

# Policy Brief

## *Organic Versus Conventional Farmer Crisis Responses*

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

#### **The case of Senegal**

**January 2021**

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 Senegal.



**Growing Sustainably**

# Abstract

The COVID-19 pandemic disrupted the food security and economic activities of millions of people all around the world (FAO 2020). Senegal was not exempted from this and experienced increased high food prices principally due to higher freight costs and the disruption of the food supply chain caused by the pandemic. Senegal reported its first confirmed case of COVID-19 on 2nd March 2020. It became the fourth country in Africa to confirm the virus from a French national who had returned to Dakar on 26th February. This was a day after Algeria reported two new cases on 1st March. This was the second wave of COVID-19 and it affected the entire country where around 300 cases were being reported daily. Senegal is a country that experienced an Ebola epidemic in 2013 and 2014 and was therefore quick to take rigorous measures to curb the risk and further spread of the coronavirus. President Macky Sall declared a state of emergency on 23rd March 2020 and introduced a curfew throughout the country. In addition to the curfew, schools and universities were closed, places of worship were banned, the transport was reduced, and strict hygiene rules were imposed in all public spaces. The pandemic however exacerbated the prevailing food insecurity and disrupted the livelihood of the people of Senegal.

The Biovision Africa Trust (BvAT) is the lead executing agency for the Swiss Agency for Development and Cooperation (SDC) -supports the Ecological Organic Agriculture Initiative (EOA-I). It hosts the Continental Steering Committee Secretariat for the initiative which supported this policy brief. The EOA-I is a continental initiative that holds promise for increasing the productivity of Africa's smallholder farms, with consequent positive impacts on food security. The initiative emerged after the African Union Commission (AUC) supported work held in Kenya in 2011. This resulted in the development of the concept note, proposal and later formation of a Central Steering Committee (CSC) on organic agriculture. The overall goal is to mainstream ecological agriculture into national agricultural production systems, plans and policies. This is to support organic farmers and exporters, and to support the establishment of organic agriculture platforms among the member states of the African Union to access markets, certification and sustainable development in Africa.

Although organic production has the potential in Africa, the key question repeatedly raised by the stakeholders is its ability to withstand the storm, particularly, the advent of COVID-19 and its disruption of the food system. The BvAT institution initiated a study to establish the impact of the COVID-19 pandemic on agriculture and food systems in Africa: to assess how farmers practising organic agriculture & conventional agriculture have been affected by the pandemic, and how they are responding to it (Adaptation).



# The impact of COVID 19 in Senegal

In Senegal, 95% of the households heard about COVID-19 pandemic in the first quarter of 2020 (January to March). The period coincided with the time the first case of COVID-19 was reported within the region in March. The study observed that all the households interviewed depended on agriculture as their main source of livelihood. Of these, 80% of them particularly the women had their livelihood impacted by the pandemic between January 2020-August 2021 due to disruption of the supply chain. 38% of the participants felt April to June 2020 as the months they experienced many difficulties as a result of the pandemic (Fig 1). These were the early households to be impacted by the pandemic after the first 120-180 days post announcement. This was associated with the various measures the government had put in place in March to mitigate economic impacts of COVID-19. The most affected value chain in terms of production (65%) and marketing (60%) was **local vegetables such as tomatoes, carrots and potatoes.**

Any disturbance such as lack of farm input and services or limited access to the market in this value chain therefore negatively affected the livelihoods of the households. 90% of the respondent farming community had their farming activities affected by the government restrictions to mitigate the spread of the virus. Poultry among livestock and its products sector, was the most highly utilized sector as a source of income as 55% of the households sold poultry to generate income in the months of January 2020 to August 2021. This was followed by small ruminants (sheep and goats) with 35%. Among crops, onions (95%) were highly utilized as a source of income, followed by tomatoes (65%). This notwithstanding, the closure of weekly markets through which women sell their farm produce such as vegetables and small stock such as chicken, left the majority of women without any source of income.

The study evaluated the impact of COVID-19 on the sources of livelihood among women and men. 90% of women, compared to 85% of men, reported that their sources of livelihood (Agriculture, Business, services) were affected by the pandemic. This led to a 40% reduction in incomes, of which 93% compared to 86% men, reported a reduction in overall incomes during the pandemic period.

