

# The COVID-19 crisis and the seed sector in Africa: impact, options for actions and recommendations

White Paper  
Prepared for the African Union Commission

Prepared by  
The African Seed Trade Association (AFSTA)  
  
in collaboration with  
The African Seed Access Index (TASAI)  
Wageningen Centre for Development Innovation (WCDI)



## Part 1: Introduction

Over the past few months, the COVID-19 pandemic has spread across African countries at an alarming rate, threatening lives and livelihoods. The pandemic has adversely affected people's health and disrupted the economy across Africa. Governments' health agencies are combating the pandemic with mobility restrictions, social or physical distancing measures, prohibition of public gatherings and the closure of non-essential businesses. Beyond the first-order medical emergency, the pandemic has disrupted the food value-chain from input supply (including the seed sector) to consumer-level access, threatening already vulnerable populations in both rural and urban areas.

To address the challenge of COVID-19 on food systems, the African Union Commission – Department of Rural Economy and Agriculture (AUC-DREA) and the Food and Agriculture Organization of the United Nations (FAO) convened a virtual meeting of Ministers of Agriculture on 16 April 2020. Recognizing the imminent disruptions in food supply chains due to the pandemic, member States agreed to prioritize the food and agriculture sector as an essential service that must continue to operate during periods of lockdown and movement restrictions. The Ministers also called upon the Commission to assess the impacts of the pandemic among member States and propose appropriate mitigation strategies to minimize food insecurity and malnutrition.

Resolution (v) of the *Declaration on Food Security and Nutrition during the COVID-19 Pandemic* committed members States to “ensuring that farmers have timely access to quality equipment and crop inputs, including seeds and planting material this season<sup>1</sup>.” This is important as seed is a fundamental input for agricultural productivity, affecting crop yields and food quality. Any threats to farmers' access to quality seed has significant consequences for food and nutrition security and farming livelihoods and other players along the value chain.

This white paper reviews the effects of the COVID-19 crisis on key aspects of the seed sector in Africa. It describes actions by governments and other stakeholders in response to emerging challenges in the seed sector. Building on the above, the paper concludes with short- and medium-term recommendations to build resilient seed systems, thereby strengthening food systems serving Africa.

The white paper is prepared by the African Seed Trade Association (AFSTA) in collaboration with The African Seed Access Index (TASAI), and Wageningen Centre for Development Innovation (WCDI).

The African Seed Trade Association is a membership association for the private seed industry in Africa. AFSTA mainly draws its membership from national seed trade associations and private seed companies. For this paper, AFSTA consulted its members and compiled an overview of the impacts that they are realizing as a result of the COVID-19 crisis. Based on the overview, AFSTA prepared a list of recommendation for enhancing seed business resilience and recovery due to COVID-19 pandemic and future emergencies ([www.afsta.org](http://www.afsta.org)).

The African Seed Access Index is a seed industry research initiative coordinated by TASAI Inc. TASAI seeks to encourage public policymakers and development agencies to create and maintain enabling environments that will accelerate the development of competitive formal seed systems serving smallholder farmers in Africa. Over the last six years, TASAI has conducted comprehensive seed industry studies in 21 African countries. The scope of the studies covers 22 indicators across the seed value chain. TASAI is currently conducting studies across seven African countries – Burkina Faso, Ghana, Kenya, Malawi, Mali, Nigeria and Uganda ([www.tasai.org](http://www.tasai.org)).

In collaboration with partners in Ethiopia, Nigeria and Uganda and within the larger framework of the Integrated Seed Sector Development in Africa (ISSD Africa) programme, WCDI part of Wageningen University & Research (WUR) conducted rapid assessments of the impact of the COVID-19 crisis on the seed sector in the months of May and June 2020. The rapid assessments included a survey among a panel of seed sector stakeholders and focus group discussions with critical stakeholders, which resulted to the publication of seed alerts. Each seed alert identifies four immediate challenges and elaborates options what can be done about it, what stakeholders are involved, who can initiate and who can drive proposed actions. A synthesis paper based on the set of first seed alerts was published. The seed alerts for Ethiopia, Nigeria and Uganda as well as the synthesis paper are the inputs that WCDI and its partners through ISSD Africa provides to the current paper ([Link](#)).

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<sup>1</sup> <http://www.fao.org/3/ca8655en/ca8655en.pdf>

## Part 2: Resilience of Africa's seed system

Seed systems are critical to improving food and nutrition security, resilience, and livelihoods of smallholder farmers. With an emphasis on service to smallholder farmers, a successful seed system should be based on its ability to deliver the following outcomes:

1. **Availability:** All seed classes are available in sufficient quantities to meet existing demand.
2. **Accessibility:** Enough delivery channels are in place for seed to reach smallholder farmers
3. **Affordability:** Seed must be available at prices that are affordable for most smallholder farmers.
4. **Quality:** Seed must be available in quality that meets the farmers' expectations, the labelled specifications or the regulated standards.

