



RAJASTHAN FORESTRY AND BIODIVERSITY PROJECT (PHASE-2)

Annual Report
2017-18

FOREST DEPARTMENT, RAJASTHAN

यस्यां समुद्र उत सिन्धुरापो यस्यामन्नं कृष्टयः संबभूवुः ।
यस्यामिदं जिवति प्राणदेजत्सा नो भूमिः पूर्वपेये दधातु ॥

*(Salutations to Mother Earth) In Her is woven together Ocean and River Waters;
in Her is contained Food which She manifests when ploughed,*

In Her indeed is alive all Lives; May She bestow us with that Life.



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Forest Department, Rajasthan

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GAJENDRA SINGH

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MESSAGE

Rajasthan, the largest state in the country, is characterized by extreme climatic zones. It is a big challenge for the state forest department to not only maintain the existing green cover but also enhance it. It is a matter of great joy that the forest cover in Rajasthan has grown by 466 sq km in the last two year (as per India State of Forest Report 2017). The plantation initiatives taken under various projects and schemes have contributed towards this achievement.

The three biological parks developed in the state have become popular tourist destinations in their respective cities. Work has started for the creation of two more biological parks - Abhedha Biological Park, Kota and Ajmer Biological Park, Pushkar. They shall also contribute towards bio diversity conservation and developing empathy in general public for wildlife.

Rajasthan Forestry and Bio diversity Project (Phase-2) is entering into its final year. I compliment the department for the project achievement and wish them all the success in their future endeavour.

With best wishes.

Yours Truly,


(Gajendra Singh)



Kuldeep Ranka
IAS



Principal Secretary
Department of Forest & Environment
Tourism, Art & Culture
Government of Rajasthan

MESSAGE

Importance of Forests in our lives is well known. Their protection, upkeep and enhancement has many challenges.

The department has taken many initiatives and implemented schemes for not only protection and enhancement of forest in the state, but also for engaging the forest dependent communities in execution of these interventions. Alternate income generation activities have been explored for the livelihood of these communities.

Rajasthan Forestry and Biodiversity Project (Phase-2) being implemented with the cooperation of JICA and Rajasthan government has achieved various milestones. I compliment all those associated in execution of the project activities and wish them success in their future endeavors.

With best wishes,

(Kuldeep Ranka)

From the Project Director's desk...



A clean environment reverberating with positive energy impacts all aspects of life positively. One of the major challenges for all of us today is to protect and maintain a sustainable clean environment around us. To overcome this challenge we not only need the will but the means also.

Forestry development programs implemented by Government of Rajasthan with co-operation of JICA are one such measure towards achieving the objectives of conserving the nature and natural resources. Rajasthan Forestry and Biodiversity Project (Phase-2), being implemented by Government of Rajasthan with co-operation of JICA from FY 2011-12, has achieved almost all quantitative targets of various components. It has also left an impact on the life of marginalized communities by providing them with alternate source of life sustainability.

Although FY 2018-19 will be the last year of project, the various activities of the project since inception will have a long lasting impression on the socio-economic development of the state. I take this opportunity to express my gratitude and appreciation for the efforts of everyone involved in the execution of project activities.

(P. K. Upadhyay)

Prologue

Rajasthan Forestry and Biodiversity Project -Phase 2 is being implemented by Government of Rajasthan with co-operation of Japan International Cooperation Agency (JICA) in 15 districts of Rajasthan. The project activities are being undertaken in 650 selected villages (363 villages in desert districts, 225 villages in non desert districts and 62 villages within 2 km fringe area of 7 Wild Life sanctuaries).

Objective

“To enhance forest area and livelihood opportunities of the forest dependent people and to conserve biodiversity by undertaking afforestation and biodiversity conservation measures through JFM approach, thereby contributing to environmental conservation and socio-economic development of Rajasthan.”

Project outlay

Period	Cost (INR)		
	JICA's share (Loan)	State government assistance	Total Cost
2011-12 to 2018-19	884.77 crores	267.76 crores	1152.53 crores

Salient features of the project:

- For the implementation of project activities Rajasthan Vaniki Evam Jaiv Vividhata Sanrakshan Society was registered under Rajasthan Societies Registration Act 1958. The Society forms the State level Project Management Unit (PMU).
- A High Power Committee headed by minister in charge of Forest Department is the highest decision making body for the project.
- For the supervision of activities executed under the project, Governing Body has been created under the Chairmanship of Principal Secretary (Forests and Environment).
- All the members of society constitute the General Body.

