

The resilience of the seed sector, and its contribution to ensuring food security, is at stake

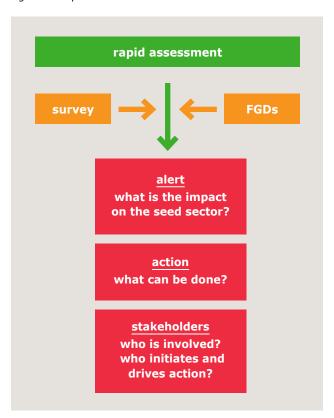
Over the past months, the COVID-19 pandemic has spread across countries in sub-Saharan Africa and Asia. We are deeply concerned about the impact of the pandemic on people's health and lives, and on the disruption of the economy and society, from household level to community, and up to national and global levels. Governments and their health agencies are trying to combat the pandemic with mobility restrictions and social-distancing measures. We share our appreciation of their efforts to protect people's lives and health, as these measures contribute to a reduction in the likelihood of human mortality, severe health consequences and the spread of the disease, especially among vulnerable people and communities.

However, these efforts have also resulted in challenges in the functioning of the food system. In this 'Seed Alerts - Synthesis' document, we focus on the way the crisis impacts the seed sector, and affects the operations and services of seed value chains of many important food and cash crops in low- and middleincome countries. Farmers' access to and use of quality seed of preferred varieties is already being impacted and will likely continue to be affected in the future, which will in turn affect crop productivity and production, and have consequences for farmers' income, food and nutrition security, as well as the agricultural and national economy. If the seed sector is not resilient in these times of crisis, and as a result, farmers cannot access quality seed, the COVID-19 crisis has the potential to turn into a food or hunger crisis. We synthesize the outcomes of rapid assessments of the seed sector in Ethiopia, Myanmar, Nigeria and Uganda, and complement these with lessons learned, aiming to inform seed stakeholders in other countries facing similar challenges, and provide insights and a set of options to help them address the similar challenges.

COVID-19 crisis and the seed sector

The measures taken to cope with the COVID-19 pandemic include imposing the lockdown of cities, regions and countries; and enforcing mobility restrictions, social distancing and strict sanitary practices. People are responding to the pandemic and the government measures in different ways. This assembly of changes in mobility, social interactions and human responses, varies between countries and regions, and also between rural and urban areas. Each feature of the crisis, individually and combined, impacts society and the economy, as well as public services, businesses and markets, and thus also the functioning of the seed sector.

Figure 1: Rapid assessment of the seed sector



The crisis, the government measures and public response, affect various components, interactions and transactions within the seed value chains and seed sector functions. The result is that farmers' current and future access to quality seed of preferred varieties is at risk. It is important to consider that seed access has multiple traits that include physical availability, affordability, quantity, quality in vigour and health of seed, and the availability of farmer- and market-preferred varieties. With individual and combined traits of accessibility affected, the functioning of the seed sector is at stake.

Rapid assessments of the seed sector

In May 2020, a team from Wageningen Centre for Development (WCDI), part of Wageningen University & Research, in collaboration with national partners, conducted rapid assessments of the impact of the COVID-19 crisis on the functioning the seed sector

in Ethiopia, Myanmar, Nigeria and Uganda. The rapid assessments were guided by the frameworks of seed sector transformation and seed value chain analysis. We used a survey run through a digital application accessible to respondents by mobile phones and online to identify emerging challenges. In focus group discussions (FGDs), involving multiple stakeholders, we identified and elaborated the immediate actions required. We subsequently determined the stakeholders involved, including the stakeholders in the best position to initiate and drive the actions proposed. Figure 1 illustrates the framework used in the rapid assessments. The methodology used is elaborated in this document (link). The expectation is that through the rapid assessments and country seed alerts produced during the current COVID-19 crisis, we will enhance the resilience of the seed sector, i.e. its capacity to respond to change, and thereby contribute to more resilient food systems.

