Developing the seed sector to increase agricultural productivity in West and Central Africa

Key interventions areas and guiding principles

Policy brief

by Dr Patrice Djamen
p.djamen@gmail.com

Key Messages:

1. The sustainable increase in agricultural productivity needed to achieve food security and inclusive economic growth in West and Central Africa (WCA) is not possible without a performant seed sector.

2. The seed industry cannot develop without a strong private sector, but seed remains the most essential agricultural input and farmers should not lost control over it at the risk of making them more vulnerable.

3. The persistence of poor performance of the seed sector despite multiple efforts carried out over decades highlights the need for a paradigm shift in the preparation and implementation of interventions.

4. The six priority areas for addressing current challenges and finally developing the seed sector in WCA are: (i) governance of the seed sector; (ii) structuring and functioning of seed markets; (iii) research - development scheme; (iv) seed policies; (v) capacity building of actors and (vi) funding mechanisms.

5. Programmatic approach, results-based management, partnership and subsidiarity, alignment between initiatives, and stakeholder’s participation and empowerment are the key guiding principles that can ensure the efficiency of interventions.

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1 Introduction

In West and Central Africa (WCA), achievement of food and nutrition security and poverty reduction have been part of priority goals of various public policies and investments for agricultural development for decades. But agricultural yields and productivity are still among the lowest in the world, food insecurity is still prevalent and poverty is severe, especially in rural areas. Today, sustainable agricultural intensification (SAI) i.e. the mobilization of processes or systems to increase yields without negatively affecting the environment, or having to use additional agricultural lands becomes indispensable¹. SAI is one of the conditions for achieving the goals of the Malabo Declaration aimed at eradicating hunger and halving poverty on the African continent by 2025. SAI is also necessary to addressing the Objective two of the Sustainable development goals (SDG 2) to "End hunger, achieve food security and improved nutrition and promote sustainable agriculture."

The use of certified seed is considered to be the first step in the agricultural intensification process. Seed is the primary input use byfarmers, contributing for at least 40% to the formation of crop yields² in WCA. Its role is more predominant than that of other key factors such as the use of good
agricultural practices, soil fertility and water supply, crop protection and management of climatic hazards, among others, and which in turn influence its performance.
When farmers have the opportunity, the varieties of seeds they choose reflect their production objectives and are also an important lever for adaptation to climate change whose effects are increasingly perceptible in WCA.

West and Central African countries and development partners are increasingly aware of the strategic importance of seeds. This awareness has increased since the food price crisis of 2008 and is reflected in several local, national or regional policies and initiatives to improve producers' access to certified seeds. In several countries, seed subsidy programmes targeting smallholders are implemented since several years now. Efforts have been made to harmonize national regulations and facilitate the emergence of a regional seed market. However, the access of the majority of WCA smallholders to certified seed remains problematic (Box 1). The rate of use of certified seed, particularly for food crops, remains low (12.5% on average in 2013). This situation reflects the low impact of the various public policies and interventions in the seed sector over decades and underlines the need to explore other options and to identify, if need be, the most effective levers to lift the challenges and harness the potentials.

This policy brief outlines the main results of a multi-stakeholder consultation process on identifying strategies to guide and improve the efficiency of public policies and private investments in the seed sector. This process was led by the Foundation for Agriculture and Rurality in the World (FARM) and the West and Central African Council for Agricultural Research and Development (CORAF / WECARD) with the support of their partners.

This document is intended primarily for decision-makers, investors and planners who, due to their involvement in the preparation, operationalization or support to agricultural development policies, have a central role to play in mobilizing levers and implementing guiding principles that are proposed. This document is also intended for (i) investors who need more and relevant knowledge to better target their interventions and (ii) actors of the seed sector who will find here a global overview of the state of the sector and actions necessary at their links and to the subsequent ones.

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**Box 1. Some major concerns of WCA smallholder farmers regarding access to quality seeds in WCA**

