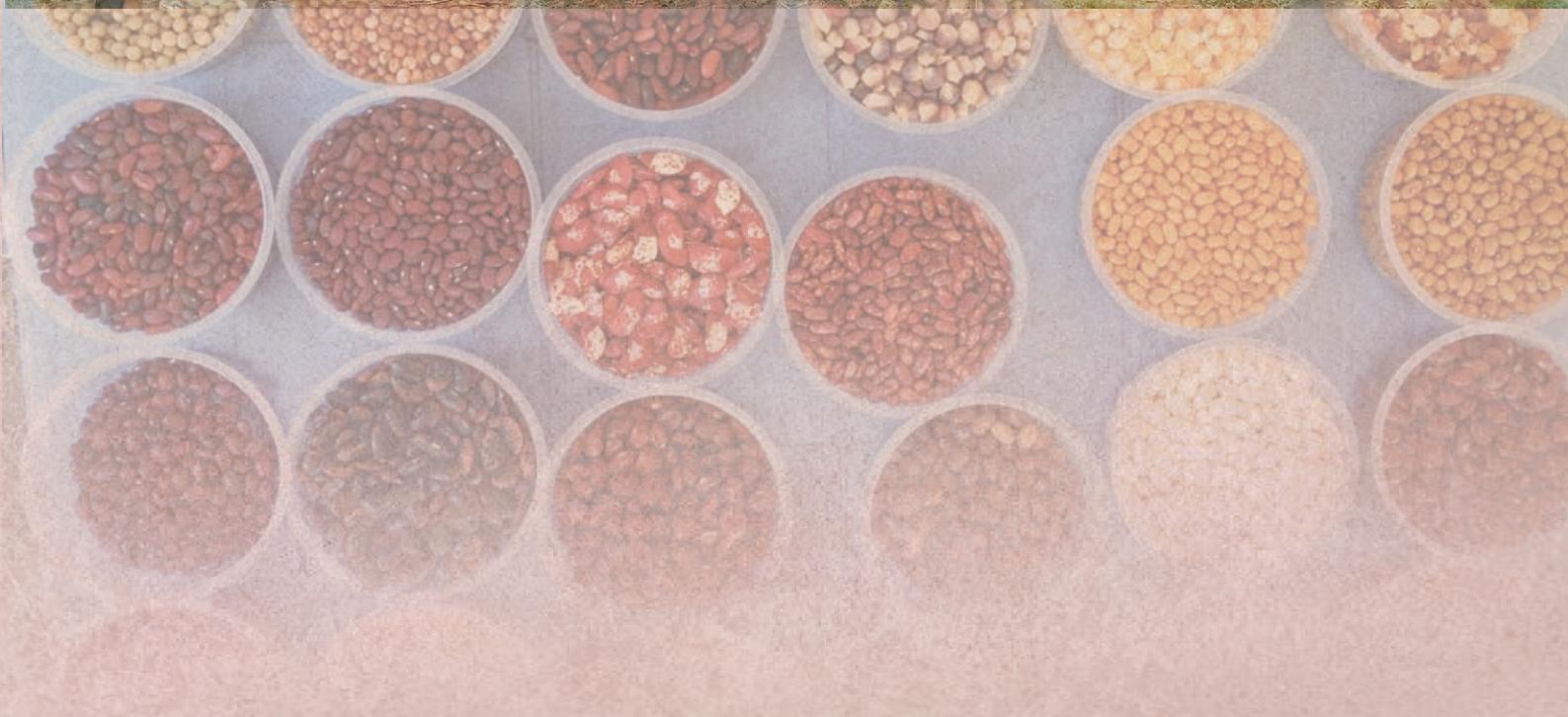


REGULATING ONLINE SEED EXCHANGE

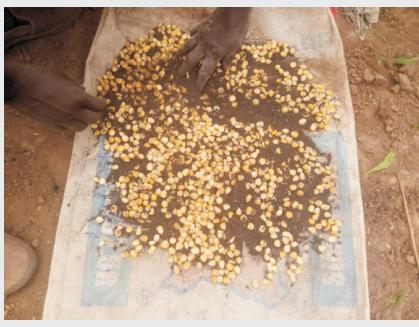




Regulating Online Farmer Seed Exchange

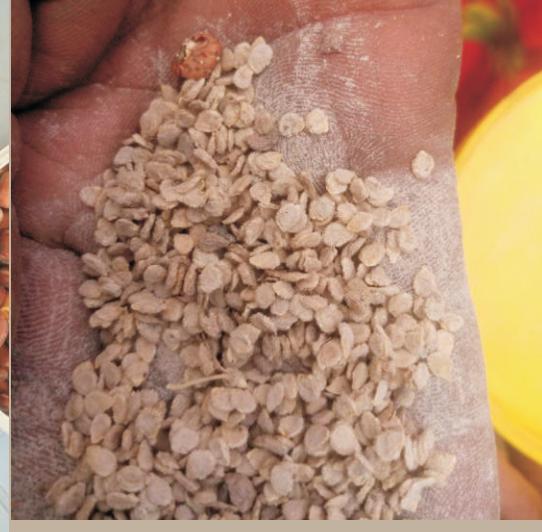
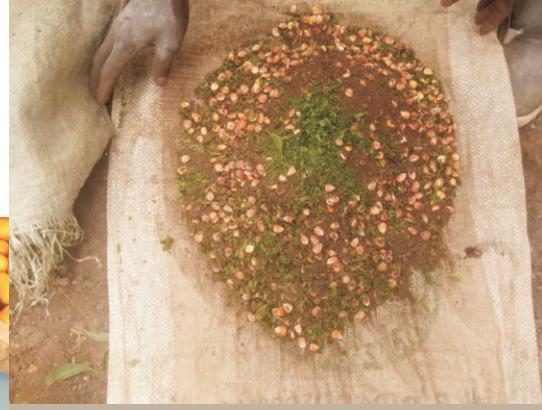
Executive Summary

Farmer seed exchange is an important social practice that has played a great role in maintaining valuable agrobiodiversity. Unlike traditional seed exchange which was mainly done physically, the current advances in modern information technology have led to the emergence and growth in popularity of online seed exchange and sale. This exchange has been greatly aided by the current social media revolution which has provided various social networking platforms through which the exchange is conducted. There has also been formation of dedicated seed exchange platforms. The high transaction costs involved in regulating the numerous farmer seed exchanges which are in most cases localized makes it uneconomical, impractical and quite challenging. It might therefore be need to consider developing a separate regulatory regime for online farmer seed exchange that is different from that of other types of seed transfers and movement. Key recommendations for such a framework include the need to develop an open source seed sourcing and exchanging platform, exempting exchange of small seed lots from strict regulatory requirements such as phytosanitary certificate and seed quality testing as well as development of clear guidelines on the packaging and shipping of seeds. There is also need to develop and adopt an open source seed license that prevents privatization and seeking of intellectual property rights (IPRs) on open source materials being exchanged.



I. Introduction

Seed saving and exchange has existed as a social practice for thousands of years in different cultures, as a way to maintain agro-biodiversity. Farmer seed exchange plays a great role in meeting the seed and varietal demands particularly of non-commercialized crops and those that are overlooked by research and the commercial seed sector. Seed exchange assists farmers to access productive, adapted and genetically diverse crop varieties possessing important climate resilience traits. Studies have indicated that germplasm that will have capacity to withstand future climates needs to be sourced from distant provenances as locally sourced genetic resources will likely lose its adaptive capacity in the face of climate change (Prober et al., 2015). This makes farmer seed exchange across national, geographical, and ecological boundaries an important in accessing important genetic material for climate change adaptation by farmers and gardeners. Over the years, there has been major growth in farmer seed networks in different countries and these continue to play a major role in promoting seed saving and exchange (Coomes et al., 2015).





platforms. These provide different capabilities and functionality, key of which include ability to create user profiles that will allow the user to post seeds of varieties under their custody and request seeds from other members. These online exchanges could either be locally done within the country or involving international transfer.

