

# THE EFFECT OF COVID-19 ON THE PULSE SECTOR

RAPID ASESMENT  
August 2020

## INTRODUCTION

Since the first coronavirus case was reported in the country, the number of infected people has been soaring at increasing rate. As of August 1, 2020, the cumulative reported cases have reached over 18,000 persons (Figure 1).

The government of Ethiopia has declared a state of Emergency to mitigate the consequence of the virus. The pandemic has negatively affected most businesses across the country. One of these business sectors affected is the pulses sector.

According to the CSA 2018/2019 data, pulse covered 12.73% (1.6 million hectares) of the grain crop area and 9.54% (about 3.32 million tons) of the grain production. The production obtained from faba beans, haricot beans (white), haricot beans (red) and chick peas (white) was 3.30%, 0.48%, 1.07% and 1.05% of the grain production, in that order.

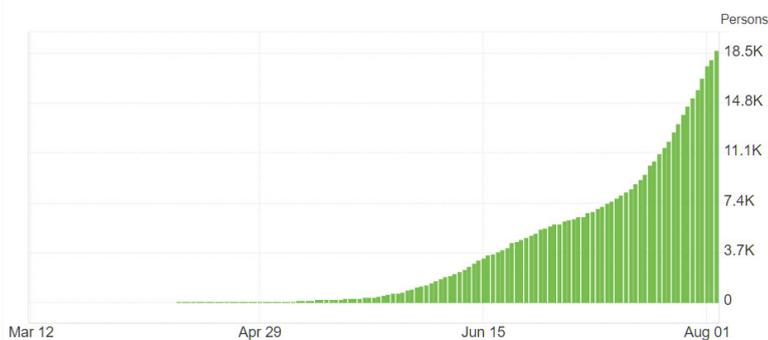
Ethiopia generated US\$ 255 million from export of pulses in 2016/2017. Pulses are the third largest export crop after coffee and oilseed. The most prominent export pulses are haricot bean, chickpea and faba beans.

This rapid assessment tries to briefly zoom in and see COVID-19's pressure on:

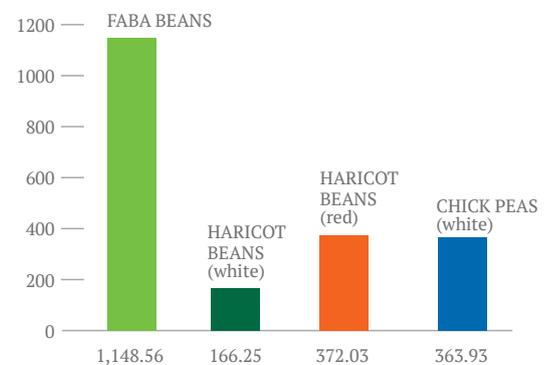
- » availability on agri-inputs
- » farmers mobility
- » pulse production
- » pulse export
- » pulse price and employment.

At the end, the report summarizes by presenting conclusion and by forwarding a few recommendations.

**FIGURE 1. NUMBER OF PERSONS INFECTED BY COVID-19 (CUMULATIVE)**  
Source: WHO



**FIGURE 2. PRODUCTION OF MAIN PULSE CROPS IN 2018/2019 (000' TONS)** Source: CSA



## EFFECT ON AVAILABILITY OF AGRICULTURAL INPUTS

Agricultural inputs application including appropriate use of fertilizer and improved seeds, use of pesticides and improved agronomic practices are required to increase agricultural production and productivity in general and pulse in particular. Smallholder farmers rely on primary cooperatives, cooperative unions and, most significantly, informal markets to access agricultural inputs. On top of other existing challenges, due to COVID-19 outbreak, and following that lack of access for transportation and movement restrictions from port to woredas and cooperatives, agricultural inputs delivery delay has occurred. Based on the Rapid assessment conducted by BENEFIT-REALISE<sup>1</sup> regarding the effect of COVID-19 on the agri-inputs supply and availability, there is a wide gap between demand and supply of inputs such as fertilizer and seed. According to the study, as of May 2020, the demand and supply gap of fertilizer (NPS and Urea) and seed in the four regions of the country<sup>2</sup> ranged from 22.4–51.2% and 38.1–73.2% respectively.

## EFFECT ON MOBILITY OF FARMERS

Even if agricultural inputs are available, smallholder farmers mobility matters a lot, so they can buy/take inputs and apply on their farm. However, the pandemic is affecting farmers mobility negatively. On top of the restrictions, lack of transport service and increment of transport cost contribute partly to the reduced access to mobility. Of the interviewed actors 38% of them believed that due to the pandemic mobility of farmers is affected highly negatively. On the other hand, 15% of respondents thought that the pandemic has no effect on farmers' mobility.