- Availability of varieties adapted to objectives, agro-ecological, socio-economic and conditions. The most important is not to have access to the best performing varieties, but to those that best suit objectives of farmers, their opportunities and challenges of their environment (biophysical and socioeconomic). Criteria for choosing varieties are increasingly taking into account climate change, nutritional value, etc.
- Intra- and inter-varietal diversity: Research tends to place less emphasis on varieties and species that are considered less strategic or not cost-effective, while those varieties who often require few external inputs are generally very important to producers. This is particularly the case for tubers and vegetable crops such as okra.
- Seed quality: Despite increasing efforts, fraud is still present in seed chains, resulting in poor seed quality. This problem is accentuated in the case of subsidized seeds.
- Timeliness: the low utilization of seed of improved varieties is also linked to the often late arrival of these seeds, whether through private suppliers (slowness in certification processes) or public suppliers (delay in the distribution channels for subsidized seeds)
- Economic accessibility: the price of certified seeds is still perceived as very high by many producers, furthermore seed breeders are raising issue of high production charges
- Access to related services: the use of improved varieties is perceived as an important sociotechnical change that can only be successful if adequate support in terms of decision making (agricultural advise, connection to markets) and access...
2 Process for the identification of levers

The multi-stakeholder consultation process involved representatives of all actors and stakeholders in the seed sector in WCA. This process consisted mainly in an electronic forum organized in March and April 2016 with the aim of contributing to the sustainable improvement of agricultural productivity based on a shared diagnosis leading to strategic and innovative actions for the development of the WCA seed sector. 352 people (including 21% women) from 47 countries scattered across 5 continents participated in the electronic forum. The participation of researchers and people from the private sector was very high. 28% of the participants actually participated in the exchanges with a total of 375 contributions. The analysis of the various contributions to the electronic forum led to results, conclusions and recommendations which were shared and validated during an international workshop held in Abidjan (Côte d’Ivoire) from 11th to 12th July 2016. The strong presence and the active participation in that workshop of categories of actors (Producers organisations, NGOs) who were under-represented during the electronic forum made it possible to attenuate eventual biases linked to the predominance of contributions submitted by actors from research and private sector during the electronic forum.

3 Overview of some recent developments and issues in the seed sector in West and Central Africa

3.1 A relatively dynamic seed sector

Recent years have seen several innovations that need to be well documented, consolidated and scaled up. One example is the adoption of the innovation platform approach, which allows value chain stakeholders to be involved in the process of varietal creation. Despite scarce resources, research has initiated successful efforts in taking into account criteria related to nutritional, climatic, economic and environmental challenges in breeding work. In addition, new hybrid varieties for crops as maize and rice have been created. Consultations between actors are strengthened, giving rise to partnerships such as those between producers and sorghum processors. The emergence of seed companies contributes to improving the structuring and professionalization of value chains. There are also some improvement in the development of public-private partnerships and dynamics of higher consultation for better programming of supply and demand. A regionalization of research efforts through the establishment of national centers of specialization (CNS) and regional centers of excellence (RCE) with specialization per commodity in the framework of programmes (WASP and WAAPP) implemented by CORAF / WECARD offers an opportunity to optimize resources.

At the institutional level, the key developments are the ECOWAS-UEMOA-CILSS partnership, which led to the development and progressive implementation of a harmonized regional seed regulation on quality control, certification and marketing in the sub-region. At the regional level, the West African Seed Committee (CoASem) was established to facilitate and monitor the implementation of the Harmonized Regional Seed Regulation. The CoASem is represented at country level by National Seed Committees (NaSCs). These arrangements are likely to encourage cross-border flows and the emergence of a regional seed market. One of the first results of these harmonization efforts is the production of a single regional catalog of seeds and seedlings. Moreover, the African Union Intellectual Property Organization (OAPI) accession to the International Union for the Protection of Plant Varieties (UPOV) is likely to facilitate the use protection of intellectual property rights and
stimulate breeding activities as it provides new opportunities for the protection of intellectual property rights (IPR). The Alliance for the Seed Industry in West Africa (ASIWA), one of the components of the West African Seed Program (WASP), is gradually expanding. ASIWA’s vision is "a sustainable, inclusive and effective platform for advocacy and action on key national and regional issues and for the development of the seed sector to increase the production, supply and use of quality seeds in West Africa ".

The majority of these evolutions are the fruit of the interventions carried out within the framework of projects designed to bring more or less concrete solutions to specific issues at some links of the value chain. But very often, these projects have a limited lifespan and the conditions for ensuring their sustainability and scale-up their results are not always taken on time before the closing. This limits the range and duration of effects that have been induced. In the context of breeding research, for example, many varieties have been created within the framework of projects. But the research centers do not always have the resources to ensure the maintenance of these varieties.