Seed sale/exchange is regulated through both seed and intellectual property right (IPR) laws, which could be in one or different sets of legislation depending on the country. Seed laws usually focus on registration, certification and seed quality testing for marketing/exchange while IPR laws deal with the various variety protection regimes and how such protected varieties can be used. In order to prevent the introduction of pests and diseases, movement of seeds either due to trade or other forms of exchange is usually highly regulated in most countries. The respective regulatory authorities have set guidelines, conditions and standards that must be met prior to importation of seeds. In Kenya, export and import of seeds is regulated by the Kenya Plant Health Inspectorate Service (KEPHIS), with the principal law regulating seed movement being the Seeds and Plant Varieties Act Cap 326.

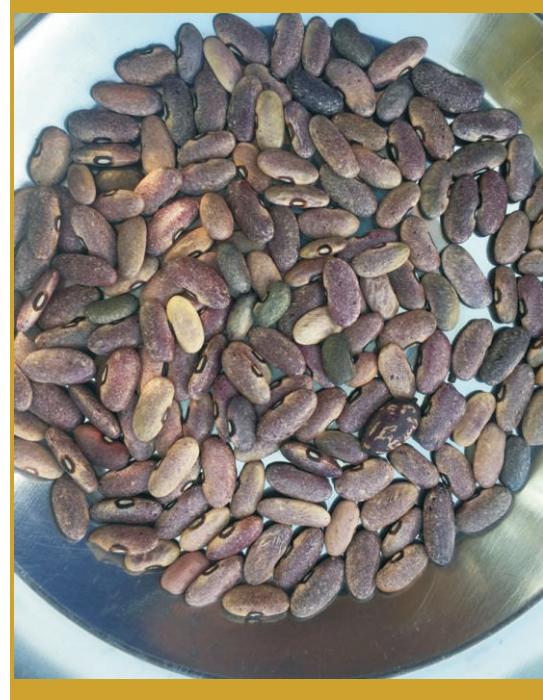
3. Need to rethink the regulation of online seed exchange

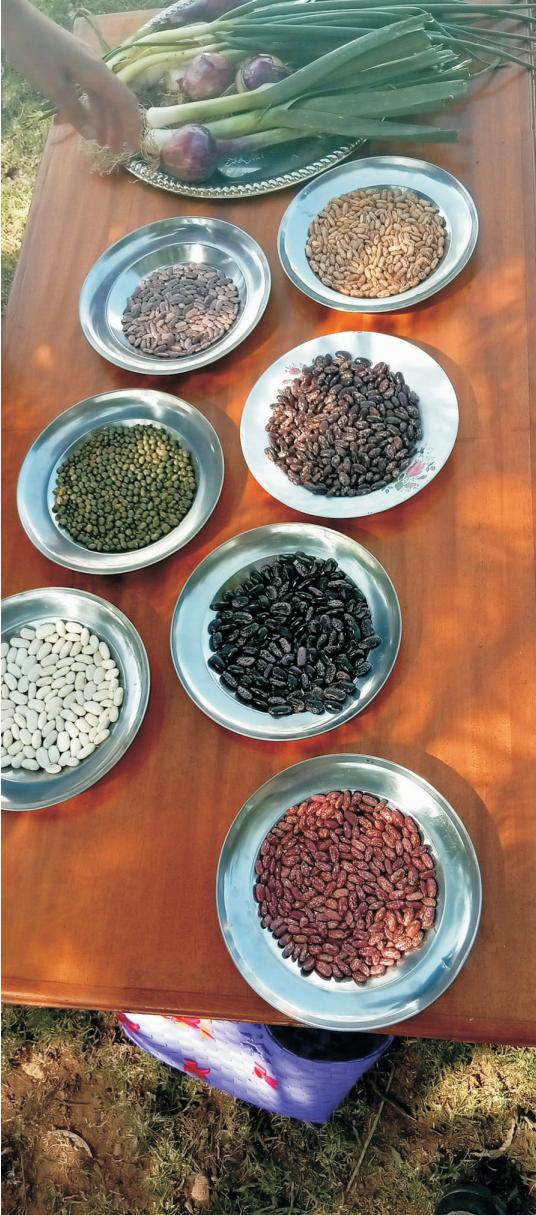
As already indicated, online seed exchange and purchase of seeds from e-commerce sites is increasingly getting popular and the number of samples transferred through these sites has increased significantly over the last couple of years. Despite the importance of seed exchange in enabling a large proportion of



