

Community-Based Seed Production System (CBSP) in Nigeria: An Opening for Complementing National Supply of Quality Seeds

Policy Brief 34 April 2018

Main Contributors to the development of this Policy Brief:

Dr Michael Boboh Vabi - ICRISAT Nigeria, Dr Philip Ojo - National Agricultural Seeds Council (NASC), Mr Ebiarede Zidafamor - National Agricultural Seeds Council (NASC), Dr Hakeem A Ajeigbe - ICRISAT Nigeria and Mr Hulu Ubanduma - National Agricultural Seeds Council (NASC)



Summary

Two seeds systems co-exist in Nigeria, the formal and informal systems. An integrated system (semi-formal) brings together core elements of both the formal and informal systems. In the semi-formal seed system, farmer groups produce, distribute and market Certified Seeds endorsed by the National Agricultural Seeds Council (NASC). The primary beneficiaries of the semi-formal system are members of concerned farmer groups and other farmers within and out of their communities. In 2016, NASC identified over 712 farmer groups engaged in the semi-formal seed system in Nigeria with 92% (655) engaged in the production, distribution and marketing of Certified Seeds and vegetatively propagated materials. Increasingly, this seed system is becoming the focus of technical and financial partners (donor) for enhancing the availability of quality seeds to farmers across West and Central Africa (WCA), including Nigeria. As an approach, the semi-formal seed system makes available farmer and market preferred seed varieties. Groundnut and vegetatively propagated planting materials notably yams, cassava, coco-yams, potatoes (Sweet and Irish) may well benefit from this system and contribute to making quality seed available to the anxious farming communities in Nigeria.

1. Community-based seed production (CBSP)

Is an approach directed at empowering registered farmer groups to produce seeds from traceable source(s) and make them accessible to other actors within and around their communities. This approach is protected by the Nigeria 2014 Seed Policy. It is both *community and market-oriented.*

2. Crops currently being promoted by CBSP

In **Nigeria** include Groundnut, Yams, Cassava, Cowpea, Ginger, Cocoyam, Potatoes (Sweet and Irish), Millet, Rice, Maize, Sorghum, Soybean and Sesame.

3. Approach and source data/information

The Nigerian 2014 Seed Policy and related legislations identify both the formal and informal seed systems. Likewise, evidence is also drawn from collaborative activities of NASC and ICRISAT beginning from 2015 on the implementation of the USAID funded Groundnut Upscaling Project. According to Nigerian Seed Policy, the formal seed system is guided by principles and clearly defined rules leading to seeds of traceable sources, clear genetic purity, physiological features and sanitary qualities while the informal system is unregulated and unorganized. The core element of the formal seed system is a clear distinction between '**seed**' and '**grain**'. The informal seed system encompasses all methods which farmers produce, disseminate and access planting materials









(seeds) from their own harvests, through exchanges and/ or barter between and among friends, neighbors and relatives including direct purchases from local markets. The core element of the informal system is **its flexibility**. A vast majority of resource-limited farmers in six African countries covering forty (40) crops were reported to access 90.2 % of their seeds from informal seed systems with 50.9 % of seeds being bought from local markets. Further, 55 % of seed was paid in cash, suggesting that farmers can effectively invest in securing quality seeds.

An **integrated system** (semi-formal) system brings together elements of both the formal and informal seed systems. In this system, farmer groups or producer cooperatives, produce and market seeds inspected by the National Agricultural Seeds Council (NASC). The supply outreach of these actors are members of their groups and other farmers within and around their communities. In a survey of registered farmer groups of the semi-formal seeds system carried out by NASC in 2016, seven hundred and twelve (712) farmer groups were identified, with 92% (655) engaged in the production and marketing of Certified Seeds in Nigeria (Box 1).

Increasingly, these farmer groups are being empowered by a wide range of donor-funded projects across the national territory. In general, empowerment events focus on the basic concepts and techniques of seed production, pre-and postharvest management of diseases/pests, seed management for Aflatoxins control, and the Nigerian seed policy and legislation. These have been the core areas of collaboration between ICRISAT and NASC on the implementation of the Nigerian component of the USAID funded Groundnut Upscaling Project *"Increasing Groundnut Productivity of Smallholder Farmers in Ghana, Mali and Nigeria".*

4. Impact of CBSP on the availability of quality seeds of groundnut

Within the framework of the implementation of the USAID funded Groundnut Upscaling Project, thirty-one

(31) hectares of improved varieties of Certified Seeds were established during the 2015 cropping season by individuals nominated by farmer groups. In subsequent cropping seasons, areas placed under Certified Seed have been doubling. Certification activities by NASC has also become regular with nearly 100 field inspections carried out during the 2016 and 2017 cropping seasons (Box 2). By the end of the 2017 cropping season, a total of 742 tons of Certified Seeds of groundnut were made accessible to desiring farm-families, in and out of the five States targeted for the implementation of the USAID Scaling project. Similarly, State-based initiatives for the multiplication and distribution of Certified Seeds of groundnut have been escalating. In Jigawa State, while 1,735 hectares were planted with Certified Seeds during the 2016 cropping season, this increased to 3,528 hectares during the 2017 cropping season. Likewise, over 10 tons of Breeder Seeds and 65 tons of Foundation seeds were made available to appropriate collaborators notably private seed companies, faculties of agriculture or crop protection of some State/Federal Universities and donorfunded projects engaged in promoting the groundnut seed system.

