The Mystery of Soya Bean Marketing: the need for integrated measures



Introduction

A large portion of northwest Ethiopia was known for its wide scale mono-cropping of sesame. Since 2020, a production shift to pulses, largely soya bean, has been observed. A number of factors contributed to the wide scale acceptance and the dramatic increase in volume of production. Since 2014, stakeholders in the development domain have played invaluable roles in introducing, testing, validation and scaling of the soya bean technologies. Meanwhile Gonder Agricultural Research Centre supported by the Sesame Business Network project has been multiplying seeds of soya bean varieties anticipating that the crop has a potential to become a game changing commodity for the area. Innovation uptake remained slow until it gained momentum in the 2021 marketing season, where prices hiked to over 46 ETB per kg which motivated farmers to make a sudden shift from production of sesame to soya bean.

The main reason for price increase was an increase in demand by both the local and international markets. To meet specifically an increasing local agro-processing companys' demand, Ministries, Bureaus, Researchers and NGOs have intensified their technical support to producers for increasing soya bean production. Likewise, efforts were made to create a sustainable market by linking agro-processors with producers through contract farming. Subsequently, in 2022, the soya bean area reached about 250,000ha in Amhara alone and production surpassed half million ton.

KEY messages

- The explosive increase in soya bean production due to high profitability in previous production seasons has resulted in an adequate market supply while cost of production has increased by about 300% and a sharp decrease in farm gate price.
- While the demand of soya bean outweighs supply, the processing industries are buying below their capacity, claiming shortage of cash, power breakage and high transport costs as the main reasons.
- Farmers have very limited options for selling their soybean products, thus they frequently sell their products at a low price to village collectors or traders in the nearby spot markets.
- The game played by exporters in the quest for hard currency disturbs the market. Exporters buy commodities at higher price locally and sell at lower price (~300 USD less per ton) in the international markets.
- The large fluctuations in the market affecting supply and demand will have spin-offs leading to reduced income of value chain actors and support services, limitations in job creation, hard currency earning, import substitution, animal feed supply, income tax, and soil fertility improvement.
- To reduce the impact of the soya bean marketing challenges, there is a need to design actions that will result in longterm solutions to create a sustainable market for soya bean.





The increase in volume resulted in a sharp decrease of farm gate prices to 28-30 ETB per kg. The large drop is discouraging producers and may result in a decline of soya bean production in the coming years. Shockingly, the local processing companies that were airing their annual consumptions in thousands of tons are buying far below their capacity or have vanished from the scene. According to the bureaus of agriculture and trade, 265 buyers signed contract agreements with more than 50 thousand farmers, but only 42 are participating in the market. Due to this defaulting of sourcing companies, farmers sell their produce to spot market traders or to village collectors via brokers. Farmers perceive that, traders at spot markets usually collude and set lower prices, less than 32 ETB per kg. Farmers are however, in a position to set the price for their own product.

In 2022, production costs increased from 123% to 500% as compared to 2020 crop season (see table below). For example: seed and fertilizer were purchased at 50 and 48 ETB per kg, respectively; herbicides and insecticides at around 800 ETB per litre; labour cost raised from 80 to 400 per man-day during clearing, weeding and harvesting; machine threshing cost escalated from 100 ETB in 2020 to 500 ETB per 100 kg in 2022; loading and unloading from 10 to 30 and transporting cost was nearly 150 ETB per 100 kg bag for a very short distance, that is from field to stores. Because of the soar in production cost, farmers expected more than 45 ETB per kg at farm gate in the 2022/23 marketing season. However, the price started at less than 25 ETB per kg and still remains far below their expectations.

	Cost of production (ETB)										
Year	Clearing (M/day)	seed (kg)	Ploughing (per tractor hour)	Fertilizer (NPS per 100 kg)	Weeding (M/day)	Herbicide (lt)	Har- vesting (M/day)	Threshing (per kg)	Load- ing/ un- loading (100kg)	Transport- ing (100kg)	Total
2020	80	15	400	1250	100	400	150	1	10	30	2436
2022	250	50	1500	4800	250	800	400	5	30	150	8235
% increase	123	233	275	264	150	200	167	400	300	500	338

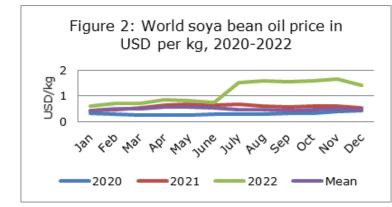
Source : Mierab Armachiho woreda agriculture office; Note: M/day = man-day

Multiple reasons could be speculated for the current low price of soya bean. The international market price fall to less than 510 USD per ton seems to outweigh others under which fair price is paid to producers. In the international market soya bean price peaked in May 2022 and fetched 0.566 USD or nearly 30 ETB per kg. Surprisingly in the same period, soya bean seed price in Ethiopia was nearly 46 ETB per kg, which is much higher than the price on the international market. A similar price trend was reported by Hailu and Kelemu (2014) where domestic price was significantly different than the international market price in 2011. For example: in August 2011 local price was 900 USD/t, while the international price was 500 USD/t. In September 2011 international price was less than 500 USD, while domestic price rose to 1100 USD/t, with a difference of about 600 USD/t. In October 2011 domestic price increased to 1,200 US-D/t, while international price showed slight

reduction (450 USD/t). In November 2011 domestic price fall down to 800 USD/t, while international was around 400 USD/t. In December 2011 both domestic and international prices showed downfall from 550 to 40 USD/t, respectively. January 2012 international prices continued to stabilize below 400 USD/t, while domestic remained at 500 USD/t. In February 2012 domestic price raised to 600 USD/t, while international showed slight increase (500 USD/t). In the period December 2011 to February 2012 domestic and international prices narrowed down to 100 USD/t difference. This might be due to increase in supply of soya bean seed because of entry of the new produce into the market.

