

THE AFRICAN SEED AND BIOTECHNOLOGY PLATFORM

(Reference: Assembly/AU/Dec.86(V))

**Development and Establishment of Farmer Managed Seed Systems
Cluster -The Roadmap**

Lead

EOA-I Continental Secretariat hosted by Biovision Africa Trust

on behalf of

The AU-led EOA-I Continental Steering Committee

Prepared by

The EOA-I CSC Technical Working Group on Seeds

23rd August 2021

ACRONYMS AND ABBREVIATIONS

ACB	Africa Centre for Biotechnology
ASBP	African Seed and Biotechnology Platform
AUC	African Union Commission
BIBA	Biosafety and Biodiversity Association
CPB	Cartagena Protocol on Biosafety
CSC	Continental Steering Committee
CSO	Civil Society Organization
DUS	Distinct, Uniform and Stable
EOAI	Ecological Organic Agriculture Initiative
EOAPS	East African Organic Products Standard
FMSS	Farmer Managed Seed Systems
FSR	Farmer Seed Register
GMO	Genetically Modified Organism
IKS	Indigenous Knowledge Systems
IPM	Integrated Pest Management
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
KALRO	Kenya Agricultural and Livestock Research Organization
PGS	Participatory Guarantee System
QDS	Quality Declared Seed
SDC	Swiss Agency for Development and Cooperation
SSNC	Swedish Society for Nature Conservation
TWG	Technical Working Group
UNDROPS	United Nations Declaration on the Rights of Peasants

DEFINITION OF TERMS

Explanation of Terms and their use under FMSS

Access and Benefit Sharing- refers to the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers).

Biosafety is the prevention of large-scale loss of biological integrity, focusing both on ecology and human health. Primarily in agriculture, Biosafety refers to the way threats from modified living organisms, new molecules, or even artificial life forms compete in the natural food chain.

Community Seed bank – This may be an on-farm or physical facility, created, maintained and dedicated to the conservation and storage of seeds for use and circulation within farmers' networks under rules collectively defined by the farmers themselves. These banks hold collections of seeds stored in the community either in large quantities to ensure that all planting material needed is available, or in small samples to ensure that genetic material is available over time should varieties become endangered. Facilities can vary widely, from simple to elaborate constructions; they can even function as “virtual” seed banks, where individual farmers store the agreed seeds in their own houses or premises, but this decentralized system of storing (and re-using) is still discussed, agreed and formalized and between the farmers in the community, and their work is documented to facilitate the maintenance of the varieties and the use of the seeds. In Kenya, virtual seed banks are beginning to take shape, where the virtual seed bank exists online as a database that facilitates the exchange and sales of small quantities.

The Community Seed banks should be closely linked to the National Gene bank systems to coordinate their databases and ensure proper storage and freedom from pests and diseases infestation.

Conservation is expanded to seed conservation and redefined as the action of maintaining quality seeds in good condition for reproduction in farmers' fields.

Commercial seed system - Refers to the chain of activities that results in the seed production of field crops, roots and tubers for consumption and marketing. This traditional seed supply system is an important backup to overall agricultural crop production in a country.

Chain of activities: The Commercial seed system usually starts with plant breeding and promotes materials for formal variety release and maintenance. Regulations exist in this system to maintain variety identity and purity as well as to guarantee physical, physiological and sanitary quality, and by way of national agricultural research systems (Louwaars 1994) and even through relief seed programs. The central premise of the formal system is that there is a clear distinction between seed and grain. Formal systems are especially important when the seed is used to grow crops for commercial purposes (for example export or further food processing) and the uniformity and high quality of the product must be guaranteed.

DUS – An acronym for Distinct, Uniform and Stable. This is a testing criterion used in Commercial Seed Systems to determine whether a newly bred variety differs from existing varieties within the same species (the Distinctness part), whether the characteristics used to establish Distinctness are expressed uniformly (the Uniformity part) and that these characteristics do not change over subsequent generations (the Stability part).

DUS tests exist so that new varieties can legally gain access to the market via a National List and/or for the granting of Plant Breeders Rights, a form of intellectual property rights designed to profit, and recoup economic investment involved in commercial plant breeding. From an FMSS standpoint, the DUS criteria are a barrier to communities gaining livelihoods from their genetic resources since their goal in selection and maintenance is not uniformity but diversity and because of this, measured traits cannot be stable every season. FMSS are unfortunately the largest reservoir and start point for Commercial Seed systems.

Farm-saved seed is any seed selected and or bred and saved by the farmer in the field.

Farmer Seed Register (FSR) and defined as a document kept by farmers, with a copy to the local administration and the regional and National Gene Bank, and intended for the voluntary registration of farmers' varieties with a view to their description and characterization to ensure an inventory at the local level.

Farmers Managed Seed System (FSS) is defined as a set of knowledge, practices and rules collectively developed by farmers, based on their customs and tradition, and applied to the seeds selection, conservation, use, quality assurance and distribution, in Smallholder networks.

Farmers Seeds is seeds selected and multiplied by farmers in their fields, using farmers' techniques and methods, including natural pollination, that do not artificially modify the plant cell and that are renewed by successive multiplications through multiple environmental stressors from season to season.

Gene bank - a collection of seeds, plants, or animals, maintained as a repository of genetic material, typically to preserve genetic diversity.

Genetic resources/ material – Living material of plant, animal, microbial or other origin containing functional units of heredity and of actual or potential value material. (CBD, Article 2)

Genetically Modified Organism (GMO) is any living organism whose genetic material has been altered using genetic engineering techniques, that is "does not occur naturally by mating and/or natural recombination".

Indigenous knowledge - Local and indigenous knowledge refers to the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. For rural and indigenous peoples, local knowledge informs decision-making about fundamental aspects of day-to-day life.

Institutional framework - "Institutional Framework" refers to a law or other formal provision that assigns primary responsibility as well as the authority to an agency involved in facilitating specific action, and in this case the FMSS.

