



RAJASTHAN FORESTRY AND BIODIVERSITY PROJECT (PHASE-2)



ANNUAL REPORT 2013-14



RAJASTHAN VANIKI EVAM JAIV-VIVIDHATA
SANRAKSHAN SOCIETY, JAIPUR (RAJ.)



RAJASTHAN FORESTRY AND BIODIVERSITY PROJECT (PHASE-2)

ANNUAL REPORT 2013-14

FOREST DEPARTMENT
RAJASTHAN





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VASUNDHARA RAJE

CHIEF MINISTER RAJASTHAN

MESSAGE

In an increasingly connected world, development management in order to be successful, calls for active participation of all stake holders. In case of natural resource management this dictum holds true and if finite natural resources have to be conserved sustainably the active involvement of the people becomes essential. Ancient traditions show us how natural areas like local populations could manage forests. Today, we seem to have done a full circle and once again are looking at active participatory management of forest resources.

For an arid state like Rajasthan, forest resources play an important role in climate change mitigation. Moreover, the same wilderness areas are sources of livelihoods and provide opportunities for recreation. It is important that management practices are engineered to fulfill the multiple objectives of conservation, climate, livelihoods and tourism.

It is good to note that the Rajasthan Forestry and Bio-diversity Project (Phase-II), with the financial assistance from Japan International Co-operation Agency (JICA) is under way full swing in the state. Aimed at protection and bio-diversity conservation through participatory management of forest resources, this project is also promoting supplementary income generation for local inhabitants and promoting eco-tourism.

I wish all agencies involved in execution of this project the very best and look forward to time bound and qualitative achievement of the project objectives.

(Vasundhara Raje)



O. P. Meena
Chairman GB, RVJVSS
& Additional Chief Secretary
Forest & Environment



MESSAGE

Rajasthan Forestry and Biodiversity Project (Phase -2) has completed three years. After the preparatory phase of two years in which the emphasis was on establishing the processes and strengthening of project executing bodies, the third year marked the beginning of the implementation phase.

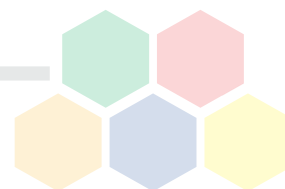
The year witnessed activities being initiated under all the project components and successful completion of already initiated ones. The project has made steady progress in almost all the components and is likely to achieve all the set targets in the stipulated time frame.

I wish all the officials of PMU, technical consultants, subject experts, support staff, NGOs and other department colleagues involved in the execution of project activities at various levels, success in their endeavor.

Best wishes,



(O. P. Meena)



From the Project Director's desk...



Conservation of natural resources and biodiversity is of utmost importance. Especially in a state like Rajasthan with severe climatic conditions, sustaining the forestry development is a challenging task. Rajasthan Forestry and Biodiversity Project (Phase-2) being implemented with the financial assistance from Japan International Cooperation Agency (JICA) envisages to enhance the forest area and livelihood opportunities of the forest dependent people besides conserving biodiversity.

By the end of third year of the eight year project duration, RFBP-2 has made significant progress in all the project components. After the establishment and strengthening of project executing bodies in the preparatory phase lasting first two years, the focus shifted to field activities in the third year which was beginning of the implementation phase. It is very heartening to note that the efforts put in ground building activities have paid rich dividends. Capacity building & training of VFPMC members, partner NGOs and RFD staff have resulted in preparation of more accurate microplans, more precise GPS data collection and effective implementation of field strategies.

I applaud the hard work put in by forest department officials, project management consultants, resource organisation staff, partner NGOs, VFPMC / EDC members and all those who have been a part of this journey so far. I am confident that the continued motivated efforts by project executing bodies will take this project to new heights.

(A.K. Upadhyay)



Journey so far....

Rajasthan Forestry and Biodiversity Project (Phase - 2), the fifth JICA assisted forestry project in Rajasthan, was started in the year 2011-12 covering Fifteen districts and Seven WL Sanctuaries over a period of eight years i.e. up to 2018-19. The project, with a total outlay of Rs 1152.53 crores, involves undertaking Afforestation, Soil and water Conservation, Biodiversity Conservation, Poverty Alleviation and Livelihood Improvement activities in 650 villages of the project area through active participation of villagers under the Joint Forest Management (JFM) approach.

