



Seed Security Lessons + COVID-19 Lessons = Better Seed Security Response during the Time of COVID-19

Covid-19 is bringing new challenges, including to farmers, seed systems, and to seed security response. This set of guidance notes aims to help humanitarian practitioners think through the possible effects of Covid -19 on farmers' seed security ---and then to offer guidance on possible response options, if needed. It is important to emphasize that Intervening in seed systems is serious business. Even short-term interventions may have serious effects over many seasons or years: e.g. seed can be replanted. Also, although they have a benign image, seed interventions can do harm and increase farmers' vulnerability. For example, late, or mal-adapted seed is directly harmful as it wastes farmers' land and labor and takes space on plots that might have been otherwise productive. During Covid-19, humanitarians should conduct a seed-related intervention only if it is really needed, and only if it can be done effectively (in time, focusing on the right crops and varieties, and targeting the most vulnerable). The safety of farmers, suppliers, and humanitarian workers has to be considered paramount all along the process.

Finally, as an introductory thought, seed interventions do not lead immediately to life-saving activity. They can be crucial— key – especially in the early recovery and stabilization phases.

There is often leeway in planning and executing emergency seed interventions: the bottom line is that seed needs to be in farmers' hands for the beginning of the planting season. If faced with a choice between life-saving or a seed intervention--- focus on saving lives first.

What will (likely) be some of the effects on Seed Systems from COVID-19?

Covid-19 will likely have a strong effect on farmers' seed security even in the absence of other stresses, such as drought, locusts, civil strife. Smallholder farmers (the focus of this guidance) most commonly seek their seed from multiple sources. Some seed comes from their own stocks, that is, what they have saved. Smallholders also usually seek seed off farm: some seed might come from social networks of friend and neighbors; some might come from formal sources such as agro-dealers, particularly for crops such as hybrid maize; and for many crops and especially for the poor, good amounts of seed are routinely sourced from informal local markets. All three of these seed supply sources--social networks, formal markets, and informal markets--will be operating in a reduced manner with the spread of the coronavirus. Farmers themselves are constrained to move and to gather in groups; markets days are being held less frequently or stopped all together; and supplies from both the informal and formal seed sectors may experience bottlenecks in the distribution channels (e.g. access to transport, business support services....) However, while there may be drops or delays in the supplies of seed globally, nationally, or regionally, supplies may be sufficient to serve the specific target populations in question.

Farmers' access to seed--the ability to exchange, barter or purchase --will also be reduced. Physical distancing can be expected to reduce seed exchanges and barter among farmers. Farmers' purchasing

power of seed may also decline considerably as their ability to sell goods, sell labor, or carry on with business opportunities will likely be curtailed. Again, this curtailing of access is not a question of 'if' but the degree of the constraint. In many locales, farmers may indeed have the resources to access the seed they need.

To help initially address both these possible constraint issues of seed availability and access, it is important to remember that smallholder farmers do save some seed and for the large majority of their crops. (For smallholders, the big exceptions may be hybrid maize and vegetable seed). **Step 1 in addressing Covid-19 constraints is to encourage farmers to save the seed they have-** not sell it for cash; not eat it—and also to store it carefully. Humanitarian messaging to farmers to save and store their seed was among the more important interventions during the Ebola crisis—a crisis that has important similarities with Covid-19. Messaging can be designed to put no one at risk: it can be done remotely.

In brief, Covid-19 in itself, will likely have important effects on farmers' seed security and especially on poorer farmers' seed security—that is, those most linked to routine local market use.

That said, in much of farming reality, the Covid-19 stress is overlain with other stresses that also may affect farmers' seed security-- drought, locust attacks, conflict. Hence, farmers' seed security for the upcoming season may be affected by multiple stresses: Covid 19 + other (natural or manmade)—and Covid-19 may not be the prime constrainer. All stresses need to be assessed and, if there is an intervention, the response needs to be tailored to aim to mitigate all.

How to decide whether to intervene: assessments

One should intervene with a specific seed intervention only if there is a real seed security problem. This situation needs to be assessed: In no case should seed aid be given blindly. The assessment conditions may not be perfect but remote data collection methods can give partial insight, e.g. phoning, texting, using messaging apps and the like. Non-essential in person interviews should not be part of an assessment plan at this time. Government officers, local agronomists, key farmers, NGO workers still living in communities all may have valuable insights that can be gained remotely. (See resources below for assessment guides.)

Channels to assess in terms of seed availability

In terms of supply channels three are critical ones. All need to be assessed. (Failure or shortages in one channel can often be compensated by supplies in another.)

- a) *Farmer seed supplies.* Have farmers stocked seed (note it may be combined with grain)? is it in good condition? Are amounts generally sufficient for sowing (or to meet what portion of needs) ?