In addition to the above, resilience requires seed systems to be able to withstand, recover from, and adapt to both natural and man-made shocks. Past and present natural shocks facing the seed sector include extreme weather (e.g., draught and floods), pests (e.g., locust and fall army worm) and diseases (e.g., maize lethal necrosis disease). Man-made shocks comprise political unrest and economic upheaval. It is worth noting that even in "normal" years (with no shocks) the seed systems of many African countries cannot adequately meet farmers' needs.

Well-functioning seed systems, aligned with the above four qualities, are a necessary but not sufficient criteria for resilience. The effects of the COVID-19 pandemic on Africa's seed systems illustrates the need to measure and monitor the level of resilience of national seed systems<sup>2</sup>. To date no comprehensive tool has been designed to measure seed system resilience. However, some of the tenets of a resilient seed system include:

- *Robust public and private breeding programmes* which produce adapted varieties that are climate-smart, consumer-responsive and nutrition-enhancing. The basic seed produced from these programmes should be affordable and easily accessible to seed producers.
- *Fully functional and efficient variety release and registration system* that facilitates the accessibility of newly released plant varieties.
- *Up-to-date seed policy instruments* which provide the legal and regulatory environment for the conduct of all seed related activities and services along the value chain.
- *Vibrant private sector participation* through seed companies and seed growers who adhere to seed quality control guidelines, coupled with the presence of a strong national seed trade association to advocate for policy reforms.
- *Effective seed delivery systems* in the form of rural agro-dealer networks and a functional system of agricultural extension officers are critical to ensuring the reliable and timely delivery of quality inputs of certified seed that reaches farmers.

## Part 3: Impact of COVID-19 on the seed sector and immediate options

In the short time since COVID-19 was first reported in Africa, it has affected the seed sector in multiple ways, overwhelmingly negative. Depending on the stage in the cropping season during the crisis, farmers in varying degrees have been able to access and thus plant quality seed. The impact is foreseen to be felt more at the end of the 2020 or in 2021, when it will become visible how the crisis has impacted various functions of the seed sector and ultimately its output.

### [Brief description of the impacts](#)

**Reduced mobility**, as a result of lockdown to all but essential services; curfew; prohibition of gatherings; closure of public property; social distancing measures; precautionary behaviour; and fear, is at the root cause of many of the disruptions in the supply chains of seed and other inputs. Disruptions include the low availability of labour, reduced processing output, and delays in distribution, causing seed and related industry to operate at reduced capacity.

Due to the **increased cost of transactions** and doing business during these times, the scarcity and price of inputs including early generation seeds (breeder, pre-basic and basic) and labour for seed production is likely to continue to rise. This will come at a cost to either the producer or the farmer, possibly beyond what they can recover. The outlook for seed production in 2020, and seed availability in future cropping seasons is looking more and more worrisome.

**Delays in distribution** have occurred because of lockdown, absenteeism of workers at processing and off-/loading facilities, and restrictions to transport. Reportedly, impediments have increased the cost of distribution in several occasions.

For globally-traded commodities, **reduction of exports and imports** has resulted in specific goods becoming less available in specific domestic markets, for example vegetable seed, agro-chemicals and fertilizer. Countries are not readily able to increase local production in substitution of this trade and will face shortages.

Quality seed sales have also been negatively affected due to delays in distribution, weakened marketing efforts and fewer farmers present at markets. This puts increased pressure on informal seed systems, including seed saved, shared and/or sold at what are commonly referred to as local, traditional and informal markets. There is **heightened probability of substandard seed** in the market. Unemployment is on the rise and with it migration from urban to farming areas. Though these cases appear to be isolated, they are noteworthy for the additional burden they place on seed systems.

Release and registration of new varieties; seed quality inspection, testing and certification; and other important **services have been delayed**. Social distancing measures prevent stakeholders from meeting face-to-face to exchange goods, services and information or coordinate activities. Whilst they gradually get up to speed with innovations in ICT, **stakeholders are hesitant in going digital**.

Lastly, **existing legislation is unlikely to offer provisions** for such exceptional circumstances. Prompt and unprecedented action to ensure continuity in the performance of essential activities in the seed sector will require executive order by Government to make certain exceptions from regulations and standards.

