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ALLIANCE FOR FOOD SOVEREIGNTY IN AFRICA

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ON THE GROUND. AGAINST HUNGER. YEARS



**Position paper on
POLICIES FOR PLURALISTIC
SEED SYSTEMS**

1. Introduction

Seeds are the very foundation of all food systems. To a large degree, today's diversity of varieties is the result of the collective efforts of farmers over thousands of years¹. Which seeds we sow, has a strong influence on the resilience of crops towards climate change as well as on their suitability for agroecological cropping systems. Many varieties created and managed by farmers have advantageous properties regarding present challenges of food systems, such as tolerance to prolonged dry periods, saline tolerance and lower input dependency compared to varieties formally released by research institutes and commercial breeders². Mankind's treasure of seed diversity can best be managed and conserved in situ through continuous cultivation and selection by farmers.

Since the Green Revolution, agriculture has been industrialized and seed breeding and production has become a business for specialized breeding companies in many countries. States in Europe and North America started to regulate their seed sector through seed trade regulation and intellectual property regimes³. While such regulations were adapted for the industrialized seed sector of these regions, they are very ill adapted to many countries of Africa and Asia where up to 90% of seeds are farm-saved and where the commercial seed sector is virtually inexistent. Nevertheless, seed regulations that are almost identical or even stricter, have been implemented in many countries in these regions. For instance, Ghana has recently introduced a plant variety protection act that provides for a punishment of a minimum of 10 years of prison for the unauthorized multiplication of protected varieties⁴ while no criminal punishment is foreseen in most countries of Europe and North America. In Switzerland, the US and some other industrialized countries, protected varieties can even be freely saved by farmers in many cases. In many African countries (e.g. Niger, Tanzania, Chad) only certified seeds of varieties that are uniform and stable can be brought into circulation, while the EU allows the marketing of heterogenic seeds through its recently revised Organic Regulation.

In many countries, current legal and policy frameworks on seeds have been defined without the participation of farmers' organizations and other relevant stakeholders. In contrast, external and international actors such as USAID, the World Bank, UPOV⁵ and States of the global North often have imprinted seed regulation in countries of the Global South⁶.

During the last decades the need for an agroecological transformation⁷ to solve the multiple crises of food systems – climate change, biodiversity loss, and malnutrition – became accepted internationally. While diversity, including genetic diversity of crops and livestock, has been defined as a key element of agroecology, the importance of seed systems and seed regulations has so far been overlooked in international discussions. However, the UN Declaration on the Rights of Peasants and other People Working in Rural Areas (UNDROP) makes a strong reference to agroecology. In its article 19, it defines the right of peasants to save, use, exchange and sell farm saved seeds. Previously, farmers' rights to seeds were recognized in the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). Furthermore, ITPGRFA, together with the related Convention for Biological Diversity (CBD), oblige states to maintain (agro-) biodiversity and define mechanisms to share the benefits from the use of genetic resources and associated knowledge with the people providing them. Despite these international obligations, most countries lack implementation and are yet to revise legislation that violates farmers' rights and threatens agrobiodiversity.

1 HRC. 2021. Seeds, right to life and farmers' rights, Report of the Special Rapporteur on the right to food, Michael Fakhri

2 FAO. 2019. The State of the World's Biodiversity for Food and Agriculture, J. Bélanger & D. Pilling (eds.).

3 Louwaars, N.P.; Manicad, G. Seed Systems Resilience—An Overview. *Seeds* 2022, 1, 340–356. <https://doi.org/10.3390/seeds1040028>

4 APBREBES. 2021. Updates on Plant Variety Protection #47 (<https://www.apbrebes.org/node/332>)

5 International Union for the Protection of New Varieties of Plants or UPOV (French: Union internationale pour la protection des obtentions végétales)

6 Geneva Institute, CROPS4HD, SWISSAID and South Center. 2023. The Right to Seeds in Africa. The United Nations Declaration on the Rights of Peasants and other People Working in Rural Areas and the Right to Seeds in Africa. Karine Peschard, Christophe Golay & Lulbahri Araya