The study observed that 71% of conventional farmers and 62% of organic farmers were affected by government restrictions and public health measures negatively affecting their sources of income. These indicate that organic producing households had built their resilience over time and were better equipped to handle the disturbances at the farm level caused by COVID-19 pandemic. This is associated with the capacity strengthening provided to organic farmers by organic promoting organizations like the National Federation of Organic Producers of Senegal (FENAB). The COVID-19 containment measures such as stay-at-home advice and travel restrictions heavily affected farming activities in general and any shocks that interfered with the delivery of extension services affected all the farming community and the absence of the officers in charge was glaring. In terms of access to farm inputs, conventional farmers who over-relied on exotic farm inputs were heavily affected by the subsequent lockdown and movement restrictions compared to organic farmers who rely on recycling resources in the Agro-ecological systems. The farming community too experienced postharvest losses and had limited access to extension services. 85% of the respondent reported loss of income as the main felt effect of COVID 19, followed by difficulties in accessing farm inputs and services for both crops and livestock (34%) (Fig 3).

*In my village, even though there was no notable gender-based violence, during the period of restriction and curfew, there was a sharp tension among couples with sometimes physical aggression between couples, as a result of spending time together and stress occasioned by lack of cash.*

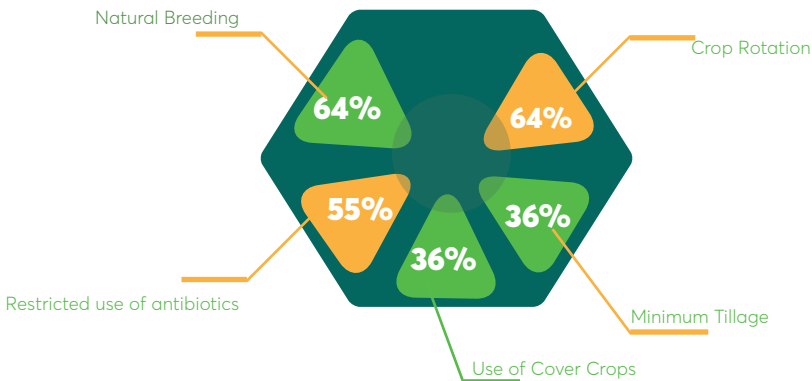
*Mausi Segun, Africa Director at Human Right Watch.*

## The Mitigation measures

The five most adopted organic agriculture production systems used by the organic farmers' respondents in Senegal were crop rotation (64%), natural breeding (64%), restricted use of antibiotics (55%), minimum tillage (36%) and use of cover crops (36%) (Fig 4). The adoption of these agroecological practices built the resilience of the organic farmers as they are based on ecological principles that positively affects the environment through improving the soil structure, aeration and water-holding capacity which subsequently strengthens its adaptation strategies, and this shield the households against external shocks such as COVID-19 pandemic.

The International Development Association provided a \$150 million credit to mitigate the impacts of COVID-19. This was through increasing the exports of high-value crops such as ground nuts and horticultural products and increasing the productivity of dairy livestock and reducing the mortality of small ruminants. This fund was in addition to a fund initially created with an envelope of 1.4 billion FCFA (2.1 million), Senegal undertook three new measures to mitigate the effects of the coronavirus on its economy .<sup>1</sup> (1) The establishment of a Response and Solidarity Fund against the effects of COVID- 19 called "FORCE-COVID-19" (2) Then the creation of a COVID-19 growth and economic watch committee and (3) The development of a contingency plan following the evolution of the pandemic for an amount of 64 billion FCFA (97.6 million euros).

### Adopted Organic Agriculture production systems



*In Senegal, the government supported organic producers through subsidizing organic fertilizer. The government has also supported rice, oil, sugar, macaroni and soap during the COVID-19 pandemic. KII, Senegal*

The lack of extension service observed in the study meant that most farmers (41%) relied on their neighbors while others (22%) found information on social media (Fig 5) as coping strategies to the difficulties in accessing the face-to-face extension services affected by the pandemic. Based on the FGDs, farmers indicated that the low prices and reduced profitability in vegetable production and lack of market had resulted in many abandoning the production of local vegetables as a mitigation measure. This was likely to hit the vulnerable vegetable farmers, but their second-best choice was not clearly understood to guide government policy.