Intellectual property rights are legal rights that provide creators protection for original works, inventions, or the appearance of products, artistic works, scientific developments, and so on. There are four types of intellectual property rights (IP): patents, trademarks, copyrights, and trade secrets.

Labelling - Labelling is a part of the branding and enables product identification. It is printed information that is bonded to the product for recognition and provides detailed information about the product. Customers make the decision easily at the point of purchase seeing the labelling of the product.

Phytosanitary- relating to, or being measures for the control of plant diseases especially in agricultural crops

Quality Declared Seed -QDS--seed [which is not resultant from a commercial production system but in] whose quality is checked by an autonomous quality control agency and is backed by the reputational identity of the producer group.

Seed Quality Assurance - generally is defined as whatever the customer expects. This includes the physical and physiological quality of the seed itself, but also items associated with the seed including service, price and the seed label reputation.

Seed Registration - means seed produced from plants grown according to certification regulations and that meets the specifications of the official seed certifying agency of the jurisdiction in which the seed is released.

Seed-A seed is a basic part of any plant-reproductive body.

Seed certification - seed certification is a process designed to maintain and make available to the general public a continuous supply of high-quality seeds and propagating materials of notified kinds and varieties of crops, so grown and distributed to ensure the physical identity and genetic.

labels and terms used to stigmatize Farmer Managed Seed Systems

Derogatory terms	Acceptable terms	suggestions/ note
Traditional Seeds, Orphaned Seeds, Women Seeds, Peasants Seeds	Farmers seeds	
Informal seed systems	Farmer Managed Seed Systems	
Formal Seed Systems	Commercial Seed Systems	

ACKNOWLEDGEMENTS

The EOA-I Continental Secretariat wishes to thank the EOA-I Technical Working Group on Seeds, the Department of Agriculture, Rural Development, Blue Economy, and Sustainable Environment (DARBE) of the African Union Commission for underscoring and integrating the FMSS cluster development into the African Seed and Biotechnology Programme (ASBP).

Much appreciation also goes to the ASBP Working Group for approving the development of the FMSS cluster road map concept based on the AU Continental guidelines for the harmonization of seed regulatory frameworks in Africa.

The document has received valuable inputs from Biovision Africa Trust (BvAT) the EOA-I Continental Secretariat, Africa Food Sovereignty Alliance (AFSA), Biosafety and Biodiversity Association (BIBA), Africa Centre for Biodiversity (ACB), Participatory Ecological Land Use Management (Pelum) Kenya, The Alliance of Bioversity International and CIAT, Beacon, Action Aid International, Ministry of Agriculture (Kenya), Genetic Resources Research Institute based in KALRO, OBEPAB (Benin), University of Nairobi, Kenya Food Alliance.

We would like to thank all the EOA/Agroecology partners, farmer and farmer associations, networks, experts and practitioners, from across the African continental for their participation in the validation of the road map to develop the FMSS cluster.

Additionally, we would like to thank our development partners; the African Union Commission (AUC), Swiss Agency for Development and Cooperation (SDC), and Swedish Society for Nature Conservation (SSNC) for providing technical and financial support to the process.

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1.0 INTRODUCTION

1.1 Preamble

The Ecological Organic Agriculture Initiative (EOAI) is a response to broadly implementing the African Union (AU) Executive Council’s Decision on Organic Agriculture to address challenges facing the organic sector and improve seed quality.

The EX.CL/Dec.621 XVII:

The Executive Council’s decision on organic farming (DECISION ON ORGANIC FARMING Doc. EX.CL/631 (XVIII))

The Executive Council requested the AU Commission and its NEPAD Planning and Coordinating Agency to i) initiate and provide guidance for an AU-led coalition of international partners on the establishment of an African organic farming platform based on available best practices; and to ii) provide guidance in support of the development of sustainable organic farming systems and improve seed quality. The decision also called iii) upon development partners to provide the relevant technical and financial support for the implementation of this decision. Further, it called iv) upon the AUC to report regularly on the implementation of this Decision. The EOA-Initiative translates this landmark decision into action.

The EOAI is thus a continental platform of African organic farming stakeholders supported by a coalition of international partners. To ensure oversight and guidance in the implementation, the AU chairs the Continental Steering Committee (CSC) of the EOAI that is supported by a Secretariat hosted by Biovision Africa Trust (BvAT).

1.2 Context of the Farmer Managed Seeds Systems (FMSS)

For centuries, peasant and small-scale farmers in Africa have managed, selected, enhanced, multiplied, stored, planted and exchanged seeds, using their own intergenerational knowledge, experience and skills. Today, millions of small-scale farmers in sub-Saharan Africa, most of whom are women, still supply 80-90% of all the seeds planted in Africa.

The local seed varieties of hundreds of food-crops are available to farmers without the need to buy them or depending on external sources and other seed systems. The collection of these seeds is embodied in what is universally called the Farmer Managed Seed Systems (FMMS) which are culturally and customarily appropriate, and inclusive. These systems produce biodiverse and ecologically resilient seeds that can adapt to the changing climate which comes along with many other challenges.

Farmer managed seeds are referred to by several names in literature: - i.e. informal, local, traditional, community managed, indigenous and or peasant seed systems. One official document referred to them as “women’s seeds”!

These systems underpin the diverse, localized agro ecological food systems that are associated with peasant food webs, and which feed more than 80% of the people in Sub-Saharan Africa. To sustain

these diverse food systems, it requires genetically biodiverse seeds that are selected by farmers each season to suit local ecosystems, and which can adapt to external threats such as climate change. In all our work, we must recognize the farmers' seed systems that underpin the food sovereignty of African peoples.

Women among other small-scale farmers are the custodians and managers of these systems. They are the champions and must be empowered and supported in their practices from seed production to selection, and storage and selling. Women and men farmers continue to play a critical role in their decision-making processes in variety selection, multiplication and storage. These systems have taught us that seed systems are not a “one size fits all” as they vary from community to community being centered on community values of selecting, exchanging and sharing seed; sharing knowledge about planting, cultivating, harvesting processing and value addition. They support the best use of local resources within local systems to innovate. The embedded systems value and respect gender roles where women and men and children have specific roles.