7 See SWISSAID Position Paper on Agroecology (https://swissaid.kinsta.cloud/wp-content/uploads/2020/03/2019_SWISSAID_Positionspapier-Agro-ökologie-EN-ok.pdf), SWISSAID's Policy on Agroecology (https://swissaid.kinsta.cloud/wp-content/uploads/2021/04/2021_SWISSAID_Policy_Agro-ökologie_ENG-ok.pdf), and AFSA's A STUDY OF POLICIES, FRAMEWORKS AND MECHANISMS RELATED TO AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS IN AFRICA (<https://afsafrica.org/wp-content/uploads/2018/09/agroecology-policy-eng-online-single-pages.pdf>)

Certified seed system

In most countries, seed policies focus on seed systems that are subject to certification, variety testing and specific release procedures. Such seed systems often stand under intellectual property regimes and are often referred to as formal seed systems. However, this denomination does not refer to an inherent quality of seeds but rather shows the lack of recognition of “informal” seed. Therefore, the term formal seed systems is avoided in this document. Instead, we use the term certified seed systems. As it is used here, certified seed systems include all seeds that are subject to official processes, such as variety release, even though in some cases (e.g. standard seeds) no certification in the narrow sense is needed. Certified seed systems can be divided into corporate seed systems (led by seed companies) and public seed systems (led by governments).

Farmer managed seed systems

For simplicity, the terminology farmers’ seed system is used to refer to farmer managed seed systems. Farmers’ seeds systems are often referred to as local seed systems, traditional seed systems or informal seed systems. While the latter is avoided in this document, the other two terms are considered as synonyms, as seeds are typically managed by communities of farmers of a certain locality or region as part of their tradition and are therefore “local” and “traditional”. However, this does not exclude that seeds are exchanged amongst regions and varieties are bred beyond their traditional properties.

Intermediate seed systems

Intermediate seed systems are seed systems that are located between certified seed systems and farmer managed seed systems. These seed systems are often managed and controlled by institutionalized farmers’ groups, e.g. cooperatives or associations. These seed systems define processes to control the quality of their seeds. Some use control systems that are rather government led like Quality Declared Seeds, while others use their own procedures, such as Participatory Guarantee Systems.

Pluralistic seed system development

Pluralistic seed systems development is a policy and regulatory approach to foster a diversity of seed systems which interact in a synergistic way and make best use of the specific advantages of each of the described seed system. Other than the farmers’ seed system and certified seed system in the narrow sense, it also encompasses intermediate seed systems that have a certain degree of formalized quality control while still (at least partially) being managed by farmers.

The term of integrated seed systems development (ISSD) is used by some actors to describe similar ideas, however it can be (mis-) understood as the attempt to integrate farmers seed systems into certified or formal seed systems. Therefore, we urge for a new terminology and prefer the term pluralistic seed systems. Contrary to “integrated seed systems”, the term pluralistic seed systems has been developed in the global South and was first inscribed in Ethiopia’s pluralistic seed system development strategy of 2017⁸.

8 Mulesa, T.H.; Dalle, S.P.; Makate, C.; Haug, R.; Westengen, O.T. Pluralistic Seed System Development: A Path to Seed Security? *Agronomy* 2021, 11, 372. <https://doi.org/10.3390/agronomy11020372>