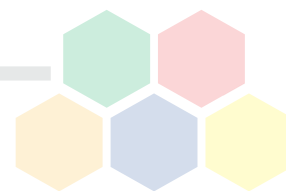
Unlike earlier foreign aided projects there are certain unique features of this project namely:

- First project to be implemented on society mode in which Project Management Unit has been registered as a Society.
- The entire project is process oriented and lays emphasis on developing and establishing systems and procedures.
- 'Village' is the basic unit and Village 'Microplan' is the base document for undertaking various activities under the project.
- NGOs have been deployed by each DMU to help in formation of VFPMC/ EDC, prepare microplan, community organization, capacity building, executing poverty alleviation & income generation activities and extending support to DMU/FMU/VFPMC.
- International and National consultants have been engaged for technical inputs and assistance on different subject matters.
- Resource organization has been appointed for providing various services and support to PMU. The resource organization has provided specified numbers of subject matter specialists, GIS & MIS analysts, project executives, offices executives etc.

The entire project area has been divided into 25 Divisional Management Units (DMUs) and 80 Field Management Units (FMUs). Of the 650 selected villages 340 are in ten desert districts, 250 are in 5 non desert districts and 60 villages are in fringe area around 7 wildlife sanctuaries.

The project involves various activities under Afforestation, Agroforestry, development of Water Conservation Structures, Biodiversity Conservation, Capacity Building, Poverty Alleviation & Livelihood Generation, Community Mobilisation, Monitoring & Evaluation and Project Management components.

Before the commencement of project activities in a village, its Microplan is prepared which is like a village development document that lists out almost all the activities that are necessary



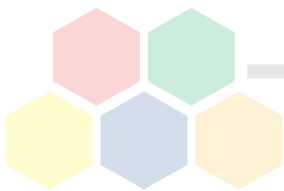
for integrated socio-economic development of the village and its inhabitants taking into account the natural, ecological, social, human, animal and skill based resources of the village. The preparation of micro plan is preceded by R.R.A. and P.R.A. of the village along with detailed interaction with the villagers, VFPMC/ EDC members and local NGOs. The whole exercise is undertaken by partner NGO under supervision of forest officials. Participatory Rural Appraisal (PRA) methodology helps to identify and prioritize the various needs of the village community. Once approved the prescriptions made in micro plan forms the basis for undertaking project activities in the village. A Microplan contains:

- Comprehensive profile of the village detailing the demographic data, land use classification, cropping pattern, natural resource, ecological status, socio economic condition, physical infrastructure as well as human resources and skill available in the village.
- Identification and prioritization of problems which could be addressed either directly through the Project or through convergence with other agencies/ line departments.
- Identification of poor and forest dependent communities for poverty alleviation and livelihood interventions.
- Pre project values of tangible indicators for monitoring and evaluation of project induced impact.

Entry point activities (EPA) are also undertaken in the project villages to inculcate credibility and acceptance of project staff among the villagers during initial stage of the project.

Capacity Building is also a very important component of the project and Institutional capacity building is an integral part of it. Though the Institutional Capacity of Rajasthan Forest Department is sufficient to manage and sustain the forestry and biodiversity conservation activities, however the mechanisms like microplanning, IGA through SHGs and JFM require significant change in orientation of the staff to adopt a new role such as trainer, leader and facilitator. Furthermore, the project involves multiple stakeholders and partners, it is vital to build up suitable capabilities at each level.

In the backdrop of above points a dedicated wing has been formed for Capacity Building which is responsible for Capacity Building, Research & Training. So far, approximately 23000 participants have been benefited through trainings based on cluster approach and the emphasis is on creating an echelon of master trainers. Trainings have been organised starting from grass root level like VFPMC to the level of Dy. C.F. The major emphasis has been on VFPMC members and NGOs. These efforts have resulted in timely submission of microplans,



proper GPS & GIS data from field, better coordination, communication and execution of project activities.

One of the major thrust areas of the project is Biodiversity Conservation. It is being undertaken by two forms- with EDCs at 60 villages in the fringe areas of selected 7 wildlife sanctuaries and directly by RFD. The activities to be undertaken with EDCs include Drainage Line Treatment, Development of water points and Closure for biodiversity conservation. The activities taken up directly by RFD include:

- In-Situ Conservation of Germplasm (Four horned antelope in Kumbhalgarh & Sitamata wildlife sanctuaries and Great Indian Bustard in Desert National Park, Jaisalmer)
- Creation of new Biological Park (at Machia, Jodhpur)
- Development of Biological Parks (at Nahargarh, Jaipur and Sajjangarh, Udaipur)

Significant progress has been achieved in this and all the three biological parks are likely to be operational by end of next financial year.

