

# Policy Brief

## *Organic Versus Conventional Farmer Crisis Responses*

### *Implications under Covid and Russia-Ukraine War*

#### **The case of Egypt**

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The impact of the COVID-19 Pandemic on Organic and Conventional Farmers and Mitigation Strategies in Africa assessment was initiated by Biovision Africa Trust in eleven countries in Africa, including Egypt.

# Abstract

The impact of the COVID-19 Pandemic on Organic and Conventional Farmers and Mitigation Strategies in Africa assessment was initiated by Biovision Africa Trust in eleven countries in Africa, including Egypt. A cross-sectional design and a mixed research approach guided by participatory tools and techniques for data collection were employed in this study. The study observed that the COVID-19 pandemic significantly affected the social and economic fabrics of the organic and conventional producing households in Egypt, bringing their livelihoods to a near standstill. The study observed a relationship between the time the first case was announced in Egypt on 14th February 2020, the population awareness level and the time the households started feeling the negative social economic impact of the pandemic. While 75% were aware of the pandemic between January and March 2020, households started feeling the negative impact within 120-130 days after the date of announcement of the first case.

The economic consequences of the pandemic ended up hurting more people than the disease itself. While 88% wholly depend on agriculture as the main source of livelihood, 62% reported that their production systems were disrupted by government restrictions and public health measures, with 95% of the conventional farmers being the worse affected compared to 83% of the organic, due to adoption of resilience building factors among organic producers such as climate-smart organic production technologies in which out of the 11 evaluated, 31% organic farmers had adopted compared to 21% among the conventional. Households reported a 29% reduction in overall household income, which led to 38% of the households being food insecure. 56% of the households were not able to access weekly markets to sell or purchase food items due to closure. 39% experienced post-harvest losses heightening poor access to food and reduced demand for their product. The inability to travel and fear among the community of contracting the disease led to 45% of the producers having no access to extension, resulting in consulting their neighbours and mobile phones for extension tips. Access to credit among traders and households was poor, with 36% and 19% access respectively. 75% of the traders were affected negatively by the restrictions. 83% copped through reducing the daily operating hours. Reduction in orders due to a reduced customer base, and shortage of raw materials affected 25% and 19% of traders respectively. These limitations led to a 21% reduction in incomes.

The study, therefore, recommends the establishment of structures in place as part of an early warning system to build resilience against future pandemics within 120 days of the announcement of the initial case. The establishment of Agro-dealer networks at the community level for sustainable access to inputs, while at the same time making such services essential, will enable producers to access inputs without travelling far from their villages. Improved access to finance and financial services for the traders and producers through the establishment of village-level financial institutions will be important in face of pandemics. Improving the market structures to comply with social distancing between the traders will promote trade. Promoting the implementation of the digital marketplace and blended extension delivery services will accelerate the dissemination of Agro-information, especially during lockdowns and the implementation of social distancing.



Biovision Africa Trust (BvAT) initiated a study to assess the “Impact of Covid-19 Pandemic on Organic and Conventional Farmers and Mitigation Strategies in Africa” between October and December 2021. Egypt was one of the countries selected to participate in this study. This study employed a cross-sectional design and a mixed research approach guided by participatory tools and techniques for data collection. Qualitative data was collected through the application of the Participatory Rural Appraisal (PRA) methodology. In total, 98 households involved in the organic and conventional production of vegetables and spices were interviewed. In 2019, Egypt recorded an area of 116,000 Ha under Organic production systems, which represents 6% of the African continent, with 970 producers reported to be producing organic products, representing less than 1% in Africa. Generally, organic production occupied 72 million hectares of land globally, of which 2.03 million hectares were in Africa, contributing 2.8% to the global landscape. The agricultural value chain in Egypt is labour intensive and therefore, the spread of COVID-19 and enforcement of social distancing, working from home and restricted movement affected operations along the organic and conventional value chain.



