

Food and Agriculture Organization of the United Nations

POLICY ANALYSIS

Analysing changes to price incentives during the first wave of COVID-19

Monthly monitoring of price incentives

The COVID-19 pandemic has triggered a shock on agrifood systems around the world, with the potential for low- and middleincome countries to be particularly affected. As containment measures disrupt access to agricultural inputs and markets, governments have sought to insulate domestic consumers from world price fluctuations and ensure local availability by changing export and import policies and introducing price stabilisation measures, among other responses.

To monitor changes in the levels of price incentives to agricultural production and help support policy recommendations as the pandemic evolves, a new indicator defined as a monthly nominal rate of protection "express" (monthly NRPx) was developed. This simplified measurement of agricultural price incentives tracks the extent to which domestic prices differ from international-equivalent prices (generally found at the country's border). It builds upon decade-long experience of FAO's Monitoring and Analysing Food and Agricultural Policies (MAFAP) programme in calculating annual price incentives indicators for countries in sub-Saharan Africa, and ongoing monitoring efforts of the Agricultural Incentives Consortium in other regions (Ag-Incentives, 2020).

Focus on staple cereals for the poor and food insecure

While the vast majority of the world's poorest households depend on the agricultural sector for their livelihoods, the rural poor are often farmers and net food consumers. How to keep





- A new monthly indicator finds a median decline in price incentives for staple food value chains during the first wave of COVID-19.
- Government responses included changes to export and import polices, among others.
- Developing countries must consider how to promote food security without generating disincentives to agricultural production.

farm prices high enough to provide production intensification incentives for farmers, while at the same time keeping them low enough to ensure poor consumers' access to staple foods, is one of the most critical aspects during this pandemic period – and perhaps of all times. It is important to both reduce food price risks and raise smallholder staple food farm productivity to keep the economy alive in rural areas.

Using the new monthly NRPx indicator, changes to price incentives during the first wave¹ of COVID-19 are analysed for staple cereals; primarily, rice, wheat and maize, along with sorghum, millet and potatoes. Twenty-seven low- and middle-income countries were included in the analysis, based on data availability primarily from the FAO-GIEWS Food Price Monitoring and Analysis (FPMA) tool and UN Comtrade.² Forty-three country and commodity combinations, or case studies (such as maize in Ecuador), were examined.

² Due to the lack of widespread, timely producer price data in developing countries, wholesale and retail prices are used to provide a sense of the general direction of incentives to staple food value chains.

¹ The first wave of COVID-19 is defined here as March 2020–August 2020, based on case numbers recorded by the World Health Organization (WHO).

Declines in price incentives alongside changes to trade and market policies

Price incentives for staple cereal value chains exhibited a median decline of 12.6 percentage points during the first wave of COVID-19. This median is relatively low in magnitude, as changes in price incentives were widely varied across case studies. A slight majority (24 case studies from 18 countries) did experience a decrease, as anticipated when policies are enacted to prevent domestic prices from increasing at the same rate as international prices. Alterations to trade policies intended to protect poor consumers, such as by way of export restrictions and lifting of import tariffs, can lead to a decline in price incentives (Anderson and Nelgen, 2012).

Rice and wheat, which comprised 60 percent of all case studies and were the subject of many of the recorded policy changes, both had median declines in price incentives, as shown in Figure 1. Examples of these declines include rice in Pakistan, where an export ban was briefly enacted from the end of April 2020 through May 2020 and disincentives became further negative, and wheat in South Africa, where imports were exempted from the value-added tax beginning at the end of March 2020. Price control measures to mitigate domestic price increases were also implemented for a few case studies. For maize, international price declines, lack of export restrictions and compounding impacts such as the desert locust outbreaks could have contributed to the median increase.

Ensuring food security without disincentivising production

Despite the fact that alterations to trade policies collectively contributed to global price spikes during the 2007–2008 world food crisis (Anderson and Jensen, 2017), governments responded in a similar manner during the first wave of COVID-19, albeit to a much lesser extent, in part due to higher stocks of staples and lower initial increases in international prices.

Developing countries must consider how to ensure consumer food security without consequently generating disincentives to local production. To balance these two priorities, governments should inform themselves through timely information, such as that generated through the new monthly NRPx indicator. This will be critical to

REFERENCES

Ag-Incentives. 2020. Ag-Incentives. Washington, DC. Cited 8 September 2021. http://ag-incentives.org

Anderson, K. & Jensen, H. 2017. Grain Price Spikes and Beggar-Thy-Neighbor Policy Responses: A Global Economywide Analysis. World Bank Economic Review, 31(1): 158-175. https://doi.org/10.1093/wber/lhv047

Anderson, K. & Nelgen, S. 2012. Agricultural trade distortions during the global financial crisis. *Oxford Review of Economic Policy*, 28(2): 235-260. https://doi.org/10.1093/oxrep/grs001

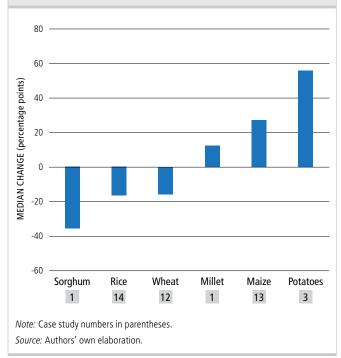
Agrifood Economics Division – Economic and Social Development ESA-Director@fao.org

Food and Agriculture Organization of the United Nations Rome, Italy

Required citation: FAO. 2022. *Analysing changes to price incentives during the first wave of COVID-19.* FAO Agricultural Development Economics Policy Briefs, No. 49. Rome. https://doi.org/10.4060/cb9047en

Some rights reserved. This work is available under a CC BY-NC-SA 3.0 IGO licence

FIGURE 1. Median changes to price incentives by commodity during the first wave of COVID-19 (March 2020 to August 2020)



track active trade and market polices and comprehensively consider potential impacts of policy responses during subsequent waves of the pandemic or any other future shocks. Continued monitoring of price incentives as COVID-19 evolves and going forward more generally will be critical for identifying where further analysis and realignment of individual case studies is needed to facilitate inclusive economic recovery.

The potential for trade-insulating policies, such as export bans or taxes, to distort prices and the economy should be seriously taken into account, with a recognition of how they can result in a reduction of agricultural production and economic welfare. Prioritizing the collection of farm price data to more closely estimate incentives faced by producers, and calculating monthly price incentives for additional commodities, will help further guide policy development to ensure food security and nutrition for the world's poorest consumers.

This brief has been edited by Sarah Consoli, Juan José Egas Yerovi and Cristian Morales Opazo.

The findings of this brief have been adapted from the FAO Agricultural Development Economics Working Paper 22-06 *Realigning policy interventions on agricultural prices – Facilitating economic recovery in low- and middle-income countries in the post-COVID-19 era* (available at https://doi.org/10.4060/cb8992en).

The FAO Agricultural Development Economics Policy Brief series is available at www.fao.org/agrifood-economics/publications/policy-briefs