# Policy responses to keep input markets flowing in times of COVID-19

# **BACKGROUND**

The COVID-19 pandemic poses a substantial risk to agricultural input<sup>1</sup> supply chains. It can detrimentally affect access to and availability of inputs, including seeds, fertilizers and pesticides, as well as labour.

The effects of the COVID-19 pandemic will be felt throughout supply and demand channels, and interventions will be required to address these areas. The pandemic has already caused disruptions to the movement of goods and labour, affecting the production and distribution of tradable agricultural inputs. Consequently, entities along the supply chain must adapt their operations to a new and evolving environment. They must adopt appropriate policy interventions to bolster support services, such as logistics and finances, to facilitate the functioning of supply chains. At the same time, demand for agricultural inputs has also been affected. Uncertainty across agricultural supply chains, shortages of labour and the general economic downturn are putting incomes at risk and can jeopardize government funded programmes that support agricultural investments. The resulting lack of liquidity could reduce the demand for agricultural inputs and, hence, affect agricultural production in the medium-term.

The exposure of agricultural systems to pandemic-induced disruptions are, to a large degree, contingent on the intensity and composition of input utilization, which differs among countries and by agricultural product. In general, production systems in high-income countries are predominantly capital intensive, while the opposite holds for low-income countries where production is mainly dependent on labour, and where the use of intermediate inputs is limited.

As such, disruptions to the supply and demand of inputs will have diverse impacts across and within countries and will need to be reflected in different policy responses depending on the context. Similarly, differences across input markets need to be considered. Fertilizer markets, for example, are highly concentrated with five countries accounting for 80 percent of the global fertilizer production. A high degree of market concentration is likely to increase the risk to disruptions. The seed sector, an expanding market, is also highly concentrated although somewhat more localized than that of fertilizers. The same applies to other chemicals such as pesticides, which means that their markets could be similarly affected by the COVID-19 pandemic.

It is essential that all actors in the input supply chain coordinate their interventions to ensure the stability of food production and limit uncertainty in markets. This brief presents the policy implications to be considered given the effects of the COVID-19 pandemic on agricultural input markets and it outlines policy recommendations to mitigate short- and long-run impacts.

<sup>&</sup>lt;sup>1</sup> For the purposes of this policy brief, agricultural inputs refer to labour, intermediate products (such as fertilizers and seeds) and capital goods (such as machinery). While this is not an exhaustive list, the brief focuses on those inputs that are considered to be the most affected by the COVID-19 pandemic.

## **KEY POLICY AREAS**

- Implement recommended sanitary measures in the production of tradable inputs (seeds, fertilizer and crop protection inputs) across all the logistical operations to allow supply chains to function without transmitting and spreading the virus.
- Maintain open trade channels across input supply chains and assess the option of declaring tradable agricultural inputs as essential goods to uphold the functions of markets and prevent supply disruptions.
- Ensure accessibility to accurate and timely information on production, distribution channels, policy measures and other aspects of supply and demand in agricultural input markets, to enable entities to adapt efficiently to disruptions and to maintain a well-functioning agricultural input supply chain.
- Adapt and maintain support for agricultural financial services that sustain local agricultural input markets and ease access constraints for farmers amid potential income contractions.

#### **BEST PRACTICES TO ACHIEVE POLICY OBJECTIVES**

# To support the supply of agricultural inputs:

Adopt sanitary measures to resume production. On the supply side, to avoid a shortage of intermediate agricultural inputs, production facilities need to resume operations. To contain the risk of infection during the production processes, it is necessary to develop and adopt strategies and measures that safeguard the health of employees. Measures should focus on adopting and assuring the highest health and safety regulations. This involves measures such as maintaining physical distance, reducing interaction among co-workers and providing sufficient access to hygiene products, such as face masks and disinfectants. Similarly, measures such as continuing to screen for COVID-19 related symptoms and monitoring contact among co-workers, could facilitate the re-opening of production plants, contingent on the severity of the crisis. Governments could further provide guidance on health and safety protocols to reduce infection risks in production and processing facilities and promote the adoption of factory-specific contingency plans. Given the overall degree of economic contraction, adopting containment measures within production and processing plants could be supported with targeted policies such as tax exemptions, delays of tax payments and access to credit. Moreover, policies should consider the specific characteristics of each agricultural sector and avoid blanket approaches.

# To maintain trade in agricultural inputs:

**Declare agricultural inputs as essential goods.** It is vital that agricultural inputs continue to flow<sup>2</sup> across countries, despite national lockdowns and closed borders. It might be necessary to adopt measures that facilitate the trade of essential agricultural inputs and equipment in the short term. In that regard, expanding the concept of "essential goods" (i.e. goods that are exempt from movement restrictions) to agricultural inputs would improve trade flows within and across countries. By early April 2020, more than 17 countries had declared agricultural inputs to be essential. This is a vital step, given that the primary planting season is near in many regions of the world. In the short term, governments should focus their policies on facilitating the mobility of inputs within the agricultural sector, emphasizing the delivery and availability of inputs for farmers (for example, China's "green channels" and the Philippines' "food passes").