3.2 A potentially large but still poorly characterized demand

The demand for quality seed is considered potentially very high. In 2013, the potential market of certified seed for WCA was estimated at USD 1.7 billion but only USD 215 million was actually exploited. The problem of seed supply is less for commercial / export crops (cotton, oil palm, rubber, etc.) than for food crops, especially oilseeds, tubers and cereals (apart from rice and maize to some extent). Demand is not only relative to household consumption, it also includes needs of the agro-industry presently in a development phase in WCA. Beyond the quantitative aspects (availability and accessibility to quality seed), the problem of seeds is also qualitative (availability and accessibility to varieties meeting the demand of end-users). In addition to technical and economic criteria, demand is increasingly taking into account climate resilience, nutritional value, the possibility of growth on low fertile soils, etc.

3.3 The response capacity of the seed system is low

The seed sector in WCAis characterized by a multitude of actors with roles are often vague and diffuse. This sector is highly fragmented due in particular to the weak structuring of both supply and demand. The main suppliers in West and Central Africa are individual producers, seed farms, seed companies and multinationals seed companies (Table 1). Individual seed producers and seed companies are the main suppliers. They are characterized by a relatively strong territorial anchorage which allows them to develop social links with users and improve the physical accessibility of seeds. This social and territorial proximity gives users the opportunity to observe and appreciate in a real environment (fields) the behavior of the varieties that are proposed to them and to be able to make an informed decision.

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<th>Individual producers</th>
<th>Producers organisations</th>
<th>Seed companies</th>
<th>Multinationals</th>
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<td>Physical presence</td>
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<td>Territorial anchorage</td>
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<td>Local availability</td>
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<td>Communication on products</td>
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<td>Diversity of supply (varieties, species)</td>
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<td>Supply of related services</td>
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Caption. The number of “x” illustrates the level of occurrence of the response

Seed companies are distinct from POs and individual producers because they are organized into commercial companies and do often have a more diversified offer in terms of varieties and species. They often source from their own seed fields, but also and especially from individual seed producers
or organisations of seed producers with whom they have developed contractual relationships. WCA seed companies are still of small or medium size, but they are playing an increasingly important role in structuring and centralizing demand and strengthening links between users and seed producers. Some seed companies also market inputs and equipment for crop management (e.g. fertilizers, pesticides, etc.). One of the main limitations of seed companies is their low geographical coverage often resulting in poor physical access of smallholder farmers to seed. Multinationals are still few in number, probably because of the fragmentation of markets. They are mainly interested in major crops (e.g. maize).

Apart from multinationals seed companies, the emergence of most of the current seed suppliers is largely linked to institutional “markets” generated by the subsidy programmes. Their competitiveness is a challenge to meet if the regional seed market is to develop and attract more multinationals in a context marked by the Economic Partnership Agreements which will open further the African market to European firms. The diversification of seed suppliers poses the challenge of coordinating and valuing their specific assets. In some countries, these providers have organized themselves into networks or associations to better interact with other actors and stakeholders. In Burkina Faso, for example, there is a National Union of Seed Producers (UNPS) and the National Association of Seed Enterprises (ANES-BF).

These different seed suppliers often face the lack of breeders’ and parent seeds whose production is still exclusively part of the research mandate. The performance of breeding in WCA is very weak, particularly due to insufficient human, financial and logistical resources of research centers. Research is financed mainly by public funds which are characterized by the weakness and irregularity of their volume. Despite efforts, there is still a gap between the genetic materials supplied of and the end-users needs. The Plant Variety Protection Certificate (PVPC) is still very little issued and used in WCA for various reasons: in some countries, there is no regulatory texts on access to Intellectual property rights (IPR); non-conformity of national laws with the regional or international regulations governing certification and marketing of seeds and seedlings. Moreover, market of improved varieties is still seen as very small in order to encourage the acquisition of exclusive rights on varieties created. The seed sectors are characterized by a lack of governance system resulting in a mixture of roles and a lack of ownership from the multitude of actors and stakeholders.

### 3.4 Subsidies' policies have not produced the expected results

In several countries, seed subsidy programmes, which target in principle the poorest producers, were intensified over the last decade. To some extent, they have improved the access of poor small producers to certified seeds, induced adoption processes of new varieties, and overcome damages generated by crises (natural calamities, conflicts, etc.). However, questions are arising about the efficiency of these programmes and their effects on the seed sector as a whole. Characteristics (volume and quality) of the annual seed demand for these subsidies are often communicated lately to suppliers. Because of the weak involvement of beneficiaries and the private sector in the management of these programmes, these subsidies programmes are benefiting more "opportunistic" suppliers than professional seed producers and companies. The lack of rigor in fraud control mechanisms does not ensure the quality of the seeds that are distributed to farmers. Complaints about the low germination rate of certified seeds distributed under subsidy programmes are common. This problem leads to a loss of confidence among many farmers who now prefer to use traditional varieties from their own farms or community seed systems. This behavior tends to develop, especially since subsidized seeds are sometimes distributed lately, when the cropping season has already started.