## EFFECT ON PULSE PRODUCTION

In the last five years, there has not been very significant variability in the overall pulse production of the country.

Data compiled from CSA (Ethiopia's Central Statistical Agency) shows that between 2013/14 and 2018/2019 in the range between 2.5 and 3 million tons of pulses have been produced (Figure 4).

Observatory of Economic Complexity (OEC)<sup>3</sup> projected that 3.2 million metric tons of pulse will be produced in 2019/2020. Report done by Jimma University on April 2020 projected that agricultural commodities production could decline by 20–30% in 2019/2020 production season.<sup>4</sup> Thus, taking into account the above two data sources, COVID-19 could cause the reduction of the country's pulse production by six to nine hundred thousand metric tons in 2019/2020.

FIGURE 3. COVID-19 IMPACT ON THE MOBILITY OF FARMERS

Source: Surevy result

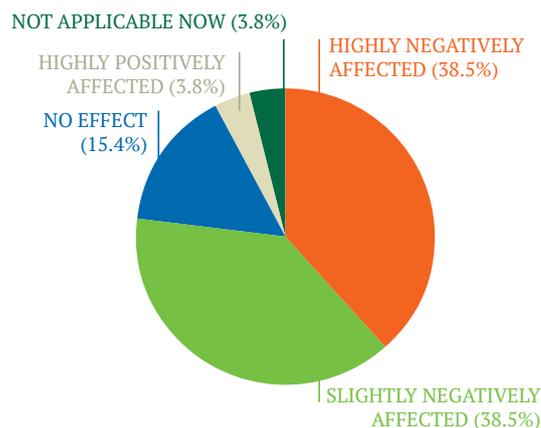
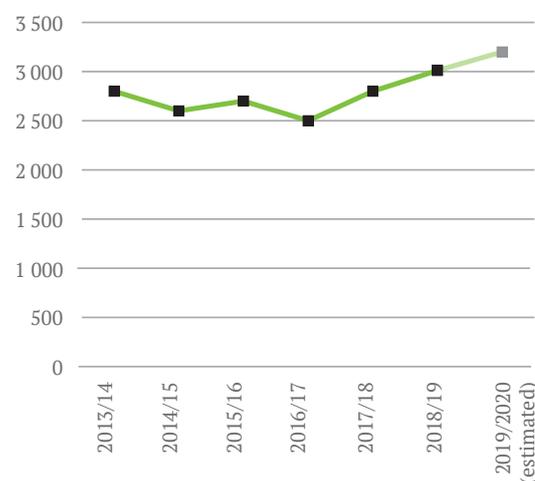


FIGURE 4. PULSE PRODUCTION ('000 METRIC TONS)

Source: Compiled from CSA and OEC



<sup>1</sup> <https://benefitethiopia.org/2020/07/21/rapid-assessment-findings-on-effect-of-covid-19-on-agricultural-inputs-availability-and-supply-in-psnp-area/>

<sup>2</sup> Amhara, Oromia, Tigray and SNNP.

<sup>3</sup> The Observatory of Economic Complexity is a data visualization site for international trade data created by the Macro Connections group at the MIT Media Lab.

<sup>4</sup> COVID-19 Probable Impacts on Ethiopian Agriculture and Potential Mitigation and Adaptation Measures: No Food-No Health-No Life.

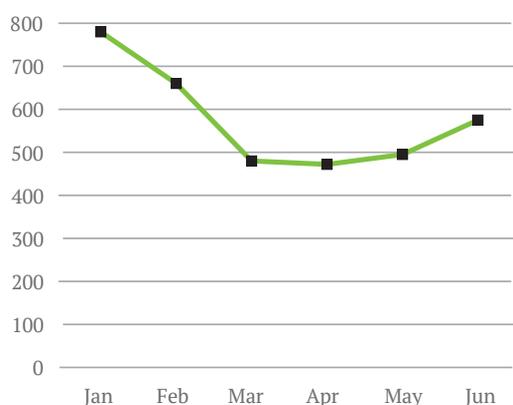
## EFFECT ON PULSE EXPORT

Based on data from the Ethiopian Revenue and Customs Authority (ERCA), between 2013 and 2018 on average Ethiopia exported 326 thousand metric tons of pulses. In general terms, pulse export has been increasing. In 2013/2014 the country exported 318 thousand metric tons of pulse. While in 2017/2018 350 thousand metric tons of pulse was exported. Between the two mentioned referenced years, 13% export growth was recorded. However, there is a concern that COVID-19 could change the slow growth direction of pulse export into rapid decline. A report made by Seneshaw and Tewodros (January 2020)<sup>5</sup> indicated that commodities, such as oilseeds and pulses export have shown declines because of COVID-19. For oilseeds a 15.3% decline between January and February; for pulses a 9.5% fall between February and March, 2020.