Knowledge about FMSS helps us remove the negativity that has been placed on them. They help recognize and give respect to our farmers as the primary agents in these systems and that they should be treated as equal partners in any attempt to support their farming practices and rights.

Overall farmer-controlled systems celebrate the work and pride that farmers take in the management, production, storage, selection and sharing of seed.

It is on behalf of these farmers, women and the youth that we pass our motion of appreciation to the AU and other partners that are supporting the African Seed and Biotechnology Platform (ASBP), and especially the honor that they placed on the Ecological Organic Agriculture Initiative and its technical working group on seeds to develop this cluster as one of the working groups under the ASBP.

In this cluster our context is focused on understanding how FMSS operate and what support is needed to continue supporting and raising the profile of these systems and their diverse and resilient seeds which feed most people in Africa.

“I raise my voice, not so that I can shout, but so that those without a voice can be heard. We cannot succeed when half of us are held back” *Malala Yousafzai, Pakistan activist*

In Africa it is the woman's responsibility to feed her family. As policy makers, development advisors and business leaders with a focus on Agriculture to feed the African population, Africa will not become a breadbasket unless its women are given a sit at the policy table otherwise, we are biting the finger that feeds us. We need to raise the status of women through awareness, literacy, and training. We need to implement supply chains and market practices and enterprise development to empower women. We need to champion gender equality through community initiatives and advocacy.

‘Women can confidently say that we can do everything men can do, but which man can say that they can do everything that a woman can do?’ By Stinem Gloria.

We need to invest in activities that elevate women in the seeds sector where women are the custodians of seeds. We need to give a perspective to empower them in owning these seeds as seeds companies.

This can be achieved through a recognized, supported and strengthened Farmer Managed Seed System.

1.3 Definition of Farmer Managed Seed Systems

Farmer Managed Seed Systems (FMSS) is defined as a set of knowledge, practices and rules collectively developed by farmers, based on their customs and tradition, and applied to the selection, conservation, use, quality assurance and the circulation, in Smallholder networks, of seeds both plant and animal utilized by local communities.

The EOA-I CSC recognizes the importance of FMSS in the implementation of the EOA decision (*The EX.CL/Dec.621 XVII*) and has established a Technical Working Group (TWG) to collaborate with relevant agencies to ensure consideration of FMSS in the seed development sector and report progress. The CSC TWG on Seed is officially a member of the African Seed and Biotechnology Platform (ASBP) Steering Group and has been requested by the working group to lead other stakeholders on the development and establishment of a FMSS cluster.

1.4 Rationale for developing and strengthening FMSS

- 1) Recognizing farmers' core rights to produce, save, share, exchange, and sell to enhance seed and food sovereignty, women play a very crucial role hence their focus on FMSS development.
- 2) To contribute to Agroecology and Ecological Organic Agriculture for Food and nutritional security and improved livelihoods.
- 3) To enhance genetic diversity, conservation, preservation and protection of seed germplasm for resilience and climate change adaptation and allowing for sustainable use by local communities.
- 4) To contribute to ecosystem services (pollination, quality air, soil health improvement).

1.5 Objectives of the FMSS cluster

An AU report on the development of continental guidelines for the harmonization of seed regulatory frameworks in Africa (Ref: AUC/DREA/C/036) by Consultant Josiah Wobi has recommended the formation of a cluster on Farmer Managed Seed Systems to adequately address the issues raised by FMSS stakeholders. This is in recognition of the fact that the FMSS serve as a source of seed for many African farmers providing 90% to 100% for several traditional crop and vegetative propagated crops. Therefore, harmonization will provide an opportunity and enabling environment for complementary exchanges between the FMSS and the commercial seed sector. This exchange will further foster FMSS and enhance the benefits accruing from farmers' deployment of their own seeds.

Therefore, in view of the above objective, the EOA-I CSC TWG on Seed held a stakeholders' workshop (physical and online) on 10th and 11th August 2021 in Nairobi, Kenya along with Civil Society organizations (CSO), experts, government officials and private sector actors. In the meeting FMSS stakeholders unanimously expressed concerns that the process of harmonizing seed regulatory frameworks across the continent is focusing more on the formal and commercial seed sector; noting neglect and even criminalization of FMSS and total failure to recognize small holder farmers' rights.

The stakeholders called for the recognition and formalization with view of strengthening FMSS within a framework of protocols that foster and cement ownership, sharing, trading and rights environment

and not infringing on the way farmers produce and share their seeds. The process should not allow for infringement but should also create a strategic farmer led economic viability for FMSS.

Once fully established and constituted, the FMSS cluster will examine some provisions as enlisted in the proposed guidelines and ensure:

1. Representation within the ASBP working Group to champion the mainstreaming of farmer managed seed systems.
2. Contribution to the development of FMSS within the framework of harmonization of seed regulatory frameworks across the continent.
3. Recognition of farmers' rights and their intricate link to the FMSS, which uphold food security and agricultural biodiversity, and support ways to ensure adequate resourcing for their sustainability.

1.6 Vision and Mission of the FMSS Cluster

Vision: Seed Sovereignty for sustainable food systems and livelihoods in Africa.

Mission: Develop and promote continental FMSS guidelines for the harmonization of the seed's framework in Africa.

2.0 TERMS OF REFERENCE (TOR_s) FOR THE FMSS CLUSTER DEVELOPMENT

2.1 Introduction

The ToR has been developed based on the continental guidelines for the harmonization of seed policies and legal frameworks. It outlines the governance structures, and partnerships, their internal and external roles, the scope of work and funding of the cluster activities.

