

# Improving the efficiency of the Ethiopian edible oil value chain



## **Oilseeds in Ethiopia**

Ethiopia has favorable agro-climatic conditions for cultivation oilseeds and is one of the centers of origins in the world for several oil crop plants like rapeseed, niger/noug seed, and castor beans. Other oilseeds like linseed, soybeans, groundnuts, sunflower and safflower seeds are produced in different parts of the country. Production and export of sesame seed has increased dramatically in the last ten years and thus Ethiopia has become one of the world's leading producers and exporter of sesame in very short time. The oilseeds sector makes an important contribution to the Ethiopian economy, accounting for about 18 percent of the total foreign exchange earnings of the country at a value of \$ 382 million in 2010. It supports the livelihoods of about 3 million Ethiopians farmers, but also a number of traders, transporters, and oil millers.

While the potential is there to adequately supply both domestic and export needs, chronic shortages in supply have been known to beset the operations of both the edible oil industry and the requirements of oilseeds exporters. Despite this potential Ethiopia imported Palm oil worth \$250 million in 2010. Both oilseeds commodity production and edible oil processing industry in Ethiopia remain to a large extent underdeveloped and the cheap imported palm oil has put the local edible oil industry under additional pressure.

## **Challenges to overcome for building a competitive edible oil sector**

The substantial local demand provides sufficient room for crushers to work at full capacity<sup>1</sup>, but there are many constraints facing the development of the sector. Low production and poor quality of oilseeds, inadequate facilities (storage, transportation, post harvest handling and packaging), outdated edible oil processing technology and weak business development service providers targeting the edible oil sub-sector are all challenges that need to be addressed in order to become competitive. Weak linkage among the chain's actors and lack of finance also constitute major obstacles. Multiple handling that typically occurs between farmer and processor causes a deterioration of the quality and high post harvest losses in the range of 15-25 percent. Furthermore, this weak linkage between the farmer and the industry leads to poor market orientation for the farmers and unreliable supply for the processors.

In addition to the 27 large and medium-scale edible oil processors in Ethiopia there are more than 1,000 edible oil micro-processors that operate in rural and urban areas in often using outdated technology to crush oilseeds which are sold to consumers as crude oil. The processors run their operations in their own backyard in residential areas. An almost complete absence of modern packaging material has further added to poor quality and reduced shelf life, which adds to the difficulty of marketing oil from local processors who now has to compete with well packaged cheap imports.

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<sup>1</sup> In general, the oil extraction capacities of existing large and medium industrial processors are heavily underutilized, mostly operating at only 30-40 percent of full capacity. For small scale processors the situation is usually worse.

## **Demand driven production of oil seeds in Amhara and Oromia**

Given the number of constraints that hampers the development of the oilseed sector, the Joint Programme (JP) is designed to enhance the performance of the entire value chain, including production, processing and marketing. The assistance is directed at the commercialization of small holder oilseeds production through creating market outlet by farmers to small and medium edible oil processing enterprises active in Oromia and Amhara Regions. The JP is aiming to improve the raw material supply system, promote efficient processing capacity and improve access to finance and markets. The approach is to integrate the private sector engagement in all aspects of the value chain, from production and processing of oilseeds, to marketing, finance and business support services.

### **Direct beneficiaries of the JP**

#### **Small scale processors**

UNIDO, FAO and ILO are supporting 28 small scale edible oil processors in Bahir Dar, Woreta and Hamusit towns in Amhara and 46 processors in Adama in Oromia. The processors have been organized in clusters and have established business associations. The members have received technical training in processing and quality control. For this purpose the JP has established collaboration with Bahir Dar and Adama Universities in order to bring the needs of the processors and the skills of service providers so that they jointly can learn from each other and develop practical solutions to technical problems. Collaboration has also been established with the Quality and Standard Authority of Ethiopia (QSAE) for testing and certification.

Apart from upgrading the skills and the technology of the processors the JP is supporting them to relocate from residential areas to industrial zones. Relocating industrial activities from residential areas will have huge financial, social and environmental benefits and it will also allow for better quality control of the edible oil.

The JP is also facilitating access to financial resources from different financial institutions with very encouraging results. As individuals the processors have had little access to credit but through their business associations the financial institutions have declared firm support to support investments the clusters have started mobilizing their own resources for upgrading their technology.

The JP will continue to support the efforts of the clusters in terms of technical assistance relating to pressing efficiency, refining, testing for quality assurance and packaging. The goal is to establish a common refinery complete with a test laboratory within the industrial zones in order to ensure that the edible oil is safe for consumption and of high quality. This facility will be managed and operated by the processors themselves and therefore further capacity building in terms of leadership, management and bookkeeping will be provided to members of the clusters. In addition an Occupational Safety and Health (OSH) plan has been developed and implementation of the same is in the process of being rolled out.

## **Smallholder farmers and Farmer Unions**

On the production side the JP is supporting small holder farmers in Mecha, Derra & Fogera Woredas in Amhara as well as the Merkeb Farmer Union situated in Bahir Dar. In Ormoia the JP is working with the Hitosa Farmer Union and with smallholder farmers in Limu Bilbilo, Digelu Tijo, Hitosa & Tikur Inchini Woredas.

To promote the oilseed production and provide an incentive for the smallholder farmers the JP has established a revolving fund for improved seeds fertilizers and other inputs within the Farmer Unions. In addition to the inputs extension workers have been trained together with farmers on best agricultural practices for oilseeds production. The Merkeb and Hitosa Farmers Unions are the collecting points in the respective regions and these are being equipped with seed cleaning and grading technology so that they are able to supply the processing clusters with high quality oilseeds.

To further strengthen the supply of good quality raw material contract farming and warehouse receipt are two systems that will be trialed under this JP. Contract farming is perhaps the most promising method of connecting farmers to processors, avoiding multiple handling. Currently many traders and market agents are making lots of profit adding little value as they alone know the full market situation and therefore can dictate prices, which affects farmers as well as processors negatively. Warehouse receipt is another way of connecting the farmers directly with the market, where the farmer gets a receipt of the quantity and quality of his/her produce at the warehouse and this receipt the farmer can take to an organized market and sell directly to marketing agents in a transparent way – the market information is known to all actors.

## **Sustainability of the interventions beyond the lifetime of the JP**

The lack of effective market linkages have been a major obstacle for the farmers as well as the processors and so the JP will work with the farmers, the farmer cooperatives, the unions and the clusters to develop strong market linkages between them, where risks as well as profits are shared between the different actors. Securing a market outlet for the farmers and at the same time establish a good source of high quality raw material for the processors is key to long term success.

As part of the JP sustainability strategy, there is a lot of effort going on as regards institution building and more specifically in the area of capacitating the newly established business associations at the two project sites through, among other things, providing demand driven and relevant hard and software support. The collaboration between the processors, the Universities and QSAE is an important aspect of this, where partnerships are formed between local institutes and the clusters that will last beyond the scope of the JP.

## **Results to be achieved**

The JP aims to demonstrate a sustainable supply system of oilseeds at desired quantity and quality between demand driven farmers and local processors on one hand and to demonstrate efficient processing and market access for locally processed oil on the other. In short, the JP aims to demonstrate a competitive edible oil value chain. The benefits of this will be noticed among farming communities and processing clusters, but also in the public at large. Ideally this JP will serve as a model on how to transform the small scale edible oil processors from being marginalized to become competitive and supply the market with high quality edible oil.