- International and National consultants have been engaged for technical inputs and assistance to PMU on different subject matter.
- A Resource Organisation is also contracted for providing various services and support to PMU.
- The entire project area is divided under 27 Divisional Management Units (DMUs) and 83 Field Management Units (FMUs).
- The basic unit for implementation of project activities is Village.

The project has made significant progress in its preparation and implementation phases. An account of financial progress of first six years of the project duration is given below:

Financial Progress from 2011-12 to 2016-17

(Fin. : ₹ in lacs)

S. No.	Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
1	Afforestation		1701.30	7599.07	10147.71	16080.26	12030.25
2	Agro Forestry Activities			1.55	0.05	3.39	35.75
3	Water Conservation Structures		166.01	459.03	463.21	959.88	2714.52
4	Biodiversity Conservation		1060.81	2963.95	3464.10	1559.75	1178.55
5	Poverty Alleviation and Livelihood Improvement			105.76	156.86	99.04	88.60
6	Capacity Building Training & Research		5.60	36.51	58.35	62.91	64.61
7	Community Mobilization	4.24	167.30	1086.49	1460.17	1104.24	1017.17
8	Project Management	1.21	390.05	485.09	314.62	355.06	260.48
9	Monitoring & Evaluation	26.56	11.20	36.00	64.63	36.86	13.08
10	Contractual Personnel for PMU	8.35	16.66	195.86	267.45	254.27	245.96
	Total	40.36	3518.93	12969.31	16397.15	20515.66	17648.97
11	Administrative Cost (PMU)	45.06	98.45	116.59	102.30	104.74	111.14
	Grand Total	85.42	3617.38	13085.90	16499.45	20620.40	17760.11



Annual Performance 2017-18

The financial year 2017-18 was the penultimate year for the project. This was also the first year of two year duration exit phase. The year began with more than 90% of physical targets already achieved in almost all the components. The momentum continued and remaining physical targets were achieved barring a few exceptions. The overall financial achievement for FY 2017-18 against a revised financial target of Rs. 97.50 Crores was Rs. 91.69 Crores (i.e. 94%).

Financial Progress

(Fin. : ₹ in lacs)

S. No.	Item	Project Budget	Achievement upto 2016-17	2017-18			Cumulative Achievement
				BE	RE	Achievement	
1	Afforestation	42328	47558.59	6260.95	6260.95	6067.24	53625.84
2	Agro Forestry Activities	163	40.74	54.74	54.74	26.51	67.24
3	Water Conservation Structures	4692	4762.65	852.89	1300.00	1249.15	6011.80
4	Biodiversity Conservation	8436	10227.16	600.02	550.00	731.87	10959.03
5	Poverty Alleviation and Livelihood Improvement	1689	450.26	458.50	410.50	241.15	691.41
6	Capacity Building Training & Research	634	232.22	253.18	116.66	31.63	263.85
7	Community Mobilization	6542	4836.58	547.97	482.40	397.84	5234.42
8	Project Management	2982	1831.85	345.70	298.70	184.27	2016.12
9	Monitoring & Evaluation	590	161.77	86.00	86.00	14.98	176.75
10	Contractual Personnel for PMU	1496	988.54	190.05	190.05	225.15	1213.69
11	Price Escalation, Contingency, Consulting services	18926					
	Total	88477	71090.38	9650.00	9750.00	9169.78	80260.15
	Administrative Cost (State Share) Vat & Import Tax, IDC and Commitment Charges	PMU	26776	578.29	150.00	116.58	694.87
		DMU		14208.71		3278.42	17487.13
	Grand Total	115253	85877.38	9800.00	9900.00	12564.78	98442.15

A detailed account of component wise physical progress and financial achievement of the project in FY 2017-18 is presented in subsequent pages:

Package 1 : Afforestation

In FY 2017-18, plantation work was carried out in 5758 Ha. taking the overall achievement of plantation to 83676 Ha against the project target of 83650 Ha.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
Advance Action	0	0	0	0
Planting	5758	5758	861.35	859.91
Maintenance I	25957	24702	3705.17	3569.23
Maintenance II	18381	16463	844.38	827.51
Maintenance III	19077	17235	609.28	580.94
Maintenance IV	6185	5940	211.88	201.92
Maintenance V	873	848	28.89	27.73
Total			6260.95	6067.24

