Minutes of the National Project Steering Committee Meeting held on 10 September 2021

To provide general oversight and guidance to the "UN Environment Implemented GEF Project 'Mainstreaming Agricultural Biodiversity Conservation and Utilization in Agricultural Sector to Ensure Ecosystem Services and Reduce Vulnerability' jointly executed by Bioversity International & ICAR, facilitate interagency coordination and monitor national-level activities and to present midterm review report, the meeting of the National Project Steering Committee (NPSC) was held on 10 September, 2021.

Brief background and summary of progress:

- Biodiversity and human society have existed together in a close and complex association over many millennia. Agricultural biodiversity that exists in and around India's different agroecosystems is used as food, forage, medicine, fuel, building material, or clothing and many other uses; the most important being the food. Crop genetic diversity is particularly rich in some parts of India and plays a major role in the livelihood strategies of rural and farming communities. This biodiversity, however, has been fast eroding after onset of 'Green Revolution' of mid-1960s. Therefore, conservation and use of land races are vital in meeting the unforeseen future demands of society especially under the changing climate and newer biotic and abiotic stresses evolved due to global warming. It is expected that increased diversity, both of traditional varieties and new materials, will have to be deployed to combat these problems. Consequently, continued availability of the unique diversity present in India's traditional crop varieties will be central to achieving these objectives.
- The present project, funded by the Global Environment Facility's Trust, is a full project with a total allocation of US \$ 13,341,097 out of which, US \$ 3.046,347 (22.83%) is in the form of direct GEF Trust fund and US \$ 10,294,750 (77.17%) is in the form of Co-finance from the Government of India through Indian Council of Agricultural Research, State Agricultural Universities and Non-Government Organizations. The geographical coverage of this project is limited to the north-eastern region, north-western Himalayan region, hot arid western region and central tribal region wherein nearly half of the area is inhabited by the disadvantaged hill and tribal farmers dominated by the women folk. Fig. 1 shows the location of project sites and crops selected to work on.
- The project with 20 sites and 20 crops spread over 4 diverse ecosystems across India, is expected to develop local community-based approaches, together with the necessary national framework to mainstream India's agricultural production and environmental management strategies through the following three inter-linked components:
 - ✓ Component-1. Adaptive management of crop diversity of 20 crops for resilient agriculture and improved livelihoods.
 - ✓ Component-2. Strategies and policies for sustainable conservation and use of crop diversity including access and benefit sharing (ABS).
 - ✓ Component-3. Improved agricultural support systems, institutional frameworks and partnerships that support crop diversity on farm through improved research,

hugut.

outreach & extension at national, regional and local levels.

- The implementation of the project started with signing of the contract with partners in October 2017. Inception workshop was held as planned and all the partners attended and were sensitized about the GEF/UNEP MTS on environmental priority, Agenda for 2030 on Sustainable Development Goals, Gender Equity, Bali Strategic Plan for Technology Support and Capacity Building (BSP) as well as South-South Cooperation (S-SC).
- After completing 03 years of work (in Dec. 2020), the most salient accomplishments of the project are listed as follows:
 - ✓ One hundred sixty-one (161) varieties identified from 2,762 landraces selected through PVS for the diverse use of farmers
 - ✓ Twelve products identified for value chain
 - ✓ Market value chain for nine crops completed many of which are rich in protein, essential amino acids and micronutrients like Fe and Zn
 - ✓ Five products commercialized and new markets established for them
 - ✓ Nutritional profiling 639 farmers' varieties completed
 - ✓ Five local Seed networks established in all four agro-eco-regions
 - √ Twenty-nine community seed banks established at 17 project sites
 - ✓ Two thousand five hundred (2,500) native varieties conserved in community seed banks.
 - ✓ Seed Multiplication of 161 farmers' varieties in place
 - ✓ Sixteen Community diversity registers at ten project sites in place
 - √ Two hundred ninety-eight (298) farmers varieties submitted to PPVFR Authority for registration and certificates for 59 of them issued
 - ✓ Forty-five crop diversity fairs, 149 workshops, 162 field day and 194 famers meetings organized at project sites
 - ✓ A strong network of four ICAR institutes, five SAUs, eight KVKs (Farm Science Centers)
 & seven NGOs established.
 - ✓ Six training workshops conducted till Decemebr 2020
 - ✓ Potential value-added products from nine crops identified and five of them (of rice) launched as 'Native Basket'.