# COVID-19 Pandemic

The COVID-19 pandemic, which first emerged in Wuhan, China in December 2019 and spread rapidly to other regions, was declared a public health emergency of international concern on 30th January, and a global pandemic by WHO on 11th March 2020. Egypt was the first African country to report the first case of COVID-19 on 14 February 2020, followed by Nigeria on 27th February 2020. Algeria, Cameroon, Morocco, Senegal, South Africa, Togo and Tunisia reported positive cases in early March 2020. The number of deaths as of October 24th, 2021, was 18,242 from 323,733 infections in Egypt. So far, over 7 million individuals have received vaccinations, which represents 8% of the Egyptian population. The study observed that the awareness level among the population on the availability of the COVID-19 vaccines was very high, as confirmed by 96% of which 64% have received COVID-19 vaccination.

There was a relationship between the time the government announced the first case of COVID-19 and the awareness level. 75% of the respondents heard of the pandemic in the first quarter, January and March of 2020. This coincided with the date, 14th February 2020, on which the government announced the 1st case of COVID-19 in Egypt. The impact of the pandemic on socio-economic conditions within 42% of the households was felt in the April-June quarter of 2020. This was approximately 120-130 days post being aware of the pandemic. Initiating safety nets and protective measures within the initial 120 days would build resilience among the population

## Household demographic characteristics

The majority of the households were male headed, as represented by 96%, indicating a patriarchal society. 66% of the respondents were in the 31-65 years cohort, with only 17% youth within the 19-30 years age cohort, indicating low participation of youth in the agriculture production systems. The ability to read and write was assessed, with 89% being able to read and write, therefore the mixed methodology used by the government in the dissemination of COVID-19 information included both electronic broadcastings, and written messages through posters. The study observed that Television was the main source of COVID-19 information, reaching 74% of households. Neighbours also played a key role in disseminating information concerning the pandemic, reaching 43%, compared to the radio which reached 37% and social media at 30%.

## Impact of the pandemic on the agriculture sector

Agriculture is the main source of livelihood among organic and conventional farming households in Egypt. The deployment of measures to contain the spread of the pandemic included lockdowns, governance and socio-economic measures, movement restrictions, public health measures and social distancing. Hand washing, avoiding handshakes and avoiding public gatherings were the leading preventive measures adopted by 74%, 85% and 55% respectively. As much as these measures were notable moves in containing the spread of the disease, they negatively impacted the food supply, access and stability, particularly agricultural inputs and outputs markets, and agricultural extension services, compromising the agricultural activities in Egypt. According to FAO (2020), the food and agriculture sector was confronted with challenges along the value chain. United Nations (UN) also acknowledged that mitigatory measures to prevent and control COVID-19 outbreaks affected global food supply chains (UN, 2020).

Based on the study, 88% of the households reported that their livelihood source, which is mainly agriculture, was affected by the pandemic. COVID-19 led to a reduction in overall household income by 62%, reducing by 29% between January 2020 and August 2021, compared to the same period in 2019. Households practicing conventional production systems were the most impacted by COVID-19, as reported by 95% compared to 83% in organic production systems. Organic-producing households seem to have adopted resilience-building practices that made them more adaptive to the pandemic compared to conventional farmers. This was partially contributed by the adoption of improved organic technologies at the farm level. There was a significant difference in technology adoption among the organic and conventional producing households. While 31% of organic-producing households have adopted 11 organic production technologies, only 21% of conventional farmers had adopted such technologies. The low number of conventional farmers adopting organic production practices may be associated with a lack of exposure to these improved practices, therefore exposing them to both climate and general disturbances that may affect their production systems.

## Impact of COVID-19 on access to extension services

Agriculture extension and advisory services have also faced severe disruptions since lockdown measures have been imposed, reducing farmers' access during this critical growing period. 45% of the producers had no access to extension services. The majority of them, 37%, were not able to access crop-related extension services compared to 17% livestock producing households. There were more than 61% of organic farmers face challenges accessing extensions compared to 58% of conventional farmers. Government restrictions and enforcement of public health measures reduced the mobility of the extension officers. Transport availability for the extension staff proved to be the major stumbling block during lockdowns as observed in Zimbabwe (Muvhuringi et al 2021) . Most farmers were not allowing people to visit their farms as they fear contracting the disease. Producers therefore resorted to different ways of staying abreast with agricultural production information, through their neighbours, who reached 21%, while 15% resorted to their mobile phones, as a source of extension information.