The cumulative model wise progress of afforestation is given below:

S. No.	Plantation Model	Project Target (Ha)	Plantation Upto 2016-17	Plantation 2017-18	Cumulative Achievement	Cumulative %
1	CSP- D	1056	893	174	1067	101%
2	CSP- M	1394	1368	41	1409	101%
3	SDS	25000	24850	150	25000	100%
4	SP	17000	15623	1377	17000	100%
5	BP	7800	7800	0	7800	100%
6	RDF I	8000	7748	252	8000	100%
7	RDF II	13000	10060	2940	13000	100%
8	ANR	4200	3500	700	4200	100%
9	PEO	3000	2950	50	3000	100%
10	FWP	3200	3125	75	3200	100%
		83650	77918	5758	83676	100%



Package 2 : Agro Forestry

This component which was reworked upon two years ago showed significant progress. 66 new SHGs were formed and training on nursery raising techniques continued.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
Raising of Seedlings by SHGs	35	66	40.44	21.47
Trainings to SHGs	48	52	14.30	5.04
Total			54.74	26.51

The cumulative status of physical progress of activities under this component is given below:

S. No.	Item	Project Target	Achievement Upto 2016-17	Achievement 2017-18	Cumulative Achievement	Achievement %
1	Raising of Seedlings by SHGs	130	103	0	103	79
2	Trainings to SHGs (First Year)	130	74	4	78	60



Package 3: Development of Water Conservation Structures (WCS)

For the second year in succession, significant progress was recorded in the construction of Anicuts. The approval for construction was received from the Technical Approval Committee (TAC) for all the required numbers. Except for Anicut Type -I, 100% targets have been achieved in all other components.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
Anicut-I	198	186	445.50	418.82
Anicut-II	128	128	832.00	808.11
Check Dams (Cumt)	219	219	0.64	0.64
Contour Bunding (Rmt)	8722	9689	15.39	15.19
Percolation Tank	2	2	0.97	0.96
Renovation restoration of traditional water harvesting structures	0	0	0.00	0.00
Silt Detention structure	4	4	4.80	4.74
Gabion Structures	2	2	0.70	0.69
Total			1300.00	1249.15

The status of WCS component is listed below:

Model	Project Parget	Achievement Upto FY 2016-17	Achievement in FY 2017-18	Cumulative Achievement	Cumulative %
Anicut-I	600	304	186	490	81.66%
Anicut-II	400	272	128	400	100%
Check Dams (Cumt)	200000	199781	219	200000	100%
Contour Bunding (Rmt)	500000	491278	9689	500967	100%
Percolation Tank	700	698	2	700	100%
Renovation/restoration of TWHS	200	200	0	200	100%
Silt Detention structure	300	296	4	300	100%
Gabion Structures	500	498	2	500	100%



Package 4 : Biodiversity Conservation

The activities in this component are being executed in 62 villages situated in the 2km fringe area of 7 wildlife sanctuaries. In all the villages, eco development committees have been formed and they are engaged in various activities of eco tourism.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
DLT Works (Ha)	1004	1004	177.10	176.54
In-situ Conservation of Germplasm				
Four Horned Antelope (Kumbhalgarh & Bassi)	-	-	56.30	50.35
Great Indian Bustard	-	-	9.61	9.61
Closure for Biodiversity Conservation (Ha)	-	-	78.03	77.88
Nahargarh Biological Park	-	-	128.96	417.48
Abheda Biological Park, Kota	-	-	50.00	0.00
Ajmer Biological Park, Ajmer	-	-	50.00	0.00
Total			550.00	731.87

The cumulative status of physical progress of other activities under this component is given below:

Activity	Project Target	Achievement upto FY 2016-17	Achievement in FY 2017-18	Cumulative Achievement	Cumulative %
DLT Works (Ha)	12000	10996	1004	12000	100%
Development of water points	100	100	0	100	100%
Biodiversity Closures (Ha)	5000	5000	0	5000	100%

The three Biological Parks created and developed under the project are turning out to be major tourist destination. The details of visitors to these parks is as follows;

