



Position Paper

Inclusive Seed Sector Development for Sustainable Agricultural Transformation in Africa

Context and Background

Sustainable agricultural transformation can be defined as the process by which the agri-food system changes over time to become more productive and efficient in increasing farm productivity, reducing malnutrition, creating jobs and raising incomes, while minimizing negative environmental impacts and economic risks for the farming sector. Key inputs in transformation of agri-food systems are namely seeds, land, irrigation, fertilizers, labor, capital and farm mechanization. Of all these inputs, seed is basic and most critical for sustainable agricultural transformation, since the response of all other inputs depend to a large extent on quality of the seed used. It is estimated that the direct contribution of quality seed alone to the total production can be raised up to 45% depending upon the crop and efficient management of other inputs. However, the question is how to accelerate, sustain and scale the growth process of agricultural transformation with particular focus on the seed sector? The answer lies in the extent to which the approach to seed sector development is truly inclusive in terms of recognizing and embracing the diversity of seed systems in Africa and giving every farmer the opportunity to equitably contribute to agricultural transformation.

Inclusive seed sector development for sustainable agricultural transformation in Africa is one of the flagship programs of the AfricaSeeds' 2022-2031 Strategy. The inclusive seed sector approach considers one of the key goals of the African Union's 2063 agenda on "*ending poverty through active engagement of all Africans in development processes in which no one is left behind or excluded on the basis of whatever factor*". It is in line with this aspiration that AfricaSeeds advocates for an effective exploitation of the diversity of seed systems in Africa particularly in enhancing the unregulated (informal) seed systems and fostering closer links with the regulated (formal) system for producing and distributing quality seeds more widely. There is a huge untapped potential within the unregulated seed sector in which smallholders have the capacity to enhance agricultural productivity if they receive adequate attention and sufficient well-targeted investment. This will have implications for attaining seed security in Africa, which will serve as the basis for achieving food security and contributing to poverty alleviation.

Diversity of Seed Systems in Africa

A key feature of the African seed sector is the diversity of seed systems existing in the regulated sector and the unregulated sectors, with the latter being the dominant sector accounting for more diversity and at least 80% of seeds used by farmers. This sector remains the predominant source of seeds particularly covering all crops, including cash crops, traditional crops and varieties, neglected/underutilized crops and other crops and varieties not commercially attractive to the regulated seed sector, and thus presents a huge entry point and opportunity for quality seed production and supply to meet the diversity of seed needs and seed users.

The unregulated sector comprises of two major seed systems groups: the **Farmer-Managed Seed System (FMSS)** and the **Unregulated Local and National Seed Enterprises (USE)** (see Figure 1 below). In the FMSS, the seed value chain is entirely managed by the farmer himself. The FMSS is traditionally integrated in normal by many African smallholder farmers and made up of a continuum of variants between a traditional farmer-managed seed system (traditional / family farming) and a “commercial” farmer-managed seed system (commercial traditional farming).

The Unregulated Local and National Seed Enterprises cover all seed enterprises which do not respect or do not follow entirely national seed regulations for various reasons. Unregulated seed systems can constitute a continuum depending upon the parameter used.

A major challenge is how to utilize this diversity of seed systems to promote sustainable availability of and access to quality seeds to all farmer categories in Africa, without falling into the trap of fueling the often-unproductive dichotomy opposing the regulated and the unregulated seed sectors. Rather, AfricaSeeds considers that seed systems in Africa are interdependent entities that form a complex within which they all contribute individually and collectively to enhancing the efficiency of seed supply towards achieving seed security in different countries and eventually on the continent.