<sup>&</sup>lt;sup>2</sup> A discussion of the impact of the COVID-19 pandemic on trade is available in the FAO brief *Agri-food markets and trade in the time of COVID-19* (FAO, 2020a). This brief, however, is focused on trade in the context of agricultural input markets and provides sector-specific policy examples and recommendations.

**Support to logistics is essential for trade.** The COVID-19 pandemic has resulted in disruptions to logistical support services, particularly related to transport (FAO, 2020b). For example, ports have imposed various restrictions on vessels and crews, impeding maritime trade. Transportation services are essential to maintain the delivery of products and, as such, certain measures are required to sustain operations. In the current context, however, countries must ensure strict sanitary surveillance in the transportation sector, allowing for the movement of goods without transmitting the virus. The health and safety of workers moving tradable inputs must be protected, and in many cases will require more inspection services, upgraded sanitation systems, an increase in the use of digital documentation and more infrastructure investment to allow operations with minimal health risk. For example, the Government of France has taken measures to ensure the availability of sanitary facilities along road networks, making this information readily available for truck drivers (European Commission, 2020).

Monitor impacts of political distortions on input markets. In the medium term, agricultural trade policies will likely be adjusted to reduce the negative impact of the COVID-19 pandemic on the supply of tradable inputs. Already, governments can adopt urgent enabling policies to support production. Temporary input subsidies could be considered and could be targeted at regions and value chains most affected by the outbreak and the measures to contain it. It is essential to provide support in time for the upcoming spring planting season.

Adjust trade policy to improve the functioning of market flows. In terms of trade policy, further analysis will be necessary at the country level to evaluate the implications and relevance of modifying some aspects of the trade policy, such as import tariffs for agricultural tradable inputs. This is especially true if price monitoring indicates increasing prices for some products (i.e. phosphates and urea) and if national production capacities are limited. Trade policy measures vary depending on the production and input utilization of each country. This could provide an opportunity to improve some procedures and policies to optimize trade.

**Enhance availability and dissemination of data.** Access to accurate and timely data is critical for efficiently functioning input supply chains. Information reduces market uncertainties and allows entities, such as governments or companies, to adapt efficiently to risks and disruptions. Improved accessibility to data can also facilitate a coordinated and balanced interaction between public and private sectors, limiting the use of potentially disruptive policies that can have a detrimental effect on supply chain performance. An assessment by the World Economic Forum revealed that sharing information is a key component to effectively tackle disruptions in the supply chains, and to strengthen resilience in the long run (WEF, 2020).

# To support investment in agricultural inputs:

Reduce income uncertainty at the farm level. To reinforce the capacity of farmers to access agricultural inputs amid pandemic-induced uncertainties, it is important to reduce risks to farm incomes that are due to, for example, illnesses and changes in demand for agricultural products. Policy measures that contribute to keeping agricultural value chains alive, such as facilitating ecommerce platforms to connect producers and consumers and ensuring labour supply, also contribute to reducing risks to farm income. Moreover, providing access to credit eases temporary liquidity constraints. Governments could further facilitate interest-exempt loans and grant temporary cash payments or subsidies to poor farmers to enable the restart of production. India and the Philippines, for example, issued direct cash transfers to farmers to mitigate pandemic-related liquidity constraints. India further extended the due dates of agricultural credit instalments. The Food and Agriculture Organization of the United Nations' (FAO) Hand-in-Hand initiative in Haiti supports a Government—FAO collaboration under the SCALE-UP programme that, among other activities, distributes fertilizers to smallholder farmers.

**Support digitization of input markets.** Digital trade services, like e-commerce and associated delivery companies, are becoming more relevant during the pandemic and are playing a key role in agricultural value chains and the interaction between different markets (e.g. labour, production and consumer). A successful example is the Tobao Villages in China. Large e-commerce enterprises have been collaborating with the Government to encourage rural markets to digitize their services and become part of the e-commerce economy. The success of this business model comes partly from the "e-commerce ecosystem effect", which drives both the supply and the demand side of the market. For example, these platforms offer agricultural inputs such as fertilizers and pesticides that are mostly organic at affordable prices. Digitizing market transactions allows sellers to limit their dependency on intermediaries and reach markets directly (SAMPi, 2017). Similarly, promoting and adopting tractor-sharing apps and e-platforms, such as "Hello Tractor", can facilitate continued access to machinery (Forbes, 2019).

