Upgrading wheat grain quality along the value chain in Ethiopia

Key messages

- Sustainable access to quality seeds of user-demanded varieties enhances product productivity and marketability.
- Adoption of best agronomic practices by producers improves quality and increases quantity of produce.Adoption of appropriate post-harvest handling practices and adequate storage by farmers, retailers and wholesalers helps ensure delivery of quality grains to processors, increases the produce shelf life, reduces losses, and increases the income of actors.
- Networking between produce buyers and input suppliers will help producers run sustainable enterprises.

The issue

Ethiopia is the second largest wheat producing country in Africa after South Africa. Wheat is a major grain crop grown for consumption and sale and demand for wheat quality products in Ethiopia is growing, particularly during fasting periods, creating opportunities for increased wheat production.

Despite the importance of wheat for consumption and as a source of income, value chain actors are constrained by various challenges.

- Failure to produce the desired wheat grain reduces the prices received by producers and affects the quality of products purchased by consumers.
- Generally, grain quality is negatively affected by poor agronomic practices of farmers who lack training on post-harvest management and storage of wheat grain.
- Adequate storage facilities are missing along the value chain.
- There are no established formal channels facilitating market information exchange between input suppliers and wheat grain buyers. The problem of wheat seed quality is passed on to consumers, reducing the incomes of value chain actors.

Findings

The market assessment revealed that the quality of seeds supplied to wheat producers is low and the varieties are inappropriate for further flour processing, into bread, cake, etc. Bakeries in Basona Worena district, for example, say they do not get the right quality wheat flour from the flour factory (union). This is mainly because the factory uses the ET13 grain variety which produces poor quality bread because the grain itself is soft and the protein content is low.

Table 1: Value chain actors attending training on post-harvest management

District	Traders	Processors	Total	% of actors trained
Endamehoni actors	8	5	13	
Actors trained	0	0	0	0
Lemo actors	12	8	20	
Actors trained	3	1	4	20
Sinana actors	10	9	19	
Actors trained	4	1	5	26
Basona Worena actors	12	6	18	
Actors trained	1	1	2	11

Processors in Sinana, Endamehona and Lemo districts also reported that grain quality was generally not uniform, undermining the quality of their wheat products.

All traders and processors interviewed, except in Sinana, reported that they did not have access to adequate wheat storage facilities. They also highlighted poor grain quality resulting from poor quality seeds used by farmers as a major challenge to the development of the value chain. The survey indicated that few actors in the four districts have received training on post-harvest management and storage (Table I), despite a clear demand for enhanced skills in this area. Those who did attend, were mainly from cooperatives and unions; A few trainees were private individual traders.

Recommendations

Findings point to various interventions to upgrade wheat quality from producers to end consumers.

- Encourage extension workers to offer training to farmers on the best wheat agronomic practices, helping improve the quality of farm-level grain.
- Encourage wheat farmers to seek higher quality seeds which are demanded by buyers, thereby increasing productivity, production and income of farmers.
- Increase training by extension workers and marketers on improved post-harvest practices, increasing shelf life of wheat and reducing losses. Wider access to improved storage facilities and awareness on appropriate storage techniques by value chain actors may result in increased income as the actors can store the wheat grain until prices are favourable.
- Establish platforms bringing produce buyers and input suppliers together, encouraging producers to grow high quality varieties that markets want.

Methodology

The value chain assessment built on previous participatory community assessment surveys and telephone interviews carried out at farm and business level by Africa RISING. Value-chain mapping was used to identify value chain actors and service providers; methods used included focus group discussions, key informant interviews and innovation platform meetings.

The work was carried by staff from the International Center for Tropical Agriculture (CIAT), the International Potato Center (CIP) and the International Livestock Research Institute (ILRI).

The Africa Research In Sustainable Intensification for the Next Generation (Africa RISING) program comprises three research-for-development projects supported by the United States Agency for International Development as part of the U.S. government's Feed the Future initiative.

Through action research and development partnerships, Africa RISING will create opportunities for smallholder farm households to move out of hunger and poverty through sustainably intensified farming systems that improve food, nutrition, and income security, particularly for women and children, and conserve or enhance the natural resource base.

The three projects are led by the International Institute of Tropical Agriculture (in West Africa and East and Southern Africa) and the International Livestock Research Institute (in the Ethiopian Highlands). The International Food Policy Research Institute leads an associated project on monitoring, evaluation and impact assessment.

Prepared by Eliud Birachi (CIAT), Edith Wairimu (CIAT), Wellington Jogo (CIP), Ashenafi Mekonnen (Southern Agricultural Research Institute), Annet A. Mulema (ILRI), Kalpana Sharma (CIP), Kindu Mekonnen (ILRI) and Dirk Hoekstra (ILRI)

africa-rising.net