UPSIDE

Northern Uganda Resilience Initiative (NURI) – Extension 2023

Pilot Activity report on Local Seed Business

December, 2023

PILOT ACTIVITY REPORT

Pilot Title:	Local Seed Business (LSB)
Brief description of pilot	NURI CSA Programme was centered on the provision of extension services to farmer groups focused on specific crops of their choice. This was done through group trainings and individual farmer visits which was supplemented by radio programs. It also included sessions on planning and marketing. Farmers were expected to adopt good agricultural practices for increased production. However, a major challenge in the adoption was access to quality and affordable improved seeds. NURI in the Extension period piloted the establishment of Local Seed Businesses (LSBs) among few well established and interested NURI farmer groups in an attempt to alleviate this challenge. LSB is one avenue to bridge the seed supply gap through supporting the sustainable production of Quality Declared Seeds (QDS). In addition, seeds for refugee support were often procured from far. LSBs will then provide an avenue for locally adapted seeds. It was noted that some NURI CSA groups were already a source of seeds for neighbouring communities including refugees. Exposing NURI CSA farmer groups to entrepreneurship of LSB could be a strategy to sustain them. The concept of Local Seed Business in Uganda was first introduced by Integrated Seed Sector Development (ISSD) Uganda and intended to address the inadequate availability of quality seeds for food security crops in the country often open pollinated varieties and vegetatively propagated. This was done in collaboration with the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) and the National Agricultural Research Organisation (NARO) and was meant to complement the existing formal seed system. NURI program sought technical support from ISSD in implementing the LSB pilot in order to learn from and build on the experience of this earlier programme. The Local Seed Business was piloted in 12 out of 13 districts NURI programme covered. The pilot activity selected 69 CSA farmer groups following an assessment carried out with focus on their interest and capacity. **General objective:** To increase supply of affordable, quality declared seeds to farmers, including NURI groups, while supporting suitable groups to develop seed businesses, thus contributing to their sustainability. **Specific objectives:** 1. To initiate and support LSB as a business venture in some NURI groups 2. To build the capacity of the selected farmer groups in LSB. 3. To improve access to affordable quality declared seeds (QDS) in the NURI areas 4. To test LSB approach for possible upscaling in the successor program NURI CF led the implementation of the pilot through its CSA partners; RAU Kitgum/Lamwo, RAU Adjumani, RAU Moyo/Obongi, PICOT, ARUDIFA and AFARD spread in the targeted districts. Additionally, it also received support from DLGs in form on field inspection and monitoring of the pilot. Others were NARO institutes, NARO Holdings Limited and Makerere University Soybean Project for technical information and foundation seeds, while MAAIF through National Seed Certification Services (NSCS) provided inspection of LSBs, certification of seeds and registration of LSB (ongoing). Approximately a budget of UGX 587 million was used to implement the program and this was basically covering procurement of foundation seeds and other basic field inputs, training staff, field inspections, monitoring of the activities, seed certification. The staff costs were not included here.
Brief description of context	**Weather:** This was most challenging especially for first season crops. There was prolonged dry spell which affected groundnut and cassava LSBs planted in first season. It resulted in delayed planting, poor germination, poor performance of the crops and some were totally destroyed. Second season rains were generally better except a few isolated places such as Parombo and Nyaravur sub counties in Nebbi district which remained dry for long. The inconsistent rainfall affected the performance of many LSBs as the yields were low for most crops. The variations in weather also increased groundnut rosette disease prevalence and severity. **Economic activities:** Farming is the main economic activity the community in northern Uganda was engaged however the poor weather as reported above affected it. There was very little first season harvest thus little for sale. The second season improved in terms of harvest. The poor harvest led to a