**Ease movement restrictions for procuring agricultural inputs.** In the short term, policies should allow the free mobility of farmers to purchase inputs in informal and formal markets, while maintaining the necessary health measures and considering that public transport might be suspended or blocked. In the medium term, it is necessary to consider the role of public procurement of essential agricultural inputs and delivery-on-cash mechanisms that could be used to help farmers to have access to agricultural inputs.

Maintain government support for investment in agricultural inputs. Due to the overall economic contraction and large-scale fiscal programmes currently adopted in many countries, governments are likely to experience fiscal strain and to reallocate their budgets to focus on fiscal-stimulus and social-support schemes. This could present a substantial risk to support programmes that aim to increase the use of agricultural inputs, with the objective to improve farm-level productivity. The lack of financial support could trigger a decrease in input use and, hence, a decrease in demand for inputs and agricultural productivity in the medium term. A decline in demand would, in turn, be particularly damaging to the nascent private sector for agricultural inputs in developing countries. Ghana, for example, reassured farmers that subsidies for seeds and fertilizer are still active. It is essential that governments maintain their long-term commitment to input subsidy programmes to protect the future development of local industries and help support gains in agricultural productivity. This could also be an opportunity to reform some subsidy programmes and integrate them with other practices, such as soil management and irrigation.

# To support and facilitate the movement of agricultural labour:

**Exempt agricultural labour from movement restrictions.** Measures to contain the COVID-19 pandemic include movement restrictions and border closures, which have a significant negative impact on the supply of agricultural labour. The emerging shortages of labour can be mitigated through policies classifying agricultural labourers as system-essential service providers, exempting them from movement restrictions. Colombia and South Africa, among other countries, have granted exemptions to agricultural workers to ensure the normal availability of agricultural labour.

Facilitate the cross-border movement of migratory workers. Closing borders inhibits the movement of seasonal migrant workers, who represent a significant share of the agricultural workforce across countries. To reduce shortages in agricultural labour, policies should focus on authorizing longer stays for seasonal workers who are already in the country, by amending visa and residency regulations. Similarly, strategies that consider exempting seasonal migrant workers from cross-border movement restrictions should be developed. In this context, governments could facilitate measures to transport seasonal workers across borders and within countries, while maintaining a level of control over the movements of foreign migrant workers. Germany, for example, introduced a quota allowing 40 000 seasonal migrant workers to enter the country in April and May, and chartered flights to assist their travel.

**Support the allocation of the local population to agricultural labour.** A complementary approach to easing restrictions on agricultural and migrant workers is to train the local population to work in agricultural activities such as in harvesting and storage operations. Unemployed workers could temporarily relocate to the agriculture sector. To facilitate this process, measures should focus on connecting local residents to farms through online platforms and on incentivizing the shift in the labour force by adding a premium to wages. France and Spain, among other countries, have called on their local populations to work in agriculture sector, specifically to harvest fruits and vegetables.

**Prioritize the health of agricultural labour.** Complimentary policy measures should also prioritize and safeguard the health of farm workers. Subsidizing or providing health insurance for migrant workers enables timely treatment and containment in case of infection. Using safety practices, such as ensuring the recommended distance between workers in the fields and in on-farm housing is essential to reduce the risk of transmitting the virus. Governments could, for example, facilitate technical guidance to farms on how to ensure on-farm containment practices.

Table 1 provides a summary of policy measures that have been adopted to mitigate the impact of the COVID-19 pandemic on the supply and demand of agricultural inputs.

# TABLE 1 | Examples of current policies intended to mitigate the adverse impacts of the COVID-19 pandemic on the supply and demand of agricultural input markets

#### **SUPPLY**

- Create a channel to facilitate mobility in the agricultural sector including delivery of inputs (China's "green channel" (IFPRI, 2020a) and the Philippines' "food pass" (Department of Agriculture of the Philippines, 2020) and ban unauthorized roadblocks.
- Develop and adopt agricultural technologies (e.g. digital agriculture) to mitigate the impacts of the COVID-19 pandemic on different markets including the input supply market (Devex, 2020).
- Flexibility and permits for operating farm input shops and their associated partners in the value chain (manufacturing units and intermediate traders) (The Hindu Business Line, 2020).
- Stimulate input markets. For example, offer convenient loans for small and medium companies that produce inputs (The Hindu Business Line, 2020).
- Raise awareness and promote the importance of designing contingency plans (Technology Networks, 2020).