2.2 Governance Structure

The governance structure will have the following levels of operations:

- 1) ASBP Platform is the top structure reporting obligations to the AUC
- 2) ASBP Steering Committee
- 3) ASBP FMSS Working Group
 - a. The working group shall be drawn from key stakeholders (EOA Initiative, farmer associations and movements, RECS, government institutions, academia, research, CSO's, private sector, faith-based organizations, experts and networks, donor groups and international partners)
 - b. The roles of the working group stakeholders will be elaborated during the development of the cluster
- 4) ASBP FMSS Steering Committee

The steering committee shall be drawn from key stakeholders (EOA Initiative, farmer associations and movements, RECS, government institutions, academia, research, CSO's, private sector, faith-based organizations, experts and networks, donor groups and international partners)

The roles of the steering committee will be elaborated during the development of the cluster

2.3 Specific Framework Areas for FMSS Cluster

The TOR will cover the following continental framework guideline areas:

- 1) Seed certification and quality assurance
- 2) Variety evaluation, release, and registration
- 3) Intellectual property rights
- 4) Seed packaging and labelling
- 5) Biosafety and phytosanitary measures
- 6) Seed production
- 7) Seed marketing
- 8) Institutional arrangements

Elaboration of framework priority areas

I. Development of Seed Certification and Quality Assurance

For purposes of meeting the quality needs of a FMSS, quality assurance protocols shall be used and guided by the FAO Quality Declared Seed System (QDS) standard and existing indigenous and organic quality assurance standards and certification. The process shall be backstopped by expertise from national gene bank systems and other relevant genetic resource conservation agencies. On need basis, the national gene bank system shall be facilitated to help the FMSS to meet seed quality assurance standards to enable the QDS to go beyond the traditional community borders

Objective: Indigenous and organically certified seeds within FMSS recognized and promoted

Key Tasks:

1. Develop policy, legislative and regulatory frameworks for standards for FMSS including seed quality assurance.
2. Document seed types, attributes of good quality seeds and pest and disease status in FMSS.
3. Capacity building of farmers, traders, border control officials and other law enforcement agencies etc. on FMSS seed inspection procedures
4. Awareness creation among the publics on FMSS guidelines/protocols
5. Development of digital platforms for seed quality assurance, certification, and traceability.

II. Establishment of Variety Evaluation, Release, and Registration

FM seeds are open pollinated and therefore do not require to be subjected to variety evaluation, release, and registration requirements hence they need to be exempted from DUS standards.

Further FMSS is intrinsically linked to biodiversity that is critical to farmers diversified livelihoods (social, economic, and environmental). Farmers are constantly exploring this biodiversity whose evolving nature cannot be controlled. The variability of the seeds gives them a competitive edge to address food and nutritional security and climate resilience needs.

Objective: Create and maintain genetic diversity within FMSS.

Key Tasks:

1. Promote the exchange of FM seeds from different agroecological zones to enhance heterogeneity.
2. Promote farmer participation in variety release committees
3. Create awareness among key stakeholders (farmers, community leaders, policy makers, certifiers, traders, regulators/enforcement agencies etc.) on the unique seed attributes in relation to QDS standards.
4. Promote the establishment of community seed banks and development of existing ones.

III. Protection of Intellectual Property Rights

FMSS is heavily dependent on Indigenous Knowledge and Innovation Systems (IKS), cultural and customary law. Traditional knowledge and innovations are not time-bound and are owned by communities and are not transferable except under the Access and Benefit Sharing (ABS - The Nagoya Protocol). The communities' rights are further provided for and protected by provisions in the AU Model law (*The Protection of the Rights of Local Communities, peasants, and breeders and for the Regulation of Access to Biological Resources*), as well as by provision of the **United Nations Declaration on the Rights of Peasants and other people working in rural areas (UNDROPS)**. Adopted in 2018, UNDROPS article 19 elaborates the rights of these communities; - among which is the right to their seeds and has provisions for the protection of peasants that include rural women, fishers' folks, pastoralists, nomadic communities as well as agricultural workers. Items of community innovation, practices, knowledge, or technology including biological or natural resources shall be identified, interpreted, and ascertained by the local community under customary law and practices whether that law is written or not.

Objective: Recognize and protect FMSS genetic resources and Indigenous Knowledge and Innovation Systems (IKS) around their use.

Key Tasks:

1. Engage with Member States for recognition, protection, and support for the inalienable rights of local communities to their biological resource, knowledge, and technological innovations.
2. Support participation of communities in FMSS with a focus on women and youth in policy decisions regarding IKS and other rights relating to the sharing of this knowledge.
3. Facilitate the capacity building of grassroots, national and regional communities using learning/ networking forums e.g., farmer research networks, field schools, learning center's etc. and other traditional centers for transgenerational transfer of this knowledge.
4. Engage with Member States to mainstream the (UNDROPS and the African Model Law) statutes in their national laws by sharing best practices from countries that have done this i.e.- Kenya, ESwatini etc.
5. Develop strategies of documentation/digitalization for FMSS genetics and resources and IKS for protection under the above laws and treaties.

IV. Development of Guidelines for Packaging and Labelling

Farmer managed seeds shall be well labelled and packaged to ensure traceability, ownership, performance, and quality assurance. The label shall have the following: crop species, name of variety, name of seed producer within the FMSS, germination percentage, free from contaminants, date of any acceptable treatment and name of responsible authorizing standardization agent such as existing continental and/ regional standards.

Objective: Labelling for traceability and quality assurance of farmer managed seeds.

Key Tasks:

- 1) Develop a database of farmers, communities, gene banks and the varieties under their custody for ownership and traceability.

- 2) Develop packaging and labelling standards for FMSS including the logo to ensure traceability, identity, and trust.
- 3) Capacity building for farmers and extensionists on the various certification schemes for FMSS
- 4) Awareness and knowledge creation amongst farmers, promoters, regulators etc. on seed labels and standards for FMSS.