## Impacts of the Ukraine and Global Crises on Poverty and Food Security

Senegal's economy grew by more than 6% per year between 2014 and 2018, while real GDP growth stood at 0.87% in 2020, down from 4.4% in 2019, and 6.2% in 2018<sup>2</sup>. However, the recovery is being undermined by the conflict in Ukraine. Average inflation is expected to peak at 5.5% in 2022, as a result of trade disruptions exacerbated by the conflict in Ukraine, with energy and food prices rising the most. Real growth is expected to slow from 6.1% in 2021 to 5% in 2022 as private consumption and investment are declining owing to higher food and energy prices and greater uncertainty<sup>3</sup>. Oil prices have soared on world markets, driving a sharp rise in fuel and food prices in many countries, including Senegal<sup>4</sup>. According to IFPRI, the global food, fuel, and fertilizer prices have risen rapidly in recent months, driven in large part by the fallout from the ongoing war in Ukraine and the sanctions imposed on Russia<sup>5</sup>. Most of the total GDP losses in Senegal are driven by rising fuel prices, while within the agrifood system, rising food and fertilizer prices are the main drivers of GDP losses. Rising fertilizer prices may cause some farmers to reduce their use of this input, leading to lower agricultural production and higher food prices.

Senegal imports 27 percent of its maize and 100 percent of its wheat grain, so international price movements are important even if international prices do not lead to corresponding changes in prices of locally produced goods. Cereals and edible oils make up 14 percent of the total value of household consumption in Senegal and about one-quarter of total food expenditures. The negative impact of the war has led to a fall in household consumption, with larger losses for poorer and rural households. National consumption spending, including the value of home consumption, fell by 4.2 percent. Most of the declines in consumption are driven by the fuel shocks, which explain 2.2 percentage points of the absolute decline in total household consumption, followed by the food price shock at 1.5 percentage points.

*"Senegal's dependence on the outside world for basic commodities and foodstuffs is a real bottleneck and poses a threat to the country's food sovereignty, which has been sharpened by the war in Ukraine," Mohamed Chérif, World Bank's Country Manager for Senegal.*

<sup>1</sup><https://home.kpmg/xx/en/home/insights/2020/04/senegal-government-and-institution-measures-in-response-to-covid.html>

<sup>2</sup><https://www.worldbank.org/en/country/senegal/overview>

<sup>3</sup>[https://www.agrilinks.org/sites/default/files/media/file/Senegal\\_final.pdf](https://www.agrilinks.org/sites/default/files/media/file/Senegal_final.pdf)

<sup>4</sup><https://www.africanews.com/2022/05/11/senegal-state-distributes-aid-as-global-economic-crisis-hits/>

<sup>5</sup><https://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/135950/filename/136161.pdf>

To some extent, rural farmers also benefit from higher prices for agricultural products, but the net effect on their welfare is negative once we account for the effects of higher fertilizer and fuel prices, reduced fertilizer use, and lower agricultural productivity. Overall, national household consumption falls. Impacts are larger on poorer and rural households, leading to an increase in inequality in Senegal. That said, all households are adversely affected by the crises. Falling household consumption also leads to greater poverty, particularly in rural areas. To cushion impacts of war in Ukraine, the African Development Bank extended a €121 million food-production loan to Senegal . The emergency agricultural programme would benefit 850,000 small farmers, 35% of whom are women , intervening on three components: improving access to certified seeds and advisory support; strengthening farmers' access to fertilizers; and enhancing governance and implementation of public policies in the agricultural sector.

## Policy recommendations

**Promotion of crop rotation strategy:** The high utilization of crop rotation in Senegal if encouraged as a farming technology can effectively reduce the fragility of the cropping system, as it improves soil water content and crop water efficiency by adding water-retaining crops into the cropping system. Senegal needs to develop supporting technologies for crop rotation and formulate policies related to crop rotation according to local conditions and improve farmers' awareness of crop rotation through training and strengthening the crop rotation technology. This is a strategy that will effectively guarantee future shocks inclusive of climate change.

Senegal's key development challenge is to mitigate the socioeconomic impact of the war while enabling sustainable and inclusive growth. This will require: Improving resilience to climate change, and social risks to safeguard investments in human capital and household livelihoods and promoting the services economy and boosting the productivity and competitiveness of agriculture and related value chains.

<sup>4</sup><https://www.afdb.org/en/news-and-events/press-releases>

<sup>7</sup><https://www.afdb.org/en/news-and-events/press-releases>

**ECOLOGICAL ORGANIC AGRICULTURE INITIATIVE**

**P.O. Box 30772-00100 Nairobi, Kenya Duduville Kasarani Opp Thika road**

**EMAIL: [Info@eoai-africa.org](mailto:Info@eoai-africa.org)**

**WEBSITE: [www.eoai-africa.org](http://www.eoai-africa.org)**

**OFFICE TEL: +254 20 8632000||+254 721 766628**