S. No.	Name of the Park	Inauguration Date	No. of visitors since inauguration (till March. 2018)	Amount Collected (INR)
1	Nahargarh Biological Park, Jaipur	4 th June , 2016	787204	43616710
2	Machia Biological Park, Jodhpur	20 th January, 2016	804770	26109697
3	Sajjangarh Biological Park, Udaipur	12 th April, 2015	925843	28639120



Package 5 : Poverty Alleviation and Income Generation Activities

The focus in this year was on further institutional capacity building of the SHGs and initiation of income generation activities. More than Rs. 226 lacs of revolving fund was released which is almost 93% of the amount released in previous six years.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
Livelihood improvement Activities	750	453	375.00	226.74
Mobilization of SHG	850	463	25.50	13.86
Technical Training to SHG Members	5	1	5.00	0.55
Support for Marketing & Value Addition			5.00	0.00
Total			410.50	241.15

The cumulative status of activities under this component is presented below:

Details	Achievement upto FY 2016-17	Achievement in FY 2017-18	Cumulative Achievement
Total No. of SHG Formed	1841	78	1919
No. of Saving Bank A/C opened	1159	368	1527
Income Generation Activities selected by SHGs (Nos)	1050	248	1298
Categories of Self-Help Groups formed			
Male	440	0	440
Female	1401	78	1479
Total No. of members involved	19891	851	20742
Total Amount of saving (Lakhs)	203.33	20.31	223.64
Total Amount of Revolving Fund released (Lakhs)	242.12	226.74	468.86

The products prepared by SHGs were put on display and for sale at various events and exhibitions organised at district and state level including Van Mahotsav.



Package 6 : Capacity Building, Training and Research

In continuation of efforts to build capacity of VFPMC / EDC /SHG members, so that more of these bodies could be made independent, exposure visits, extension camps and field visits were organised. To get information about the new technologies and innovations in different fields, four exposure visits were organised to forestry projects in Gujarat and Uttrakhand.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
No of Trainings for VFPMC Members	133	116	6.63	5.68
Exposure visit / study tours				
i) Project Personnel				
ii) VFPMC Members	4	4	8.00	7.80
Overseas Study Tour (I)	1	0	3.50	0.00
Organisation of National Level Workshop	1	0	15.00	0.00
Organisation of International Workshop	1	0	20.00	0.00
Research Activities	0	0	29.00	0.00
Research & Propagation of : Rohida and Khejri				
Planting	65	65	9.28	7.63
Maintenance	50	50	4.55	3.28
Training to Officers / Field Visits in GIS (No. of Officers)	25	0	5.00	0.00
Technology Extn. & Adoption, Extension Camps/Field Visits	157	73	15.70	7.23
Total			116.66	31.62

The major achievements so far have been:

S. No.	Type of Training / Activity	Unit	Project Target	Achievement upto FY 2016-17	Achievement in FY 2017-18	Cumulative Achievement	Cumulative %
1	VFPMC training by NGO	Nos.	1300	1169	116	1285	99%
2	NGOs training	Nos.	6	7	0	7	117%
3	Forest & Cattle Guards	Nos.	54	64	0	64	119%
4	Range Officers/ ACFs	Nos.	6	6	0	6	100%
5	DCFs and Equivalent	Nos.	2	2		2	100%
6	Exposure Visit						
(i)	Project Personnel	Nos.	6	4	2	6	100%
(ii)	VFPMC Members	Nos.	12	8	4	12	100%
7	Research: Rohida and Khejri (Advance Action/Planting/Maintenance)	Ha. (AA)	200	115	0	115	
		Ha.(PL)		50	65	115	
8	Extension camps/Field Visits by DMUs	Nos.	1400	1154	73	1227	88%
9	Training in GIS*	Persons	200	22/1032	30/0	52/1032	

*The target was to impart GIS training to 200 persons. However we have trained 1032 persons in GPS also besides training 52 in GIS.

Package 7: Community Mobilisation

Most of the activities in this component have already been completed. The focus was again on further strengthening of grass root level institutions established under the project.