V. Establishment of Biosafety and Phytosanitary Measures

The FMSS needs to be safeguarded and protected from various unfair and unjust socio-economic considerations. Bio-engineered technologies particularly GMOs driven by corporate interests pose threats to biological diversity, traditional crops or other products and farmers' varieties and landraces and substitution of their technologies and practices. Such trends are likely to lead to undue costs affecting social, economic, cultural, ethical, and religious values and livelihoods of communities. Other socio-economic concerns include the dependence on large profit-driven corporations for high-cost fossil fuel-based inputs (seeds, fertilizers, pesticides etc.) that are unaffordable and limit small-scale farmers' access to them; and stifling the rights of communities to own seed and food sovereignty.

Objective: To safeguard and protect farmer-managed seeds from contamination by bio-engineered products, pests and diseases thereby maintaining genetic diversity, seed integrity, viability, and purity of the farmers' seeds.

Key Tasks:

- 1) Lobby Member States to fully implement the AU Model Law on Biosafety and the African biosafety strategy, the Cartagena Protocol on Biosafety (CPB) including their provisions on prior informed consent and the Liability and Redress Law. These frameworks contribute to the conservation and sustainable use of biodiversity and environment especially at the farm level.
- 2) Strengthen capacity of gene banks to monitor FMSS for GMO contamination.
- 3) Capacity building on seed health standards using acceptable models such as the regional organic standards (e.g., the East African Organic Products Standard -EAOPS), the international standards developed by IFOAM Organics International for organic products, using the Participatory Guarantee Systems (PGS), the Integrated Pest Management (IPM), measures for pest risk management (ISPM # 14 IPPC) among others.
- 4) Sensitization and capacity building of farmers to maintain buffer zones and GMO-free areas to enable safeguarding and protection of farmer-managed seeds.

VI. Development of Guidelines for Seed Production

A supportive policy environment for seed production by small holder farmers is fundamental for the continuance of farmer managed seed systems. Training on farmer managed seed production as well as accompanying technologies are critical to the process of a successful FMSS. Adequate capacity is required to establish infrastructure and governance of community gene banks and distribution networks.

Objective: Promote the revival, multiplication, preservation, and conservation of farmer managed seeds

Key Tasks:

- 1) Promote farmers rights in the UNDROPS, African Model Law on the rights of farmers, breeders, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) including safe use, exchange, and sharing within FMSS locally, regionally, and internationally
- 2) Strengthen seed bulking systems for farmers managed seed systems through community seed banks
- 3) Lobby Member States to increase budgetary allocations to support research, extension, capacity building and infrastructure to inform upscaling of production in FMSS.
- 4) Support establishment of farmer managed seed networks and cooperatives to enhance farmer managed seed production
- 5) Build the capacity and support extension services regarding promotion of farmer managed seeds production
- 6) Develop infrastructure in support of FMSS production including seed banks and other seed handling infrastructure

VII. Developing Seed Marketing

The FMSS should aim to satisfy farmers' demand for reliable, accessible, and affordable for a range of improved variety of QDS seeds of assured quality. The existence of strong and vibrant local FMSS market systems backed by well-established community seed banks is key to the viability and sustainability of FMSS.

Objective: Strengthen FMSS markets to allow for wide access to QDS seeds to ensure food security.

Key Tasks:

- 1) Undertake a value chain analysis to identify the key actors within the FMSS, their roles, weaknesses and strengths.
- 2) Develop and implement marketing information systems and guidelines on marketing of farmer managed seeds.
- 3) Develop and enforce standards under PGS to ensure QDS.
- 4) Develop frameworks for registration and certification of farmer managed seeds.
- 5) Establish cooperatives to mobilize and coordinate farmers and strengthen markets and related structures (e.g., farmer managed seed companies).
- 6) Create awareness on the existing farmer managed seed markets and other outlets.

VIII. Identification and Establishment of Enabling Institutional Arrangements

The development and establishment of FMSS and its recognition will depend on the institutions and partnerships that support seed production, certification, standards, quality assurance, distribution, and marketing. The gene bank system should be well developed and established to offer technical backstopping for all farmer genetic resources within FMSS. Institutional development and capacity building by certification and standards organizations will be required to support the production of QDS in bulk.

Objective: Establish autonomous institutional frameworks with partnerships for developing vibrant and sustainable farmer managed seed systems

Key Tasks:

- 1) Undertake a policy environment and institutional analysis to identify the enablers (existing regulations, policies, strategies) and dis-enablers (contradicting or inhibiting policies, regulations, strategies etc.) on the development and establishment of FMSS.
- 2) Map out existing initiatives/ programs/ projects to identify areas of synergies, complementarities, and gaps for strengthening.
- 3) Strengthen the active involvement of traditional/local governance institutions and customary laws in FMSS to safeguard their traditional institutional memory for transgenerational transfer to the youth and other young farmers
- 4) Develop strategies of integrating FMSS in development and implementation of emerging and ongoing initiatives at various levels.
- 5) Leverage the African Union and Member States to meet the financial needs of FMSS.
- 6) Promote and leverage the involvement of traditional governance institutions and customary laws in FMSS.
- 7) Lobby to position FMSS in development and implementation of emerging and ongoing development strategies and programs at various levels.

3.0 FMSS CLUSTER DEVELOPMENT ACTION PLAN (2021-2022)

Task	Objectives	Activities	2021	2022			
			Q4	Q1	Q2	Q3	
Development of Seed Certification and Quality Assurance	Indigenous and organically certified seeds within FMSS recognized and promoted	Review current policy frameworks and standards (EAOPS, PGS) across all levels to inform the development of policy, legislative and regulatory frameworks for standards for FMSS including seed quality assurance.		X			
		Undertake a participatory scoping study involving farmers to identify seed types, define the attributes of good quality seeds and determine pest and disease status in FMSS.		x			
		Organize validation workshops for stakeholders (farmers, policy makers, and other stakeholders) for validation of seed quality attributes and current policy frameworks and standards		X	X	X	
		Support the inclusion of seed certification and quality assurance into the current organic PGS, ICS and other acceptable organic/agroecology standards.		X	X	X	
		Undertake capacity building and awareness creation among farmers, CSOs, traders, border control officials and other law enforcement agencies etc. on FMSS seed inspection procedures		X	X	X	
		Develop and disseminate knowledge products in simple formats (fliers, modules, manuals, guidelines, videos) on seed certification and quality assurance, guidelines/protocols e.g., on pest identification, pest surveillance				X	X
		Lobby and advocate for policy enabling environment at all levels for FMSS standards for seed quality assurance.	X	X	X	X	
Establishment of Variety Evaluation,	Maintain and facilitate the	Undertake an inventory of existing seed varieties to understand the genetic diversity		X			