RFBP2 includes many interventions which have spatial component as an important attribute. For Monitoring and Evaluation of such interventions GPS, GIS and Remote Sensing techniques are being used. Knowing the exact ground location of an intervention is a vital information and is measured using Global Positioning System (GPS). Training on GPS Based Survey, Demarcation and Mapping have been organised in all DMUs and Etrex 20 GPS instruments have been procured for each DMU.

To provide technical advice and guidance for various project components and activities services of Project Management Consultants (PMC), consisting of international and local consultants, have been engaged.

To provide various support services to the PMU, a consultant organisation has also been selected which has provides subject matter specialists, GIS & MIS analysts, project executives, office executives and office boys.

To sum up, the project has made steady progress in first three years. The various milestones achieved despite initial teething impediment are quite encouraging and project is likely to achieve all the objectives as envisaged.

Project Progress

The project activities have been divided into three phases, namely; - preparatory, implementation and closing. During preparatory phase emphasis was laid on establishing project executing bodies besides focusing on other ground building activities required for successful execution of the project activities. A package based approach has been adopted in this project where project activities have been grouped in ten different packages. Each package comprises of a set of similar kind of works that are to be implemented.

In **Afforestation** package, as shown in Appendix- 1 14% of planting targets were achieved till March 2014 and about 27% of planting targets are likely to be achieved by the end of 2014-15. The plantations activities are regularly inspected and monitored by the officials of PMU, PMC, RFD, DMU and FMU to ensure proper implementation.



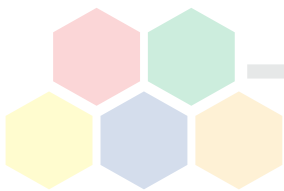
In **Agroforestry** package, 37 SHGs have been formed and 8 were trained for raising seedlings upto 31.03.2014.



Under package-3 of **Water Conservation Structures** 17 Anicuts, 28131 Cumt Check dams, 71082 Rmt Contour bunding, 105 Percolation tanks, 30 Renovation of traditional water harvesting structures, 47 Silt detention structures, 133 Gabion structures have been constructed upto 31.03.2014.

In the **Biodiversity Conservation** package, steady progress has been recorded with formation of Micro Plans of

45 villages out of a total of 60 fringe villages to be covered under the package. Progress of other activities like DLT works, development of water points and construction of biodiversity



closures have also been satisfactory. The three biological parks (Machia, Sajjangarh and Nahargarh) are likely to be operational by March 2015.

In **Poverty Alleviation and Livelihood Improvement** package, 258 SHGs have been formed till March 2014, out of which 72 have initiated income generation activities



after receiving relevant training. Formation of remaining SHGs along with their training and capacity building is under progress. Suitable income generation activities have been identified and efforts are on for establishing market linkages. Convergence possibilities with other schemes are also being explored.

Under the **Capacity Building, Training and Research** component more than 22000 participants have been benefitted under various training programs and other activities listed under the package. So far the focus has been on the training of VFPMC members, identification of master trainers and their capacity building. Orientation programs for NGOs and skill enhancement trainings for SHGs have also been conducted. Besides organising training programs for the project, support has been extended to RFD by organising training programs for newly recruited forest guards / cattle guards on GPS based survey, demarcation and mapping.



In **Community Mobilisation** package, one of the most important activity is preparation of village micro plan. Till March 2014, 400 Microplans have been prepared and this process is likely to be completed for remaining 250 villages by March 2015. Entry point activities have

also been undertaken in accordance with the requirement of the community. This has resulted in generation of interest and enthusiasm amongst the community towards the project.

The **Monitoring and Evaluation** package consists of (a) Development of customized GIS/MIS based Monitoring Tools, (b) Studies, Evaluation, Reports & Publications



and (c) Monitoring & Evaluation work at PMU & DMU level. The PMU has a fully operational GIS & MIS lab with all the necessary hardware and software. The development of project MIS work was outsourced to RAJCOMP and is at final testing stage. The website has also been developed. GIS lab is actively working for creation of GIS data and has achieved significant progress. Besides creation of GIS Data for the project, GIS team at PMU is lending valuable support to

RFD in training and digitization of forest block boundaries. The monitoring and evaluation work is also progressing with creation of standardized reporting formats and regular physical verification of project activities.