### 3.5 The non-integration of traditional varieties accentuates the marginalization of smallholders

In West and Central Africa, there are two main types of seed systems, with more or less specific actors, products and operational modes. On one hand, there is the traditional or “informal” system, which is often very localized and serves mainly poor smallholders. In this system, the producer himself makes a selection of his seeds generally on a mass basis. He uses these seeds mostly of traditional...
varieties in its own fields, and exchanges or possibly sells the supplement. This system still provides the majority of seeds used in WCA. On the other hand, there is the "formal" system based on a varietal creation through research, multiplication and distribution by the private sector (companies, POs) with more or less strict compliance with the regulations. Increasingly, this formal system is extending beyond national borders thanks to the increased regionalization of markets and improved cross-border movement generated by the implementation of the regional harmonized seed regulations.

The estimated percentage of area planted with seeds from traditional and formal systems are 80 and 20 respectively. These two systems are not to be opposed, they are rather complementary. Depending on their objectives, crops or even the year, producers can source seeds from one or the other of the two seed systems. The majority of public policies and investments (funding, capacity building, coordination, etc.) for production, marketing, distribution and use of seeds are mainly directed at the formal system. The development of traditional seed systems and varieties is receiving only the attention of NGOs which, unfortunately, have very limited resources (technical and financial) to induce significant changes at a large scale. This is one of the key cause of difficulties to increase agricultural productivity among smallholders.

3.6 The disengagement of the State: an unfinished process

In several WCA countries, over the past decades, the State has been disengaging from some activities (notably the production of certified seeds) in order to concentrate more on its support functions of strategic orientation, regulation and funding of research. The expected result of this reform was the emergence of a strong seed industry, led by a strong private sector. In fact, we have seen the emergence of seed companies, some of which, such as Neema Agricole du Faso (NAFASO) in Burkina Faso, are now exporting seeds in the sub-region. Seed producers’ organizations (POs) that were initially focusing their activities on meeting the demand of their members are gradually developing and seeking to gain share of the domestic market, notably due to the relatively solvent institutional "demand" generated by subsidy programmes.

But overall the private seed sector is still very fragile, many seed companies are having difficulties to run marketing campaigns or to develop and implement a coherent business plan. The liberalization of the market has not been accompanied by the creation of favorable conditions for private investments. The regulatory framework for control and repression of fraud is still not very effective. Access to funding (operating capital or guarantee funds) remains a challenge. POs who are the main suppliers of seed in WCA are still struggling to find the right strategy to evolve from their basic associative model to a sound business model adapted to the rules and vagaries of markets. Moreover, they face the lack of storage infrastructures and operating capital. Recent years have witnessed the emergence of initiatives such as the West Africa Seed Programme (WASP) which is investing in capacities building of the private sector.

In several countries, there are no clear and well-articulated seed policies, interventions are often carried out on an opportunistic basis within the framework of projects. Regulatory and strategic frameworks set up to accompany the liberalization and support good governance and performance of the seed sector are sometimes superimposed, incomplete or not fully implemented. The reasons for this inadequate deployment include, among others, a discrepancy in the level of knowledge of texts by various actors, lack of political will and consultation, inadequate funding, lack of equipment and human capital. There are delays in the alignment of national with regional texts, particularly in the case of West Africa. The institutions in charge of implementing seed regulations do not have the level of resources needed to fulfill their missions. The case of national varieties licensing committees, which in some countries do not even have sufficient resources to meet at least once a year, is a strong example of this situation.

4 Six levers for the development of the seed sector in WCA

The process of consultation with stakeholders shown that the seed sector in West and Central Africa in its present state is not compatible with the objective of a sustainable increase of agricultural productivity. While it is important to recognize the value of recent and past interventions, it should also be noted that results achieved so far are far from the expected and that more appropriate efforts
need to be made. However, it should be pointed out, that future public policies and investments can effectively contribute to the sustainable development of the seed sector only if they are directed mainly towards the following six areas: (i) Implementing more coherent seed policies; (ii) Improving the governance of seed sector; (iii) Strengthening seed demand and supply; (iv) improving the performance and responsiveness of the research - development scheme; (v) Strengthening actors' capacities and facilitating involvement of youth and women; and (vi) Establishing appropriate and sustainable funding mechanisms. It is the accumulation of strategic outcomes of the six areas will lead to the improvement of the accessibility and use of certified seeds to meet demand (Figure 2). The six levers proposed are complementary and may have different priority levels depending on countries.