Release, and Registration	increase of genetic diversity within FMSSs.	Undertake awareness creation to key stakeholders (farmers, community leaders, policy makers, certifiers, traders, regulators/enforcement agencies etc.) on the unique seed attributes in relation to QDS standards.	X	X	X	X
		Promote the exchange of FMSS seeds from different communities to enhance biodiversity	X	X	X	X
		Support farmer participation in variety release committees.	X	X	X	X
		Support the establishment of new community seed banks and strengthen existing ones.			X	X
Protection of Intellectual Property Rights	Safeguard the genetic resources of farmers, innovations and uphold the African model law and UNDROPS Indigenous Knowledge Systems (IKS) that conserve and protect FMSS practices, culture, customary laws, and traditions.	Review the existing policies and legislations of seed systems to integrate aspects of IKS and farmer innovations in FMSS		X	X	
		Undertake advocacy and policy influence to protect and support the inalienable rights of local communities under FMSS to their biological resource, knowledge, and technological innovations.		X	X	X
		Support the participation of women and youth in participating in policy dialogues regarding the indigenous and traditional knowledge, and other customary laws and aspects in FMSS		X	X	X
		Undertake an inventory of the knowledge, customs and traditions associated with knowledge in FMSS and assess the extent of sharing across generations(transgenerational)		X	X	
		Undertake capacity building of communities in FMSS with a focus on women and youth in policy decisions regarding IKS and other rights relating to the sharing of this knowledge.		X	X	X
		Create awareness and lobby Member States to adapt the (UNDROPS and the African Model Law) statutes in their national laws by sharing best practices from countries that have done this i.e.- Kenya, Swatini etc.	X	X	X	X

		Undertake the documentation and digitalization of FMSS genetics and resources and patenting of farmer innovations including georeferencing		X	X	
Development of Guidelines for Packaging and Labelling	To enhance visibility and recognition of farmer seeds for traceability, quality guarantee and assurance.	Develop packaging and labelling standards for FMSS including the logo to ensure traceability, identity, and trust.			X	X
		Develop and maintain a database of farmers, communities, gene banks and the varieties under their custody for ownership and traceability.		X	X	
		Undertake awareness (farmers, traders, and consumers) on the availability and use of FMSS labels and standards	X	X	X	X
		Capacity building for farmers and extensionists on the various certification schemes for FMSS.		X	X	X
		Lobby Member States to fully implement the AU Model Law on Biosafety and the African biosafety strategy, the Cartagena Protocol on Biosafety (CPB) including their provisions on prior informed consent and the Liability and Redress Law. These frameworks contribute to the conservation and sustainable use of biodiversity and environment especially at the farm level.		X	X	X
		Strengthen capacity of gene banks to monitor FMSS for GMO contamination.		X	X	X
Develop Biosafety and Phytosanitary guidelines for FMSS Cluster	To facilitate capacity building in the implementation of the Cartagena protocol on biosafety put in place measure to maintain the organic integrity, viability, and	Undertake capacity building among Member states on seed health standards using acceptable models such as the regional organic standards (e.g., the East African Organic Products Standard - EAOPS), the international standards developed by IFOAM Organics International for organic products, using the Participatory Guarantee Systems (PGS), the Integrated Pest Management (IPM), measures for pest risk management (ISPM # 14 IPPC) among others.		X	X	X
		Lobby Member States to fully implement the AU Model Law on Biosafety and the African biosafety strategy, the Cartagena Protocol on Biosafety (CPB) including their provisions on prior informed		X	X	X

	health, as well as the genetic diversity of farmer managed seed	consent and the Liability and Redress Law. These frameworks contribute to the conservation and sustainable use of biodiversity and environment especially at the farm level.				
		Undertake sensitization and capacity building of farmers to create and maintain buffer zones and GMO-free areas to enable safeguarding and protection of farmer-managed seeds.	X	X	X	X
		Conduct a capacity needs assessment for farmers to assess the knowledge gaps for FMSS	X	X		
		Conduct awareness creation on the new FMSS guidelines	X	X	X	X
		Lobby for adoption into national agricultural strategies, programmes, and policies	X	X	X	X
		Map out stakeholders engaged in seed and genetic banking activities and existing infrastructure to identify gaps and develop an action plan to address the identified gaps	X	X	X	
		Map out FMSS research, innovations and development institutions and support them to undertake FMSS research	X	X	X	
Development of Guidelines for Seed Production	Promote the revival, restoration, multiplication, preservation, and conservation of farmer managed seeds	Lobby for the integration farmers' rights in the UNDROPS, African Model Law on the rights of farmers, breeders, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) including safe use, exchange, and sharing within FMSS locally, and regionally.	X	X	X	
		Strengthen the seed banking systems for farmers managed seed systems through community seed banks	X	X	X	
		Support and undertake research to inform upscaling of farmer managed seeds production	X	X	X	
		Lobby governments to increase budgetary allocations to support research, extension, capacity building and infrastructure to inform upscaling of production in FMSS.	X	X	X	X