5. Actions to further develop and sustain CBSP

Initiatives by different levels of Government and donor funded projects to develop CBSP are already wide-spread in all the 36 States of Nigeria, including the FCT.- Federal Capital Territory. The enlightenments of potential users of improved seed varieties on the benefits of improved varieties and vegetatively propagated materials require strengthening using carefully designed dissemination materials. These actions also require the facilitation of the registration of desiring farmer groups with NASC, thematic trainings, provision of basic seeds to actors of different commodity value chains, seed certification activities, facilitation of connections between CBSP and private seed companies, grain producers, and agro-input dealers.



Box 2: CBSP - an approach that empowers farmers while ensuring seed quality

During the 2016 and 2017 cropping season, representatives of farmer groups in five project States were provided with Foundation Seeds of three improved groundnut varieties: SAMNUT 24, SAMNUT 25 and SAMNUT 26, fertilizers and seed dressing chemicals by the USAID funded Groundnut Upscaling Project. The farm-fields of representatives of the farmer groups were closely nurtured by the State ADPs and subjected to screening by field inspectors of NASC. At the end of each cropping season, in-kind repayments of the equivalents of the seeds and inputs were made to the ADPs. Three hundred and twenty one (321) representatives of these farmer groups also benefited from hands-on trainings delivered by NASC. A total of nineteen (19) of these seed producers are being linked to four (04) private seed companies in Kano State while the rest are being connected to agro-inputs dealers in other States; the objective being to explore win-win exchanges in the production, distribution and marketing of improved groundnut seeds.

6. Conclusion and Policy Implications

Ensuring quality seed supply to farmers across the national territory through the formal seed system is limited by several factors. Therefore the benefits of using improved seeds are not frequently maximized by small scale farm-families. The CBSP approach is worth nurturing to complement seed supply by the formal seed system in order to meet the ever growing demand of quality seeds from groundnut farmers in Nigeria. In deed the semiinformal seed system:

- has potential of making Certified Seeds more available to farmers at accessible, fair and affordable prices, and in the quantities they require at the right moments;
- it enhances investments by farmer groups thereby representing an option for livelihoods improvement in rural Nigeria;
- it ensures access to farmer and market preferred varieties.

Groundnut and vegetatively propagated planting materials notably yams, cassava, coco yams, potatoes (Sweet and Irish) may well benefit from the semi-formal seed system thereby contributing to ensuring overall quality of seeds and its supply in Nigeria.

7. Suggested Documents for Further Reading

Ajeigbe AH, Waliyar F, Echekwu AC, Kunihya A, Motagi NB, Eniayeju D and Inuwa A. 2015. A farmer's Guide to Profitable Groundnut Production in Nigeria. Patancheru 502 324, Telangana, India. ICRISAT 36 pp.

David S. (2004). Farmer seed enterprises: a sustainable approach to seed delivery? Agriculture and Human Values, 21(4), 387–397.

GTZ and **CGN.** (2000). Support for the informal seed sector in develop- ment cooperation: Conceptual issues (pp. 30): GTZ.

FMARD (2016). The Agriculture Promotion Policy (2016 - 2020): Building on the Successes of the ATA, Closing Key Gaps. Policy and Strategy Document.

ICRISAT. 2010. (editor). Village Seed Systems Improving Smallholders' Access to Seed and Agricultural Technologies. State of the Art on Semi-Arid Agriculture. 5 Apr. 2010.

Jones RB, Audi PA and Tripp R. (2001). The role of informal seed systems in disseminating modern varieties. The example of pigeonpea from a semi-arid area of Kenya. Experimental Agriculture, 37(4), 539–548.

Mcguire S and Sperling L. 2016. Seed Systems Smallholder Farmers Use. Food Security. DOI 10.1007/s12571-015-0528-8, Springer.

Sperling L, Boettiger S and **Barker I.** (2014). Integrating seed systems Planning for Scale Brief Number 3: AgPartnerXChange.

Setimela PS, Monyo E and Bänziger M. (editors). 2004. Successful Community-Based.

Seed Production Strategies. Mexico DF.: CIMMYT.

Sperling L, Boettiger S and **Barker I.** 2013. Integrating Seed Systems: Planning for Scale Brief Number 3. AgPartnerXchange.

Stewart DW and **Shamdasani PN.** 1990. Focus Groups: Theory and Practices. Sage, United Kingdom.

Vabi BM, Motagi NB and Ajeigbe AH. 2016. Developing a Sustainable Groundnut Seed Supply Chain for Nigeria. Internal Technical Document, ICRISAT, Nigeria.

Vabi MB, Ajeigbe HA Ishyaku Y Bala L and Affognon H. (2017). Moves to Determine the Price of Certified Seeds of Improved Groundnut Varieties: *Outcomes of focused group discussions in Northern Nigeria*. Paper Presented at the National Conference on Quality Seed Production in Nigeria. Conference Hall of the National Seeds Council (NASC), Abuja 1 3 July 2017.



ICRISAT is a member of the CGIAR System Organization About ICRISAT: www.icrisat.org ICRISAT's scientific information: EXPLORE*it*.icrisat.org ICRISAT appreciates the support of CGIAR investors to help overcome poverty, malnutrition and environmental degradation in the harshest dryland regions of the world. See http://www.icrisat.org/icrisat-donors.htm for full list of donors.