In order to have a glimpse to understand the impact of COVID-19 on the export sector, data from sample of eight pulse exporting companies have been taken. The pulse export data of these companies was extracted from January to June 2020. Based on the data, export sharply declined from January to beginning of March 2020.

Between March and mid of May 2020, export trend line was flat. Then export started picking up slowly from end of May 2020 onwards. (Figure 5). Exporters deduce that this export shock highly correlates with the pandemic and follows the lock down of pulse export destination countries. Interviewees reported that by the time the COVID-19 was declared as global threat and countries were closing their borders, export was almost paused. The decline in exports was caused both by a fall in demand and by disruptions in the supply chain and global trade. But, now a days, following mitigation measures of governments and market actors 'state of adoption' pulse export is getting better.

FIGURE 5. EXPORT VOLUME (METRIC TON) OF SAMPLED COMPANIES IN 2020  
Source: Surevy result



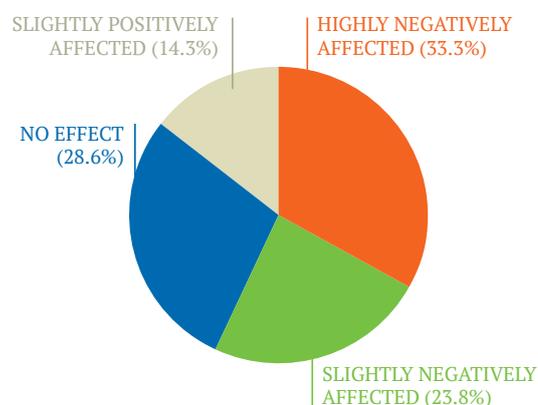
However, still the spread of the pandemic domestically (at increasing rate) along with challenges of domestic unrest, domestic supply chain disruption is expected. Since Ethiopia's exports involve a number of actors across the value chains, a shock in exports impacts high number of households involved in the domestic supply chain.

## EFFECT ON PRICES OF PULSE

Government media briefs indicate that COVID-19 has affected the prices of agricultural commodities in general and pulses in particular, following panic buying; hoarding by traders, and disruptions along the supply chain including the transportation between local markets and central markets. This could drive to higher prices in certain areas, limiting food access for poorer households. These price hikes due to shortage in the supply caused by movement restriction can be tackled in the short-term by government bodies taking control measures to lessen shocks to the food supply chains; monitoring of wholesale and retail markets to minimize artificial price increases. In the medium and long-term, there will be less food availability due to low performance in production seasons; hence, leading to a shortage in the supply and further price hikes.

Taking soya bean as an example, data taken from different actors of soya bean (processors, traders, exporter and cooperatives) pointed that the price of soya bean after the pandemic has affected them highly negatively (33%), where as on the flip side some interviewed actors mentioned that the price hike benefited them to some extent (14%), which is true for traders that have grains in stock (Figure 6).

FIGURE 6. COVID-19 IMPACT ON THE PRICING (TAKING SOYBEAN GRAIN IN THE MARKET AS AN EXAMPLE) Source: Surevy result



<sup>5</sup> Projecting the impact of COVID-19 on exports in Ethiopia.

On the other hand, data gathered from 10 different local markets in different part of the country shows that price of main pulse commodities after the pandemic is increasing. The average price of chick peas, haricot beans, faba beans and field peas have increased by 18 %, 13 %, 18 % and 21 % respectively (Table 1).

TABLE 1. CHANGE IN PULSE: PRICE PER QUINTAL (100 KG)

Source: Surevy result

PULSE	3 months average price before the pandemic	3 months average price after the pandemic	Percentage increase in price
CHICK PEA	2,624	3,108	18%
HARICOT BEANS	2,300	2,600	13%
FABA BEAN	2,782	3,271	18%
FIELD PEA	2,475	3,000	21%

## EFFECT ON EMPLOYMENT

Needless to say, the general effect of COVID-19 on the labor market is severe. However this quick survey shows the overall effect of COVID-19 on employee's job security under the pulse sector has been very little. Most companies surveyed have kept all of their employees. This partly may have to do with the directive issued by the Ethiopian government banning employee lay off. The other reason companies mentioned is that they do not want to lose their skilled and experienced labor force because of a temporary problem. However, in the first couple of months after the COVID-19 first case was identified in Ethiopia, companies did impose forced annual leave primarily for the sake of physical distancing.