Remember, amounts vary by major crop and relatively small amounts of seed are needed for many e.g. for smallholders, maybe 15 kg of common bean or 2 kg of sorghum. One needs to know these location -specific sowing amounts: they are easy to calculate. Consult existing information sources for areas sown by crop and then divide by farmers routine sowing rates- (actual sowing rates, not recommended ones).

- b) *Local market supply:* Precise local market analysis is difficult at any time, but more so during Covid-19. Two basic queries need to be answered.

What is the supply- vs. normal. Here contacting the big traders may be the best source of information. The focus should be on crops for which seed is normally sourced at markets: e.g. the legumes (common bean, cowpea, groundnut) , maize.... The focus should also be on crops needed for the next growing season. Learn about relative amounts available for sale versus normal and whether the source regions are comparable to areas where the seed will be sown. (Seed needs to be adapted).

Is the market functioning for customers? Are market days being held? Are there safety measures in place to protect both sellers and customers?

- c) *Formal sector supply.* Do agro-dealers and their parent seed companies anticipate having stocks of the right crops and varieties? Are input shops still open? Are safety measures in place?

Issues to review in terms of seed access

Farmers' purchasing power and ability to barter and exchange will emerge from overview livelihood assessments. Also, in terms of seed security, it is useful to have a sense of how much farmers spend on seed each season (although this might be difficult information to garner quickly). Seed costs also are just one element in household expenses. Livelihood analyses should add 'seed' in their asset need tally.

Quality- At this time, Covid-19 itself would not be expected to compromise quality of home stocks, that are put on offer in local markets, or the quality of certified seed. Other stresses (e.g. drought/ locust) could compromise quality.

Indicators of stress

Indicators of stress need to be developed for both the supply and user side.

On supply, there will inevitably be bottlenecks in supply chains and general distribution modalities. Are this dramatic enough to affect seed availability, e.g. seed supply coming from entire regions cut off?

Indicators from the user-farmer side are particularly key: are there acute seed security indicators?

- Stocks of key crops greatly reduced (and why?)
- Quality of stocks greatly degraded (e.g. insect attack)
- Critical seed stocks eaten (and why)
- Crops types to be planted have significantly changed—and why
- Farmers planting sub-optimal varieties- and why
- Areas to be planted greatly reduced (and why)

Getting the 'why' is very important as the driving factor may not be linked to seed issues. For instance, farmers may be planting reduced areas as physical distancing has decreased labor availability.

In all cases, remote assessments can always be done. Knowing what to look for and understanding elements of seed security is central; doing some background work on 'what is normal,'; and contacting knowledgeable informants are the basic key ingredients.

If intervening, how to implement different types of seed-related responses

General intervention guidance: good practices

If a problem is identified, whether related to the seed security framework elements of availability, access, or quality [the latter divided into variety quality seed quality per se (health, germination)], there are essential 'good practices' which cross-cut the intervention types.

1. Investment in two-way information systems (radio, SMS, WhatsApp) will be key for diverse reasons: encouraging farmers to save seed; assessing constraints on a continued basis and getting farmers' feedback. (Think 'information' even before 'seed'.) Skeletal staff and risk of infection translate to the need for unusually refined remote information systems.
2. Crops put on offer should be priority ones for the upcoming season: priority in terms of food security, nutrition, and resilience to other stresses encountered (e.g. drought). Markets may not be functioning, so ongoing programs geared to specific value chains or grown primarily for income generation might be reviewed. Key for all crops offered is that farmers should be given choice, whenever possible.
3. Crops and varieties put on offer should be proven to be adapted and meet farmers' preferences. Preferences are not likely to change under Covid-19 but the supply of a specific crop or specific variety could be more limited. It is better to have no seed intervention than to promote unadapted /undesired seed.
4. Provision or offering of new varieties should not be done. Full stop. Introducing crop or variety novelty in 'normal' (non-Covid-19) is risky at the best of times (see resources below). New introductions always have to be accompanied by extension services – and these information sources cannot conduct necessary follow-up during the virus period.
5. Storage information should be promoted. Encouragement to store needs to be given heightened visibility, much more than in routine seed security. Technical advice on different types of storage operations needs to be made available.
6. Inform the Food Security Cluster or similar body coordinating humanitarian activities of planned seed security activities. This can ensure alignment with national norms and enhance learning and impact.

Guidance for Direct Seed Distribution (DSD): specific issues to Covid-19

Guidelines and detailed manuals exist for the distribution of direct aid (resource below). These would need to be tailored to DSD during the time of Covid-19. Physical distancing, staggering of distribution (to avoid groups gathering), ensuring for protocols handwashing and clean equipment and sites of distribution are all key and transcend seed-linked issues per se. Select seed issues include:

+ Seed supply. Focus on supply of crops and varieties that are essential for the upcoming season. For seed, also remember that, to remain viable, it has to be stored in dry and cool areas, and transported so as to minimize breakage or insect infestation. Choose suppliers and distributors who understand seed (local or outside experts).