A detailed account of physical and financial progress of package wise project activities is shown in Appendices 1 & 2. The FY 2013-14 was culmination of preparatory phase and beginning of implementation phase of the project. Steady progress has been achieved in all the areas and stage is set to achieve the envisaged results in the coming years.

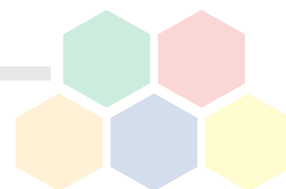


Physical and Financial Progress

Appendix - 1

Physical Target & Achievement for the Year 2013-14

S. No	Items	Unit	Target		Achiv. Up to March, 2014
			BE	RE	
1	Afforestation Work				
a	Advance Action	Ha.	39653	27333	16045
b	Planting	Ha.	14762	10960	10930
2	Water Conservation Structures				
a	Anicut Type-I	Nos.	100	7	6
b	Anicut Type-II	Nos.	45	12	11
c	Check Dams	Cumt.	30000	30000	28131
d	Contour bonding	Rmt.	100000	100000	71082
e	Percolation Tank	Nos.	150	120	105
f	Renovation / restoration of traditional water harvesting structures	Nos.	40	40	30
g	Silt Detention Structure	Nos.	100	60	47
h	Gabion Structures	Nos.	110	150	133
3	Biodiversity Conservation				
a.	DLT Works	Ha.	3800	3800	2906
b	Development of Water Ponits	Nos.	40	40	36
c	Closure for Biodiversity Conservation	Ha.	1250	1250	1264
d	Creation of New Biological Parks	Nos.			Wip
e	Development of Biological Parks	Nos.			Wip

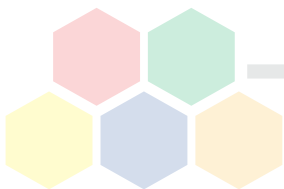


Appendix - 2

Financial Progress for the Year 2013-14

(Rs. in Lacs)

S. No.	Item	BE	RE	Exp. Up to March, 2014
1	2	3	4	5
1	Afforestation	12689.35	11199.72	7599.07
2	Agro Forestry Activities	17.20	5.15	1.55
3	Water Conservation Structures	1054.20	581.53	459.03
4	Biodiversity Conservation	3246.53	3268.41	2963.95
5	Poverty Alleviation and Livelihood Improvement	404.60	198.30	105.76
6	Capacity Building Training & Research	305.22	100.09	36.51
7	Community Mobilization	1986.85	1675.25	1086.49
8	Project Management	568.20	560.55	485.09
9	Monitoring & Evaluation	108.00	81.00	36.00
10	Contractual Personnel for PMU	192.85	210.00	195.86
	Total	20573.00	17880.00	12969.31
11	Administrative Cost	127.00	120.00	116.59
12	VAT & Import Tax	0.00	0.00	0.00
	Total	127.00	120.00	116.59
	Grand Total	20700.00	18000.00	13085.90



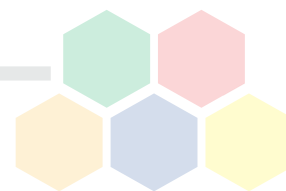
Fund Flow

Under RFBP-2, every year budget is prepared by PMU as per MOD and gets sanctioned by finance department, Government of Rajasthan through PCCF office. As per the sanctioned budget provisions, funds are transferred to the bank account of Rajasthan Vaniki evam jaiv Vividhta Sanrakshan Society (RVJVSS) from time to time.

The funds are then transferred to the bank account of DMUs as per allocation decided by PMU for carrying out various project activities. Every month DMUs send their reimbursement claims to PMU against the works executed during the month. PMU compiles the claims received from all DMUs and sends it to CAAA, New Delhi and JICA, New Delhi.

As per the agreement signed with JICA, after closure of every financial year the accounts are audited and an audit certificate issued by Chartered Accountant is sent to JICA. Besides this as per Operation Manual (OM) there is provision for internal audit of accounts of PMU and DMU by a chartered accountant firm enlisted in the panel. The detailed scope of work in audit is given in OM, point no 5.17.12.

In the MOD there is provision for audit of accounts of VFPMC also which is now being taken up.