	spike in the average prices (UGX) of commodities as follows; Sesame 5,200-6000, beans 3,500- 5500, dry cassava 1300-1500, and soybean 2000-3000, Potatoes 1,000 – 2,500 and groundnuts (unshelled) 2,500 – 4,000. The demand was higher than supply due to failure in first season harvest. On the other hand, it excited the producers who had surplus for sale. **Security situation:** There was relative peace in northern Uganda which provided good environment for implementing the pilot. The few isolated cases of insecurity did not affect the LSB pilot implementation. **Food security situation:** Northern Uganda was relatively food secure although there were households that were really stressed due to first season crop failure. In Kitgum some food relief was provided by OPM. This situation improved with second season harvest and vegetable production which is often quick. There was generally high demand for grains and pulses as a result of poor harvest. **Support infrastructure:** the road network was fair in most areas thus access to LSBs was not hindered although became poor with second season rains. On the other hand, very few groups had stores or access to community-built stores meaning most groups stored the seeds in farmers houses or huts. **Social events**: Within the communities, events such as market days, funerals, marriage parties, etc predominated the social setup affecting implementation of planned activities like trainings, monitoring and field crop activities as the targeted group members took part in these social events. The staff regularly rescheduled activities due to postponements. **Coordination and Collaboration:** NURI had good working relationships or collaboration from DLGs, ISSD Uganda, NARO, NARO Holdings Limited (NHL), DLGs, Makerere University and NSCS/MAAIF during the implementation of the LSB pilot. ISSD provided the necessary guidance on LSB methodology, NARO institutes, NHL and Makerere University provided foundation seeds, the DAOs carried out inspection of the fields, DLGs carried out monitoring and NSCS/MAAIF offered NURI technical guidance on production of QDS. Other LSBs also proved helpful in providing NURI the necessary advice and mentoring.
Key project successes	***Key results include:*** 1. **Selection and Training groups on LSB methodology**: the selection criteria used picked best groups and training of all the 69 groups had moved on very well based on field monitoring visits, interactions and observations. They had understood all the 4 pillars of LSB. All the learning sites for seed production demonstrated good agronomic practices. Technical backstopping reports from ISSD Uganda consultants also indicated that to a great extent NURI LSB groups had good understanding of LSB methodology. 2. **Production of quality seeds**: the seeds produced from the learning plots was of high quality despite the poor weather and had drawn interest from the surrounding community who want to buy. The varieties planted also performed better than those of the farmers amidst the poor weather. This further attracted the interest from the group members and community. 3. **Linkages to key stakeholders:** NURI linked the LSB farmer groups supported to key stakeholders in QDS value chain and is confident that they can continue with LSB activities with little hustle. Notable linked to are; NARO institutes, NHL, Makerere University soybean project, MAAIF/NSCS, ISSD, LSB associations, private sector and DLGs for different services such foundation seed access, inspection, certification, technical guidance and packaging materials among others. NARO is considering using NURI LSBs in technology dissemination in its upcoming project. 4. **District support:** In all the districts where the pilot was implemented, the DLGs especially the DAOs have pledged to continue supporting these groups to grow. This shows that even beyond NURI program, there is a likelihood of continuity of the LSBs. This also stems from the cordial working relations NURI had with DLGs. 5. **Access to foundation seeds:** the program managed to access most foundation seeds of acceptable quality and quantity than anticipated. Information available was that to get foundation seeds, you had to book at least 2 seasons ahead which was worrying considering NURI was piloting for 1 year only and such time was not available.
Project shortcomings	Poor weather: The sporadic rainfall pattern in first season and a bit of second season affected the planting time, establishment of the learning sites / seed plots as well as performance of the crops across the project locations. In some cases, we registered total failure for groundnuts and cassava.