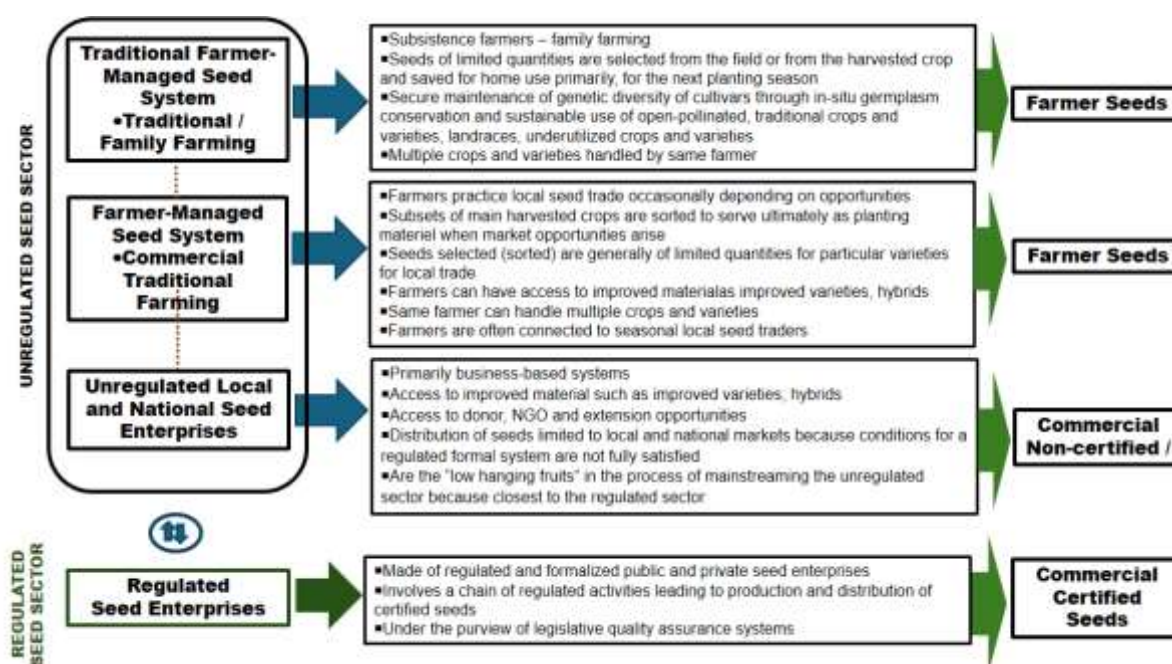


Figure 1. Diverse seed systems in Africa

The optimum requirement in a seed system is that enough quality seeds of preferred crops and varieties by farmers are made available in locations when and where they are required, and readily accessible to farmers and farming communities.

Seed security can be defined as the availability and accessibility, at the right time, of enough quality seeds and planting materials of crops and varieties to farmers and farming communities that suit their preferences, agro-ecological conditions and socioeconomic needs.

The nature of farmers' seed needs is driven by a series of factors, including crops and crop varieties (such as high market crops, traditional crops, modern varieties, local varieties, and landraces), crop ecologies, production systems, farming systems, farmer profiles, and market opportunities, all of which together shape their agricultural practices and choices.

Inclusive Seed Sector and Seed Security in Africa

Improving, through targeted interventions, the quality of 80% of the seeds used by farmers and produced by smallholder seed farmers of the unregulated sector, would contribute to increase substantially productivity, and achieve food security and eventually poverty alleviation through significant income opportunities for smallholder farmers and jobs for the youth. Boosting such productivity in the agricultural sector would require that the huge untapped potential of the seed sector in Africa, be utilized efficiently to promote availability and accessibility of quality seeds, as well as their efficient utilization by all farmers.

Seed systems in Africa are interdependent entities that form a “complex” within which they all contribute, individually and collectively to make available to farmers enough quality seeds for their needs at the right time and of that suit their preferences, agro-ecological conditions and socioeconomic needs. It is important that they are recognized and valued individually and collectively, to realize their full potentials through targeted interventions in an inclusive process which leads to an inclusive seed sector. The inclusive seed sector promotes seed security by enhancing durable availability and accessibility of quality seeds for all seed users and seed needs (see Figure 2 below).