farmers' to access seeds, this practice is increasingly being criminalized in many countries. This is through the development of regulatory regimes that favour modern seed and biotechnology industry. Seed laws in the various countries differ on the extent to which they allow farmer seed exchange with some such as Mexico and Columbia completely banning the sale and exchange of non-certified seeds of registered varieties (Wattnem, 2016). In Kenya, the Seed and Plant Varieties Act Cap 326 has outlawed seed exchange (GoK, 2016). There should be understanding among policy makers that strict regulation and enforcement of farmer seed exchange is counterproductive to efforts being made to achieve seed sovereignty and food security. While legally, these transfers should be governed by the existing regulatory frameworks, there may be need for countries to rethink and where necessary develop an alternative regulatory regimes for these types of exchange. Under this regime, non-commercial seed exchanges could for example be exempted from certain regulatory requirements.

Due to the number and nature of farmer seed exchanges, the strict regulations that govern the commercial seed sector, may be difficult to enforce in the case of online seed exchange. The high transaction costs involved in regulating the numerous farmer seed exchanges which are in most cases localized makes it uneconomical, impractical and quite challenging. For example, the logistics and cost involved in having all seeds tested would be burdensome on small scale farmers and gardeners. However, it is important to state that the risk of allowing unregulated seed transfers, particularly in the case of cross boundary exchange is too great for any country.





4. Policy recommendations on regulating farmer seed exchange

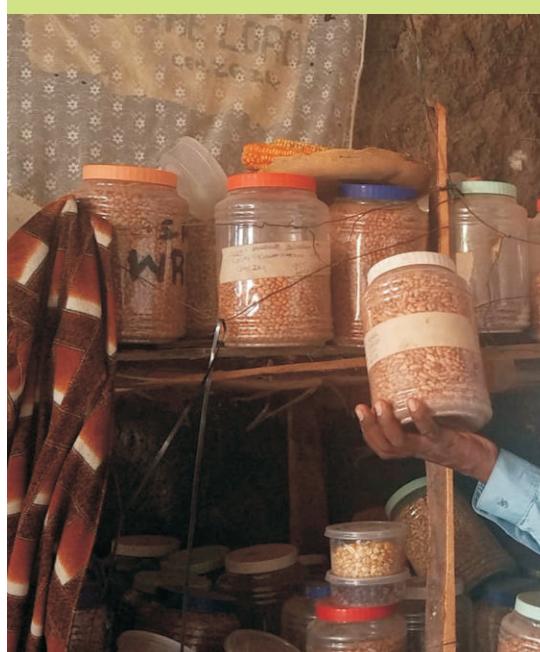
In order to enhance access to seed through farmer to farmer exchange, there is need to develop a favourable policy framework that supports and encourages online open seed sourcing and exchange. Some of the key recommendations on regulating online farmer seed exchange include

- Since farmers usually exchange small seed quantities, it is important to consider granting an exemption on the phytosanitary requirements set for large seed movement particularly those in the commercial seed sector. This is for example an exemption on the phytosanitary certificate. The United States Department of Agriculture (USDA) has allowed the importation of small seed lots comprising 50 seeds and below for one taxon. The seed lots must however meet other requirements in order to qualify for this exemption (<https://www.aphis.usda.gov/aphis/ourfocus/planthealth/import-information/permits/plants-and-plant-products-permits/plants-for-planting/small-lots-seed>). This exemption is intended to reduce logistical and financial burden on farmers and gardeners exchanging small seed quantities. This exemption may however require sufficient safeguards to ensure that this seed exchange does not lead to the introduction of alien pests and diseases.
- Countries could consider granting a general exemption on the exchange and sale of farm saved seeds so that it is exempted from the existing seed sector regulatory requirements. Such an exemption has been granted in the Ethiopian Seed Proclamation No. 782/2013 (FDRE, 2013). Farm saved seeds are therefore exempted from variety release and registration, seed certification, seed quality control, labelling requirements and post control seed testing.
- There needs to be clarity on the terms under which catalogued varieties are exchanged. In order to enhance seed sovereignty, there is need to develop open source seed exchange platforms. An Open Source Seeds license is being used to ensure that seeds are accessible widely without being privatized. By purchasing the seeds, the buyer undertakes not to claim any IPRs and not to restrict further development of the materials. The buyer further commits to exchange the seeds under the same conditions



