Measures reduce the mobility of farmers and seed entrepreneurs, and thereby reduce farmers' access to quality seed

Alert 2

Measures affect regulatory functions in seed import, variety release, and registration

Alert 3

Measures affect the affordability of quality seed for farmers

Alert 4

Measures hamper the production and supply of early generation seed (EGS)

Alert 1

Measures reduce the mobility of farmers and seed entrepreneurs, and thereby reduce farmers' access to quality seed

What is the impact?

- The COVID-19 crisis and the measures taken to combat it negatively affect the
 mobility of labour for seed production field operations, such as land preparation,
 rogueing, and disease and pest management, as well as post-harvest practices,
 seed processing, packaging, and storage
- The COVID-19 measures reduce the mobility of farmers and seed entrepreneurs (seed growers, private seed companies, seed traders, and seed and fertilisers shops)
- Because the measures and their enforcement vary between different regions, states, and townships, their impact on the functioning of the seed sector also varies
- If these measures continue to affect the agricultural input sector during the May– July period farmers will suffer a shortage of quality seed, which will have a serious negative impact on agricultural productivity and production

What actions are required?

- Allow the mobility needed to carry out seed production in the field and factories or warehouses, agri-logistic services, and agri-labour movement to designated places of work
- Ensure that seed entrepreneurs and labourers strictly follow the social distancing measures, washing their hands and wearing facemasks
- Help solve the security issues that hinder the use of drone services for pesticide and fertiliser application

What stakeholders are involved?

- Ministry of Agriculture, Livestock, and Irrigation (MOALI), Regional and District Agriculture offices, Depart of Agriculture Township extension office
- Seed entrepreneurs, and Myanmar Seed Association (MSA)
- NGO seed projects
- Private sector involving in agri-input and farm mechanisation

Who takes initiative? Who drives action?

- MOALI's Department of Planning (DOP) and Department of Agriculture (DOA) work
 with the COVID-19 National Task Force and coordinates with regional governments
 and security departments, townships and villages to increase the mobility of seed
 entrepreneurs
- DOA and the private sector, which is providing agri-mechanisation and drone services, engage with security departments so that private sector services to seed growers and farmers can be facilitated

What actions are required?

- Ensure that the same status and priority is given to the movement of seed and fertilizers, labour and employees, and vehicles as to the movement of health products, health manpower, and transport
- Because of its value for national food and nutrition security, and the contribution to the national economy, encourage the relevant authorities to classify the agricultural input sector as an 'essential sector'
- Engage with authorities so that permission is granted for the transport of seed and fertilisers within and between the townships, states, or regions

What stakeholders are involved?

- MOALI
- COVID-19 National Task Force
- MSA
- State and regional governments, government security departments, and traffic police
- Development partners and seed projects

Who takes initiative? Who drives action

 Within MOALI, DOP and DOA work with the COVID-19 National Task Force and coordinate with regional governments, administrative offices, security departments, respective township and villages

What actions are required?

- Create awareness among farmers and seed entrepreneurs of social distancing measures, hand washing, and facemask wearing
- Develop and share guidelines adapted to the seed industry, issued by the Ministry of Health and Sports (MOHS)
- Encourage seed entrepreneurs to prioritize selling their seed in their township and in neighbouring townships; this can help farmers avoid traveling long distances
- Encourage seed shops to transport seed closer to villages where farmers need quality seed; this can help farmers avoid traveling long distances
- Encourage seed entrepreneurs to promote their seed through media and digital platforms)
- Encourage seed entrepreneurs and farmers to communicate directly by phone on the availability of seed for different crops varieties
- Speed up the mobile-based 'Quality Seed App', in order to facilitate the demand for seed and sales in the dry zone and delta

What stakeholders are involved?

