COVID-19 brings new challenges worldwide, including to smallholder farmers and their seed systems. In response, an escalating number of seed projects are being planned to deliver immediate aid or to alter current seed production programs. This statement aims to steer both the immediate aid and more developmental planning towards wiser, better and more informed practice—and to stop unproductive or even harmful decisions. Supporting farmers through seeds is a rational choice both in emergency and more normal situations. However, poorly designed seed interventions can do serious harm to farmers’ immediate food security and commercial markets. A diversity of seed systems provides the necessary channels for farmers to sustainably access seeds. Seed assistance, aid and developmental, should proceed only if there is evidence of seed insecurity, whether due to availability, access, or quality. Constraint identification informs the set of intervention options that could support seed systems in the short run, and not counter longer-term system sustainability; hence, seed system security assessments (SSSAs) are obligatory not optional. Direct Seed Distribution (emergency seed provision) is a last option and needs to respect a clear set of elements, including the range of crop seeds to be supplied, varietal characteristics and seed quality options. Flexibility and choice must be built into seed intervention design so that farmers are able to respond rapidly and effectively to fluctuating circumstances. Seed assistance should integrate feedback and feedforward systems. More generally, ICT systems to shape remote assessments and information sharing need to become more strategic and operate at scale. Seed system strengthening and resilience building is best achieved through sustained support over time. The current document identifies priorities for funding and action, the next two seasons (now) and several years beyond.

Let’s work towards effective seed aid now and building seed systems back even better!
SEED SECURITY RESPONSE TO COVID-19

*now* and *beyond*

COVID-19 brings new challenges worldwide, including to smallholder farmers and their seed systems. In response, an escalating number of seed projects are being planned to deliver immediate aid or altering current seed production programs to address upcoming needs. When each crisis feels like the worst ever faced, the fear of missing a window for action could spur inappropriate seed security response. This statement aims to steer the potentially escalating aid towards wiser, better and more informed practice--and to stop unproductive or even harmful decisions.

Big disasters spurring seed aid responses are becoming more and more common. As examples, the Haiti earthquake 2010, the unrest in South Sudan 2011 and the Ebola crises in West Africa (2014) all triggered massive seed responses, from which lessons may inform COVID-19 seed assistance. That said, compared to other large-scale disasters, COVID-19 has several distinctive features which require dynamic thinking and practical innovation. The virus is not a ‘one-off stress’ and will extend over several seasons with trailing, residual effects. COVID-19 may be more geographically widespread than stresses we have known in recent history, with differentiated effects on markets and varied national policy responses. Further, COVID-19 is not the last zoonotic disease and even this current version may re-emerge. How we respond now sets a precedent and will affect the path to recovery and resilience of seed systems for years to come. We have an opportunity for rapid, global learning, with a *strong certainty* that it will serve us even in the near future.

This seed-linked guidance spans the range of seed systems that smallholder farmers normally use: ‘formal’ channels that government controls, local and international seed companies, and relief providers; ‘farmer-centered’ systems composed of seed saved from harvests, exchanged or traded in social networks or local markets; and ‘intermediate’ conduits such as community-based seed production groups. From these combined channels, farmers access seed of the range of crops they need to be food and nutrition secure, generate income, and support resilient farming systems. Experience shows that pluralistic seed systems tend to be stronger than single solutions.

This statement recommends higher-level seed system actions that are needed during COVID-19 now and beyond to protect and spur the seed security of smallholder farmers. Rather than a ‘how-to’ guide, the statement gathers reflections on strategy and identifies needed and not needed critical elements. Seed systems are complex and interventions require a strategy instead of ‘stop-gap’ measures. Seed takes seasons to produce and its effects last for many seasons to come.

The first set of reflections aims to steer actions now (this year, and next) and focus on immediate aid. The second set, more developmental, suggests key elements to build back not only better- but to build back so as to look forward (core seed system actions for 2 to 3 years ahead). COVID-19, which often overlays other stresses (such as drought, locusts), may be a pivotal catalyst for governments and donors to push seed systems towards addressing the needs of rapidly evolving biophysical, economic and social landscapes. COVID-19 has forced us to strategize about seed system change, and perhaps in very positive ways.
**ACTION POINTS NOW: the next 1-2 seasons**

1. Seed should be deemed an essential resource with continued support to agricultural and seed-related programs.

Seed is a re-producible input that empowers smallholder farmers to provide food and generate income on a continuing basis. Seed is also a good return on investment: 1 kg of sorghum seed can yield 100 kgs of food. As an essential commodity, seed should be given policy support and high-priority attention by governments, donors, and other investors. Seed system investments that truly contribute to seed system health must be ongoing - supporting researchers, farmers, extension, etc. to ensure that the right seeds are available at the right time. One-time crisis effort does not produce this result. While support to human health systems might be an immediate priority in this initial COVID-19 period, seed systems need to be prioritized during the early recovery and sustained development phases.