**Goal:** Sustainable increase in agricultural productivity

**Specific objective:** Improved accessibility and use of certified seeds adapted to demand

SR 1: Coherent seed policies are implemented
SR 2: An efficient mechanism for governance of the sector is put in place
SR 3: Seed markets are less fragmented and more attractive
SR 4: The R-D scheme is more efficient and in line with the demand
SR 5: Adapted funding is available to actors
SR 6: Empowerment of the actors is improved

*Figure 2. The six strategic outcomes to be achieved for the development of the seed sector in WCA*

### 4.1 Implementing more coherent seed policies

It is fundamental that each country define more clearly and / or update guidelines and the best and most sustainable economic model to ensure the supply of quality seeds, taking into account national realities and priorities. Alignment of seed policies and agricultural policies needs to be strengthened to address issues of complementarity with other components such as access to markets of agricultural inputs and products, soil fertility management, agro-industry development, agricultural insurance etc. which influence the use of seeds. The articulation of seed policies and the Agricultural Investment and Food Security Program at both national and regional levels would ensure coherence of interventions, facilitate the mobilization of resources for the development of the seed sector and the sustainability of interventions. Stronger support mechanisms (indirect subsidies schemes, guarantee funds, security of investments etc.) and increased involvement of private sector in the elaboration and implementation of policies would help to make the liberalization policy advocated since several years more effective and beneficial and consolidate the emergence of a strong seed industry. The exiting regulatory framework and strategic orientations must be revised to take into account recent developments in the context. Adequate resources must be provided for the effective implementation of existing frameworks, particularly for the ECOWAS-UEMOA-CILSS harmonized regional seed regulation, which has not yet been fully operationalized in some Member States.
4.2 Improving the governance of seed sectors

The improvement of the governance of the seed sectors is necessary to enable the various actors to fully play their specific roles and to have appropriate elements to manage the demand and the supply in a coordinated way. In this context, the role of each stakeholder in the seed sector must be clearly defined in order to better establish responsibilities, reduce duplication and create synergies in interventions. Functional dialogue spaces at national and regional level are needed, particularly for consultation, identification of innovation needs, coherence of interventions and elaboration of responses to challenges of the seed sector. In some cases, the establishment of existing platforms, such as National Seed Committees (NSCs) or National Platforms and the Regional Alliance for a Seed Industry in West Africa (ASIWA) will be revitalized or completed. Improved communication around legislative and regulatory texts is necessary to facilitate ownership and compliance by stakeholders. It is important that resources (human, material, infrastructural) and autonomy (status, funding) of services in charge of enforcing seed regulations be improved to reduce their vulnerability and improve their efficiency.

4.3 Strengthening demand and supply to reduce market fragmentation

A better structuring of supply and demand is essential to reduce the fragmentation and dysfunctions of the West and Central African seed markets which limit their ability to attract the volume of investment necessary for their development. A mechanism should be in place to generate and manage information and communication on the qualitative and quantitative characteristics of seed demand and supply at the national and regional levels. The www.wasix.net platform is an important asset that needs to be consolidated and popularized. Communication to end-users should be more participatory with a particular emphasis on the determinants and reasoning of producers regarding the use of seeds. Access to other inputs and services needed for the proper use of seeds should be facilitated. To have a greater impact, it is important to include the promotion of the use of certified seed in an integrated approach that takes into account access to agricultural services, capacity building of producers and respect for their liberty of choice of suppliers and varieties including traditional one. The same applies to seed subsidy programmes whose purpose and modalities are to be reviewed in order to improve their efficiency. It is necessary to promote the formalization of relations between actors (intra-private sector, but especially between the public and private sectors) into contractual partnerships in order to enhance the professionalisation of the sector.