- MOALI
- MSA, Myanmar Rice Federation (MRF)
- COVID-19 National Task Force
- State and regional governments, government security departments, and traffic police
- Development partners and seed projects

Who takes initiative? Who drives action

- Within MOALI, DOP and DOA coordinate with relevant stakeholders in raising awareness
- DOA Seed Division, DOA Extension, MSA, MRF and seed projects promote the use of phones and social media in information-sharing and sales
- Integrated Seed Sector Development Programme in Myanmar (ISSD Myanmar) and Rice Seed Sector Development Project (RSSDP) in the Ayeyarwady Delta coordinate and speed up the use of mobile-based 'Quality Seed App' for ordering and distributing seed

Measures affect regulatory functions in seed import, variety release, and registration

What is the impact?

- The mobility restrictions have a negative impact on import permit applications and approvals, hampering the importation of seed vital to the maize and vegetable sectors
- The mobility measures also mean that the Technical Seed Committee that is responsible for variety release and registration has not been meeting
- Difficulties in seed import, variety release, and registration create major risks to the business model of seed companies, producers, and other seed entrepreneurs
- Subsequently, the quantity and quality of seed available in seed markets will be reduced, with implications for seed prices, portfolio of available varieties, portfolio of crops for which quality seed is available, and quality of seed available on the market

What actions are required?

- Facilitate seed import through the Green Channel during the COVID-19 crisis
- Promote the use of digital application forms for issuing import permits, and link this
 to the Myanmar Seed Portal, managed by DOA, MOALI
- Create awareness of the 'Myanmar Seed Portal' for seed import and variety registration
- Use virtual platforms such as Zoom to organise the Technical Seed Committee (TSC) meeting on variety release and registration and regular meetings of the Technical Working Group (TWG) to support the TSC's decision-making process
- Make arrangements so that applicants who have applied for seed business, seed import, and variety registration can present information or answer questions from TWG and TSC through virtual means
- Inform seed companies and seed importers that seed samples for variety adaptability tests can be sent to the Seed Division; they do not need to come to the office physically

What stakeholders are involved?

- MOALI
- MSA
- Seed entrepreneurs, and NGO seed projects

Who takes initiative? Who drives action?

- The Plant Protection Division (PPD) of DOA, MOALI develops an on-line application and approval system for issuing import permits for seed
- The Seed Division of DOA coordinates with MSA to create mass awareness of the Myanmar Seed Portal
- DOA coordinates the organization of virtual meetings of TSC and TWG

Packaging and storing process in the warehouse of of 3G seed company (Photo: 3G seed company)



Dellta region seed grower carrying seed (Photo: Ohn Thein, WHH)



Measures affect the affordability of quality seed for farmers

What is the impact?

- The crisis has a negative effect on the income of farmers from both on-farm and off-farm sources
- Farmers have been hit hard by being unable to sell the produce from their harvested summer crops
- A large number of migrant workers from Myanmar, mainly working in Thailand, have lost their job during the COVID-19 crisis; they have returned
- Unemployment in the rural sector has increased due to the limited cash available to farmers and entrepreneurs
- If the COVID-19 crisis continues to the upcoming monsoon season, it will lead to increases in debt and force farmers and the rural population to sell household assets to cope with the crisis
- Dishonest seed dealers are taking advantage of the crisis, stockpiling seed (such
 as of the Ayeyarmin rice variety) and creating seed shortages in the market;
 consequently, the price of quality seed has increased

What actions are required?

- Develop and promote mechanisms whereby private agro-input dealers and seed companies provide credit for seed to their farmers, like they do for fertilizers and pesticides
- Support those who are producing seed for paddy, pulses, beans and oil seed crops, to access agricultural loans of 400,000–500,000 MMK from the Myanmar Agricultural Development Bank (MADB), as an incentive to promote seed production and seed business development
- Propose extending the agricultural loan payment period and reducing bank interest rates for seed growers and seed companies during the COVID-19 crisis period

What stakeholders are involved?

- MOALI, MRF
- MADF
- MSA, Private sector

Who takes initiative? Who drives action?