#### Immediate options to mitigate impacts

The stakeholders in the seed sector across Africa have responded to crises linked to pandemics in the past. During the Ebola pandemic in West Africa in 2014 and 2015, the Africa Seed Trade Association (AFSTA), in collaboration with the Economic Community of West African States (ECOWAS) and CORAF, negotiated for the supply of seed to countries that were hardest hit including Liberia, Sierra Leone and Guinea. The movement of seed to these countries was under the framework of the ECOWAS Seed Regulations. Similarly, this year, the seed industry stakeholders have taken various steps in response to the COVID-19 pandemic and associated crisis. These interventions range from sector-wide responses to specific actions intended to minimize disruption in the performance of the seed sector.

#### **Reduced mobility**

If Governments haven't already, they need to classify agriculture and input provision as an essential service to ease the movement of seed and seed workers during lockdown. The decision needs to be communicated at all levels of administration and with police and security forces enforcing lockdown measures. Government departments of agriculture and public health ought to collaborate in raising awareness among stakeholders in agriculture about SARS-CoV-2 sources of infection; COVID-19 symptoms, mortality and groups at higher risk; and the precautions that can be taken to limit the spread of the disease. Public health advice should be translated into standard operating procedures for different agricultural activities and adhered to. Employers have a responsibility to see to it. Essential workers at higher risk of infection need to be prioritized in the distribution of personal protective equipment and sanitizer, whilst others are encouraged to practice less costly non-pharmaceutical interventions including social distancing and recommended personal hygiene.

#### **Increased cost of transactions**

Selected seed producers, processors and traders are in need of direct support from Government. For starters, additional and/or alternative sites should be allocated along with irrigation for off-season production of early generation seed, if possible. Efficient utilization of early generation seed can be enhanced by regular inventory of demand and planning for supply (remotely/virtually). Some Governments have decided to subsidize supply of early generation seed. In instances of delayed payment and collection, available early generation seed should be promptly reallocated to seed producers in need. Regarding labour, seed producers should be encouraged to attract, mobilize and secure labour by providing safe transport, board and lodging. Alternatively, they may seek and be assisted in obtaining labour-saving technologies. Lastly, seed producers should be facilitated access to affordable financial credit.

### **Delays in distribution**

Seed trade associations in collaboration with Government have issued seed producers stickers for their vehicles that easily identify them in conducting essential services. This is one good practice observed. Another is the structured/scheduled trade of seed and other agricultural inputs at designated market-places in a way that diminishes congestion and complies with sanitary measures. Farmer organizations and agricultural extension workers should take stock of farming communities' needs in aggregating information to agro-input traders. Farmers can also be enabled to order seed over the telephone, transferring cash in payment electronically if possible. Digital seed tracking technologies are available and very useful in coordinating supply. Government should take measures to minimize seed price instability, manipulation and seed stockpiling.

### **Reduced export and import**

In selected cases, Governments have either suspended or reduced import duties and taxes on scarcely available agricultural inputs. Green channels for seed imports can be permitted by customs officials. Limited domestic reserves of globally-traded currencies is an exacerbating problem, which requires prioritization of much-needed agricultural inputs for import. Whilst not all countries are geared towards such a response in the short term, another option is to support local initiatives in the production of, for example, vegetable seed and seed potatoes.

### **Substandard seed in the market**

Firstly, rapid, wide-spread and collaborative effort should be taken to raise farmer awareness of the importance of using quality agricultural inputs and how to identify substandard products in the market. Farmers should be informed about where registered seed outlets are, the names and attributes of released varieties, and measures taken by Government to stamp-out the presence of substandard seed. Seed regulatory authorities ought to work closely with local authorities and extension workers in conducting market inspections. They may be empowered to take punitive measures against malpractice. A (customer) complaints hotline could be set-up. Lastly, if inaccessibility to certified seed is a contributing factor, agro-input dealers may be able to provide credit to farmers like they do for fertilizers and crop protection products in some countries.

### **Services have been delayed**

Likewise, for input provision, relevant services to the seed sector should be designated essential. Service providers should be given permits to move more freely. Selected staff performing urgent tasks that cannot be performed from home must be allowed to return to office. If need be, their supervisors can arrange safe transport for them. Advancements in ICT offer great opportunity during times like this. The possibilities for going digital should be explored exhaustively. Variety release and registration is no exception. Members of the national variety release committee can convene virtually to decide whether or not to approve candidate varieties for release. Alternatively, summaries of technical reports on candidate varieties should be sent to committee members individually, as they are asked to approve varieties recommended for release by those evaluating national performance trials. Evaluation of on-station/-farm trials should be delegated and decentralized, for example to extension workers and lead farmers close by. Field days with only a limited number of farmers, recorded interviews with them, and photographs can serve as alternative forms of trial data. A digital archive of supporting evidences can facilitate more rapid variety release.