Physical progress of various packages

Package : Afforestation

Area in Ha

Activity	Project Target	Planting 2012-13	2013-14		Total Planting up to 2014
			Target	Achievement	
CSP D	667	100	150	150	250
CSP M	1000	63	232	232	295
SDS	25000	610	2836	2846	3456
SP	25000	25	1745	1655	1680
BP	5000	75	1252	1302	1377
RDF I	6000	0	1730	1730	1730
RDF II	6000	0	1980	1980	1980
ANR	2500	0	300	300	300
PEO	2500	0	250	250	250
FWP	10000	0	465	485	485
Total	83667	873	10940	10930	11803

Package : Water Conservation Structure

Activity	Unit	Project Target	2012-13	Target	Achv.	Total
Anicut I	Nos	600	9	7	6	15
Anicut II	Nos	400	17	12	11	28
Check Dam	Cmt	2,00,000	2,836	29755	28,131	30,967
Contour Bunding	Rmt	5,00,000	3,000	92700	71,082	74,082
Percolation Tank	Nos	700	27	112	105	132
Renovation of TWHS	Nos	200	3	40	30	33
Silt Detention Str.	Nos	300	1	60	47	48
Gabion Str.	Nos	500	0	149	133	133

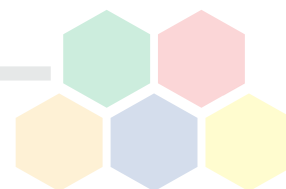


Package : Biodiversity Conservation

Activity	Unit	Project Target	2012-13	2013-14		Total
				Target	Achievement	
DLT works	Ha	12000	350	2975	2906	3256
Dev. Of Water Points	Nos	100	4	40	36	48
Biodiversity Closures	Ha	5000	135	1250	1265	1400

Package Capacity Building, Training and Research

S. No.	Activity	Targets	Achievement							
			2011-12		2012-13		2013-14		Total	
			No.	Persons	No.	Person	No.	Persons	No.	Persons
1	VFPMC Members	1300			81	5172	229	11115	310	16287
2	NGOs	6					3	196	3	196
3	VLW	26								
4	Forest Guard / Cattle Guards	54	5	118	16	379	20	647	41	1144
5	Range Officers / ACFs	6					3	230	3	230
6	DCFs	2			1	15	1	32	2	47
7	Exposure Visits Project Personnel	6					1	12	1	12
8	Exposure Visits VFPMC Members	12					1	22	1	22
9	Overseas Study Tour	11							0	0
10	Overseas training	20							0	0
11	Technical Cooperation With Other Countries								0	0
12	Organization Of National Level Workshop	2							0	0
13	Organization Of International Level Workshop	1							0	0
14	Extension camp /Field visit	1400					164	3566	164	3566
15	Training to officers /staff in GIS	200					24	800	24	800
	Total		5	118	98	5566	446	16620	549	22304



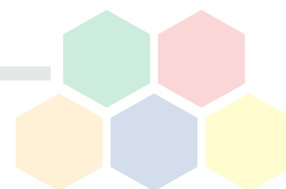
Package Community Mobilization

S. No.	Activity	Project Targets	Unit	Achievement		
				2012-13	2013-14	Total
1	VFPMC/EDC Formation	650	Nos	200	200	400
2	Microplanning	650	Nos	200	200	400
3	Entry Point Activities	650	VFPMCs	22	306	328
4	Meeting Center for VFPMCs	650	Nos	34	203	237
5	NGO Support	650	Nos	200	200	400
6	CET Activities			-	-	-
	I. Awareness Camps	650	Nos	75	125	200
	II. Workshops & Seminars	135	Nos	18	27	45
	III. Gen. Pub. & Documentation	-	LS	-	-	-
7	Village Level Worker	650	Nos	-	-	-
8	Corpus Fund	-	LS	-	-	-



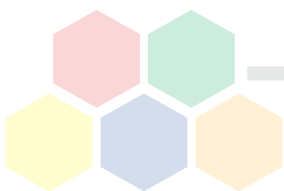
DMU wise details of VFPMC/EDC Formation & Microplanning