The two market scenarios clearly indicate the game played by exporters in the quest for hard currency. Exporters buy commodities at higher price locally at the Ethiopian Commodity Exchange (ECX) platforms and sell at lower price (~300 USD less per ton) in the international markets (Schrader et al. 2021). The price difference in 2022 between local (46 ETB per kg) and the international (30 ETB per kg) is well exemplified in the case of soya bean marketing. The difference of 19 ETB per kg between buying and selling is an intended and strategically planned loss that is temporarily absorbed by exporters, but easily recoverable in the short run. Since May 2022, soya price started to decline worldwide and stands at the equivalent of 27.4 ETB per kg in March 2023. However, in the northwest soya is being traded at ECX centre at 34 ETB per kg. This shows that there exists a 7 ETB per kg price difference between the local and international market without considering fees and shipping costs to the nearest port. Exporters withhold high volumes of commodities speculating two things: 1) earning more currency from the export, and 2) future price increase for both local and international markets. Ethiopian commodity exporters allocate budget purposely for loss, knowing that the loss will result in profit through earning foreign currency to recover the loss from sales of imported goods.

The above scenario is well explained in the case of oil imports. To explain the situation better, a three-year (2020-22) world soya bean oil price was taken as a reference. On average world price for litre oil was about 0.5 USD (fig 2). In Addis Ababa however, it is sold at over 3.78 USD (200 ETB) per litre not including import taxes. The over 7.5-fold price increase locally shows that the consumers are main absorbers of all cost that build in the process of oil import and marketing. The price difference between the two markets is a calculated risk and is temporarily shouldered by exporters for later loading onto consum-



ers. The main cause for such unfair trade is foreign currency reserve depletion in the national treasury. Therefore, it is crucial to substitute imports and at the same time produce export commodities in large quantities and earn more currency.

The finance dilemma

The second important reason for low participation of processing companies in soya bean marketing is shortage of cash. Almost all agro-processing companies depend on bank loans for running their businesses. On the other hand, banks have liquidity problems to provide the required amount of credit to agri-businesses for sourcing raw materials. Banks complain that the cash shortage is due to forced purchase of treasury bonds from the national bank. The increase in expenditures, specifically on food, health, education, transportation, housing and fuel significantly reduced saving, which aggravated liquidity problem of banks. Moreover, the high inflation rate (>35% in 2022) and the low interest rates have severely impacted on saving. Consequently, clients withdrew money for purchasing goods such as food items, land, house, car, gold ... etc. Likewise, sourcing companies that have received credit from banks might not use it for purchasing raw materials as the international market is not attractive at present. Thus, they may spend the money on goods and services that would not depreciate due to inflation.

Other important market players in rural areas are primary cooperatives and the cooperative unions. However, their participation in soya bean marketing is quite minimal mainly due to shortage of finance. Therefore, facilitating loans for the major market players (agro-processing companies, exporters, traders, cooperatives and unions) is essential to improve soya bean marketing.

Observed impacts on the sector

The consequence of disparity between farmer expected and real market prices will have a significant impact on soya bean production in the coming years. An attractive market price is the major driver for sustainable and increased production of agricultural commodities. Therefore, the currently low farm price (30-32 ETB per kg) coupled with high production cost (Table above) may force farmers to abandon soya cultivation fully or produce on much reduced area. Similarly, a strong hit will rest on agro-processing and exporting companies' shoulder due to shortage of raw material in the coming years. The production surge observed in 2022 might not continue unless a win-win situation is created. Reduced income of value chain actors and supporters; limitations in job creation, hard currency earning, import substitution, animal feed supply, income tax, and soil fertility improvement are some of the anticipated indirect effects on the sector. We want to draw the attention of concerned bodies to take immediate action to clear the soybean marketing dilemmas.

Actions required

- Creating a win-win situation where farmers receive a fair price for their produce and get motivated for sustainable production
- Facilitating access to marketing credit for processors, exporters, traders, primary cooperatives and the unions
- Solving financial shortages of banks in collaboration with the national bank
- Strictly follow whether the received loan is spent for the intended purpose
- Make a quick assessment on the amount

of produce that has not yet been sold out as well as the demand from all local processing companies and facilitate marketing linkage

- Operationalizing the warehouse receipt system if the available volume is beyond the need of local processing companies.
- Intensify communication and advertising campaigns to inform local and international buyers on the quantity of the produce available in the area
- Improve power supply to processing companies in the industrial parks or scattered over the country so that they can buy to their full capacity
- Ensure peace, security and safe movement of goods and people from region to region
- The relevant stakeholders e.g. the Ministries of Trade and Regional Integration, Agriculture and Industry, and their respective regional bureaus, the National Bank of Ethiopia and other commercial banks, the Amhara Regional State presidential delivery unit, the Industry Parks Development Corporation, the Agricultural Transformation Institute (ATI) and other development partners should jointly develop and execute an action plan based on the points given above.

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