		Support establishment of farmer managed seeds networks and cooperatives to enhance farmer managed seeds production	X	X	X	
		Build the capacity and support extension services regarding promotion of farmer managed seeds production	X	X	X	
		Develop infrastructure in support of FMSS production including seed banks and other seed handling infrastructure	X	X	X	
Develop guidelines for marketing, packaging, labelling and certification for FMSS	Enhance packaging and marketing of farmer managed seeds	Undertake a value chain analysis to identify the key actors within the FMSS, their roles, weaknesses, and strengths		X	X	
		Develop frameworks for registration and certification of farmer managed seeds.		X	X	
		Develop and implement marketing information systems and guidelines on marketing (seed quality, packaging, certification, labelling etc.) of farmer managed seeds.		X	X	
		Develop and enforce standards under PGS to ensure QDS.		X	X	
		Create awareness on the existing farmer managed seed markets and other outlets.		X	X	
		Establish cooperatives to mobilize and coordinate farmers and strengthen farmer managed seeds markets and related structures (e.g., farmer managed seed companies)		X	X	
Identification and Establishment of Enabling Institutional Arrangements	Establish autonomous institutional frameworks for	Undertake a policy environment and institutional analysis to identify the enablers (existing regulations, policies, strategies, institutions) and dis-enablers (contradicting or inhibiting policies, regulations, strategies, institutions etc.) on the development and establishment of FMSS.		X	X	

farmer managed seed systems	Conduct institutional capacity assessment for gaps to inform efforts aimed at strengthening the capacity of farmer managed seed systems institutions			X	X
	Map out existing initiatives/ programs/ projects to identify areas of synergies, complementarities, and gaps for strengthening.		X	X	
	Strengthen institutions such as cooperatives, extension services etc. in technical and managerial capabilities to meet the needs of FMSS.			X	X
	Build technical, financial and governance capacity in farmer managed seed systems institutions			X	X
	Lobby governments to provide adequate budgetary allocations to farmer managed seed systems institutions		X	X	X
	Develop funding mechanisms to leverage PPPs for FMSS		X	X	X
	Strengthen the active involvement of traditional/local governance institutions and customary laws in FMSS to safeguard their traditional institutional memory for transgenerational transfer to the youth and other young farmers.			X	X
	Develop strategies of integrating FMSS in development and implementation of emerging and ongoing initiatives at various levels.		X	X	X

4.0 MULTISTAKEHOLDER PLATFORMS FOR FMSS CLUSTER

a) CONTINENTAL LEVEL

CATEGORIES	Name of entity (Expert, organization, Network)	Role and services played by entity within FMSS	Support needed
INTERNATIONAL ENTITIES	FAO	ITPGRFA	UN
	UNEP	Funding and Policy Influence	UN
	UNDP		UN
	BIOVERSITY INTERNATIONAL	Material transfer for planting, Capacity Building, Technical and Policy Support	UN FUNDING
	IFOAM-OI	Setting Organic Standards, Capacity Building	FUNDING
	GRAIN	Capacity Building, Advocacy	FUNDING
	GIZ	Funding And Policy	FUNDING FROM BMZ
	SDC	Funding and Policy	Swiss Government
	SSNC	Funding and Policy	SIDA
	LA VIA CAMPESINA	Advocacy	FUNDING
	LAND WORKERS ALLIANCE (UK)	Advocacy	FUNDING
	AFRICANS RISING (USA)	Advocacy	FUNDING
	GAIA FOUNDATION	Funding	FUNDING
	FARA	Advocacy and research	FUNDING
	FIBL	Research	FUNDING
	ACTION AID	Advocacy	FUNDING
	IFAD	Funding	FUNDING
	ABN	Advocacy and capacity building	FUNDING
	LEISHA	Information sharing	FUNDING
	CTA	Information sharing	FUNDING
THIRD WORLD NETWORK	Advocacy and information sharing		
SID (SOCIETY FOR INTERNATIONAL DEVELOPMENT)	Social justice and strengthening Collective empowerment and Policy change towards Inclusiveness and equity		
AFRONET	Advocacy And Capacity Building		

	NAVDANYA INTERNATIONAL	Advocacy and capacity building	
EXPERTS			
FAITH BASED	ECOLOJAH	Promote conservation	
	SOUTH AFRICAN FAITH COMMUNITIES ENVIRONMENTAL INSTITUTE (SAFCEI)		
	NOWERGIAN CHURCH AID	Poverty eradication, water	
	LUTHERAN CHURCH	Support to farmers through projects	
	SWEDISH SOCIETY OF CHURCHES	Provide relief services, capacity building	
	LAND WORKERS ALLIANCE (UK)	ADVOCACY	
	AFSA	ADVOCACY AND FOOD SOVEREIGNTY	
	PELUM ASSOCIATIONS	CAPACITY BUILDING AND ADVOCACY	
GOVERNMENTS	AUC	FUNDING, POLICY MAINSTREAMING	Information from CSOs and other partners for them to fundraise and support FMSS. The information will come from the grassroot levels Funding from member states Good will from Member States
FARMER ASSOCIATIONS	SEED KEEPING RESIDENT AT GREENS GROW (IN WEST PHILY)	POLICY AND CAPACITY BUILDING	
	INOFO		

b) REGIONAL LEVEL

CATEGORIES	Name of entity (Expert, organization, Network)	Role and services played by entity within FMSS	Support needed
CSO	FRIENDS OF THE EARTH	ADVOCACY	Funding
	METHODIST BENIN		Funding
	CATHOLIC RELIEF SERVICES	Support to farmers through projects	Funding
	FRONT COMMUN POUR LA PROTECTION DE L'ENVIRONNEMENT (FCPEEP-RDC)	Environmental concerns	
	AFSA	Advocacy and food sovereignty	
	PELUM ASSOCIATIONS	Capacity building and advocacy	Funding
	BIOVISION AFRICA TRUST	Capacity building and information sharing	Funding
	African Centre for Biodiversity (ACB)	advocacy for seed sovereignty	Funding
	COPAGEN) or COMPASS	Works on ANTI-GMOs, farmers' rights, land issues, agrofuels, agricultural policies and food sovereignty.	Funding
GOVERNMENT AND RECS	EAC and EALA	Policy and Funding	Funding
	ECASS	Policy and Funding	Funding
	ECOWAS	Policy and Funding	Funding
	SADC		
	UMA		
FARMER ORGANISATIONS	ESAFF	Policy and advocacy, Capacity building, Information sharing	Funding
	Zimsoff is a farmer organization (NATIONAL)	Policy and advocacy, Capacity building, Information sharing	
	CTDT - community Technology Development Trust (NATIONAL)		
EXPERTS			
RECS	EAC		

