

## 29 Trinidad and Tobago

SJ Seed Savers

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### **Purpose and evolution**

Our community seed bank, registered through our agricultural company, Agro plus 2007, Ltd, emerged because of many factors. One was concern over the need to preserve local germplasm. Another was the desire to be able to procure planting materials and supply farmers in the various communities with the varieties and species that do best under local conditions. The seed bank is now part of a private enterprise, SJ Seed Savers, which has pioneered all seed operations.

Because we live in a multi-ethnic society characterized by multicultural practices, for example, concerning traditional foods, we recognized from the beginning that the conservation and sustainable use of diverse crop varieties was central. Diversity of varieties and species is the core of our business. Some varieties that we maintain have been grown for many generations. Because of our concern over the preservation of landraces and open-pollinated varieties, all our research and development activities have been carried out in close cooperation with institutions, such as CABI International, whose library here in our country has helped us in our research.

Our seed bank was created to supply seeds to farmers and home gardeners, and we have made tremendous improvements in many areas. For example, we were able to improve seed storage by installing ‘chillers’ to stabilize seed moisture content, and we acquired a parcel of land to conduct trials and seed selection. We have been setting up farmers’ groups and connecting farmers through our Facebook account. We are also a part of a civil society foundation that, since its inception in 2001, works with communities on such projects as backyard gardening for households.

The results have been excellent and include income generation, new working relations with new farming groups, and increased knowledge through cooperation with research agencies such as the Caribbean Agricultural Research & Development Institute (CARDI) at the university. We have worked with over 100 farmers in carrying out trials, and we provide part-time employment in growing and harvesting seeds for more than ten people.

In Trinidad, there are no gene banks; thus, preservation of genetic diversity is an uphill battle and it has become a lifelong passion and goal of our

organization. We are interested in further education in seed development and research, and working with CARDI has offered us much hope for the future. As an organization, we involve women and men and young people. All our educational programmes are available to everyone involved in the seed bank.

### **Function and activities**

The seed bank selects varieties of different species and grows them to supply farmers with seeds that are properly harvested for best quality. Appropriate chemical seed treatments and a storage system that involves the use of chillers make seed available throughout the year. Continuous germination tests are carried out to maintain viability. The bank uses materials of heirloom varieties of tomatoes, hot peppers (pimento) and various other chilies, melongene (eggplant), pumpkins, squash, beans, pigeon peas, bitter gourds and many more crops.

Due to changes in food culture, we have noticed that the flavours of landraces and heirloom varieties have become less popular. To some extent, we have been able to re-establish these varieties through our home garden projects, which are geared towards small-scale agriculture. In areas where employment for women is limited, backyard gardening projects help sustain households with food and also maintain a diversity of crops. We encourage the women to save some seeds and have organized short training courses in seed preservation for them. It has become evident to our seed bank that women in the community can play a pivotal role in ensuring the conservation of landraces and varieties that may not be in demand at present.

Each variety is labelled according to lot number and variety, and a logging system allows us to monitor and control how seeds are stored, selected and sold. We store some species that may not be for immediate use, but this germplasm is conserved for future development. Sometimes, it is used as stock material for grafting because of its exceptional resistance to pests and diseases.

### **Governance and management**

The bank is organized by small committees made up of farmers and volunteers, each with a specific responsibility: land preparation, costing, growing seed crops, harvesting, packaging, etc. Overall management is our responsibility. Seed sales take place through SJ Traders, the commercial arm of our enterprise. SJ Traders is a company that supplies agro-chemicals, fertilizers and various consumables to farmers according to international quality standards for both chemical and biological commodities. A percentage of the profits and sales from SJ Traders is used to manage and operate SJ Seed Savers.

Because of the conservation work we are carrying out, we are recognized by CARDI, the main seed body in Trinidad in charge of crop development and plant breeding. Through this connection, we have been able to modernize our operations and become more successful through the introduction of seed thrashers and driers and a greenhouse to grow lettuce for seed production in a

controlled environment that is not affected by rain. We also correspond with people with similar interests globally. SJ Traders finances our seed bank operation through sales of seeds to farmers and members of the community. We sometimes procure germplasm to develop a breeding programme that may be implemented in the future by SJ Seed Savers and collaborators.

There are no seed policies or laws in our country that apply to our work, except in relation to the import of seeds. Thus, we are free to work with what we have, develop our efforts and freely learn from others. However, we welcome assistance in whatever way that may be applicable to our situation.

### **Technical issues**

Seeds are selected, cleaned, stored and renewed using many techniques; some are selected based on time to harvest or weather conditions. Some crops are grown in the greenhouse. Some are stored and parent lines are maintained. We rely on traditional cultural practices for seed gathering and manual harvesting. We have taught the women of our communities to harvest and select seed. Attached to SJ Seed Savers premises is our nursery.

We use various techniques to guarantee seed quality and run a continuous programme to test germination. We use a logging system that involves documenting seed stock varieties, regeneration requests from farmers and other related information and an accounting system to record financial operations. Our youth programme has provided us with extra hands, as we train youth in the importance of seed selection.

Currently, we are establishing a web site for SJ Seed Savers, and we are in the process of inputting data so that computers can be used, through a customized programme developed by our group, to monitor and control all facets of the seed bank. We are confident that the use of this technology will make our job easier by tracking varieties, scheduling and accounting in a transparent, easy to use manner.

### **Achievements and prospects**

We have been able to select and supply over ten species of crop seeds, including tomato, sweet pepper, eggplant, okra, bitter gourds, cucumber, pumpkin and hot pepper, to over 100 farmers for a total of about 135kg of seeds. We have established a local chilling system for our seed-storage facility to maintain humidity at appropriate levels and store seeds as hermetically as possible. Through crop experiments, we have been successful in establishing varieties of pigeon peas, hot peppers, okra and other crops that do well under less than suitable conditions, e.g. drought, flood and other environmental factors.

Because of the increased availability of seeds to households in various communities, a surplus of food is now being produced, with improvements in quality as well as quantity. Households are now able to grow what they eat, eat

what they grow and sell some of the produce. This is having a positive impact financially.

For now, financial stability and operational sustainability depend entirely on us, the two founders. However, because of the strong interest in our efforts, we decided to set up a new organizational structure for SJ Seed Savers that will allow us to operate more effectively. The organization includes a manager, assistant manager, secretary, assistant secretary, public relations officer, three trustees, committee members and ordinary members. We are now ready to work with other seed banks around the world and exchange new germplasm for research and development providing that we meet international standards, such as phytosanitary clearance from the necessary authorities. As an organization, we look forward to procuring and helping to procure the future of germplasm and genetic diversity.

### **Acknowledgements**

We thank Bioversity International for giving SJ Seed Savers and, by extension, our island of Trinidad and Tobago the opportunity to let the world know about our enthusiasm and determination to perform this noble task of saving our landraces – and our world – for future generations while ensuring food sustainability and quality here and now.