2. Support to existing seed systems and their linked markets should be a first focus --before outside emergency or development assistance is considered.

2a. In terms of the *formal seed system*, this translates especially to attention on:
- Facilitating free movement of seed (‘green channels’);
- Supporting/extend seed inspection capability;
- Relaxing import regulations;
- Understanding the impact on access to credit/ financial institutions and how possible changes may influence the decisions farmers make.

2b. In terms of the *farmer-centered seed system*, this translates to an emphasis on:
- Helping farmers to save the seed they have through targeted interventions including messaging and technical support on improved storage options technologies;
- Supporting local market actors and including traders to move locally-produced seed within and among regions, if needed, and hold staggered market-day sales;
- Engaging market actors more generally to identify and mitigate COVID-19 related hurdles that weaken functionality.

3. The recognition that seed aid can do harm needs to frame consideration of any intervention.

Although seed aid is often viewed as benign, it can increase the vulnerability of smallholder farmers. Provision of late, mal-adapted varieties or poor quality seed is harmful as it wastes farmers’ land and labor and takes space on plots that might have been otherwise productive. Free seed can also undermine both commercial and local markets. Further, if given repeatedly, seed aid creates farmer dependency. The decision to move forward on a seed intervention needs to be made very consciously and not as a ‘default decision’ (e.g. not the common ‘when in doubt, give seed’).
Seed assistance in any form should proceed only if there is evidence of a seed security problem.

Seed system security assessments (SSSAs) are not optional but obligatory. Due to COVID-19, existing assessment methods will have to be tailored to operate remotely and to include methods that can cover even larger scales. SSSAs routinely consider 1) whether seed is available, 2) if it is accessible to farmers, and 3) if it is the quality farmers want and need. (We define quality as seed which is adapted, locally preferred and generally free from seed-borne pests and diseases.) SSSAs assess all of the seed systems farmers use in a region in the recognition that different crops and varieties may be tied to different kinds of seed systems. As general examples, hybrid maize seed is mostly traded in formal channels, millet seed is often saved within farmer-centered systems and common beans are traded on local markets, also in farmer-centered systems. Assessments should address not only staple food crops but crops that contribute important nutrients to the diet and/or farming systems, such as grain legumes or vegetables.

If seed aid is to be implemented, the better options for response will depend on whether the seed security problem is one of availability, access or quality, and also might be influenced directly by local COVID-19 regulation.

Presence of COVID-19 in a rural area, safety and social distancing requirements might affect whether market days are held, the extent of farmer and trader participation in local markets, voucher redemption at agro-dealers, and the logistics of any implementation procedure. First, consider aid types that build on existing channels and that can boost rural economies. Seed security response types include: Direct Seed Distribution (DSD); Seed Vouchers and Fairs (SVF); Cash or Voucher-based Assistance (CVA) or market-led support.

If a Direct Seed Distribution unfolds, these elements should be respected:

• Seed must be locally-adapted;
• Seed quality needs to be appropriate for germination and viability, free from seed-borne pests and diseases;
• ‘Cheap seeds’ should be avoided as they can undermine existing seed systems;
• Seeds should reflect the preferences of the farmers who produce the crop, market conditions and consumer preferences. Demand-driven aid should be the standard;
• Farmers should be given a choice of crops and varieties, allowing them to strategize under continually changing circumstances.
Any seed assistance should consider the range of crops farmers want and need, including crops that are important for nutrition and farming system resilience.

Seed assistance has too long focused on single crops. Policy attention should be given to crops with key nutrients (grain legumes, vegetables) to strengthen the health of women of reproductive age and their children, and to the array of crops that confer greater resilience to the particular farming stresses such as drought and low soil fertility.

In addition to a choice of crops, flexibility and choice must be built into seed assistance design to enable farmers to respond to fluctuating circumstances.

The effects of COVID-19 on farming systems are still being charted as the pandemic unfolds. We observe different consequences even over short distances and short periods of time. Movements of inputs and products are sometimes variable even over a modest 10km radius, with markets functioning in one village but not another nearby. Farmers need seed system assistance that they themselves can tailor to their immediate, and often dynamic, production and marketing goals. In addition to a choice of crops, elements of flexibility might be incorporated through choices in the type of aid (cash, in-kind, voucher), multiple venues for seed acquisition, and quality options that may differ by crop. Since effective, quick decisions by farmers will depend on information, information will be as important as the seed-related products themselves.

Two-way communication systems—feedback and feedforward—need to be developed at a new level of intensity and scale: quickly!

