

Strengthening Seed Delivery System for Dry land Cereals and Legumes in Drought-prone Areas of Uganda Project

The National Semi Arid Resources Research Institute (NaSARRI), one of the 16 Public Agricultural Research Institutes under the National Agricultural Research Organization (NARO) in Uganda, secured a grant of about US\$ 300,000 from the European Union to implement a 3 year Project entitled “*Strengthening Seed Delivery Systems for Dry land Cereals and Legumes in drought prone areas of Uganda*” also code named the “*Cluster Granary Seed (CGS) Project*” the project focuses on providing easy access to quality seed among resource poor farmers in the semi-arid region of Uganda. The project is being implemented in the districts of Kumi, Amuria and Kitgum. These districts were targeted so as to build the capacity of farmers who are recovering from the effects political insurgency and cattle rustling that greatly disrupted their peace to engage in productive agriculture for over two decades. Most of these farmers lost their property including seeds and crop diversity.

Generally, access to quality seed is a major challenge limiting increased agricultural production among the small holder farmers in Uganda. This coupled with the influx of fake seed on the market, lack of knowledge and skills in better crop production practices, increasing cases of drought, upsurge of pests, diseases, and weeds, poor post-harvest handling practices and declining soil fertility has left farmers helpless and impoverished in most of the areas previously disturbed by the insurgency in the Northern and Eastern Uganda.

To address the aforementioned challenges, the National Semi Arid Resources Research Institute (NaSARRI) in partnership with World Vision Uganda (WVU), and National Plant Genetic Resources Center (NPGRC) are to work together to implement the project activities to achieve the desired outputs in the affected areas.

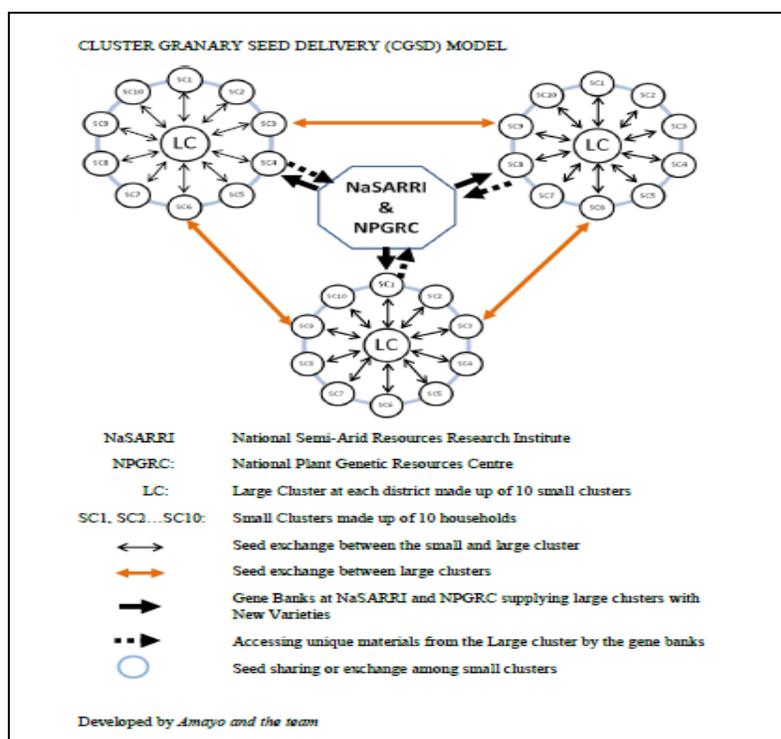
The project goal is to contribute to enhanced food security and adaptation to climate change in drought-prone areas of Uganda. The project outputs are;

- a) Diverse base of local / improved plant genetic resources adapted to drought prone areas assembled for access by farming / research communities
- b) Effective seed delivery model established to increase access to quality seed
- c) Capacity of farming communities to produce and conserve quality seed built

With support from the Local governments and corporation from farmers in the target districts, the project will be implemented using a participatory approach with the farming communities in the project area. A total of 600 farmers will directly benefit from the project and about 9000 farmers indirectly by the end of the project.

Project activities include; project inception meeting a baseline study to assess the current situation in the project area, Collection, assembling, characterization and conservation of crop diversity. Farmers will be mobilized into groups and trained in quality seed production and storage. The project will construct 33 community seed granaries (seed banks) to facilitate and operationalize the cluster seed granary delivery model and training farmers on quality seed production, and post-harvest handling practices. Establishment of demonstration plots for purposes of training in quality seed production. Project management activities, monitoring and evaluation and impact assessments will be conducted.

Initial seed will be availed to farmers by the project, and subsequently, farmers through seed loan approach will borrow and save seed in their community seed banks (granaries) as illustrated below.



An illustration of the Cluster Granary Seed Delivery (CGSD) Model

The project target crops include sorghum, finger millet, pearl millet, cowpea, pigeon pea and groundnuts. Under the cluster seed granary delivery model, a diverse base of local and improved plant genetic resources for the target crops adapted to drought prone areas will be easily accessible by the farming and research communities.

The project commenced June 2016 and is expected to run through to July 2019, and the project research and implementation team include; Mr. Joseph Wandulu (Project Coordinator and Crop Entomologist), Ms. Eunice Among (Project Assistant - NaSARRI),

Project Site Coordinators (Nick Owiny - Kitgum, William Olaun - Amuria, Opolot Clement-Kumi); Research team (Dr. Geoffrey Lubadde - Breeder Dr. Moses Biruma - Pathologist, Mr. Mbeyagala Emmanuel - Breeder, Dr. Wanyera Nelson - Breeder, Mr. John Ebiyau - Breeder, Mr. Robert Amayo - Pathologist, and Ms. Helen Opie – socio- Economist; and the implementing partner World Vision Uganda team (Mrs. Immaculate Sekitoleko – Contact officer)

Activities implemented in the first six months include an inception workshop where the National Semi Arid Resources Research Institute (NaSARRI) launched the “Cluster Granary Seed” (CGS) project to ensure access to quality seed by smallholder farmers in Eastern and Northern Uganda. The work shop was attended by the district production officers, district agricultural officers, resident district commissioners, district wealth creation officers, Subcounty agricultural officers, farmer representatives, women representatives, all invited from each of the project districts, the Curator – Plant Genetid Resources Centre – NARO, World Vision Uganda – as implementing partners, and some staff of NaSARRI. During the launch, Mr. Wandulu Joseph the Project Coordinator hinted that availability and easy access to quality seed to small holder farmers will enhance food security, better livelihoods and adaptation to climate change. Some of the target crop varieties bear desirable attributes including tolerance to drought, resistance to pests, diseases and striga weed, and high yielding.



Participants of the project inception workshop held at Akello Hotel, Soroti town, Uganda.

Germplasm collection for each of the target crop commodities was carried out in December 2016, while characterization and evaluation will be completed by the end of the first rainy

season of 2017. Partnership in project implementation with World Vision Uganda was established and mobilization of farmers into groups, preparation of farmer training and dissemination materials as well as the process to acquire land for granary construction in project areas is ongoing as we prepare to operationalize the Cluster Granary Seed Delivery Model.