2. Principles for pluralistic seed systems

- Instead of certified and farmers’ seed systems as isolated sets of seed systems, a pluralism of seed systems is needed to grant food security and to maintain seed diversity.
- Each seed system has its advantages and disadvantages, rather than promoting one seed system at the cost of others, seed regulation should aim at the creation of synergies between the different seed systems.
- Quality seeds are important for farmers, there are various possibilities to guarantee quality and various criteria for quality. Farmers are best positioned to assess what quality of seed they need.
- Farmers’ seed systems deliver the bulk of seeds for food security, and they have an important role for the delivery of seeds that are well adapted to local conditions and suitable for agroecological, climate resilient food production. Furthermore, the existence of vibrant farmers’ seed systems is a precondition for the maintenance of genetic diversity.
- Farmers have been creating and maintaining seed diversity and associated knowledge for thousands of years. This diversity is the base for all seeds and food including the certified seed sector. Therefore, this diversity should never be monopolized by intellectual property, and farmer’s right to save, use, exchange and sell their farm-saved seeds shall be guaranteed.
- Farmers shall be free to choose whether they want to save their own seeds, buy seeds produced and managed by other farmers, or purchase certified seeds. Every option has certain advantages and disadvantages, and the farmers are best placed to take this decision. States should support them through neutral and balanced information.
- Farmers’ rights to save, exchange and sell farm saved seeds should be a basic principle in seed regulation rather than an exception.
- When regulating seeds, the particular role that women take in many communities for conserving, maintaining and distributing seeds must be taken into consideration.

3. Regulatory constraints for pluralistic seed systems

To date, seed regulations in most countries focus on certified seed systems and ignore the existence of farmers’ seed systems. As farmers do not follow the processes and criteria defined for certified seeds, they often operate outside the legal framework and their traditional practices are classified illegal in many countries. Such regulations need to be changed for the benefit of realizing pluralistic seed system. Major regulatory constraints are identified in Figure 1.