S. No.	DMU	Project Target	Achievement		
			2012-13	2013-14	Total
Desert					
1	Nagaur	25	6	14	20
2	Bikaner	32	3	16	19
3	IGNP-2, Bikaner	40	15	3	18
4	Chhattargarh	16	6	6	12
5	Churu	24	8	9	17
6	Jhunjhana	24	4	7	11
7	Sikar	25	7	10	17
8	Barmer	24	9	9	18
9	DDP Jaisalmer	24	9	4	13
10	IGNP-2, Jaislmer	48	7	13	20
11	Jalore	25	11	8	19
12	Jodhpur	24	-	8	8
13	Pali	25	11	10	21
	Total Desert	356	96	117	213
Non-Desert					
14	Bhilwara	38	14	13	27
15	Jaipur (North)	50	15	17	32
16	Jaipur (South)	38	11	8	19
17	Sirohi	31	4	8	12
18	Banwara	39	16	14	30
19	Dungarpur	38	16	8	24
	Total Non-Desert	234	76	68	144
Wildlife					
20	DNP Jaisalmer	5	-	1	1
21	Mount Abu	6	3	-	3
22	Buffer Karauli	5	2	2	4
23	Chittorgarh	15	8	4	12
24	Udaipur	10	7	1	8
25	Rasamand	19	8	7	15
	Total Wildlife	60	28	15	43
	Grand Total	650	200	200	400



DMU wise details of Entry Point Activities

S. No.	DMU	Project Target	Achi.		
			2012-13	2013-14	Total
Desert					
1	Nagaur	25		19	19
2	Bikaner	32		9	9
3	IGNP-2, Bikaner	40		14	14
4	Chhattargarh	16		12	12
5	Churu	24		12	12
6	Jhunjhenu	24		6	6
7	Sikar	25		14	14
8	Barmer	24		13	13
9	DDP Jaisalmer	24	1	4	5
10	IGNP-2, Jaislmer	48		9	9
11	Jalore	25		19	19
12	Jodhpur	24	3		3
13	Pali	25	6	19	25
	Total Desert	356	10	150	160
Non-Desert					
14	Bhilwara	38	1	27	28
15	Jaipur (North)	50	2	21	23
16	Jaipur (South)	38		9	9
17	Sirohi	31		8	8
18	Banwara	39	4	30	34
19	Dungarpur	38		21	21
	Total Non- Desert	234	7	116	123
Wildlife					
20	DNP Jaisalmer	5		1	1
21	Mount Abu	6		3	3
22	Buffer Karauli	5		4	4
23	Chittorgarh	15	5	12	17
24	Udaipur	10		8	8
25	Rasamand	19		12	12
	Total Wildlife	60	5	40	45
	Grand Total	650	22	306	328



Partnering for enhancing efficiency

1. Consultant / Resource Organisation

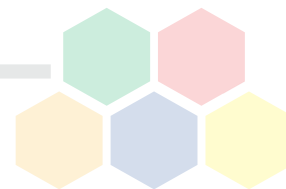
A project of such a large magnitude as RFBP-2 requires, for its execution and successful completion, services of people with diverse academic and technical qualifications, experience and skills. It was very difficult to draw employees already on the payroll of government from their current positions and give them the responsibility of carrying out the various project activities.

Initially it was proposed to engage the services of individual experts on contract. But this proposal was turned down by the finance department as the previous experience of contracting people was not very good. As an alternate measure it was then decided to outsource all the requisite experts and support services through a Consultant / Resource Organisation. JICA also gave its approval to this proposal and for the first time in the country, for a forestry project, RFP was released for engaging the services of a consultant / resource organisation. It was envisaged that partnering with a private organisation will bring in best of both worlds and amalgamation of two work cultures will produce desired results in the stipulated time frame.

In response to the RFP released, 9 firms submitted their proposal. After careful scrutiny and evaluation employing "Quality Based Selection(QBS)" method, The Louis Berger Inc. was awarded the contract for 'providing various services and support to the PMU of Rajasthan Forestry and Biodiversity Project (Phase-2)'. The contract was signed between RVJVSS and LBG on 22nd February 2013 and first batch of LBG employees joined on 4th March 2013.

LBG has provided at least one subject matter specialist along with necessary supporting technical and managerial staff for each of the following disciplines:

- Afforestation and Biodiversity Conservation
- Livelihood Promotion
- Joint Forest Management
- Monitoring and Evaluation
- Geo-informatics and IT Enabled Services
- Capacity Building, Training and Research
- Extension, Publicity and Documentation
- Project Administration



It was an eventful first year of mobilization of LBG Staff to PMU of Rajasthan Forestry and Biodiversity Project (Phase-2). Most of the employees had little or no experience of working in a forestry or any other government project. Although expert in their respective fields, it was a big challenge for all the employees to get themselves adjusted to a different work culture and prove their worth.