## DEMAND

- Expand re-lending and re-discounting facilities for farmers (China).
- Government support allowing additional resources in lending capacity to producers, agribusinesses and food processors (Farm Credit Canada).
- Agricultural response package to ensure food security, including scaling up existing home gardening programmes and a new farm support package aimed at boosting the production of shortterm crops through seeds and materials distribution (Fiji).
- Loans under a subsidized credit programme for the agricultural sector (Honduras).
- Tax relief and extensions of interest payments for agriculture companies (the Lao People's Democratic Republic).
- Expanded government guarantee schemes, including guarantees for agricultural as well as loans for small and medium enterprises by approximately EUR 1.3 billion (Lithuania).
- Fiscal package announced by the Government of the Philippines for different sectors, including agriculture (the Philippines).
- Exemption of agricultural land use tax for households and farmers (Viet Nam).
- Rent reduction and financing support (IFPRI, 2020b).
- Temporary subsidies for farmers (IFPRI, 2020a).

## **REFERENCES**

- Department of Agriculture of the Philippines. 2020. DA calls for stronger farm to market links amid COVID-19 [online]. Manila. [Cited 16 April 2020]. <a href="www.da.gov.ph/da-calls-for-stronger-farm-to-market-links-amid-covid-19">www.da.gov.ph/da-calls-for-stronger-farm-to-market-links-amid-covid-19</a>
- **Devex.** 2020. *Opinion: How to address the impact of COVID-19 on global food systems* [online]. [Cited 16 April 2020]. <a href="www.devex.com/news/sponsored/opinion-how-to-address-the-impact-of-covid-19-on-global-food-systems-96892">www.devex.com/news/sponsored/opinion-how-to-address-the-impact-of-covid-19-on-global-food-systems-96892</a>
- **European Commission.** 2020. *Coronavirus response* [online]. Brussels. [Cited 16 April 2020]. https://ec.europa.eu/transport/coronavirus-response\_en?modes=3849&category=3799
- **FAO.** 2020a. *Agri-food markets and trade policy in the time of COVID-19*. Rome (also available at <a href="http://www.fao.org/3/ca8446en/CA8446EN.pdf">http://www.fao.org/3/ca8446en/CA8446EN.pdf</a>).
- **FAO.** 2020b. Responding to the impact of the COVID-19 outbreak on food value chains through efficient logistics. Rome (also available at <a href="http://www.fao.org/3/ca8466en/CA8466EN.pdf">http://www.fao.org/3/ca8466en/CA8466EN.pdf</a>).
- Forbes. 2019. What The Uber Of Tractors Means For The Future Of Agtech In Africa [online]. Jersey City. [Cited 16 April 2020]. <a href="www.forbes.com/sites/jennysplitter/2019/08/12/what-the-uber-of-tractors-means-for-the-future-of-agtech-in-africa/#41b9fa3045b7">www.forbes.com/sites/jennysplitter/2019/08/12/what-the-uber-of-tractors-means-for-the-future-of-agtech-in-africa/#41b9fa3045b7</a>
- International Food Policy Research Institute (IFPRI). 2020a. How China can address threats to food and nutrition security from the coronavirus outbreak [online]. Washington, DC. [Cited 16 April 2020]. <a href="www.ifpri.org/blog/how-china-can-address-threats-food-and-nutrition-security-coronavirus-outbreak">www.ifpri.org/blog/how-china-can-address-threats-food-and-nutrition-security-coronavirus-outbreak</a>
- **IFPRI.** 2020b. *Chinese livestock farms struggle under COVID-19 restrictions* [online]. Washington, DC. [Cited 16 April 2020]. <a href="www.ifpri.org/blog/chinese-livestock-farms-struggle-under-covid-19-restrictions">www.ifpri.org/blog/chinese-livestock-farms-struggle-under-covid-19-restrictions</a>
- **SAMPi.** 2017. *Taobao Villages: How Ecommerce Helps China's Rural Economy* [online]. [Cited 16 April 2020]. <a href="https://sampi.co/taobao-villages-china-rural-ecommerce">https://sampi.co/taobao-villages-china-rural-ecommerce</a>
- **Technology Networks.** 2020. *How COVID-19 May Impact Farming* [online]. [Cited 16 April 2020]. <a href="https://www.technologynetworks.com/immunology/news/how-covid-19-may-impact-farming-332356">www.technologynetworks.com/immunology/news/how-covid-19-may-impact-farming-332356</a>
- The Hindu Business Line. 2020. *Agriculture in the time of Covid-19* [online]. Chennai, India. [Cited 16 April 2020]. <a href="www.thehindubusinessline.com/economy/agri-business/agriculture-in-the-time-of-covid-19/article31248717.ece#">www.thehindubusinessline.com/economy/agri-business/agriculture-in-the-time-of-covid-19/article31248717.ece#</a>
- World Economic Forum (WEF). 2020. What past disruptions can teach us about reviving supply chains after COVID-19 [online]. Cologny, Switzerland. [Cited 16 April 2020]. www.weforum.org/agenda/2020/03/covid-19-coronavirus-lessons-past-supply-chain-disruptions

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