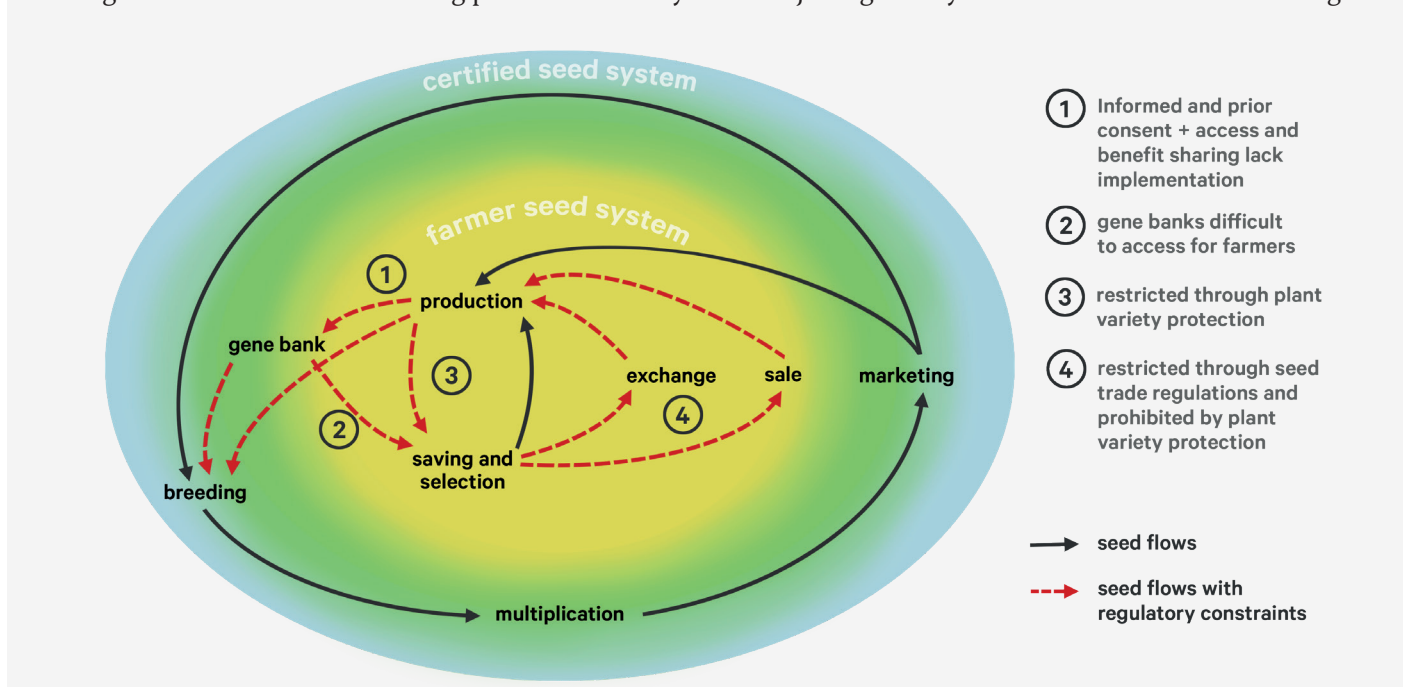


Figure 1: Interlinkages and regulatory constraints of seed systems

1. Collection and use of seeds stemming from farmer communities should be subject to prior and informed consent as well as sharing of benefits with these communities, according to UNDROP, ITPGRFA and CBD. However, this is insufficiently implemented in most countries and Access and Benefit Sharing mechanisms at international level lack effectiveness.
2. Gene banks under the control of international and national research institutes are important actors conserving seed diversity ex situ. While they are well accessible for researchers as well as breeding companies, farmer organizations face problems accessing seeds in sufficient quantities for reproducing and using these varieties.
3. In many countries, patent laws and strict plant variety protection regulations restrict the right of farmers to use farm-saved seeds from concerned varieties, as well as their exchange with and sale to fellow farmers.
4. In many countries, seed trade regulations prohibit the sale, exchange and giving away for free of farm saved seeds that are not certified. The same is true for varieties that are not formally released. Exchange and sale of farm saved seeds from varieties under plant variety protection is prohibited in most countries.

4. Policies and regulations for pluralistic seed systems

For the realization of pluralistic seed systems, policies and regulations must be reformed based on the following recommendations:

Policy

- Food, agriculture and seed policies shall be revised to facilitate agroecological, resilient, sustainable, and biodiverse food systems. They shall focus on a diversity of crops important for food and nutrition security, including neglected and underutilized species (NUS), and avoid one-sidedly promoting cash crops. Subsidies and tax exemptions linked to chemical inputs shall be faded out and redirected to agroecological farming practices. Instead of one-sidedly subsidizing certified seeds, the government should support farmers' seed systems.
- The effort of farmers to maintain and develop seed diversity and associated knowledge, as well as the value of farmers' varieties and NUS for resilient, agroecological and productive cropping systems shall be recognized and supported in related policies.
- Farmers' organizations, and particularly female farmers shall have a decisive role in the formulation of seed and agricultural policies as well as regulations related to seeds and intellectual property on plants.
- Research institutes shall acknowledge and support the role of farmers for the creation and maintenance of seed diversity and locally adapted seeds as well as associated knowledge. They shall engage with farming communities to understand the value of farmers' seeds for an agroecological transformation of food systems, for mutual learning and collaborative research and breeding.
- National and international gene banks shall grant low-threshold access to their collections for farmer's organizations. Upon prior request gene banks shall deliver sufficient quantity to start seed testing or production.

Seed Trade regulation

- Requirement for variety testing, registration and certification applies to seeds to be sold as certified seeds. Farm saved seeds and farmer's varieties can be sold freely without any formal variety testing and certification.
- Intermediate seed systems – between certified seed systems and farmers' seed systems - shall be fostered. Instead of rigorous external controls that are unaffordable to most farmers' groups, quality control shall be based on internal control. Experiences with Quality Declared Seeds and Participatory Guarantee

Systems for seeds shall be considered when drafting provisions for intermediate seed systems. These systems shall allow the production of farmers' varieties as well as non-proprietary registered seeds and commercial seeds with expired plant variety protection.

- If farmers' organizations within a country want to, they should be offered the possibility to register farmers' varieties as a means for giving recognition and to prevent biopiracy. However, the registration must be voluntary and shall not be a precondition for sharing and selling seeds. No DUS (distinctiveness, uniformity, and stability) and VCU (value for cultivation and use) criteria shall apply but only a rough characterization shall be required, the process shall be low threshold to be accessible to farmers' organizations and no fees shall be applied as registration is in the public interest.
- Not only farmers, but also organic / agroecological breeders (commercial and not-for-profit) face problems registering their locally adapted varieties, as the DUS and VCU criteria often are so strict that only hybrid or extremely homogenous varieties can be registered. Therefore, the criteria need to be simplified:
 - DUS (distinctiveness, uniformity, and stability): number of traits shall be reduced, focusing on traits that are relevant for farmers and users of produce. More variability shall be allowed.
 - VCU (value for cultivation and use): Focus shall be on value for agroecological food systems, food security and nutrition instead of over emphasizing yield under optimal conditions that do not correspond to the reality in most farmers' fields.