The 3rd NPSC was attend by the following NPSC members

S. No.	Name	Designation
1.	Dr T Mohapatra	Secretary, DARE & DG, ICAR
2.	Dr T R Sharma	DDG (Crop Science), ICAR
3.	Dr H K Chaudhary	Vice-Chancellor, CSKHPKV
4.	Dr S K Patil	Vice-Chancellor, IGKV
5.	Mr Peerayot Sidonrusmee	United Nations Environment Programme
6.	Dr Ashok Kumar	Director, NBPGR
7.	Dr O P Yadav	Director, ICAR-Central Arid Zone Research Institute
8.	Dr Lakshmi Kant	Director, ICAR-VPKAS
9.	Dr C Tara Satyavathi	Project Coordinator - Pearl Millet, ICAR-All India Coordinated
		Research Project on Pearl Millet
10.	Dr B S Dhillon	Vice Chancellor, Punjab Agricultural University
11.	Prof S K Sharma	Emeritus Scientist & Former Vice- Chancellor, CSIR- Institute
en programme de la companya della companya della companya de la companya della co		of Himalayan Bioresource Technology
12.	Dr Sanjay Kumar	Director, ICAR-Indian Institute of Seed Science
13.	Dr Anil Gupta	Director, ICAR-Central Arid Zone Research Institute

14	4. Dr J C Rana	National Project Coordinator & Secretary of NPSC, Bioversity International
1!	5. Dr Lal Singh	Director, HRG, Shimla
-	6. Mr Ashis Mondal	Director, ASA, Bhopal
1	7. Dr Prakash Tyagi	Director, GRAVIS, Jodhpur
18	8. Dr S P Ahlawat	Head of Division, ICAR-NBPGR, New Delhi
19	9. Dr Deepak Sharma	Principal Scientist, IGKV, Raipur
20	0. Dr Rajwant Kalia	Principal Scientist, ICAR-CAZRI, Jodhpur
2:	1. Dr Mamta Arya	Officer-In-Charge, ICAR-NBPGR RS, Bhowali
23	2. Dr D J Nath	Principal Scientist, AAU, Jorhat
23	3. Sh Julious Lakra	Farmer, Village Salyadih, District Sarguja, Chhattisgarh
24	4. Smt Asha Tirki	Farmer, Village Bansajhal, District Sarguja, Chhattisgarh
2!	5. Sh Dinesh Rajwade	Farmer, Village Ghugra, District Korea, Chhattisgarh
20	6. Sh Kar <mark>am Sing</mark> h	Farmer, Village Samnos, District Mandi, Himachal Pradesh
2	7. Smt Sarda Devi	Farmer, Village Kandhi, District Mandi, Himachal Pradesh
2	8. Sh Mast Ram	Farmer, Village Baniseri, District Mandi, Himachal Pradesh
2	9. Smt Kaushlaya Devi	Farmer, Village Sias, District Mandi, Himachal Pradesh
30	O. Sh Narbad Singh Paraste	Farmer, Village Bijoura, District Umariya, Madhya Pradesh
3:	1. Smt Sunita Singh	Farmer, Village Koudia, District Umariya, Madhya Pradesh
3	2. Sh Dhura Ram Male	Farmer, Osian, District Jodhpur, Rajasthan
3:	3. Smt Geeta Devi	Farmer, Osian, District Jodhpur, Rajasthan
34	4. Sh Sunil kumar Varma	Farmer, Village Pagarkhurd, District Satna, Madhya Pradesh
3:	5. Smt Aditya Narayan Shukla	Farmer, Village Amiriti, District Satna, Madhya Pradesh

Purpose: To present the action taken report for the previous NPSC meeting and to present project progress and Mid Term Review report of the UN Environment program implemented GEF project "Mainstreaming agricultural biodiversity conservation and utilization in agricultural sector to ensure ecosystem services and reduce vulnerability".

Expected outcomes:

- Project implementation progress including Mid Term Review report presented and approved
- GEF cash finance and co-finance report presented
- · Project implementation challenges identified, and possible solutions agreed
- No cost extension approved

AGENDA - NPSC Meeting

10 September 2021									
10.00 - 10.10	Welcome	of	the	NPSC	Chair	and	members	by	Jai C Rana

Mugnt.

	National Project Coordinator and presentation of action taken report	
10.10 – 10.50	Presentation of Mid Term Review Report (i) Presentation of Mid Term Review Report and Impact performance on Outcomes/outputs (against indicators and targets) (ii) Major Findings, and Recommendations (iii) GEF expenditures and delivery on Cofinance	HS Gupta and Jai C Rana
10.50 – 11.10	Review and discussion by NPSC members	NPSC members
11.10-11.25	Remarks by the Chair, NPSC	T Mohapatra
11.25-11.30	Vote of thanks	Sonal Dsouza
	Next steps: Follow up on the MTR recommendations (e.g. prepare NCE); prepare 2022 workplan and 2022 budget; others as result of PSC?	Jai C Rana and Max Zierer

Recommendations of the NPSC

On the basis of mid-term review report presented and suggestions of the NPSC members, the following recommendations were made to further follow up by the project team.