## Access to Inputs

The COVID-19 pandemic negatively impacted access to input services, with 46% reporting they experienced challenges in accessing inputs. Challenges in accessing inputs were associated with lockdown and reduced mobility, as 58% of households complied with social distancing and lockdown restrictions. Lack of cash as a result of a reduction in overall disposable income reduced input purchasing power among 29% of the households. An increase in prices was a deterrent to 44% of the potential input buyers. Fertilizers, livestock feeds, and veterinary medicine were the inputs that were greatly affected as reported by 91%, 33% and 22% respectively. Fertilizer is mainly imported from outside Egypt. With the cessation in shipment and airline movements, imported inputs especially fertilizers were greatly impacted. Staggering the application frequency and rates, to reduce purchase frequency, was practised by 51% of the respondents which had the potential of low yields as inputs were not being applied based on the recommendations. Substitution of the normally used inputs with cheap ones or those that were readily available was practised by 36% of the households, which could have led to the application of wrong inputs. A reduction in the rate of application by 29% had the potential to create resistance among pests and disease-causing pathogens as they develop resistance.

Muuhuringi Prosper Bright, Nyamuziwa Terrence Kudzai & Chigede Ngavaite (2021) *The impact of COVID-19 on agricultural extension and food supply in Zimbabwe*, *Cogent Food & Agriculture*, 7:1, 1918428, DOI: 10.1080/23311932.2021.1918428

*"The area that was most affected by the epidemic was access to inputs, marketing and extension services that almost stopped. Farmers started feeling the greatest impact when decisions were issued to close down and prohibit movement times (curfew). As an organization, we helped them solve these problems through technical support and linkages."*

*Hanan Mossa, Bright Light Association, Egypt*

## Access to credit

The study observed that only 36% of the households and 19% of traders were able to access credit or loans between January 2020 and August 2021, with the majority, 25% accessing from their neighbours. 38% among the households and traders respectively, were not able to access credit due to inability to pay, while 21% mentioned fear of contracting COVID-19 if they visit the banks. The inability to pay was a key reason why households were not accessing loans, as confirmed by 38% of the households. 75% of the traders were credit unworthy due to loss of businesses, while 21% among the households and 31% of traders feared going to the banks lest they contract COVID-19. Access to loans from their neighbours among the households who live together in the villages was, the most appropriate since access was not affected by movement restrictions and lockdown.

## Food security

Government restrictions and public health measures negatively affected access to food. 94% of the respondents faced difficulty in accessing food. 63% indicated access to food was reduced, while 31% confirmed it remained the same between January 2020 and August 2021. Difficulty in accessing food was mainly catalyzed by low income as mentioned by the 72% reduced disposable income for food purchases. High prices affected 66% of respondents who were not able to expensive foods. Respondents indicated that the cost of food items increased, as mentioned by 63%, while 31% indicated the prices remained the same. 47% indicated that food was not available for the households. This was aggregated by the closure of weekly wet and livestock markets, as the government enforced social distancing. Lockdowns and curfews affected food movement from production zones to urban and other locations. Among the food products, 91% indicated that meat was difficult to access followed by dairy products and vegetables as indicated by 22% of respondents respectively.

## post-harvest losses

39 %of the household reported that they observed post-harvest losses for their products during the period between January 2020 and August 2021, because of the pandemic. Contaminations were the leading reason for post-harvest losses as mentioned by 55%, followed by a loss in market quality in 32% of the households due to loss in colour and size. Discussions with farmers during focused group discussions mentioned that due to the closure of markets, they had nowhere to sell their food products, leading to prolonged storage, which led to the yellowing of leaves, a characteristic that is not preferred by consumers and contamination of the products. Due to poor access to inputs, the producers were not able to effectively manage pests, which was reported by 24% of the households as the main cause of post-harvest loss, leading to reduced quality, beyond the expectation of the market and consumers. The increase in post-harvest losses was due to a breakdown in transport systems as a result of the lockdown, as mentioned by 66% of respondents. Disruption of the transport systems affected the overall logistics leading to reduced product quality. Lack of labour for sorting products for the market led to contamination, affecting 53% of the households. Labour shortages, due to the stay-at-home policies, negatively impacted labour-intensive activities such as harvesting and post-harvest management.