Intellectual property rights (plant variety protection and patents)

- Farmers have the right to save, use, exchange and sell their farm-saved seeds and other propagating material. This right prevails over intellectual property rights of breeders. Only the sale of seeds in labelled bags for retail, is reserved for the owner of the variety.
- Farmers' varieties shall not be protectable under plant variety protection regulations, as they are the result of the collective breeding effort of communities.
- Breeder shall declare the origin of the breeding material. When plant material is collected from farmers prior and informed consent with the concerned communities is needed. The criteria of novelty, defined in plant variety protection, shall not only be verified with regards to registered varieties but also apply in regard to known farmers' varieties.
- Plants shall not be patented, neither based on varieties, traits, genes, nor breeding methods.
- Contracts between breeders and farmers (e.g. license agreements printed on bags) that restrict farmers' rights to seeds, are null and void.

Phytosanitary measures and biosafety

- Genetic engineering (including new methods such as CRISPR/Cas) cannot be considered suitable to create varieties suitable for agroecological production: They are largely controlled by biotech-companies instead of farmers; they are heavily monopolized by patents instead of being based on co-created knowledge and they follow a linear top-down rather than a circular approach. Furthermore, experiences made with GMOs so far show that they are worsening rather than improving the situation for farmers and environmental resources. The health risks are still not fully understood.
- When states decide to allow GMO seeds, farmers' seeds must be protected against contamination. States are in charge to install rules that assure sufficient measures to assure that no contamination takes place from released seeds or from germinable grains distributed as food or feed. Costs must be covered by companies releasing or distributing GMO seeds/grains and not by communities who want to keep their seeds free from contamination.
- Strict phytosanitary requirements shall be limited to certified seeds. For farmer managed seeds, self-control based on easily recognizable criteria (germination rate, optical purity, exemption of pests, etc.) shall be sufficient.

International agreements and obligations

- All policies and regulations linked to seeds, intellectual property, and agriculture shall respect and support the international Human Rights Obligations, including UNDRIP. They shall be drafted to protect genetic resources and facilitate their sustainable use as defined in ITPGRFA.
- No intergovernmental, regional, or bilateral agreement shall be ratified that requires the introduction of regulations that limit farmer's right to freely save, use, exchange and sell seeds. For existing agreements, their renegotiation and or termination shall be considered. This particularly applies for UPOV and its different acts.
- States, in collaboration with farmers' organizations, shall actively engage in the further development and facilitation of the implementation of international agreements that protect farmers' rights and genetic resources, such as CBD, ITPGRFA, and UNDRIP.

5. Further Reading:

- Geneva Institute, SWISSAID and South Center 2023: The right to seeds in Africa – The United Nations declaration on the rights of peasants and other people working in rural areas and the right to seeds in Africa
- AFSA 2022: FMSS Proposed legal framework for the recognition and promotion of farmer managed seed systems and the protection of biodiversity
- AFSA 2022: Mapping seed-system policies, frameworks, mechanisms and initiatives in Tanzania and East Africa
- AFSA 2022: Mapping of policies, frameworks, mechanisms and initiatives related to seed systems in Chad and Central Africa
- AFSA 2022: Analytical mapping of legal and policy instruments and actors in seed governance in Niger
- SWISSAID 2020: The key to survival – farmer managed seed systems in Latin America
- SWISSAID 2019: Farmers' seed, the regulatory framework, and seed policy in Niger
- APBEBES 2019: A dysfunctional plant variety protection system: Ten years of UPOV implementation in Francophone Africa



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