Given the potential impact of social distancing, novel ways of sharing information—mostly more remote, and at scale—need to be catalyzed or strengthened, especially for these first growing seasons (when the restrictions due to COVID-19 may be at their most intense). Capacity to feed information back is as critical as capacity to feed it forward. Approaches which leverage mobile phones, radio and digital platforms (e.g. USSD, WhatsApp) might be given first priority. Feedback is information from actual users on aid performance in real time, including concerns such as inappropriate seed and suggestions for aid process improvement. Feedforward refers to information on availability of seed, by crop/variety, price, and exact market locations or possible acquisition. All two-way digital communication systems will demand considerable coordination among key players: policy makers, donors, implementers and field staff on the ground.

An evaluation component is obligatory for any seed assistance program.

COVID-19 superimposes new seed assistance challenges on old ones. Real-time and post-season assessments allow immediate improvements to design and implementation and facilitate the identification of seed-linked lessons. Many evaluation exercises must now be remote and the scale of possible assistance might be at higher and wider levels than experienced previously. Developing common evaluation standards for COVID-19 seed might help accelerate the learning process.
COVID-19 and its effects are here to stay for the foreseeable future. Now is the time for current actions to anticipate the novel and needed ways of working. Find below recommendations to steer funding toward anticipated future actions the next 2-3 years (3-6 seasons).

1. Digital remote capacity to interact with farmers and other seed system actors needs to be taken to a higher level of sophistication and scale.

   COVID-19 has accelerated digitalization across the globe, often functioning to minimize physical contact and contagion. This is a good reason to support digitalization in seed systems as well, not only because of lingering constraints on movement and congregations in markets but also to seize on important and long-lasting opportunities. Key from the outset is that **digital forms of outreach be inclusive** ('digitally inclusive'): available, usable, affordable to all smallholders. Also, **digital forms need to extend services to support pluralistic seed systems**. In formal seed systems, demand-oriented delivery of seeds often already takes advantage of some digital tools such as mobile phones, logistics software, cashless payment, or electronic vouchers. Digital systems need to be strengthened, expanded and also support farmer-centered and intermediate seed systems.

   Among possible first-order activities:
   - Develop digital platforms to coordinate all seed related intervention in a country or affected area by facilitating the open exchange of real-time data;
   - Develop inclusive, voice-based mobile-based services that allow farmers and others to order, make payments, and collect seed using their own (basic) phones and assuming low levels of literacy;
   - Develop digitally-supported delivery channels that reach rural areas through community organizations, local markets and corner stores;
   - Create platforms for aggregating demands for seed among implementers as well as farmers across seed systems, specifying quantity, crop, variety and other information, including demand for local varieties.

2. Seed quality options should be diversified and quality verification decentralized.

   To expand access to the range of crops and varieties farmers want and need, seed quality options might be diversified not just during ‘emergency’ but in ‘normal’ periods: for many smallholder farmers, ‘normal’ means stressed (whether COVID-19 or drought or something else). Certified seed only (or even Quality Declared Seed- QDS) is not a realistic cost-benefit standard that can be applied to the needed diverse set of crops. Truthfully-labelled, standard seed, farmer-guaranteed seed categories are options that might be considered, with special guards against rogue seed providers. Legislative as well as practical (experiential) modifications might be needed—but pilots exist in different parts of the world and recent legal reviews (UN-FAO) suggest that transitions may be possible.

3. Seed sale venues should be expanded, with outlet placement decentralized and located much closer to or within communities.

   To expand access to the range of crops and varieties farmers want and need during the time of COVID-19 and beyond, seed sale venues actively need to better reach ‘last mile areas’. Formal system strategies such as use of mobile vans or satellite agents on motorcycles or bicycles can only go so far in terms of who is served and where. Extending seed sales of both formal and farmer-centered systems to the places where farmers routinely buy can greatly expand seed access. Corner stores that sell items like sugar and oil and local markets could be leveraged as specialized seed venues.
The global vantage point offered by COVID-10 offers learning opportunities to guide the development of more resilient seed assistance strategies, now and beyond. The research/learning agenda might include identification of:

- Points of system stress or failure (customs, shipping, market infrastructure) that demand investments to overcome;
- Adaptations by farmers, traders or extension agents that successfully overcame immediate barriers and introduced flexibility to operate in fluctuating circumstances;
- Examples of scaling or replication;
- Innovative partnerships that soothed COVID-19 related disruption could serve even beyond COVID, if strengthened or formalized.

In terms of seed assistance, whether emergency or developmental, the time of supply-side assistance, one crop, no choice and with only slim evidence of seed security problem needs to stop. Farmers’ demands have to drive seed system support, including allowing farmers to strategize and adjust in the face of quickly changing contexts and markets. COVID-19 has introduced novel and wide-ranging constraints, that may linger over years. COVID may also be an unexpected catalyst towards moving seed systems forward, opening up information and feedback channels, expanding crop and quality options and providing an accelerated learning opportunity to design more resilient and dynamic systems. This statement has identified some better practices for current action as well as clear areas where future investments in pluralistic seed systems might be best made in the next 2-3 years. We need to act wisely now (halt stop-gap aid) and use this crisis in history to build back much better.