*"Many children suffered from undernutrition and unhealthy food in Upper Egypt, and as a result of the closure of schools during the pandemic, school feeding programs that contribute to a large extent to achieving food security for children have stopped."*

*FGD Participant, Egypt*

## Trade

While all governments declared agricultural products as essential to ensure movements given the COVID-19 containment measures, the stay-at-home advisory and travel restrictions meant that traders faced logistic difficulties, leading to supply delays and post-harvest losses. 75% of these traders in Egypt were negatively affected by these restrictions, leading to a reduction in operation time by 83% as earlier mentioned with a 21% reduction in gross income. Reduction in product orders by customers leading to reduced sales was the greatest negative impact of this pandemic among 44% of the traders. Shortage of raw materials, inability to deliver to existing orders and increased cost of transport affected 25% of traders respectively, while 19% were not able to move their products to customers.

*"The existence of many obstacles related to land transport between Egypt and the Arab countries in particular, including not allowing Egyptian drivers to pass through the Jordanian borders, for example, for fear of the Coronavirus, which calls for unloading and reloading the cargo. This means higher costs, delayed delivery and increased losses."*

FGD, Egypt

## The impact of the Ukraine-Russia war on organic and conventional farmers in Egypt

According to Middle East Institute, Egypt is having to deal with the Russia invaded Ukraine fallout on a number of fronts, including worries about crucial wheat imports (around 80% of which come from Russia and Ukraine), further blows to an already hard-hit tourism sector, foreign reserves depletions, and an uncomfortable juggling of relations between Russia and the West. The wheat situation has garnered the most media attention — and with reason. Egypt is the world's largest wheat importer; of the 20 million tons its burgeoning population is expected to consume this year (2021/22), about 13.2 million tons are imported, and approximately 80% of that would normally come from Russia and Ukraine (roughly 50% and 30% respectively).

## Government and development partners' responses to the pandemic

The Egyptian government responded with various fiscal, and financial measures and programs to mitigate personal hardship and disruptions to economic life due to COVID-19. The Egyptian government boosted the investment funds for the agriculture and irrigation sector in the new fiscal year 2020/2021, with an increase of 2%, to enhance national food security and rationalize food imports, amid the crisis of the COVID-19, pandemic. The Central Bank approved a guarantee of 100 billion Egyptian pounds to cover lending at preferential rates for industrial, agricultural and contracting loans (for companies of all sizes). The Central Bank approved the request of the Ministry of Agriculture to allow small farmers and livestock breeders (dairy and poultry) to access the SME lending initiative loans at the rate of 5%. The Small, Medium and Micro Enterprise Development Agency (MSMEDA) launched an initiative for small businesses, especially in the industrial and labour-intensive sectors, to provide up to one million Egyptian pounds in short-term loans for a period of up to a year, to secure.



*"Supporting small businesses and protecting jobs to cope with the negative effects of COVID-19 crisis is particularly critical at this time," "This could be done by ensuring that vulnerable households have cash-on-hand, workers continue to receive salaries - even when temporarily laid off and that firms have enough cashflow (to pay workers and suppliers) and avoid bankruptcies."*

*Peter W Chacha, World Bank Senior Economist*

## Policy recommendations

01

The study recommends the establishment of structures in place as part of an early warning system to build resilience against future pandemics within the first 120 days of the announcement of the pandemic.

02

There is a need for the establishment of Agro-dealer networks at the community level for sustainable access to inputs, while at the same time making such services essential, which will enable producers to access inputs without travelling far from their villages.

03

There is a need to improve access to finance and financial services for the traders and producers through the establishment of village-level financial institutions will be important in face of pandemics.

04

There is a need to improve the market structures to comply with social distancing between the traders will promote trade.

05

Promoting the implementation of the digital marketplace and blended extension delivery services will enhance and accelerate the dissemination of agro-information in future pandemics.

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