Table 1: Overview of the status of the COVID-19 pandemic: infection rate and government response in relation to health, mobility and the agricultural sector, based on inputs from national partners $(15 \text{ May } 2020)^+$

Level	Indicator	Ethiopia	Myanmar	Nigeria	Uganda
COVID-19 toll*	# confirmed cases	287	261	5445	203
	# confirmed new cases (7 days)	19	21	1244	43
Government measures (health & mobility)	Mandatory use of face masks in public spaces & sanitary practices	Yes	Yes	Yes	Yes
	Lockdown	Not complete; free movement but with precautionary measures	Not complete; free movement but with precautionary measures	Not complete; free movement but with precautionary measures	Complete for all non-essential activities
	Curfew	None	00:00 - 04:00	22:00 - 04:00	19:00 - 06:30
	Land travel (public & private vehicles)	Significantly reduced	Allowed	Significantly reduced	Not allowed
	Domestic travel between regions, provinces or states	No restrictions	No restrictions	Non-essential travel prohibited; trans- portation of goods and services is allowed	Non-essential travel prohibited; transportation of goods and services is allowed
	Social distancing between people in workplaces and other public spaces	Promoted	Mandatory: 2 metres	Mandatory: 2 metres	Mandatory: 4 metres
	Meetings	Large public meetings and demonstrations are restricted	Large public meetings and demonstrations are restricted	Meetings of >20 people outside of the workplace are prohibited	Meetings are prohibited
	Access to public spaces, including markets, locations of economic activities	Controlled access	Controlled access	Controlled access	All closed
Agricultural sector	Exemptions from restrictions for agricultural activities and services; conditions for exemptions	Yes; on condition of taking all the necessary precautions	Yes; maximum of 5 staff allowed to travel; farm visits allowed with a permit	Yes; domestic (interstate) movement of seed and its ancillary services allowed with a permit	Yes; farm-visits allowed with a permit

⁺ Date of the first rapid assessments of the seed sector in the four countries

^{*} Source: national dashboards (15 May 2020)

Variations between the four countries

The first cycle of rapid assessments of the seed sector was conducted over the first weeks of May, in four countries that vary in the structure and functioning of their agricultural and seed sectors. In conducting the assessments, we noted that the countries differed in terms of their stages in the COVID-19 pandemic and in the type of measures that each government was taking to control the spread of the virus. Table 1 illustrates the status of the pandemic and the variations in measures the four countries were taking at the time of assessment. We also considered the timing of the growing season of each country's primary crops. For example, for the May assessments, we were in the midst of, or had just missed, the planting season for maize in several countries in sub-Saharan Africa; we expect to coincide with rice and wheat planting in Myanmar and Ethiopia for the June and July assessments respectively. These variations provided a setting for learning lessons on the different contexts, features and stages of the crisis, their impact on the seed sector, and the options available to address immediate challenges.

Structure of the 'Seed Alerts - Synthesis' document

In this document, we conclude a first cycle of rapid assessments in the seed sector of Ethiopia, Myanmar, Nigeria and Uganda. We apply a synthesis and learning framework to the rapid assessments, to determine the impact of the crisis on seed sector functions, as part of the seed sector transformation framework, and we

elaborate options for response based on the actions identified in the four countries. In order to improve the subsequent cycle of rapid assessments for the seed sector, and because similar assessments are currently planned and being implemented for other sectors, we share lessons learned on the methodology. Figure 2 illustrates the different perspectives in synthesis and learning. A reflection on the use of sector transformation as a guiding framework will be more opportune on conclusion of the second cycle of rapid assessments of the seed sector.

Emerging challenges and options

Through the survey, we identified how specific measures taken in the crisis lead to challenges in the functioning of the seed sector in each of the four countries. For each of the six seed sector functions, we share the most common and distinct emerging challenges identified in the four countries (referred to as alerts in the country documents). Emerging challenges are listed with the countries as references using the following acronyms: ET Ethiopia, NI Nigeria, MM Myanmar and UG Uganda. The seed sector functions within the context of the transformation framework are introduced in more detail in the methodology brief (link).