First year of LBG's association was in fact third year of the project and the progress till then was a bit lagging behind the targets as it was not possible for PMU with 4-5 officers and skeleton support staff to manage all the project activities. However with the availability of subject matter experts and more supporting hands, the execution of project activities gained momentum and monitoring became more effective. The project team has not only contributed towards smooth execution but has also lend invaluable support to RFD by providing GIS data, demarcating forest blocks & eco sensitive zones and providing specialised training in the area of GPS based survey.

This arrangement, where expert and support services are outsourced through an organisation, has potential to become the most acceptable way of engaging services as government is also promoting PPP model in all the important development areas.

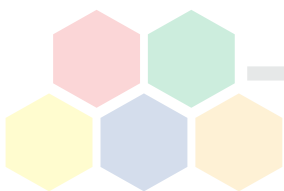
2. Partner NGOs

A non-governmental organization (NGO) is any non-profit, voluntary citizens' groups which is organized on a local, national or international level. Task orientated and driven by people with a common interest, NGOs perform a variety of service and humanitarian functions.

Local NGOs based in rural areas play an important role in improving sustainability in forestry and natural resource management. They generally have better understanding about the socioeconomic structure and prevalent indigenous traditions and customs of the communities, which helps them in better co-ordination in carrying out the projects and programme components.

MoEF, GOI specifically defines the role of NGOs in JFM for motivating and organizing village community for protection, afforestation and development of degraded forest lands. It entails that the State Forest Departments should take full advantage of their expertise in this respect for building up meaningful people's participation in forestry development.

RFBP-2 envisages active involvement of NGOs at every stage of the project. NGOs have been



hired by DMUs with approval of PMU on a contractual basis to undertake social mobilization and institutional building and to provide support to income generation activities. The NGOs are expected to provide the following services:

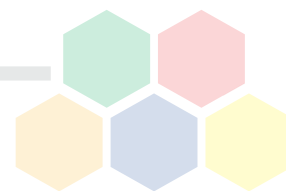
- Assist In selection of suitable village for carrying out of project activities.
- Suitably and adequately mobilize people for various activities of the project and assist in formation of VFPMC and EDC in project villages.
- Facilitate micro planning in project villages and document the micro plans of each project village. Assist in regular review of the project and updating of Micro Plan
- Develop capabilities among the people to coordinate, manage and monitor and evaluate the progress of various components and activities of the project.
- Assist in identifying beneficiaries of various project components especially' those related to poverty alleviation and livelihood Improvement.
- Identify the poor and forest dependent communities and organise them In Self Help Groups (SHGs) in project villages.
- Conduct training for SHG members on various institutional and management aspects of SHG.
- Assist In developing sufficient and adequate linkages for skill up gradation and marketing and also support in convergence with other government schemes and departments.
- To support in collection and compilation of data and carry out regular monitor and review the progress of project activities in line with the objectives of the project and ensure achievement of objectives with in stipulated timeframe.

In all, 22 NGOs have been engaged by the project for carrying out various project activities.

3. Project Management Consultants (PMC)

To assist the PMU, concerned DMU & FMU with technical guidance and policy initiatives related to the Project for smooth and quality implementation of the project activities, Project Management Consultant (PMC) were selected.

The selection was done as per JICA Guidelines through international open bid tender. The basis of selection was "Quality Based Selection (QBS)" in concurrence with JICA Guidelines.



The contract was signed on 29th March 2012 between Rajasthan Vaniki Evam Jaiv Vividhta Sanrakshan Society and Consortium of

- Nippon Koei India Pvt. Ltd.,
- Nippon Koei Co. and
- Earth Care Consultants (P) Ltd.

The target area for Consulting Services is all 650 villages and involves 39 Man Months' consulting by international consultants and 113 Man Months' consulting by local consultants besides services of supporting staff.

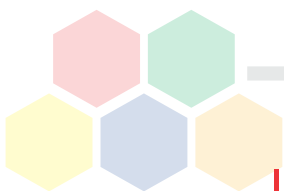
The disciplines and duration of consulting are as follows:

International Consultants

- | | |
|---|---------------|
| 1. Team Leader / Afforestation Specialist | 22 man months |
| 2. Desert Afforestation Specialist | 17 man months |

Local Consultants

- | | |
|---|---------------|
| 1. Biodiversity Conservation expert | 21 man months |
| 2. Community Development and Capacity building Expert | 34 man months |
| 3. Micro-enterprise and Income Generation Activities Expert | 33 man months |
| 4. Monitoring & Evaluation Expert | 25 man months |



Innovative interventions and their impact

1. Sand Dune Stabilization by using “Jute Mesh”

Jute mesh is an organic, flexible, loosely woven jute ‘cargo- net’ mesh used for erosion control and seed establishment. It is inexpensive and flexible product, easily separated so as to fall around existing vegetation. The coarse nature of the fibres assists in capturing wind- blown soil and native seeds.