- Registration of farmers' varieties with PPVFRA should be expedited as it is an important step in ABS. Fifty-nine varieties out of 298 submitted to PPVFRA, have been registered so far. Therefore, registration of rest of the varieties should be completed with PPVFRA. Action: Jai Rana and project team by Dec. 2022
- √ Value chain analysis of all other crops for which it has not been done such as millets and
 pseudo-cereals should be completed fast. ICAR-VPKAS, Almora should focus on the
 preparation of value-added products like cookies, cakes and tarts. Action: Jai Rana, ICARVPKAS and NGO partners by Feb. 2022
- ✓ Out of 161 potential land races, nutritional analysis of 121 has been done. Analysis of the remaining 40 should be expedited so that value chain analysis can be undertaken in other crops too. Special emphasis should be given on analysis of protein, micronutrients like Fe, Zn, β-carotene and complex starch for low glycemic index. Action: Drs. SP Ahlawat (PS) and Rakesh Bhardwaj of ICAR-NBPGR, New Delhi by Feb 2022
- Nutritional analysis of the most potential land races used for value chain should be confirmed from any ISO17025 accredited lab. Action: Dr Rakesh Bhardwaj of ICAR- NBPGR, New Delhi by December 2022.
- ✓ It is expected that elite landraces of most of the 20 crops will soon enter in value chain and will see light of the day by linking them with regional and national market. However, it would be worthwhile to identify few land races of high value crops and share them with plant breeders in NARS to improve and purify them so that those can be bring in public seed chain. Action: Dr Deepak Sharma- Regional Coordinator, CTR, IGKVV, Raipur all other Regional Coordinators by Oct. 2022.

- ✓ Leh and Kargil are important sites in high altitude area and are endowed with rich crop biodiversity. The work remains incomplete as trials for only one crop season were conducted; therefore, a concerted effort should be made to select unique land races of naked barley, buckwheat, mustard & kidney bean and value chain established during the crop season of 2022- Leh based. Action: Consultant, Bioversity Intl., New Delhi and ICAR-CAZRI's Regional Station at Leh by Nov. 2022.
- ✓ There is need to undertake complete analysis of community Seed Banks in order to identify the issues, challenges, opportunities and sustainable solutions to strengthened these. Action: Jai Rana, PC, Regional Coordinators and Director, IISS Mau
- ✓ Post-harvest handling of small grain cereals should be strengthened so that drudgery of the farmers especially of women farmers are reduced through machine threshing like Millet Thresher-cum-Pearler (17 already given) and small rice mill for milling of rice. Action: Dr Lakshmi Kant, ICAR-VPKAS, Almora for millets and Dr Jai Rana for rice by Dec. 2021.
- ✓ Efforts should be made to design and develop attractive packaging (comparable to what is available in the market) by organizing interaction with experts in packaging and marketing. Action: Dr Jai Rana, PC by Feb. 2022.
- ✓ The success of the project will depend mainly on increasing the demand through strong marketing links at regional as well as national level, therefore efforts should be made to linkFPOs with on-line marketing agencies like Amazon, Flipcart & Reliance-Jio etc. Action: NGO Partners of all the four Agro-eco Regions by June 2022.
- ✓ Covid-19's pandemic has adversely affected the speed of implementation, and the Covid-19-appropriate restriction are likely to continue further; therefore, concerted efforts are needed by all the partners to conduct online meetings frequently. In addition, procurement of materials should be completed in time-bound manner by the end of 2021. Action: Jai Rana, PC and all the Partners by Dec. 2021.
- ✓ The project, is expected to fulfil all the objectives provided the loss of eighteen months of time due to delayed start and Covid-19 pandemic, is compensated by allowing eighteen months (18) of no cost extension. This will also enable the project to contribute effectively to the Decade of Ecosystem Restoration Project Steering Committee, TM and UNEP by November 2021. Action: NC and TM at UNEP-GEF
- ✓ A 'SUSTAINABILITY FUND' in the name of SHGs/Farmers Group may be created in which 5% of the cost of inputs provided free to the farmers and 5% of the net profit received by the FPOs are deposited at each site for use by the farmers' groups after completion of the project and withdrawal of the manpower and other facilities. Action: All the Regional Coordinators and PC of the project by March 31, 2022

Dr T. Mohapatra

Secretary DARE and DG, ICAR

Chairperson, National Project Steering Committee

Jai C Rana

Project Coordinator

Member Secretary, NPSC