

Adding value in a changing world: Mechanizing small scale faba bean processing in Ethiopia

Key messages

- Improved faba bean processing methods, such as mechanized roasting, increase returns to traders and smallholder producers.
- Increasing the availability of processed faba beans leads to increased consumption of faba bean products in urban and rural areas, resulting in more income for farmers and nutrition benefits for consumers.
- Faba bean roasting mechanization will improve efficiency and reduce labour expenditure, particularly benefitting women who are heavily involved in this work.

The issue

Faba beans are a major pulse crop important in the Ethiopian diet. The bean is a major source of protein for urban and rural dwellers. Various traditional faba bean dishes such as 'full' and 'shuro wot' are eaten at breakfast and dinner. A common component of family diets, faba bean demand is high, potentially offering farmers a significant source of income.

Processing, undertaken mostly by women, is an inefficient, largely manual, procedure. The bean is split, roasted and milled into flour. Roasting takes place in an extremely hot, smoky and unhealthy environment. Other value-added processes, for example, sorting and roasting, are also done manually. In market surveys, large numbers of processors described roasting as the most challenging task, in terms of time and labour.

Figure 1. Woman roasting faba bean grains



The sub-sector is also characterized by market chain fragmentation. Weak market linkages and poor processing capacity significantly hinder supply, productivity and the earning of producers, market intermediaries and processors, particularly women. There are very few mechanisms or channels existing to enable value chain actors to exchange information on the quantities and quality of faba bean demanded by the market. Consequently, there is little incentive to invest in changing current practices. Moreover, the costs of improving processing practices and investment in equipment and knowledge, is prohibitive for most small-scale processors.

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Findings

Survey results show that the major actors in the faba bean value chain are agents/brokers, individual farmers, large traders and processors, and collectors. Faba bean supply is seasonal, peaking between November and January and bottoming out between June and August. Faba bean demand peaks during fasting periods. The cost of roasting faba beans is high due to the long hours and labour required. Traders and processors underlined the need for simpler and more efficient processing methods, especially for roasting. But once processed, profit margins are quite high.

Table I: Average prices for dried, roasted and split faba beans

Item	Average price (USD)
Faba bean grain	0.35
Cost of roasting	0.13
Average price of split and roasted faba bean/kg	0.63
1 USD= 20 ETB	

Recommendations

- Improve the mechanization of faba bean processing, especially the roasting process, beginning with cottage-level processing, moving towards larger industrial scale processing.
- Foster better market linkages between producers, intermediaries and processors along the value chain in order to improve the quality of faba bean products available to end consumers.
- Improve the quality of life of faba bean processors, mostly women, by reducing their exposure to unhealthy working environments.

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.

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