Farmers in all the zones visited usually use little or no fertiliser or improved seeds for *belg* production. They regard the *belg* season as not stable enough and they are afraid of losing inputs because of erratic weather conditions. Many farmers have no experience with these "new" inputs and are reluctant to experiment. This year, as usual in almost all the areas visited, farmers have reportedly used local seeds carried over from last year's *meher* harvest. The picture is different on irrigated land, where fertiliser and improved seeds are used in most zones.

For the current *belg* season farmers did manage to obtain seeds; be it from their own *meher* harvest at the end of last year, or from borrowing seed held by other farmers. There is in all *belg* producing zones a shortage of seed for early maturing varieties. Had such been available in suitable quantities farmers would have had greater flexibility to react to changing rainfall patterns or pest infestation.

Traction Animals

Almost all farmers interviewed during the mission a shortage of oxen for their fieldwork. This seems to be a chronic problem that was only accentuated by the drought years. Occasionally farmers can be seen ploughing with horses and cows to overcome this shortage (in the highland weredas of South Wello, for example). The traditional way of coping with this problem remains however the practise of borrowing oxen from more fortunate farmers, often in return for a share of the crop.

Market Prices

The trend of market prices in all areas appeared to be more or less the same: lower prices for grain and higher prices for livestock in comparison to the terms of trade a year ago. This reflects the good 2000 *meher* harvest and the relatively good start of the current *belg* season which has prompted better-off farmers to put their grain stocks on the market. Farmers are also making efforts to restock their livestock herds and as a consequence are holding back from selling animals, to the contrary they are in the market as buyers. This has contributed to the price increase for livestock.

Pasture and Drinking Water Availability

The comparatively good start to the *belg* season followed by generally normal rainfall patterns over most parts of the north-central highlands have contributed much to the improvement of pasture, drinking water and the physical condition of livestock.

Land Preparation and Input Supply for Meher Crops

Generally, the importance of *belg* rains for land preparation ahead of the *meher* season is underestimated. Long-cycle crops (maize, sorghum, millet) which are planted before the onset of the *meher* rains, account for more than 35 per cent of the total grain production in the country. These varieties are much higher in yield than short-cycle cereals.

At the time of the mission seed-bed preparation for the *meher* season was in progress in all the zones visited. Farmers in most areas were planning to start with the planting of long-cycle millet and sorghum crops beginning April; in fact in a few areas planting of long-cycle crops was already well under way at the end of March.

Changes in Farming Systems and Cropping Patterns

Despite the erratic character of the *belg* rains over the past 3 to 5 years, there has been no dramatic change in the way people in this part of Ethiopia are farming. A shift from high yielding long-cycle crops to relatively low yielding short-cycle cereals was noted, however, this being viewed more as a coping mechanism than a conscious change to a different farming strategy. Apart from the vagaries of the climate, an infestation of sorghum chaffer in recent years has also been a factor forcing farmers to shift from the more the vulnerable long-cycle crops to relatively more robust but low yielding short-cycle cereals. The moment the climate returns to a more normal pattern farmers are expected to revert to their usual crops and planting schedules.

The most noticeable change has been a greater willingness to expand the area of land under irrigation. At present there is an impressive tendency to manage water better during rainy periods but more needs to be done to develop the potential for small scale irrigation projects that prolong the availability of water and utilise water resources better. Such projects, however, generally require financing and technical expertise that is usually beyond the means of these farmers.

Food Security

The positive start of the *belg* season and the currently optimistic outlook prevailing among farmers of the region cannot hide the fact that many people will still lack food at least until the harvest of this year's *belg* crop.

Conclusions

Though the 2001 *belg* season started late, as of end March growing conditions could be described as generally positive. Provided north-central Ethiopia is saved from major meteorological or other mishap in the coming four to five months there is the potential for a favourable *belg* harvest and the possibility to plant the all-important long-cycle crops on time and under good conditions. This would undoubtedly have a positive effect on the overall food security situation in the area.

For the longer-term, in a situation where farmers are highly dependant on favourable weather it is of great importance to concentrate support efforts on development and enhancement of farming inputs, technology and know-how, increasing the choices and options available to farmers and enhancing their ability to adapt to changing circumstances and weather conditions. Future interventions are necessary in the following fields:

- Seed supply, especially early maturing, draught resistant and high yielding crops and varieties (vegetables / potatoes/sweet potatoes, cereals and pulses)
- Improving market conditions – particularly for perishable products
- Improving technology for storage of perishable products (potatoes)
- Problem of the shortage of traction animals
- Irrigation – focus on small scale irrigation – focus on areas with perennial water supply.
- Conduct in depth studies on weather/climate variability in order to enable farmers to effectively use *belg* rains for agricultural production and to minimise risks.
- Enhancing monitoring of season and yield forecasting capacities

Given the continuing fragility of livelihoods in *belg*-growing and *belg*-dependant areas of the Ethiopian highlands, in the short term the UN Emergencies Unit proposes to continue its field monitoring with the following objectives:

- Conduct observation visits to all *belg* producing areas in Ethiopia with basically the same objective as this mission.
- Follow up of this mission to the north-central *belg* producing areas in order to document the progress of the season in late April or early May.

DISCLAIMER

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North-Central Ethiopia Belg Producing and Belg Dependent Zones