Jute mesh retains moisture in the micro-environment for the plants, increases water infiltration for faster long term stabilisation and helps increase germination rates for direct- seeded areas. It adds organic matter to soil as it degrades.

A suo moto pilot study was conducted under RFBP-2 in IGNP Jaisalmer of Sand Dune Stabilisation using Jute Mesh. The demonstration was commissioned in Sept/October, 2013 after the meagre rains had ceased. Three mats of different weave density were used and were pegged down on three locations on wind ward slope of the active dunes. The mat 1 was sown with Phog, mat 2 with a mixture of Phog and Sewan grass and mat 3 with grass only.



Sand Dune Stabilisation using Jute Mesh before treatment



Step – 1 : Laying of the Jute Mesh Mulch



Step – 2 : Phog seeds sown on active sand dune along the mulch lines



Step – 2 : Sewan grass sown on active sand dune along the mulch lines

Liberal sprinkler irrigation was applied 4 times thereafter. Seed germination was astonishing on those portions of the dunes where mat was laid.

The DMU staff carried out their own field research and used old sacking as a mulch mat to cover the crests at three places on an adjacent dune. These had been sown with Phog and watered similarly to the Jute mats. Here too the results are encouraging and general growth is compatible to the jute mat mulched areas.



Step – 3 : Re generation of phog seeds



Step – 4 : Growth of phog within a period of 6 months after sowing as a result of in situ moisture conservation by Jute mesh mulch



2. Using “Sub Soiler” in Advance Action

Subsoiler is used for a deep tillage. It is specially designed for breaking the hard layers. Successful sub-soiling loosens and shatters compact soil layers by creating many cracks and fissures thus allowing roots to develop more freely and water to move down more rapidly. Subsoiler allows better drainage and healthier soil, which in turn leads to improved crop growth and yield. Pointed chisels shatters the soil well below the surface, thus helps increasing the water storage capacity which leads to preservation of moisture during rainy season.

The technique and its effectiveness were demonstrated in Pali in October 2013. The operations demonstrated that after making contour furrows with subsoiler, planting pits can then be dug easily in the loose soil and Cross Ties/Crescent Basins were formed to prevent lateral movement of the water and channel it to the tree.

Rain water runoff is harvested from between the rows and can double the moisture available for the trees.



Project Images



Package : Afforestation **Activity :** Advance Action **DMU :** Banswara



Package : Afforestation **Activity :** Advance Action **DMU :** Banswara



Package : Afforestation **Activity :** Advance Action **DMU :** Banswara



Package : Afforestation **Activity :** Advance Action **DMU :** Banswara



Package : Afforestation **Activity :** Advance Action (Pit Digging) **DMU :** Jaipur (South)



Package : Afforestation **Activity :** Plantation **DMU :** Churu



Project Images



Package : Afforestation **Activity :** Plantation **DMU :** Jaipur (South)



Package : Afforestation **Activity :** Plantation **DMU :** Jailsalmer



Package : Agro Forestry **Activity :** Nursery Raising **DMU :** Chattargarh



Package : Water Conservation Structure **Activity :** Anicut Type-I **DMU :** Jaipur (South)



Package : Water Conservation Structure **Activity :** Gabion Structure **DMU :** Jalore



Package : Water Conservation Structure **Activity :** Renovation of Traditional WHS **DMU :** Rajsamand

Project Images



Package : Poverty Alleviation & Livelihood Improvement **Activity :** Technical Training **DMU :** Banswara



Package : Poverty Alleviation & Livelihood Improvement **Activity :** Basket Making by SHG **DMU :** Jaipur (North)



Package : Capacity Building **Activity :** Training at IHITC **DMU :** Jaipur



Package : Biodiversity Conservation **Activity :** New Biological Park at Machia **DMU :** Jodhpur



Package : Biodiversity Conservation **Activity :** New Biological Park at Machia **DMU :** Jodhpur



Package : Biodiversity Conservation **Activity :** New Biological Park at Machia **DMU :** Jodhpur

Rajasthan Vaniki Evam Jaiv-Vividhata Sanrakshan Society

1207/Jaipur, 2010-11

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