Table 2 shows the number of permanent and temporary employees of surveyed eight exporter companies. As presented the percentage change in employees' number after the incidence of COVID-19 is only a 3% decline.

TABLE 2. COVID IMPACT ON THE EMPLOYMENT

Source: Surevy result

EMPLOYEES	Before COVID-19	After COVID-19	Total employees
PERMANENT	476	471	622
TEMPORARY	146	132	603

## CONCLUSION

This rapid assessment briefly highlights the impact of COVID-19 on the pulse sector. The pandemic does have impact on the availability of agricultural inputs, pulse production, export, price and employment. Regarding the input's availability, lockdowns and transport restrictions are affecting timely transport of the inputs. Pertinently farmers' mobility is affected by lack of access to transport and high transport cost. At production level, projections are indicating that agricultural commodities production could decline by 20–30 % in 2019/2020 production season. Particularly pulses, there could be a loss of 600 to 900 thousand metric tons. Export declined the first quarter of 2020 and specifically between February and March, 2020 export of pulse declined by 9.5%. After the pandemic, price of pulse at local markets has changed, mainly the price of mung beans and chick peas have increased by 9 % and 4 %, in that order. However, the pandemic has had relatively small impact on employment in the pulse sector with only 3 % job loss. In summary, COVID-19 is affecting the pulse sector in different ways, mainly the first three months after it was considered as global pandemic. Despite the challenges, in the past few months, following adoption and mitigation measures taken by different countries and the sector actors, it looks like business may get back on track.

## RECOMMENDATIONS

» **Availing agricultural inputs to farmers:** Ensuring the availability of agricultural inputs to farmers at the right time of the season, with reasonable prices, should be a priority for the government in the next few months to avoid disruptions to input supply. Hence efficient transportation of agricultural inputs from one part of the country to another through creation of multiple channels and systems for their timely delivery could be achieved by involving the private sector and other relevant stakeholders. It is common to hear over supply of inputs in one part of the country and short fall of different input supplies in other parts of the country. Creating a communication platform among the input suppliers, buyers and distributors and other stakeholders would contribute to decreases in inefficiencies associated to the input supply. Also in the case of emergencies, government could allow trucks licensed only to load construction goods to transport agricultural inputs as a temporary solution.

- » **Maintaining supply chains (Production):** Ensuring transport and transit routes are clear, while taking the necessary protective measures, can help mitigate the shock coming from supply chain disruption. Transportation costs from production areas to central markets and from central markets to Djibouti port or other border markets are found to be highly limiting the competitiveness of the export market. Of course, this was also true prior to COVID-19, now there is an even higher need to improve the transportation system for transporting produces and improve actors' mobility. For instance, Wodera Farmers Cooperatives Unions (FCU) is going to each of its primary cooperatives to collect the output of its farmers and to make payments. This way the primary cooperatives do not have to travel to the union, which is difficult for them due to travel restrictions<sup>6</sup>.
- » **Simplifying customs procedures:** Efficient customs procedures are the main tools for easy export and marketing of agricultural commodities to the international market. This is very true specially during the period of COVID-19. However, interviewed exporters reported that the current customs procedures are complex. In order to adjust to the COVID-19 way of working and optimize opportunities that may arise in the international market the custom procedure should be eased.
- » **Increase percentage share of pulse export:** In Ethiopia, there is an extreme shortage of foreign exchange necessary to buy products internationally. Products/ inputs that are essential to combat COVID-19 and to save the economy from further dragging down as a result of COVID-19. Increasing export of agricultural commodities that includes pulses is one of the short-term solutions. Ethiopia's pulse export of the total pulse production is low. For instance, in the year 2013/2014, of the total production of pulse only 11 % of it was (formally) exported, in 2014/2015, 12 %, in 2016/2017, 14 % and in 2017/2018 only 12.5 % of the total produce of pulse was exported. Hence joint effort by the pulse value chain actors is needed to promote the export share of pulse.

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<sup>6</sup> [https://www.agriterra.org/creative\\_solutions/](https://www.agriterra.org/creative_solutions/)

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