(<https://culinaris-saatgut.de/unsere-arbeit/bio-zertifikate/>). In order to prevent misappropriation of farmers traditional varieties, simple germplasm exchange protocols that are consistent with existing international agreements particularly the ITPGRFA, should be developed. Of importance is that these protocols will help in recognition and disclosure of the origin of the seeds or genetic resources. Tracking the origin of farmer traditional varieties can however be quite challenging owing to the wide networks involved in their diffusion (Salazar et al., 2006).

- There is need to prepare a catalogue of farmer's varieties to protect them from protection through plant breeders' rights and other forms of IPRs. Documenting them confirms the lack of novelty in case of any subsequent attempt to protect the same varieties. There is need to adopt a less stringent registration and certification process for farmer varieties. For example, the EU seed registration does not require a DUS - Distinctiveness, uniformity, and Stability tests and does not require certification for vegetable seeds.
- There should be clear guidelines on the packaging and shipping of seeds. The seed sample should be clearly labelled with species name, name and address of the shipper, country of origin, recipient's name and address. The seeds should be free from debris, other seeds, insects and pathogens.
- There is need to develop and approve standards for organic seed certification. (<https://culinaris-saatgut.de/en/>)
- Development of a supportive regulatory framework that will help commercialize farmers' varieties will provide great motivation for farmers and gardeners to engage in seed sale/exchange through e-commerce sites. Such a regulatory framework could for example be achieved through implementation of Farmers Rights as enshrined in the international treaty.



5. References

FDRE (Federal, Democratic Republic of Ethiopia), 2013. Seed Proclamation No. 782/2013
<http://www.fao.org/faolex/results/details/en/c/LEX-FAOC146018>

GoK (Government of Kenya), 2016. The Seed and Plant Varieties Act (CAP 326 amended 2016). Government Printers.

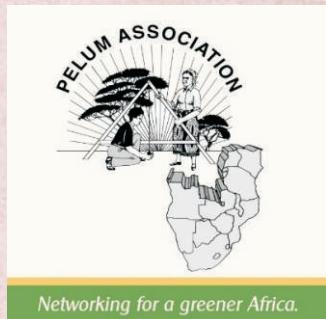
Oliver T. Coomes, Shawn J. McGuire, Eric Garine, Sophie Caillon, Doyle McKey, Elise Demeulenaere, Devra Jarvis, Guntra Aistara, Adeline Barnaud, Pascal Clouvel, Laure Emperaire, Sélim Louafi, Pierre Martin, François Massol, Marco Pautasso, Chloé Violon, Jean Wencélius. 2015. Farmer seed networks make a limited contribution to agriculture? Four common misconceptions. *Food Policy*, Volume 56, 2015, Pages 41-50, ISSN 0306-9192, <https://doi.org/10.1016/j.foodpol.2015.07.008>.

Salazar et al., 2006. On Protecting Farmers' New Varieties: New Approaches to Rights on Collective Innovations in Plant Genetic Resources

Prober, S., Byrne, M., McLean, E., Steane, D., Potts, B., Vaillancourt, R., et al. (2015). Climate-adjusted provenancing: a strategy for climate-resilient ecological restoration. *Front. Ecol. Evol.* 3(65). doi: 10.3389/fevo.2015.00065.

Wattnem, T. 2016. Seed laws, certification and standardization: outlawing informal seed systems in the Global South, *The Journal of Peasant Studies*





act:onaid



This document was developed by the partners between
20th to 22nd April, 2022 at a workshop held at
Seed Savers Network, Kenya