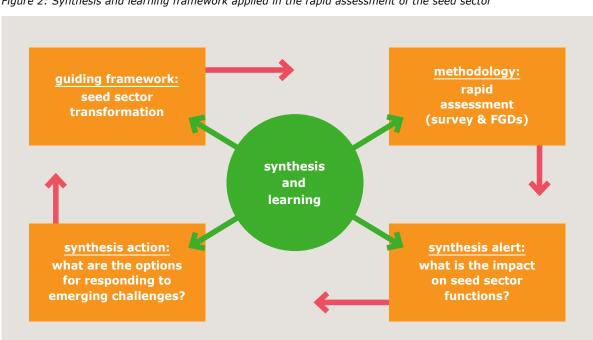


Figure 2: Synthesis and learning framework applied in the rapid assessment of the seed sector

Emerging challenges and options

Function

Seed sector service

The capacity of the seed sector to provide high quality, inclusive and differentiated services to seed producers and seed value chain actors

Emerging challenges

- · Mobility restrictions limit field inspection services for quality seed assurance (ET MM NI UG)
- Mobility restrictions, social-distancing measures, and workers' response hamper the production and supply of early generation seed (EGS) (ET MM NI UG)
- Mobility restrictions and social-distancing measures hamper the organization of meetings critical for variety release and registration (MM UG)
- Mobility restrictions limit farmers' access to finance for agro-input purchases (NI)
- Mobility restrictions hinder breeders from accessing new germplasm and conducting onstation and farm-based trials (UG)
- Mobility restrictions hamper the procedures required for seed imports (MM)

Options

Foster the issuing of permits/essential service designation for the seed sector

- Engage with authorities to designate services including quality assurance and extension as essential
- Provide required travel permits to seed sector stakeholders

Inform police/security forces of exemptions through media

 Engage in large-scale media campaigns to inform security and police forces of specific exemptions for vital agricultural services

Ensure adherence to health and safety measures

- Develop and promote the use of standard operating procedures (SOPs) for field operations to guide stakeholders, including inspectors, farm workers and extensionists
- Ensure and promote the provision of sanitizers and face masks

Prioritize EGS in quality assurance

• Ensure seed quality assurance of EGS is prioritized by seed inspectors, or delegate this to local extension officers

Promote virtual extension and virtual meetings

- Encourage technical staff of governments and seed companies to provide virtual seed extension services to seed producers and farmers through phone calls and using other communication channels
- Promote virtual meetings of committees, like variety release committees, which normally meet face to face

Accelerate the use of digital seed tracking technologies

 Promote the use of digital seed tracking technologies for marketing and distribution, to ensure quality

Seed production systems

The viability and sustainability of seed production systems

Emerging challenges

- Mobility restrictions and social-distancing measures hamper access to labour and agricultural inputs for seed production (ET MM UG)
- Fear of virus transmission among farm, company and transportation workers, hinders seed production operations (ET MN UG)
- Mobility restrictions limit processing and transportation of seed from seed producers and companies to agro-dealers/points of sale (ET MM UG)

Options

Conduct information campaigns targeting seed sector workers

- Raise awareness on, and ensure adherence to, COVID-19 safety guidelines, among seed production workers
- Increase seed industry workers' confidence in their safety by posting illustrations of the precautionary measures adopted in their workplace
- Create awareness among seed entrepreneurs of SOPs, social-distancing measures, sanitary practices and the use of face masks
- Engage in communication campaigns on work safety, including pamphlets, posters, radio and other media

Ensure adherence to health and safety measures

- Develop and promote the use of SOPs for field operations to guide stakeholders, including technicians and labourers
- Ensure and promote the provision of sanitizers and face masks to people involved in seed production
- Provide workers at seed-processing facilities with personal protective equipment (PPE) and sanitary supplies

Promote the use of labour-saving technologies

• Seek opportunities to replace human labour with other options, such as replacing manual weeding with herbicides, and look into options for promoting mechanization

Relax quality standards in the use of EGS in specific cases

 When quality seed of EGS cannot be supplied in time in specific regions, create exceptions for the use of certified seed of class 1 (CS1), to produce certified seed of class 2 (CS2) for open-pollinated crop varieties



