

Executive Summary

Food security around the globe is increasingly challenged by multiple factors, ranging from long-term stresses, like climate change or population growth, to unexpected shocks, like natural disasters or economic crises. In order to address these challenges, the concept of food system resilience was developed to better understand and assess the ability of food systems to deal with various types of shocks.

In this study, the resilience of the tef value chain in Ethiopia was assessed. Based on a methodological approach developed by the SAE-Group of ETH Zurich, the tef value chain was identified, its resilience performance assessed and interventions to improve the resilience developed. Data was generated through literature research, stakeholder- and expert interviews as well as a stakeholder-workshop.

Resilience of the tef value chain was found to be quite heterogeneous, differing considerably between the different components of the value chain. Lowest scores were achieved by the formal input supply system, as supply with many improved inputs is unprofitable, shows heavy government involvement, chronic supply shortages and high dependency on single actors and processes. In contrast, the informal seed and farm implement supply is quite resilient, as supply chains are extremely short, actors have big autonomy and production capacities and stocks are large and well distributed. Farmers often plant tef as a cash and security crop, since tef shows a very high value-cost ratio and advantageous qualities to overcome shocks. On the other hand, tef production contributes substantially to soil depletion, farmers lack knowledge on this and other issues and productivity of tef is low compared to other crops. With demand for tef growing stronger than productivity, tef prices have been increasing progressively and tef has become unaffordable for many Ethiopians. However, consumers substitute tef with cheaper cereals such as maize or wheat to cope with increasing tef prices and dependency on tef as a staple food is accordingly reduced. Traders, in contrast, profit from rising commodity prices, and profitability of tef trade is generally high. However, there is no official price information and quality grading system available for tef, making trust (reported to be generally low) a major component for tef trade and reducing the resilience for all post-production steps of the value chain. Finally, the processing & retail step shows an overall good resilience performance due to a large number of processors distributed throughout the whole country with big and flexible spare capacities, diverse income sources and limited dependency on tef.

In order to identify potentials to improve the resilience of the tef value chain, a workshop was held where stakeholders developed resilience interventions for a drought scenario. Main propositions include alternative income sources, savings and stocks, the adoption of improved farming technologies (e.g. drought resistant varieties or water harvesting techniques), as well as the need for early warning systems and government support.

Even though the increasing tef prices of the past years have made tef more of a luxury food item than a staple crop for many Ethiopians, its importance for food security remains substantial in Ethiopia. To date, only 36 percent of the tef production is marketed, with the rest being produced by subsistence farmers for

self-consumption. For the farmers producing tef as a cash crop, rising tef prices are an opportunity to increase income and consequently purchase cheaper cereals to cover the daily food needs.

The tef export ban, which was imposed in 2006, is expected to be lifted in the near future. In the short term, such an elimination would probably pose a risk to food security in Ethiopia due to higher tef prices for consumers. However, lifting the export ban also offers an opportunity for almost all tef value chain actors to profit in the long term. In the best case, the gradual elimination of the export ban could result in an increasing commercialization of smallholder farmers, a widespread adoption of improved farming techniques including mechanization of farms and finally higher tef production in Ethiopia. Accordingly the food security situation in Ethiopia could actually improve in the long run.