Physical progress and Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18			
	Physical		Financial	
	RE	Achi.	RE	Achi.
VFPMC/EDC Formation & Strengthening	14	7	0.42	0.21
Microplanning	13	9	1.30	0.90
Entry Point Activities	73	58	146.00	91.29
Meeting Center for VFPMC	117	73	175.50	107.58
NGO Support for Admin.& Exp. Overheads			69.80	131.39
CET Activities				
Workshop and Seminars of DMU Level	0	1	0.00	0.25
Awareness camp	46	57	1.38	1.67
General publicity and documentation			15.00	4.60
Corpus Fund			73.00	59.95
Total			482.40	397.84

The cumulative status of physical progress of activities under this component is given below:

S. No.	Item	Project Target	Achievement upto 2016-17	Achievement 2017-18	Cummulative Achievement	Achievement %
1	VFPMC/EDC Formation & Strengthening	650	650	0	650	100
2	Microplanning	650	650	0	650	100
3	Entry Point Activities First Year	650	623	0	623	96
	Second Year	650	584	58	642	99
4	Meeting Center for VFPMC	650	518	73	591	91
5	CET Activities					
(i)	Awareness camp	650	535	57	592	91
(ii)	Workshop and Seminars at DMU Level	135	111	1	112	83



Package 8 : Project Management

This package deals and have provisions for augmentation of office infrastructure, conveyance, purchasing of equipments & supplies for PMU and at DMU level. Besides this all the logistics of Project Management Consultants (hired for technical support to PMU in the field of Afforestation, Biodiversity Conservation, Monitoring & Evaluation and Capacity Building & Training) are being dealt with in this package. The package also organizes regular meetings of High Power Committee, General Body and Governing Body besides DMU review meetings.

Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18	
	RE	Achi.
Augmentation of Office Infrastructure		
Maintenance	20.00	11.05
Provision for Conveyance		
PMU Office		
Running and Maintenance of vehicles	4.00	2.84
Hiring of Vehicles	3.00	2.05
DMU Office		
Hiring of Vehicles	27.00	26.35
Hiring of Vehicles for Range Office	20.00	18.74
Office Equipment (Laptops, Computers & Heavy Duty Photocopiers)		
Regular Office Expenses		
PMU Office		
Office Expenses	20.00	8.21
Travelling Expenses	2.00	0.31
DMU Office		
Office Expenses	27.00	25.75
VFPMC Expenses	65.00	46.59
PMC & Other Consultancies	75.70	18.77
Audit by chartered Accountant		
PMU Office	1.45	1.11
DMU Office	0.00	0.00
VFPMC	32.50	22.48
Review Meeting		
Review meeting	0.50	0.00
Annual General meeting of PMU	0.25	0.00
High power Committee meeting	0.10	0.00
Governing Body Meeting	0.20	0.02
Total	298.70	184.27

Package 9 : Monitoring and Evaluation

The momentum of activities continued as the project entered its exit phase. IRS LISS-IV multispectral satellite images from National Remote Sensing Centre, Hyderabad were procured for change detection analysis.

Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18	
	RE	Achi.
Development of Customized GIS / MIS based Monitoring Tools		
Establishment of GIS Center at regional Level with essential GIS hardware, GIS software and other accessories.	1.00	0.00
Procurement of GPS equipment	2.00	1.63
GPS Data collection	2.00	0.00
Procurement of Satellite Imageries	20.00	1.24
Procurement of Additional Data from other Resources	2.00	0.00
Development and maintenance of customized GIS/MIS application to monitoring the project area	2.00	0.00
Expenses of GIS Related outputs	2.00	0.34
Base Line Survey of Sample villages	5.00	0.00
Reports and Publications	10.00	1.13
Monitoring and Evaluation Works		
PMU Level	20.00	2.27
DMU Level	20.00	8.37
Total	86.00	14.98



Google images of same site showing change in tree cover as a result of CSP plantation under the project at site : CSP Bhamra, FMU Taranagar, DMU Churu

Package 10 : Contractual personnel for PMU

The project has contracted services of a Resource Organization (RO) to provide various services & support to the PMU. The resource organization has provided the services of subject matter specialists in the field of Afforestation, Biodiversity Conservation, Business Planning & Marketing, Monitoring & Evaluation; IT enabled services, Capacity Building & Training, Public Relation and Administration besides support staff. Apart from that one office executive has been hired in each DMU on contractual basis to provide support in the management of MIS & other documentation work.