Field inspectors taking care of the necessary SOPs before they go into the field (Photo: ISSD Uganda)

Seed market development

The efficiency, fairness and transparency of seed value chains and seed markets

Emerging challenges

- Mobility restrictions and social-distancing measures hamper access to markets for seed companies, agro-dealers and farmers (ET MM NI UG)
- Reduced availability and increased seed prices result in substandard seed making its way to markets (ET MM NI UG)
- Fear of virus transmission among transportation workers, retailers and farmers, hampers the functioning of seed markets (ET NI UG)
- Mobility restrictions and social-distancing measures hinder the organization of variety demonstrations and field days (UG)

Options

Foster the issuing of permits/essential service designation for the seed sector

- Engage with COVID-19 task forces at national and subnational levels to allow for the interregional transportation and distribution of agricultural inputs, including seed
- Provide required permits to seed sector stakeholders

Inform police/security forces of exemptions through media

• Engage in large-scale media campaigns to inform security and police forces of specific exemptions for vital agricultural services

Conduct awareness-raising campaigns

• Engage with seed entrepreneurs and their associations to inform and create awareness among entrepreneurs, their workers and customers on SOPs, social-distancing measures, sanitary practices, and the use of face masks

Ensure adherence to health and safety measures

- Provide workers at seed marketing facilities with PPE and sanitary supplies
- Ensure and promote the provision of sanitizers and face masks to people involved in marketing seed

Designate and structure agricultural input markets

 Structure the trade of seed and agricultural inputs in designated markets on special days, complying with social-distancing and sanitary guidelines

Decentralized seed marketing

- Promote and encourage seed companies and other stakeholders involved to stock last mile agricultural input dealers and to avoid shortages
- · Allow farmers to order inputs by phone and use mobile money payment systems

Ensure accountability and good practices in markets

- Conduct seed market inspections, delegating to local extension staff if needed, and establish customer complaint hotlines
- Take measures to reduce seed price instability, and prevent stockpiling and the creation of seed shortages in particular

Avail of financing through seed companies and agro-input dealers

 Develop and promote mechanisms for seed companies and/or agro-input dealers to provide credit to farmers for seed, which is already available for fertilizers and crop protection products

Revenue generation and re-investment within the seed sector

The capacity of the seed sector to generate revenues and make strategic re-investments The efficiency, fairness and transparency of seed value chains and seed markets

Emerging challenges

- Constraints in the production, transportation and marketing of seed increase its price (ET MM NI UG)
- Economic consequences (farm and off-farm income) of the crisis reduce farmers' access to cash and thus the willingness to purchase quality seed (MM NI UG)
- In view of national food security, and the impact of measures on farmers and the agricultural sector in general, governments consider palliative interventions with major implications on the functioning of the seed market and industry (MM NI)
- Seed dealers disrupt markets by stockpiling seed and creating shortages to increase its price (MM)

Options

Consider and implement palliative measures for the seed sector

- Encourage the government to provide seed subsidies to farmers as a palliative measure
- Ensure that subsidies promote seed sector development, i.e. that they are only applicable to seed purchased from registered and genuine seed companies and producers

Use financial products and services to support the sector

- Promote and develop mechanisms for agricultural loans for a portfolio of crops beyond major staples (maize, rice)
- Propose extending agricultural loan payment periods and reducing bank interest rates for seed entrepreneurs

Function

Seed sector governance and coordination

The extent of coordination, alignment and accountability among different seed stakeholders

Emerging challenges

- Government and stakeholders are hampered in the coordination of specific seed sector functions, such as EGS supply and variety release (ET MM NI UG)
- Government and other stakeholders critical to seed sector governance and coordination are constrained in their access to critical information on seed production and marketing (ET MM NI UG)

Options

Advance the use of information management and digital tools

- Promote the use, and speed up the development, of information management tools, to help meet the supply and demand of EGS, for example
- Promote the use of virtual meetings for decision-making on coordination and regulatory seed sector functions in relation to EGS supply, variety release and registration

Prioritize actions of local authorities

Place a high priority on involving locally authorized parties in activities like seed inspection