+ Quality screening. Ensure that sufficient quality screening has taken place. Non-certified seed may not be accepted by donor, host government or other in-country stakeholders and large scale screening by seed inspection services may be curtailed during Covid-19 due to staff reductions and field mobility restrictions. Also, alternative types of screening, e.g. using local less formal experts, may be difficult to mobilize during this period although some donors allow for non-certified seed as long as the NGO implementer assumes responsibility for seed quality assurance. Some countries do allow for relaxing of regulations during crisis, e.g. use of Standard or Emergency seed. Humanitarian practitioners need to be up to date on the legal regulations for quality assurance in their given context.

+ Timing and timelines. Be aware that distributions during this period will demand more time than normal – and with skeletal staff (e.g. delays in inspection, transport and additional needs for logistical safety of both aid workers and recipient farmers). Remember that seed aid, to be useful, has to arrive at planting time.

+ Remote follow-up and feedback. Ensure immediate feedback mechanisms to identify (and solve) problems.

Guidance for Cash/Vouchers for seed: specific issues linked to Covid-19

Note this CVA experience linked to seed security is relatively limited to date

A good deal of guidance now exists for the Cash and Voucher Assistance in this time of Covid-19. Also, very recent work (2020) has reviewed cash transfers used for seed security, in normal, non-Covid-19 settings (resources below)

To-date, there is relatively little humanitarian experience directly linking cash use to seed security response. If an organization has not implemented this approach before, now might not be the time to experiment. Voucher use tied to seed security response has been more common, but particularly with the focus on linking vouchers to agro-dealer (formal sector supply). Assessments will show if formal sector supply is sufficient in volume and with the right crops and varieties. Beyond market functioning, much will hinge on the priority crops chosen as being important for the upcoming season. Three seed-linked issues linked the possible use of CVA (and especially vouchers) for purposes of seed security response during Covid-19

+ seed supply. Link only to sources that have seed of the crops and varieties ties that are priority. Review whether these sources have outlets very near to the communities being served.

+ quality screening. Ensure that sufficient quality screening has taken place. Non-certified seed may not be accepted by donor, host government or other in-country stakeholders

+ remote follow-up and feedback. Ensure immediate feedback mechanisms to identify (and solve) problems. Feedback is also needed to build insight into this implementation type

Guidance for Cash/Vouchers tied to Fairs-- specific issues linked to Covid-19

Be very cautious about doing these at all as the ultimate goal is to do no harm!

There are fundamental reasons not to effect Fairs during this Covid-19 period

- There are heightened risks bringing farmers to gather;
- There are heightened risks bringing traders/sellers into a novel marketplace (where they have less control over operations);
- Fairs take significant time and labor resources to organize, which is not useful during a period of skeletal staff;
- Fairs, in a novel dedicated market place, oblige both sellers and beneficiaries to travel beyond their home vicinities, exposing all to possible contagion as they exit their safe shelters for what usually amounts to half-day (or more) events.

That said, If conditions allow to safely and successfully carry out a seed fair, fairs can help boost the local economies and give farmers the scope to strategize on the crops and varieties they really want during this challenging period.

A reminder: During Covid-19, humanitarians should conduct a seed-related intervention only if it is really needed, and only if it can be done effectively (in time, with the right crops and varieties, and targeting the most vulnerable). Seed aid, done poorly, can do harm. Seed aid, done well, can bring farmers' important gains in both the short and long term.

RESOURCES: Many guidelines exist on seed-relative and cash assistance- mostly non-Covid times

Assessment: <https://seedssystem.org/assessments-and-e-learning-course/>

Direct Seed Distribution: <https://www.alnap.org/help-library/seed-provision-during-and-after-emergencies-good-practice-review-4>

Seed Vouchers and Fairs: https://seedssystem.org/wp-content/uploads/2017/agricultural_fair_and_voucher_manual_a4_2may_2017.pdf

New Varieties during stress- or not: <https://seedssystem.org/wp-content/uploads/2014/03/PB5.pdf>

Cash transfers and humanitarian seed security response: https://seedssystem.org/wp-content/uploads/2020/04/S34D-Study-on-cash-transfers-for-seed-security_final.pdf

CVA + COVID-19- responses, guidance, events an questions <https://www.calpnetwork.org/themes/cva-and-covid-19-resources-guidance-events-and-questions/>

Storage Advice: <https://seedssystem.org/development-guidance/>. See "Storarge options for grain and seed: practical briefs.

This brief was written with inputs from: Louise Sperling (SeedSystem) and Shawn McGuire (Food and Agriculture Organization of the UN). SeedSystem is solely responsible for its content. This brief, April 2020, will be regularly updated as lessons from Covid-19 unfold.