c) NATIONAL LEVEL

CATEGORIES	Name of entity (Expert, organization, Network)	Role and services played by entity within FMSS	Support needed
CSOs	Seed Savers network	Capacity building, advocacy, conservation	Donor Funding
	Pelum Kenya	Capacity building, advocacy, conservation	Donor Funding
	Pelum Uganda	Capacity building, advocacy, conservation	Donor Funding
	Pelum Tanzania	Capacity building, advocacy, conservation	Donor Funding
	Biba	Capacity building, advocacy, conservation	Donor Funding
	TOAM	Capacity building, advocacy, conservation	Donor Funding
	NOAM	Capacity building, advocacy, conservation	Donor Funding
	ROAM	Capacity building, advocacy, conservation	Donor Funding
	OBEPAB	Capacity building, advocacy, conservation	Donor Funding
	CNCR	Capacity building, advocacy, conservation	Donor Funding
	FENABE M ALI	Capacity building, advocacy, conservation	Donor Funding
	KENYA PEASANTS LEAGUE	Capacity building, advocacy, conservation	Donor Funding
	KOAN	Capacity building, advocacy, conservation	Donor Funding
	KESAFF	Capacity building, advocacy, conservation	Donor Funding
	ISD	Capacity building, advocacy, conservation	Donor Funding
	PAN ETHIOPIA	Capacity building, advocacy, conservation	Donor Funding
	HEALTH OF MOTHER EARCH FOUNDATION	Capacity building, advocacy, conservation	Donor Funding
	COMMONS FOR ECO JUSTICE	Capacity building, advocacy, conservation	Donor Funding
	PELUM ZAMBIA	Capacity building, advocacy, conservation	Donor Funding
	ZAMBIA NETWORK FOR AGROECOLOGY	Capacity building, advocacy, conservation	Donor Funding
	FACHIG	Capacity building, advocacy, conservation	Donor Funding
	PERMACULTURE TUNISIA	Capacity building, advocacy, conservation	Donor Funding
	GBIACK	Capacity building, advocacy, conservation	Donor Funding
ALL OTHER NOAMS	Capacity building, advocacy, conservation	Donor Funding	
RIDEP- KENYA	Capacity building, advocacy, conservation	Donor Funding	
ACADEMIA	WOLLO UNIVERSIY	Research, Information sharing, Extension support	Donor Funding
	MEKELLE UNIVRSITY	Research, Information sharing, Extension support	Donor Funding
	MAKERERE UNIVERSITY	Research, Information sharing, Extension support	Donor Funding
	EGERTON UNIVERSITY	Research, Information sharing, Extension support	Donor Funding
	UON	Research, Information sharing, Extension support	Donor Funding

	IBADAN	Research, Information sharing, Extension support	Donor Funding
	UMU	Research, Information sharing, Extension support	Donor Funding
	ALL OTHER ACADEMIA IN AFRICA IN EOA-I /KCOA NETWORK	Research, Information sharing, Extension support	Donor Funding
RESEARCH	KARLO- KENYA	Research, Information sharing, Extension support	Donor Funding
	ALL NARS IN AFRICA (NAME THEM)	Research, Information sharing, Extension support	Donor Funding
PRIVATE SECTOR			
EXPERTS	Dr. Daniel Maingi (Kenya)	Capacity building and Information sharing	
FARMER ORGANISATIONS	KESAFF	Capacity building and advocacy	Members' contributions, Donor funding
	ESAFF UGANDA SECRETARIAT	Advocacy and capacity building	Members' contributions, Donor funding
	KENYA PESANTS LEAGUE WOMENS COLELCTIVE	Advocacy and capacity building	Members' contributions, Donor funding

5.0 BUDGET CONSIDERATIONS

The terms of reference will include development of the budget for the implementation of the proposed action plan. The following will be considered in deriving the budget:

1. Budget to roll out the FMSS in between 15-20 countries. This means that the roll out will involve 3-4 countries in every AU political region.
2. Activities involving studies to be undertaken through consultancies.
3. Number of consultative and participatory forums.
4. Capacity building of institutions involved in the implementation of the FMSS cluster.
5. Coordination of FMSS cluster development.

Reference Documents:

1. Development of Continental Guidelines for the Harmonization of Seed Regulatory Frameworks in Africa: AUC/DREA/C/036: Draft Report; by Josiah Wobi (International Seed Consultant: - June1. 2021
2. African seed and biotechnology partnership program operational guidelines
3. Report of the inaugural meeting of the steering group of the African Seed and Biotechnology Partnership Platform
4. Report of the second meeting of the steering group of the African seed and biotechnology partnership platform
5. Terms of reference for the development of continental guidelines for the harmonization of seed regulatory frameworks in Africa
6. Report of the status of seed sector in Africa
7. Biba, FIAN, ZAAB, African Centre for Biodiversity, the Development bank: Development of continental guidelines for the Harmonization of seed regulatory frameworks in Africa
8. Wobil J. Development of continental guidelines for the harmonization of seed regulatory frameworks in Africa
9. The OAU's Model Law on safety in Biotechnology (*EX.CL.CL/Dec 26 (III)*)
10. The OAU Model Law on Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources, An Explanatory Booklet Prof. J. A. Ekpere Project Coordinator Organization of African Unity Scientific, Technical and Research Commission P. M. B. 2359 Lagos, Nigeria. This project was financed by the OPEC Fund for Development, Vienna, Austria
11. CBD as quoted by the Ekpere in the OAU model law
12. UNDROPS article 19/20

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