



PROGRESS REPORT

USE AND CONSERVATION OF AGROBIODIVERSITY FOR INCREASED AGRICULTURAL SUSTAINABILITY, SMALLHOLDER WELLBEING AND RESILIENCE TO CLIMATE CHANGE IN INDIA - RAJASTHAN

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With effect from **1 December 2006**, IPGRI and INIBAP operate under the name "Bioversity International", Bioversity for short. This new name echoes our new strategy which focuses on improving people's lives through biodiversity research.

INTRODUCTION

Biodiversity is sustaining human population on the planet ever since the origin of human life. In the earlier days, biodiversity was abundant and flourishing luxuriantly under undisturbed ecosystems and could meet all the needs of limited population all over the world. However, now the trend is reverse. Population is ever increasing and natural resources including biodiversity on earth are fast shrinking imposing pressure on sustainable living of the human kind. This is more so with respect to biodiversity, as many of the land races, traditional cultivars and their wild relatives are disappearing fast due to continuous anthropogenic activities. Because of large scale industrialization, fast urbanization, mega hydraulic projects and surface road/rail network, many of the natural ecosystems /habitats have been destroyed resulting in increased number of endangered species and some of the rare species are already lost. Further large scale cultivation of improved varieties of only few crops namely, rice, wheat, maize, potato, tomato etc., large number of land races, traditional varieties and their wild relatives of several useful and nutritious crops are getting replaced. This has resulted in narrowing the range of biodiversity as the result shrinking food basket. Due to cultivation of monotypic and small range of food deriving spices, the nutritional and health insecurity is becoming glaring. Majority of the women and children in the developing countries with high population density are reported to be malnourished /under nourished. The food what majorities of people eat is devoid of vitamins, minerals and enzymes and as result, people are facing deficiency disorders besides losing immunity.

Realizing the grave danger to the biodiversity and in turn nutrition and health security, several initiatives are being taken across the globe both by national and international organizations. Bioversity International is research for development organization seeking solutions to global issues through conservation of agriculture and tree biodiversity. As a part of this agenda, Bioversity International had initiated a phyto-geographical baseline survey aiming at documentation of crop diversity both cultivated and wild, diet diversity and market diversity to understand the intrinsic relationship between crop diversity in cultivated and on open lands to the dietary and market diversity. The knowledge generated by the ABD-BS has been taken as the basis for designing and implementing interventions that contribute to improve their well-being of rural households in action sites.

DISTRIBUTION OF FRUIT TREE PLANTING MATERIAL TO IMPROVE HOUSEHOLD LIVELIHOOD AND NUTRITION

A joint meeting of all the CRP1.1 project sites viz., HRES, Vijayapur, Karnataka and HRS, Anantapur, Andhra Pradesh and Grameen Vikas Vigyan Sameethi, Jodhpur, Rajasthan was held at Horticulture Research and Extension Station, Vijayapur (Tidagundi) on 28th & 29th April, 2015 during which the following points were discussed for the smooth implementation of future activities.

1. Selection of households.

2. Arranging the awareness programme.
3. Finalization of the list of plants to be supplied.
4. Arranging the planting material of appropriate size, age and quality.
5. Arranging / ensuring inputs

Selection of Households: A minimum 150 households have been selected for fruit tree plantation in the 8 villages where survey was conducted in Rajasthan.

Awareness Programmes: Two awareness programmes were held at each site: first during 2nd and 3rd week of May and the second, in 1st week of June. In the first meeting, all the stakeholders were briefed about the programme in detail, role and responsibility of each partner, contributions /work elements, time schedule, selected plant species, cultivation practices etc. In the second meeting pamphlets were printed (250 nos.) duly following the points and distributed mentioning the title of the project, project partners and duration, role and responsibility of each partner, selected plant species, technology package and activity flowchart. These were circulated among all the three agencies with minor modifications to suit the local conditions.

Arrangement of Planting Material: Dr H B Patil Head HRS has co-ordinated the supply of identified planting material for the respective centres. Further, it was also decided to cover as many as new species excluding the commonly available local plants. Pits of the recommended size (1 m x 1 m x 1 m) have been prepared. FYM and neem cake is mixed and filled in the pits along with vermicompost. Soon after planting, a support and protection was ensured for better and early establishment. For ensuring moisture supply to the new plants, earthen pots/plastics bottles/other local available containers were buried in the soil as discussed and filled with water frequently during, non-rainy periods. All other plant protection measures are being taken as finalized. Weekly visit of the field supervisor and fortnightly / monthly visit of identified PIs are ensured to enable the better establishment and growth of the plants.

Meetings have been organised in each project village to generate awareness regarding nutrition, bio-diversity of food habits and role of fruits plants in house hold nutrition security especially in mother and children and elders. Beneficiaries were also educated about the methodology of plantation, pit digging, protection of plant, watering, disease control, after care of plants, role of each house hold and their commitment in the project etc. Besides this, distribution of leaflets, brochure about horticultural plantation was also done among the involved farmers. Planting material was purchased from CIAH, CAZRI, Horticulture Department and horticultural nurseries. The material has been planted to the action sites at farmers' field.

List of the selected species for fruit trees in Rajasthan

Sl No	Crop	Quantity of planting material/ seeds required
1	Lasoda	
2	Lime	
3	Ber	
4	Jamun (85, Bahadoli, KRCCH Arabhanvi)	60 plants
5	Bael	
6	Woodapple	50 plants
7	Pomegranate	
8	Sapota (Cricket ball, Kalipatti, DHS1, DHS 2 and DHS 2-1)	200 plants
9	Custard apple	
10	Karonda	
11	Amla	
12	Drumstick	0.5 Kg seeds