



Community Seed and Food grain Storage- Useful in Natural Calamities, Helpful in Income Generation

Success Story of Gupteshwari Agriculture Cooperative, Hetauda

Background

The destruction of the 26 April 2015 earthquake and subsequent aftershocks had a massive effect on the agriculture sector of affected districts. Seeds and food grain storage facilities within households of farmers were severely damaged and stocks spoiled. At the request of the Ministry of Agriculture, SAMARTH implemented a post-disaster activity whereby constructed 15 earthquake-resistant seed and food grain storage facilities, which have 50MT capacity, in three districts of Nepal. This was succeeded through Samarth implementing partners in coordination with the Department of Agriculture, District Agriculture Development Office and the District Natural Disaster Relief Committee of Makawanpur, Tanahun and Lamjung.

Introduction

In response to the demand of the community, a seed and food grain storage has been constructed in Gupteshwari, implemented by their Agriculture Cooperative at Ward No. 13 of Hetauda Sub-Metropolitan City, which is now operated and led by local women. Up to the final period of construction in 2016, the storage facility was being run by a cooperative of 33 groups and 555 members. The share capital was NRs. 500,000.00 and saving was of NRs. 2.8 million. The cooperative, which had initiated the production, storage and marketing of improved maize seeds for commercial purposes since 2012/13, had also produced and marketed 38MT of improved maize seeds during this time.

In order to operate the storage facility in a sustainable manner the following programme objectives were implemented for this Cooperative, as well as other groups and cooperatives, with the assistance of SAMARTH and District Agriculture Development Offices (DADOs):

- The preparation of Commercial Action Plan for 3 years
- Provision of theoretical and practical training on production, monitoring, quality, supervision,

packaging, storage and marketing of seeds

- Provision of grants for 6 machines and various tools necessary for the operation of the storage facilities
- Developing a relationship with Regional Seed Examination Laboratory, Hetauda for the certification of seed quality.

Seed Reserve Fund for the Management of Natural Calamities

In order to preserve improved seeds and to insure some level of stability during times of natural calamities (such as earthquake, drought, flood, landslide, wild fire), the Gupteshwari Agriculture Cooperative has implemented a Seed Reserve Fund for 1,350 Kgs. of Rampur Composite maize seeds and 500 kgs. of improved rice seeds are stored in the newly-constructed Storage Facility as a fund.

Implementation of Pocket Area Programme for Commercialisation

This cooperative, has also been implementing the “Commercial Maize Seed Production Pocket Area Programme” under the Prime Minister’s Agriculture Modernisation Project, since April 2017. Under the programme a maize plantation machine, maize de-weeding machine and trolleys has been purchased; the cooperative is actively targeting a production level of 15 MT of basic maize seed, grown over 7.5 hectares of land, and an additional production of 70MT of improved maize seeds over 70 hectares using modern technology.

Additional Investment in Infrastructure along with Expansion of Business

The Cooperative has achieved its objective to harvest 30MT of seeds thus far in accordance with the commercial action plan. As a result, they have reached maximum utilisation of recently-constructed storage facility. In order to expand its commercial interests, the Co-op has applied for a 90% grant from Agriculture Engineering Directorate to build additional storage capacity, it has also constructed a community seed bank building, staircase and wall. In the future, this cooperative seeks to store 100MT of seeds in two storage facilities.

Implementation of Crop Insurance and Farmer's Library

To increase their skill foundation and mitigate risks this Cooperative has implemented a Crop Insurance Programme and Farmer's Library in cooperation with DADO Makawanpur.

Increase Income Levels through Commercial Production and the Sustainable Development by using a Market Systems Approach

The Cooperative has commenced the production of maize seeds in a commercial manner in accordance with commercial plan prepared under technical assistance programme of SAMARTH Nepal Market Development Programme for the maximum utilization of newly constructed seed and food grains storage facility. The cooperative has implemented its activities in cooperation with 135 farmers to produce 70MT of improved seeds and 20MT of basic seed across 70 hectares of land in 2017/18.

In order to expand its business, the cooperative has increased the group’s membership by 2 sub-groups and 40 members. As of now, the Cooperative has Rs. 750,000 of share capital and Rs.4 million saved. Its commercial maize seed production block area programme, from fiscal year 2074/75 (2017/18) under Prime Minister Agriculture Modernisation Project, is to increase membership numbers to 1,000 and to earn a net profit of Rs.1.5 million by producing and marketing improved and basic maize seed over 100 hectares of land, providing dividends to its members. Similarly, under diversification, it has commenced the production of bean seed and Remson Soya bean seed.

In regards to the organisational and scientific development of market system, The Cooperative has prepared a business model and activities under the technical assistance of SAMARTH Nepal Market Development Programme. The model set out an objective to obtain basic seed in cooperation with

DADO Makawanpur and Maize Crop Development Centre in Rampur, Chitwan, and distribute the same to seed producer member farmers for a fee. In addition, assistance to seed producer member farmers, the cooperative will provide fertiliser and extend offers of loans. The Cooperative will then purchase the improved seeds produced by them and will market in accordance their grading, packaging, quality certification and labeling strategy and provide storage. The improved maize seeds will then be sold to seed companies such as Nasik Seed Company, Community Seed Company and Agro-Vet.

Key Learnings and Conclusion

The seed and food grains storage facility plays an important role in supply, contributing to the chain of production, storage, processing, certification and sales and distribution of improved seeds, which is ultimately the backbone of agricultural production. To ensure and promote continuous and sustainable activities as carried out by Gupteshwari Agriculture Cooperative, there must be a regular supply of basic seeds from the authorities related to agriculture, an example of this being the Crop Development Programme under Agriculture Research Centre and continued technical assistance from District Agriculture Development Office's and crop supervision and seed examination under the Regional Seed Laboratory.

By installing community seed and food grain storage facilities, the production and productivity of seed production can be enhanced. This provides farmers with an opportunity to increase income levels and mitigate against post-harvest loss.. Furthermore, as the storage and management of seeds and food grains are carried out at local level, farmers have better access to seeds which support food and nutritional security. As for the product, it can now be stored and protected as it is resilient to external risks which is invaluable to rural communities. Long term, this supports the objective to increase the existing rate of minimum seed replacement (approximately 12%) to the target of 25 % of National Seed Vision, 2013-2025.