- Within MOALI, DOA and DOC coordinate with other line ministries and departments, MADB, and the private sector for the provision of agriculture loans, the reduction of reduce interest rates, and extension of loan payment periods until the COVID-19 crisis is over
- MSA coordinates with seed companies on seed credit for farmers

Myanmar Seed Portal team at office work at DOA MOALI, Nay Pyi Taw (Photo Win Thein)



DOA staffs are in the field for inspection (Photo Greenish Sagaing Regional Seed Company)



What actions are required?

- Encourage government to provide seed subsidies for the duration of the COVID-19 crisis as a palliative measure
- Ensure that the seed subsidies model do not affect to the private seed sector business
- Develop and propose a subsidy model in which the government for the duration
 of the crisis provides financial support to the private seed sector (seed companies
 and seed shops), who provide subsidised seed as advance credit to farmers under
 contract farming arrangement
- Develop and propose an alternative subsidy model in which the government during the crisis buys seed from the private sector at the current market price and distributes the seed at a subsidised price to farmers
- Ensure that seed subsidies only are applicable for seed purchased from registered seed companies, seed producers, seed shops, and seed traders
- Take measures to reduce instability, especially regarding stockpiling and the creation of seed shortages in the market

What stakeholders are involved?

- MOALI
- MRF
- MSA
- Private sector

Who takes initiative? Who drives action?

- MOALI (DOA, DOC), MSA, and MRF collaborate on the seed subsidy model
- The Seed Division of MOALI coordinates with township offices on seed shop inspections, in order to prevent stockpiling and seed shortages

Measures hamper the production and supply of early generation seed (EGS)

What is the impact?

- Mobility restrictions hamper the supply of EGS by the DOA and Department of Agricultural Research (DAR) to seed entrepreneurs (e.g., seed companies, seed growers, and NGO-supported seed projects)
- If the COVID-19 crises is prolonged, it will affect EGS production at DOA Seed Farms and DAR Research Farms
- No information on the volumes of EGS available for different crops and varieties at the farms and facilities of DOA and DAR is available to seed entrepreneurs
- Likewise, information on the demand among seed entrepreneurs for EGS of different crops and varieties in the coming seed production season is not available to MSA

What actions are required?

- Collect data on the volume of foundation and registered seed in stock for different crops and varieties at the various DOA and DAR farms
- Share the EGS stock data widely, so that seed entrepreneurs can access it and plan seed production for the coming monsoon season
- Use a variety of communication channels to share EGS availability
- Collect data on the volumes of foundation and registered seed planned for production in the coming monsoon season at DOA and DAR seed farms
- Collect data on demand for registered seed among seed entrepreneurs and supply it to the DOA and DAR
- Speed up the use of the 'Quality Seed App' for digital ordering of EGS seed in the dry zone and Delta

What stakeholders are involved?

- MOALI
- MSA, seed entrepreneurs
- Development partners and seed projects

Who takes initiative? Who drives action?

- The Seed Division of DOA coordinates the collection of data, and shares information
- MSA coordinates on the provision of EGS demand data
- ISSD Myanmar and RSSD project coordinates on speeding up and the extensive use of the Quality Seed App in EGS supply

What actions are required?

- When registered seed cannot be supplied due to the exceptional circumstances and for the duration of the crisis, permit the use of Certified Seed Class 1 (CS1) to produce Certified Seed (CS2) for open-pollinated crop varieties
- Encourage and promote this exception particularly in remote areas where registered seed distribution is limited
- Encourage 'Registered Seed' production by selected seed entrepreneurs in different regions
- Support DAR and DOA in organizing public–private partnership agreements with seed entrepreneurs in the dry zone to produce foundation and registered seed

What stakeholders are involved?

- MOALI
- MSA, seed companies, and seed growers
- Development partners seed projects

Who takes initiative? Who drives action?