4.4 Improving performance and responsiveness of the seed research - development scheme

Strengthening the match between demand and the supply of genetic material is one of the main challenges facing the seed research - development scheme (Box 1). The resolution of this concern requires a more participatory management of the research - development cycle. The increasing use of innovation platform approach must be consolidated. More generally, the revitalization and stronger involvement of agricultural extension and advisory services in the identification of the demand, participatory evaluation of varieties, and facilitation of interactions between actors, capacity building and support of adoption processes are part of the main levers to increase the responsiveness of the R & D scheme. Facilitating the procurement and enhancement of Plant Variety Protection Certificates (PVPC) will help improve research performance and funding. The rapid increase of agricultural productivity in WCA calls for efforts to create and disseminate new hybrid varieties of species of interest to producers. The lack of attention to varietal maintenance (including traditional varieties) is a gap that needs to be corrected by putting in place measures to preserve the genetic progress achieved and to have a richer and more reliable potential for future crop improvement. The issue of access to quality seeds should no longer be considered only in the angle of seeds of improved varieties. A better understanding and integration of traditional varieties and farmers’ seed systems in policies and investments would help to better meet the diversified demand.
4.5 Strengthening actors' capacities and facilitating involvement of youth and women

The complexity of the current challenges of the seed sector and the need to develop innovative and effective responses require that individuals, organizations and all stakeholders in general develop new skills and competencies. At the level of individual actors, capacity building needs relate to strategic thinking, good knowledge of the structure and functioning of value chains, technical skills, and organizational and interaction skills with other actors. At the organizational level, the main concerns to strengthen the capacity for mobilizing and managing resources (human, financial, material), revising strategic orientations and / or business models, developing synergies, adopting new tools, methods and practices. Particular attention will be paid to training of seed producers and entrepreneurs to support the emergence of a strong private sector. Capacity building must be gender-sensitive and give a priority to enhancing the potential of youth, women and vulnerable groups so that development actions in the seed sector do not accentuate existing inequalities between different socio-professional categories in the agricultural sector.

4.6 Making funding more sustainable and accessible to stakeholders

Solving the problem of quality, accessibility and sustainability of funding is important to enable individual and organizational actors to adopt innovations and acquire new capacities they require to meet the challenge of performance. For the sector as a whole, it is a whole new funding mechanism that needs to be put in place by drawing lessons from the various financing models used in recent years. Given the interdependence of different links of the seed sector, this financing mechanism should be more inclusive, that is, integrate the specificities of different actors and provide them a more appropriate support, with particular attention to young, women and vulnerable groups. The adoption of a successful business model for its varietal creation and maintenance activities is a vital necessity for research. A more direct and concrete participation of actors in the management of services they received will reduce the influence of political uncertainties and strengthen the sustainability of funding mechanism. Potential of private funding is still not yet fully harnessed. It can be better mobilized if adequate measures are taken to: increase awareness of actors on investment opportunities in the seed sector, reduce fragmentation of markets and secure investments.

5 Guiding principles for efficient interventions

In light of the lessons of past experiences and the current context, the following principles emerged as key elements for successful implementation of the various interventions recommended in this paper.

1. Programmatic approach: The systemic nature of the challenges and the interdependence of the different links of the seed value chains suggest a shift from punctual or one-off actions to a programmatic approach underpinned by a global vision. The duration of interventions should no longer be determined a priori on the basis of current habits or practices but should take into account the magnitude of efforts needed to induce the expected changes. The suggested long-term commitment is linked to the need to give priority to the establishment of mechanisms, to ensure their efficiency and to create conditions required for their sustainability before the exit of interventions.

2. Impact-based management: The implementation approach of interventions will be flexible and adaptive, taking into account interactions between actors as well as specificities of the context and their possible evolutions. Interventions will be accompanied by capacity development and creation of enabling conditions to ensure their success as well as the sustainability and scaling-up of their effects. At the regional and national levels, appropriate indicators for evaluating progress will be defined and measured regularly to guide the steering of interventions. The development of a producers’ access to seed index could be very useful for this purpose.

3. Partnership and subsidiarity: There is need for a greater recognition of the plurality of the seed sector and consequently the need for a diversity of initiatives according to objectives, needs and resources of actors concerned. Better coordination must be ensured and collaboration with all the other actors concerned will always be sought. Interventions should not conflict or contradict other initiatives unless if necessary to make corrections and ensure chances of success and impact.
Adherence to the principle of subsidiarity will be the rule by considering that processes and initiatives must be undertaken by the competent and operational levels closest to the place of action.

4. **Alignment**: Existing achievements, strategic frameworks and initiatives for the development of the seed sector at local, national and regional level must be taken into account. This alignment would facilitate the development of synergies, optimization of resources / cost sharing and sustainability of investments.

5. **Stakeholders’ participation and empowerment**: At each level of implementation, targeted stakeholders’ groups must be involved in the planning and management of interventions and benefit from capacity building operations necessary to enable them to pursue processes initiated and manage their effects.

6 **References**