Myanmar Seed Portal team at office work at Department of Agriculture MOALI, Nay Pyi Taw (Photo: Win Thein)

Seed sector regulation and management

Rules and systems that govern seed markets, production systems, service delivery and coordination

Emerging challenges

 Government and other stakeholders crucial to seed sector regulation are hampered in convening, decision-making and ensuring the implementation of regulations relevant to seed quality assurance, variety release and seed imports (ET MM NI UG)

Options

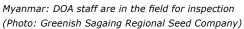
Foster seed import facilitation

• Facilitate green channels for seed imports

Advance the use of information management and digital tools

- Promote the use, and speed up the development, of digital tools for seed quality assurance, variety release and registration, and seed imports
- Promote the use of virtual meetings for decision-making within coordination and regulatory seed sector functions such as EGS supply, and variety release and registration
- Within government structures, promote and create awareness on the use of electronic signatures







Myanmar: Delta region seed grower carrying seed (Photo: Ohn Thein)

Lessons learned

A. Quick turnaround

The rapid assessments were conducted in a relatively short period of time. We kept the time short between the survey, FGDs and publication of the 'Seed Alert', as we were operating in a time of urgency and continuously changing conditions in terms of the pandemic, government measures and people's responses. Since seed production and marketing are seasonal and agricultural activities, we wanted to be aligned with the agricultural calendar of several crops. In Ethiopia, Nigeria and Nigeria, we coincided with the time for maize seed to reach the farmers and be planted, while in Ethiopia and Myanmar respectively, we were ahead of the wheat and rice planting season. A delay in publishing of two or more weeks would mean that the actions proposed may no longer be relevant

B. Seed and varieties for today, tomorrow and beyond

The rapid assessments examine challenges in the marketing of seed for the current crop production season; they also look at challenges in the production of EGS and quality seed, and in the development and release of new varieties. Thus, the assessments observe not only the issues that impact the current season, they also look at how the crisis will affect seed sector functions, and access to quality seed and particular varieties in coming and future crop production cycles. Therefore, some proposed actions are relevant to seed use in the current season (e.g. market access for seed companies and farmers; seed imports), while others will only affect access to quality seed of particular varieties in subsequent (e.g. seed production by producers; field inspections) or later seasons (e.g. EGS supply to seed producers; promptness in the release and registration of varieties).

C. Promptness and reliability of insights

As many of the emerging challenges impact the sector and business models of the industry, we conducted a broad consultation among multiple respondents and stakeholders. These consultations were followed-up in FGDs, ensuring many different perspectives and insights, and providing more details on the outcomes of the survey. Triangulation of information from multiple sources and stakeholders, and through diverse means, enhanced the trustworthiness of the information gathered and the insights gained. However, we realize that we were trying to balance

speed, stakeholder representation and thoroughness in our information gathering, and we consider it important to be transparent about this.

D. Approach of involving, informing and advocating

The FGD approach, in addition to the high-level consultation and approval of the alerts, allowed the teams responsible to facilitate joint action and ensure ownership among key stakeholders and decision-makers. The format of the 'Seed Alerts' informs stakeholders and creates awareness on challenges, but above all serves as an advocacy tool to identify vulnerable seed sector functions and prompt for immediate action. The 'Seed Alerts' also list those stakeholders that can initiate and drive that action.

E. Proactive, instant and jointly constructed solutions

Whilst the FGDs and 'Seed Alerts' are practical in their orientation towards determining actions required, they are also transparent in the way in which they identify stakeholders with the capability to assume responsibility for initiating and driving the necessary actions. As such, they have a proactive and solutiondriven character. Through its solution-driven, multistakeholder approach, quick turnaround, and the strong ownership of the process among decisionmakers, the exercise of producing and sharing the 'Seed Alerts' contributed to strengthening sector coordination and governance as one of the six seed sector functions within the transformation framework. The 'Seed Alerts' are critical for increasing vibrance, resilience and accountability, which are features of the sector vision elaborated in the framework for seed sector transformation.