Financial achievement

(Fin. : ₹ in lacs)

ITEM	Year 2017-18	
	RE	Achi.
PMU/DMU Level		
Contractual Personnel through Service Provider	190.05	225.15
Total	190.05	225.15



Plantation for Controlling Desertification and Enhancing Forest Cover

Rapid industrialization and urbanization is having substantial impact on the ecology, economy and society at local, regional, and global scales. The distance between inhabitants and nature is increasing. One of the major challenges faced by authorities is prevention and enhancement of green cover. A lot of money is being spent through various schemes, projects and activities for this. The migration of population from rural to urban areas has made this situation more alarming in cities.

One of the objectives of Rajasthan Forestry and Biodiversity Project (Phase-2) is enhancement of forest area. This is being done in selected 363 villages in ten desert districts and 225 selected villages in five non desert districts by undertaking afforestation activities. The total target of plantation under the project was fixed at 83650 Ha and plantation has been done by selecting appropriate plantation model. The details of model wise plantation undertaken is given below:

S. No.	Activity	MOD Target (Ha)	Achvmt. (Ha)	% Achvmt.
1	Canal Side Plantation along Distributory	1056	1067	101.00
2	Canal Side Plantation along Minor	1394	1409	101.00
3	Sand Dune Stabilization	25000	25000	100.00
4	Silvipastoral Plantation	17000	17000	100.00
5	Block Plantation	7800	7800	100.00
6	Rehabilitation of Degraded Forests – I	8000	8000	100.00
7	Rehabilitation of Degraded Forests – II	13000	13000	100.00
8	Assisted Natural Regeneration	4200	4200	100.00
9	Productivity Enhancement Operations	3000	3000	100.00
10	Fuel Wood Plantations	3200	3200	100.00
	Total	83650	83676	100.00





Desertification Control

Desertification is the persistent degradation of dryland ecosystems by variations in climate and human activities. It is not the advance of deserts, though it can include the encroachment of sand dunes on land. Land degradation is often a cause and a consequence of rural poverty. About 74 per cent of the poor are directly affected by land degradation globally. Desertification can cause poverty, and poverty can cause further desertification.

Desertification contributes to internal displacement and international migration of people. Due to drought and desertification, each year across the globe, 12 million hectares are lost (23 hectares per minute), where 20 million tons of grain could have been grown.

On 1 January 2016, the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development – adopted by world leaders in September 2015 at an historic UN Summit – officially came into force. One of

them is **Goal 15 : Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss**, with the *Target : By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.*

The afforestation activities under the project are also aimed at controlling desertification and improving the quality of life of people living in the desert areas. About 62% of total plantation done in the project is in the desert district. Of the total estimated spent on plantation activities during entire project duration, about 76% shall be in the desert areas.

The plantation activities in the desert area have been undertaken using following models :

- Canal Side Plantation
- SDS cum Pasture Development
- Silvipastoral Plantation
- Block Plantation

The major plant species used are Shisham (*Dalbergia sissoo*), Desi Babool (*Acacia nilotica*), Israeli Babool (*Acacia tortilis*), Rohira (*Tecomella undulata*), Khejari (*Prosopis cineraria*), Ber (*Ziziphus* spp.), Sewan grasses (*Lasiurus scindicus*), Neem (*Azadirachta indica*).

Various innovative techniques have also been used like using Jute as mulching material in SDS, 'Double Blasting' technique for planting in rocky terrains of Machia Biological Park and use of Sub Soiler during advance action work.