### **Stakeholders are hesitant in going digital**

Digital innovations are within reach. Governments and their development partners should take advantage of these capabilities to familiarize farmers, traders, seed producers and service providers with advancements in ICT. Capacity building on online services should be given immediate priority, for example: submitting and processing applications online for variety release and registration, seed inspection and testing, and import/export permits; trade between of seed companies and farmers through e-commerce platforms; and sharing crop management advice via apps and e-manuals; among other proven areas of application.

### **Existing legislation is unlikely to offer provisions**

Firstly, the use of electronic signatures must be promoted within Government structures to expedite bureaucracy. Government should also consider more 'palliative' measures during these exceptional circumstances. Exceptions to the law and temporary and/or amended permissions of certain practices must be announced in directives, executive orders or official decree and broadcasted to stakeholders. Government should urge regulatory authorities to demonstrate strategic flexibility in the enforcement of relevant regulations. Subsidies to producers, traders and farmers is one type of

option that Governments have resorted to. New subsidy instruments should be considered for time-bound intervention in supply-side constraints. Private sector should be consulted in their design, implementation, monitoring and evaluation, and seed should continue to be supplied through existing retail networks. On the demand-side, payment by Government-issued/-accredited vouchers can be considered.

## Part 4: Medium-term recommendations for African Ministers of Agriculture

The recommendations below highlight the medium-term actions that the governments should implement to ensure that quality seed is accessible, affordable and available to farmers across the continent. In some cases, these recommendations pertain to the implementation of already-existing policy instruments. In other cases, the recommendations include new actions that are specific to the dynamics of the COVID-19 crisis and its current impact on the sector. Overall, the goal should be to develop resilient seed systems that can respond to all shocks. The pursuit of this goal would also respond to one of the goals of the AU Agenda 2063 – modern agriculture for increased productivity and production.

### **Develop and implement a comprehensive industry response strategy**

This should be done in close collaboration with seed industry stakeholders and other relevant institutions such as the Ministries of Health, Trade and Commerce. The response strategy should include the following:

- i. Conduct a situation analysis of the implications of COVID-19 crisis on seed value chain activities, including seed movement and seed quality control.
- ii. Develop or revise guidelines and standard operating procedures to cover all aspects of the seed value chain from production, processing, marketing, and distribution.

### **Develop a system for planning, forecasting and monitoring production and supply of early generation seed.**

Many seed companies and producers are not satisfied with the supply of early generation seed (i.e. breeder and basic seed) from national agricultural research institutions. The situation is exacerbated by external shocks to the system, such as COVID-19. A robust system for planning and monitoring production and supply of early generation seed should include:

- i. Develop annual or quarterly balance sheets of early generation seed by crop, as this will inform decisions related to seed demand and seed supply;
- ii. An assessment of the capacity of the public research institutions and private entities to meet this production requirement;
- iii. An elaboration of the process that seed enterprises should follow to obtain early generation seed from public research institutions.

### **Promote regional seed trade**

To mitigate against localized shocks. For example, in the event of a country-specific shock seeds can come from neighboring countries to alleviate shortages. Governments can support regional seed trade through the following actions:

- i. Implement the harmonized seed regulations in the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC). This would entail supporting countries within these blocs to harmonize their seed regulations with the regional regulations.
- ii. Develop harmonized seed regulations in regional blocs where such regulations do not exist, including Union du Maghreb Arabe (UMA) and the Economic Community of Central African States (ECCAS).
- iii. Develop a roadmap for the implementation of the African Continental Free Trade Area (AfCTA)

### **Strengthen public and private agricultural extension systems** in collaboration with the private and NGO sectors

- i. Improve coordination between the different providers of agricultural extension services to ensure the consistency of the messages;
- ii. Promote the use of digital platforms for service delivery to farmers and value chain coordination.

### **Strengthen agro-dealer networks**

Agro-dealers are critical to closing the last mile in service delivery to smallholder farmers. Governments should promote agro-dealer networks through the following actions/programmes:

- i. Develop and implement guidelines for registration and accreditation of agro-dealers;
- ii. Train agro-dealers in effective service delivery and monitor their performance regularly.

**Move towards third-party authorization to complement government delivery** of selected seed services. To augment service delivery, governments should develop a roadmap which (i) outlines the different seed services that can be outsourced to third parties – such as seed inspection, seed testing and analysis, (ii) proposes guidelines for the authorization of these services. The guidelines may include the requirements for the third party, the oversight roles of government, and funding mechanisms.

**Strengthen public research institutes.**

National agricultural research institutes play a pivotal role in ensuring steady supply of new improved varieties and maintenance of varieties that are in the market. The new improved varieties are a gateway to enhancing resilience of farming households in the wake of pandemics such as COVID-19 and vagaries of climate change. New varieties are required to respond to increasing need for greater nutrition enhancement, changing market requirements and focus food security crops that the private sector does not pay attention to.