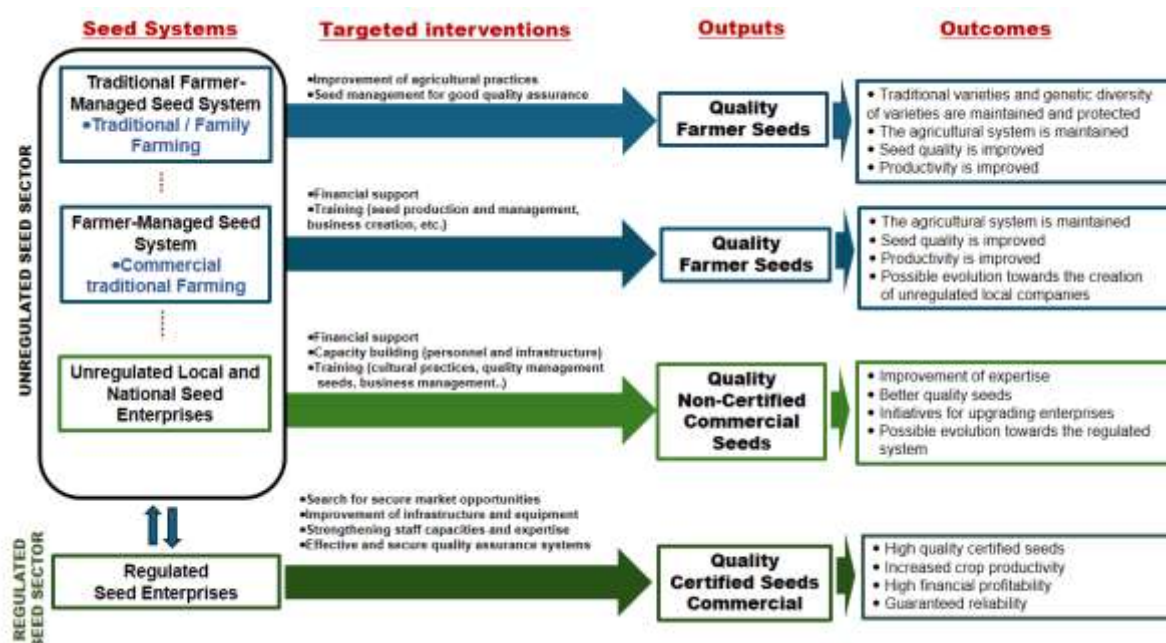


Figure 2. Harnessing the diversity of seed systems for an Inclusive Seed Sector

Inclusive Seed Sector to Support Sustainable Agricultural Transformation to Promote Food Security and Poverty Alleviation in Africa

The following Figure 3 illustrates a conceptual framework that describes the process by which inclusive seed sector enables to achieve the United Nations Sustainable Development Goals (SDGs), particularly SDG 1 – No Poverty, and SDG 2 – Zero Hunger, through sustainable agricultural transformation in Africa.

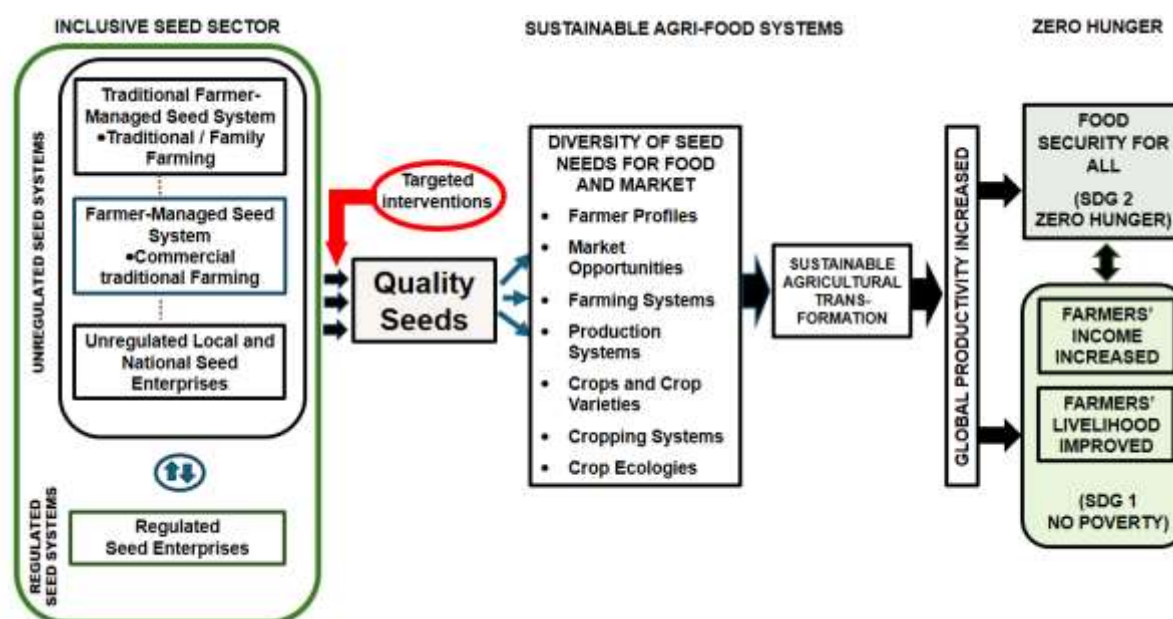


Figure 3. A Conceptual Framework for the contribution of inclusive seed sector development to sustainable agricultural transformation and UN SDG 1 and SDG 2

The inclusive seed sector includes the diversity of interdependent seed systems – traditional farmer-managed systems, regulated and unregulated seed systems, seed companies, etc. - all making their individual and collective contributions, in a holistic manner to the achievement of seed security.