and solutions	The yield of most crops was below the research and district averages which is partly attributed to prolonged dry spells. Proper variety selection, timely planting and replanting where possible. Procurement of foundation seeds by farmers: The program had anticipated that most groups would buy foundation seeds for individual production to supplement the learning plots. However, very few groups heeded to this call and they gave various reasons such as poor weather, high cost of foundation seeds, wanting to first experiment with learning plots before investing their resources fully, lack of money, isolated cases of poor-quality seeds procured discouraged them etc. On the other hand, as per LSB methodology, the farmers shouldn't as much as possible receive handouts. This is a bit worrying in terms of their likely continuity. However, the learning plots surpassed their expectation in performance over their home saved seeds. The groups with good harvest from learning plots were asked to re-invest proceeds to procure foundation seeds and NURI staff continued to mobilise farmers to raise funds for buying foundation seeds e.g. starting seed box funds. Few groups have already booked for seeds and others were in process. Poor quality seeds: Cases of poor-quality seeds were encountered in form of adulteration, poor packaging for the cassava cuttings, small seeds / poor sorting, old seed, supply of different varieties than intended, diseased cuttings with CMD and CBSD etc. The program dealt with them on case by case such as rejection of consignment and replacement, sorting before planting, giving feedback to the suppliers, rogueing off types in the field. For cassava LSBs, NSCS agreed that cuttings be sourced from within the respective regions, inspected by DAO and LSB shall only raise first crop of cuttings and uproot. NURI also organised a stakeholders' meeting on access to quality basic seeds which drew different participants and this was much deliberated and some action points developed. Inadequate supply of foundation seeds: for some crops e.g. groundnuts it was not possible to get quantity of seeds required until first season harvest. However, the seeds came late for planting in some areas e.g. Adjumani where one LSB declined to plant saying it was late. The LSBs have been sensitized to pre-book for seeds to save them from the situation NURI went through in procurement of seeds for learning sites. Delayed inspection of fields by DAOs: there were some cases of delayed field inspection of LSB learning sites which were also serving as seed multiplication plots. This is worrying when farmers now take over. The DAOs and farmers have been encouraged to continually communicate so that this service is rendered timely. Short period to train NURI staff and farmer groups: Both ISSD Uganda consultants hired and NURI staff accented that the training for LSB was short. It should have been three weeks for staff it was compressed to 8 days split into two phases. For farmers, it should have been at least two years. It was agreed to select key topics, use of other participatory approaches e.g. twinning and exchange visits and future program should factor duration of training staff and farmers.
Lessons learned	**Farmers do not easily take up buying foundation seeds:** From this pilot despite selecting strong groups by the implementing units, very few farmers quickly accepted to buy foundation seeds. Other farmers first wanted to experiment with the learning plots that NURI program has established. Against this, it is not necessary to train all groups on LSB methodology since it is not easy for farmers to take buying foundation seeds and it's also time consuming. **Availability of foundation seeds:** During fact finding, it was stated that foundation seeds can only be procured after pre-booking but after trying different sources, NURI was able to buy foundation seeds for learning plots and farmers. However, in some cases the quality was poor. **Period to train LSBs:** NURI was able to train its groups within one year. This turn around period is short according to ISSD but commendable work was done. The groups will be left with some level of understanding with which they should be able to succeed in the seed business if they continue practicing. **LSB training biased to Agronomy:** NURI staff based on their training background had excelled training groups on module of being "Technically equipped" and this was evident from the learning plots established. In future it would be important to emphasise other modules especially "Market oriented" so that LSBs are strong on marketing aspects. It would be good to have staff who have agri business training background in the team so that this is delivered well. **Superior varieties acquired:** The varieties procured for learning plots were superior to the farmers

	grown varieties. They performed exceedingly well in prevailing weather conditions that were witnessed compared to farmers varieties and this has created demand from within the group members and surrounding communities. Farmers said the LSB varieties were drought tolerant and high yielding compared to theirs. **A mix of training methods is good:** NURI used a mixture of training methods; training sessions by AEOs, exchange visits and twinning visits with other mature LSBs. This was appreciated across section of groups interviewed about the training approaches that NURI deployed. **Weather vagaries:** Weather is a key success factor since this is a business. The weather in 2023 was generally bad especially first season. It caused total failure for some learning plots of cassava and groundnuts and such groups were totally discouraged. If farmers, more so beginners incur 100% loss , they may not again venture in LSB. . The yields of most crops were also below the averages which can impact on the profitability of such enterprises.
Follow-up Actions	**More Training of LSBs needed**: Much as NURI was able to train LSB groups within one year not all groups learnt at the same pace. There are some grey areas that warrant some follow up / mentoring to improve on them and motivate them to continue. At least one more year of targeted support would be ideal but unfortunately NURI is no more and this is left to any future program or partner or DLGs to consider. **Integration of LSB approach in overall program**: LSB should not be a stand-alone program but integrated along the main extension program and only be provided to few groups most especially after identifying good groups. It should come after first or second year of training groups on Good Agronomic Practices and CSA of crops being promoted and that will have covered one module to be technically equipped to a great extent. **Train more AOs for inspection:** There have been complaints of delayed inspection of the fields by some DAOs. This could be alleviated by training Agricultural Officers based at sub county level as this can result in timely inspection as it relieves pressure from DAOs' tight schedules. This can also increase interaction of LSBs with Sub County extension staff who can provide the needed technical guidance and support. **Focus attention on weak areas identified**: There are key areas that need attention; Poor resource mobilisation by LSBs for procurement of foundation seeds, NURI staff did not articulate well on business development, and strengthening linkages that are vital for LSB operation. Continuity of LSBs is dependent on farmers buying foundation seeds, able to sell their seeds profitably and have ability to connect with all key actors in QDS value chain. Short of that will lead to collapse of LSBs. These have not been well developed at time of NURI closure. **Integration of LSBs in other DLG programs:** There is need to encourage the DLGs to take promising LSBs into other programs supporting seed development e.g. National Oil Seed Project (NOSP). In Agago district one LSB – Kimato Kikano has been selected to benefit from this project. **Conclusion:** LSB pilot has been a success with great learning and recommended for inclusion in future programs of Danida. It has generated a lot of enthusiasm from participating groups who have pledged to continue even without NURI arising from the training they received and superior varieties. There is need to improve timely access to quality foundation seeds as the demand for improved quality seeds in the community is very high which provides a good market prospect.