F. Embedding of rapid assessments in programmes, networks and partnerships

In three of the four countries, WCDI and national seed sector stakeholders are collaborating on ISSD programmes and playing a catalytic role in addressing systemic and structural features of the seed sector. In Nigeria, WCDI is working with the lead government body responsible for the seed sector, and a consulting firm with a strong and catalytic footprint in the sector. Through our partners, the necessary institutional capital and networks are in place for the survey and FGDs to be rapid and effective in involving stakeholders.

Through the programmes and relationships, our partners are in a position to follow-up by taking on their role, or supporting stakeholders, as initiators and drivers. As we engage in processes guided by seed sector transformation and integrated seed sector development, we encourage partners to look for actions and innovations that support the overall development of the sector, and avoid actions and interventions that focus on single crops or seed systems, or that could have a negative impact on the long-term sustainability of the sector. The programmes and partnerships allowed the rapid assessments to move beyond just observing problems, adopting instead a more practical and action-oriented approach.

G. Complementarity in seed security assessments

The programmes and partnerships target seed security within food and seed insecure areas only to a limited degree, and we recognize that such aspects are not addressed in the rapid assessments. However, we consider the highly relevant work of the network associated with Seed Systems (www.seedsystems. org) as complementary to our effort. The Seed Systems network includes national and international organizations aiming to improve seed security in vulnerable and high-stress areas of the world and is in a strong position to address issues of seed security in humanitarian and relief operations, which is becoming more and more relevant as the current crisis evolves.

H. Seed stakeholders within formal and informal seed systems

In the first cycle of assessments, we have been mainly focusing on formal and commercial seed systems and engaged with the stakeholders therein. We realize that the sector is much broader and that the majority of seed users depend on informal sources of seed. Some components of the seed value chain are not relevant to informal seed systems, like EGS production and supply, and field inspections. Local seed systems seem to be less affected by, for example, restrictions in mobility. However, there may be the issue where one category of seed producers has access to services and support, for example subsidy programmes, while another category of producers has not. The current assessment does not provide insights into aspects that relate to accountability and inclusiveness of the seed sector. In the next assessments, we will look at addressing issues related to inclusion and exclusion among seed sector stakeholders.

I. Focus on few crops and associated seed systems

In the design of the rapid assessments, we were guided by the seed sector transformation framework. Our focus was on the overall structure and functioning

of the seed sector, and we identified crops to anchor our assessment. The following crops were identified for the first 'Seed Alert' as being the key crops for which seed was being sown, grown, harvested or distributed at the time of the assessment: maize (Ethiopia, Nigeria, Uganda), wheat (Ethiopia), rice (Myanmar, Nigeria), and legumes (Myanmar, Uganda). We realize that through our crop choice and use of the seed sector framework, we identified mainly challenges within formal and commercial seed systems. In future assessments, we will strive to address a more inclusive set of crops, including small grain cereals, oilseed crops, root and tuber crops, and vegetables, and their associated seed systems.

J. Inclusion and exclusion in emerging seed sector dynamics

A deeper and more important aspect is the assessment of which type of seed users are affected by the crisis. As it evolves and impacts the seed market, users will be affected differently in their access to seed. For some users, access will be diminished as they will simply no longer be able to afford quality seed, or the seed they want to access will no longer reach them through distribution or marketing channels. We realize that we need to strengthen our rapid assessment methodology, but also the guiding seed sector transformation framework, in aspects and dynamics related to the inclusion and exclusion of different types of seed users. The crisis not only illustrates the resilience of the sector, but also highlights the inclusivity of the sector towards a diversity of seed users.

K. Purpose to alert and prompt stakeholders to act

Critical to our efforts is that the rapid assessments serve to alert stakeholders on emerging challenges in the seed sector and prompt them to act within the boundaries of what is possible during the development of the pandemic and the resulting health crisis in the country. The functioning of the seed sector is essential to the functioning of crop production today, but also tomorrow and the day after tomorrow. Sticking to this purpose, we want to emphasize that the 'Seed Alerts' are not meant to be a monitoring tool. They do not assess the progress in terms of sector change or programme implementation. The purpose of the rapid assessments is to study the changing conditions of the crisis, in relation to government measures, and social and economic responses; identify emerging challenges; and explore ways to address them, taking into account the seasonal agricultural calendar of certain crops, and working within the strict timeframe of the crisis. We aim to stick to this purpose in future assessments and, by raising awareness and advocating for action, enhance and contribute to the resilience of the seed sector.