 DOA and DAR engage in partnership with capable seed companies on production of registered seed

Dashboard

Outcomes of May Survey Myanmar - identification of FGD topics or Alerts

- Severe negative impact
- Negative impact
- Slight negative impact
- No impact; business as usual

Seed sector operations and services	Seed Alert May
Breeding on-station	
Multilocational variety trials	
Farmer variety trials	
Variety release committee and release process	Alert 2
Production of early generation seed	Alert 3
Supply of early generation seed	Alert 3
Field inspection for seed quality assurance	
Laboratory testing for seed quality assurance	
Access to agro-inputs for seed production	
Access to labour for seed production	Alert 1
Field operations for seed production	Alert 1
Post-harvest practices for seed marketing	Alert 1
Seed distribution	
Seed import	Alert 2
Seed & variety promotion	
COVID-19 measures on mobility	Alert 1
Mobility of seed companies to point of sales/agro-dealers	Alert 1
Mobility of farmers to point of sales/agro-dealers	Alert 1
Mobility farmers to informal markets	Alert 1
Accessibility informal seed sources	
Presence of substandard seed in markets	
Sales of quality seed	
Government funding of services	
Government investment in marketing and distribution	
Seed sector information sharing and coordination	Alert 2
Affordability of quality seed to farmers	Alert 4
Farmer cash availability	Alert 4
Farmer willingness to pay for quality seed	Alert 4
Quantity and quality of seed sown	Alert 4
Quantity and quality of produce harvested	
Food and income security	

Rapid Assessment & Seed Alert

To avoid a food and hunger crisis following the current COVID-19 health crisis, urgent action is needed to address key agricultural challenges, including bottlenecks identified in the seed sector. The Rapid Assessment is conducted at country level through a survey and focus group discussions. On at least a monthly basis, reiterations of a Rapid Assessment identify alerts and actions, and Seed Alerts are published. More details on the methodology and steps can be accessed through this link. (https://bit.ly/sectoralertMETH)

Purpose

The purpose of the Seed Alert is to assess the impact of the COVID-19 crisis on the functioning of the seed sector. The project operates in Ethiopia, Myanmar, Nigeria and Uganda, where Wageningen Centre for Development Innovation (WCDI) collaborates with partners in seed programmes. More details on the Rapid Assessments Project for the Seed Sector can be accessed through this link. (https://bit.ly/seedalertINTRO)

Alerts in other sectors

In May and June 2020, likewise Alerts are foreseen to cover the impact of the COVID-19 crisis on the functioning of the horticultural and sesame sectors. The use of the tool is explored in other specific commodities such as dairy and potato. Working with a similar model of Rapid Assessment in various sectors and countries over a time series allows for interpretation and synthesis of the impact of the COVID-19 crisis on food systems at national, regional and global levels, while also gaining insights into immediate and practical actions addressing emerging challenges. It furthermore provides insights into the use of the sector model as diagnostic tool supporting strategic development, planning, identification and monitoring interventions that aim to enhance the functioning and resilience of specific sectors and food systems.

Institutional reference

The Seed Alert Myanmar is the result of a collaborative project that brings together experts working in the Integrated Seed Sector Development in Myanmar programme (ISSD Myanmar) and Seed Division, Department of Agriculture Ministry of Agriculture, Livestock and Irrigation (MOALI).

Contributing organizations

The Seed Alert Myanmar involved representatives of the following organizations in the survey and focus group discussions:

- Department of Agriculture (DOA), Ministry of Agriculture, Livestock and Irrigation (MOALI)
- Department of Agricultural Research (DAR), MOALI
- Agro Bio Company Limited
- Awba Group
- · Ayeyarwaddy seeds Company Limited
- CP Company Limited
- East West Seed Company
- Green Growth Generation Seed Company Limited
- Greenish Sagaing Regional Seed Company
- Medihub Company Limited
- New Ayar Company Limited
- Shweyaung Win Seed Company Limited
- Tropical Bio Company Limited
- Shwe Zin Yaw Seed Producer Cooperative
- Farmer representative from Myaung Township,
 Sagaing region
- Myanmar Seed Association (MSA)
- Myanmar Rice Federation (MRF)
- Integrated Seed Sector Development Programme (ISSD Myanmar)
- Rice Seed Sector Development Project (RSSD)
- Livelihoods and Food Security Trust Fund (LIFT)
- Netherlands Embassy
- Syngenta Foundation
- Welthungerhilfe (WHH)

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