

## Conservation of vegetable crop genetic resources, standardization of package of practice and testing the efficacy: Phase II

### Background



India has farming communities with an age old tradition of agro-diversity related knowledge and practice of mixed cropping with a wide range of species and varieties of vegetables/pulses. But the green revolution in late 60's has wiped out the diversity by introducing high yielding varieties of seeds essentially through monocropping practices of mostly rice and wheat with high external dependency, backed by government subsidies. The government run public distribution system also slowly brought limitations to the choices of food basket by promoting single type of food for all communities. Which ultimately leads to monoculturation of food culture/farming practices and erosion of genetic resources; ultimately the farmers fell in to trap of market forces and the community's rights are thus being reduced to only consume within the parameters decided by more powerful and distant entities.



Traditional crop varieties are important since these crops have harmonized over a long period of time with the environment and hence are easier to grow and demand less external resource leading to more sustainable and diversified food and farming system. The loss of those crop varieties will also affect the local biodiversity which increases the vulnerability of the farm, farmers and ecosystem as a whole. Apart from environmental factors, vegetable has a very important role to play in daily food basket of the rural community of West Bengal as a source of vitamin and minerals in absence of animal protein.

During 2009-11, with support from Aid India, DRCSC established Seed Bank and Seed Exchange network in 4 districts of West Bengal which are also the area of ecological stress.

1. Patharpratima, South 24 Parganas – salinity, waterlogging, cyclone
2. Hingalganj, North 24 Parganas - salinity, waterlogging, cyclone
3. Bagnaon, Howrah – Waterlogging
4. Alipurduar, Jalpaiguri – Landslide, poor soil, less organic matter

This phase has been designed on the basis of the learning outcome of the phase I.

### What we want to do

This phase is focused on creating awareness, standardise the package of practice and make the seed bank self sustained through marketing initiatives. We expect to involve more farmers who will be growing these vegetable in the locality. The specific objectives will be following

Objective 1: To create market opportunity of the already established seed bank in the locality

Objective 2: Popularising the variety of seeds that were collected in the phase I in the seed bank and initiating 2 smaller branches of the seedbank in Sunderban regions

Objective 3: Testing out the efficacy of the local variety in stressed condition of salinity in Hingalganj and Patharpratima.

### The Workplan

| Activity  | Timescale | How   | Output/Outcome                                |
|---|-----------|---|---|
| Objective 1: Making the seed database available for all | Month 1   | The seed database with more than 100 varieties of seeds with specific location of the availability will be uploaded in the website <a href="http://www.drcsc.org">www.drcsc.org</a> so that it is available in the public domain. | Seed information is available for larger use. |

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|---|------------|---|---|
| Objective 1: Planning of marketing strategy of the seed banks   | Month 1    | Group meeting with involved farmers of the bank.  | Specific strategy of marketing in each seed bank.   |
| Objective 1 & 2: Campaigns in the locality  | Month 2-10 | Campaign through wall righting, leaflet and notices in prominent space like Panchayet, Ration shops etc. We can try small meetings in prominent location on importance of local seed and seed rights etc.   | Increased access to seed bank.  |
| Objective 1: Putting up mobile stall in the village market  | Month 2-12 | One volunteer will be going to the weekly market with selected seeds in the local/nodal haat. There will be roaster in each bank.   | Increased access to seed bank.  |
| Objective 1 & 2: Workshop on packaging, labeling etc  | Month 1    | One day workshop in each location on seed packet to make it more attractive, user friendly with proper information.   | The acceptance will be increased with good packaging.   |
| Objective 2 & 3: Selection of few popular varieties by the farmers through SAS  | Month 2    | Selecting few popular seed variety according to experience of last 1 year, and through participatory exercises of SAS for selecting 10 most popular varieties in each location.   | 10 varieties in each location will be selected.   |
| Objective 2 & 3: Finalization of package of practice of the selected varieties  | Month 2-12 | Field trial in the seed plot to finalise the package of practice including time, duration, need of the crop, cultivation practice, seed preservation etc. This will be used in the seed packet and promotional programme. These seeds will be focused more. | Location specific package of practice will be developed with 20~35 varieties of indigenous seeds. |
| Objective 3: Testing efficacies of few selected vegetables against salinity in Hangalganj and Patharpratima through scientific field trials | Month 2-12 | Selecting few seeds from the seed bank which are grown in the saline soil and trial in the controlled seed plot in various saline concentrations. In Sunderban, the crop choices has reduced drastically after AILA due to salinity of the soil.            | Farmers will have scope of crops in the saline soil also.   |
| Objective 2: Initiating 2 new seed banks  | Month 6-12 | 2 new seed banks in Brajaballavpur and Shibganj, both in Sunderban, will be created. The study of best suitable crop according to earlier activities will be focused here.  | 2 new seed banks.   |

### Budget

| Activity   | Details  | Cost requested |
|--|--|----------------|
| Various meeting and capacity building workshop/training in the seed bank | Workshop and on packaging, crop selection and other meetings | 15000          |
| Various campaign   | Campaign, street corner on seed rights etc                   | 12000          |
| Marketing initiative   | Putting up stall, packaging materials etc                    | 20000          |
| Field trial  | Package of practice and saline tolerance                     | 15000          |
| New seed bank and followup of old banks                                  | 2 such   | 35000          |
| Documentation, reporting, leaflet, poster                                |  | 25000          |
| Follow up and monitoring   |  | 10000          |

|   |  |        |
|---|--|--------|
| Account, administration and other costs |  | 12000  |
| Remuneration                            | for the researcher, analyst and other resource persons | 216000 |
| Total                                   |  | 360000 |

**Total : Rs three lakhs sixty thousand**