Rapid Assessment & Seed Alert

To avoid a food and hunger crisis following the current COVID-19 pandemic, urgent action is needed to address key agricultural challenges, including those identified in the seed sector. The rapid assessments contributing to this 'Seed Alerts - Synthesis' were carried out in Ethiopia, Myanmar, Nigeria and Uganda in May 2020. In each country, the survey included at least 30 respondents covering multiple stakeholder organizations, while the FGDs were composed of participants that represented the seed sector. We plan to repeat these rapid assessments at least once a month, to identify alerts and determine the immediate actions required. More details on the methodology and steps can be accessed through this link.

Purpose, countries and partners

The aim of the 'Seed Alert' is to assess the impact of the COVID-19 crisis on the functioning of the seed sector. Rapid assessments are implemented by Wageningen Centre for Development Innovation (WCDI), in close collaboration with partners in the Integrated Seed Sector Development Programmes in Ethiopia (ISSD Ethiopia), Uganda (ISSD Uganda Plus) and Myanmar (ISSD Myanmar). In Nigeria, WCDI is collaborating with stakeholders on the development of the National Seed Road Map and the design of the Collaborative Seed Project, in contributing to the Nigeria-Netherlands Seed Partnership.

The National Agricultural Seeds Council (NASC) and Sahel Consulting Agriculture & Nutrition Limited join these efforts in Nigeria. More details can be accessed through this link.

Alerts in other sectors

In June and July 2020, similar 'Alerts' are anticipated to cover the impact of the COVID-19 crisis on the functioning of the sesame, fertilizer and horticultural sectors. Working with a similar framework in various sectors and countries, and within a specific timeframe, facilitates an interpretation and synthesis of the impact of the COVID-19 crisis on food systems at national, regional and global levels, while also providing insights into immediate and practical actions needed to address emerging challenges. It furthermore offers insights into the use of the sector transformation model as a diagnostic tool for supporting strategic development, planning, and monitoring interventions that aim to enhance the functioning, resilience and inclusiveness of specific agricultural sectors and food systems.





Farmers accessing seed selling point at cooperative office. Amhara region, Ethiopia (Photo's: Wonzie Asmare)

About WCDI

WCDI supports value creation by strengthening capacities for sustainable development. As the international expertise and capacity-building institute of Wageningen University & Research, we transform knowledge into action, with the aim of exploring the potential of nature to improve quality of life. WCDI's 'seed team' is engaged in the design and implementation of programmes that guide the transformation of seed sectors in several countries throughout the world. It has developed a strong reputation for taking an integrated or pluralistic approach to seed sector development, thereby becoming an attractive partner for seed sector stakeholders in various countries. WCDI is in a unique position to lead this pilot as it has a global network and plays a leadership role in the seed sector.

Team

WCDI's seed team includes staff with technical, facilitation and communication expertise in the seed sector; they are supporting efforts to produce rapid assessments in the four countries and the current synthesis document. The team includes Abishkar Subedi, Arnab Gupta, Gareth Borman, James Mulkerrins, Marja Thijssen, Mirjam Schaap and Walter de Boef.

We would like to acknowledge the tremendous commitment of our partners and seed sector stakeholders in Ethiopia, Myanmar, Nigeria and Uganda. Their efforts in conducting and participating in the first cycle of the rapid assessments, through an action research approach, contributed to the development of the methodology that was subsequently used in several other sectors and countries. They were motivated by their commitment to the seed sector in their respective countries, but their work contributes to broader efforts.

The 'Seed Alerts - Synthesis' is published within a series of 'Rapid Assessments' and 'Alerts' in multiple countries, and is a WCDI Sector Transformation publication.

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