The harnessing of individual and collective potential of various seed systems through targeted and relevant interventions results in the production of quality seeds for all seed needs that contributes to the development of efficient agri-food systems through sustainable agricultural transformation.

These agri-food systems make it possible to achieve food security for all (SDG 2 – zero hunger) through a global and sustainable increase in crop productivity for all crops concerned.

The surplus realized after meeting consumption needs through increased productivity is used for commercial purposes to provide more income to farmers and improve their livelihoods, thus contributing to poverty reduction (SDG 1 – no poverty).

Inclusive Seed Sector and Food Sovereignty

Food and nutrition security are realized when all people at all times have access to sufficient, safe and nutritious food that meets their dietary needs and food preferences, while food sovereignty ensures that the processes of achieving food security involve judicious usage of local and national resources and potentials, including all crops, producers and production systems, as well as local and traditional knowledge and practices in the country. In this regard, food sovereignty and food security are two

complementary themes, the former making it possible to guarantee the sustainability of the latter. Food sovereignty is an inclusive process for achieving sustainable food and nutrition security.

Implementing the Program on Inclusive Seed Sector Development for Agricultural Transformation in Africa

The implementation plan of the AfricaSeeds' 2022-31 Strategy outlines activities for implementing its flagship program on inclusive seed sector development for agricultural transformation in Africa. First is an online high-level dialogue on the inclusive seed sector concept, which was held in October 2023 with the primary aim to unveil and give clarity to the concept and solicit partners' support for collaborating with AfricaSeeds in implementing the concept across the continent. This dialogue was designed to lead to a conference in 2025, which will analyze and discuss the roles and specific outputs of diverse actors in the African seed industry and how these could be assessed and recognized with the aim to improving their overall efficiency in contributing to sustainable agricultural transformation and the entire seed market in Africa. The conference is expected to identify the root causes of Africa's low contribution to the available data on global seed market, brainstorm potential solutions, and develop an agenda to improve the efficiency and value of Africa's seed market within an inclusive framework. The conference will explore other issues pertaining to the inclusive seed sector concept such as:

- appropriate indicators to assess performance and contribution of existing seed systems;
- conducive national policy to encourage and motivate inclusive seed systems;
- organizational approaches (appropriate small-scale enterprises encouraging the active participation of individuals and groups of particularly women and the youth, cooperatives, etc.);
- technical considerations (research, extension, technology transfer);
- capacity building issues (field and seed quality training, infrastructure and facility improvement);
- trade and market issues (sustainability and income generation pursued by all seed systems);
- financial and investment issues including start-up support for small enterprises.

Partnership and stakeholder collaboration will be sought in all afore-mentioned interventions as well as other related aspects such as partnership with African Universities in supporting student research to estimate value of inclusive seed market in Africa, collaboration in preparing and publishing practical publications on inclusive seed sector stimulation and development, and deployment or socializing of inclusive seed sector publications as promotional and capacity enhancement tools in national seed programs and beyond.

7. Conclusions and Way Forward

At a time when many sub-Saharan African countries are facing the effects of climate change and internal and external challenges of various kinds, the seed sector constitutes a major source of innovations to support the resilience of agricultural systems and guarantee food security and poverty alleviation. By generating quality seeds for all crops, as well as for the diversity of seed needs and their users, the inclusive seed sector constitutes a major pillar of food sovereignty to promote the sustainability of national food security, while securing genetic diversity and crop biodiversity. The inclusive seed sector also offers greater choice to all categories of farmers in terms of seeds intended for food and for market.

AfricaSeeds calls upon all seed experts and seed practitioners to partner to improve and promote the inclusive seed sector concept through effective partnerships. In this regard, AfricaSeeds will undertake a series of contacts with potential partners aimed at assembling contributions and participations required to organize the Conference.