Significant achievements

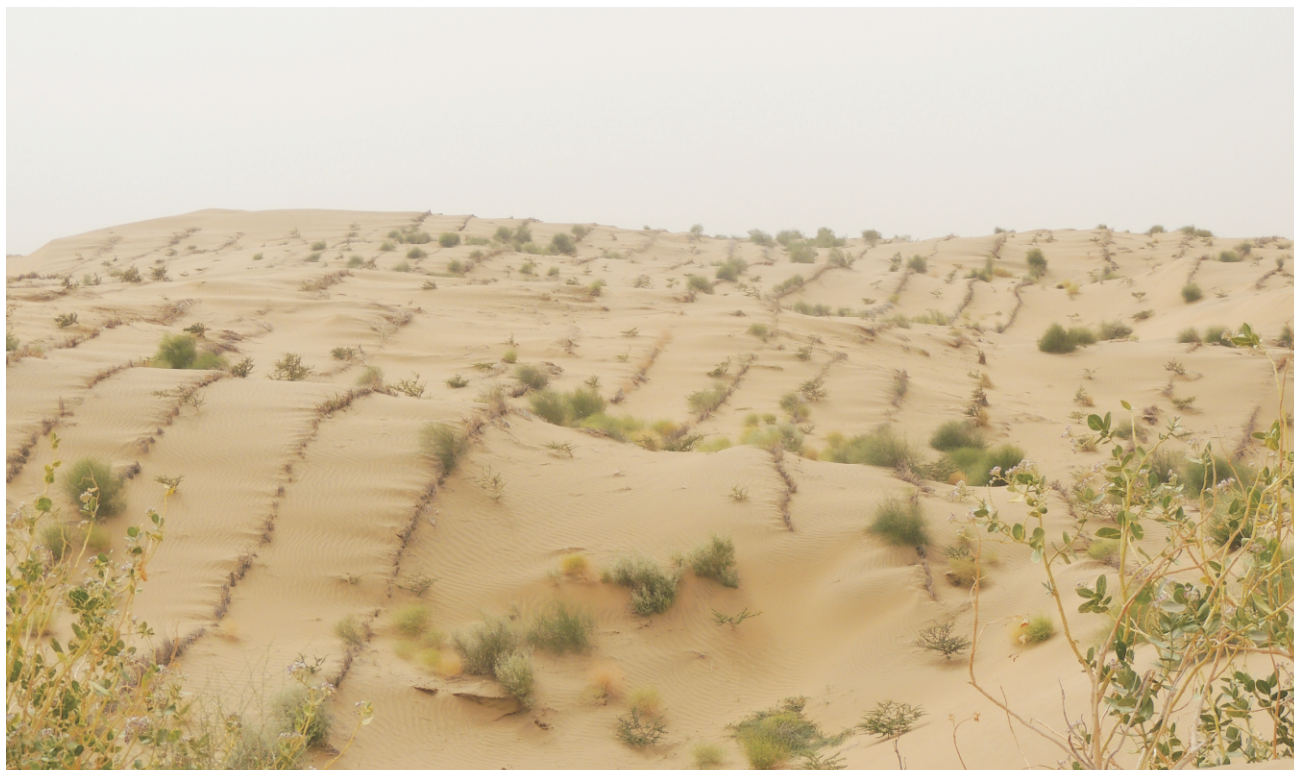
The efforts put in the afforestation work have yielded significant results. As per the report of Mid Term Evaluation study, the Plantation Survival Rate in desert area has been 85%.

According to the latest India State of Forest Report 2017, the total change in forest cover of Rajasthan in last two years has been 466 sq km. Out of this, the change in 15 districts where RFBP-2 is being implemented, has been 396 sq



km (85%).

These are encouraging statistics which prove that the project objective of enhancing forest area is being achieved.



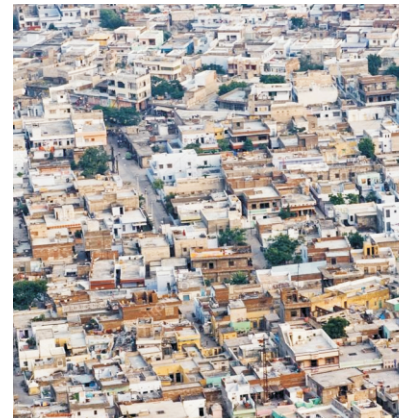
Sustainable Forest Management through People's Participation



Historically, Rajasthan had a great tradition of conserving and sustainably managing its forest wealth. Most of forest area that exist today are mainly because of the interest evinced by the rulers of then princely states towards maintaining and conserving forest areas for wildlife and game hunting. Various religious/cultural practices and customs of various communities and sects emphasize on providing protection to trees and wildlife and encourage need based use of forest resources. There is a long indigenous tradition of building consensus for earmarking areas for protection via the process of kesar chhanta. Another glaring example is that of the sacrifice of 363 women and children, led by Amrita Devi of Bishnoi community, who gave up their life protecting the vital “khejri” tree found in desert area against the wishes of the then ruler of their area who intended to cut these trees.



However, in the recent past, population growth and increasing urbanization leading to conversion of forest lands for agriculture and cattle-raising had become one of the most direct causes of deforestation. People's participation in forest protection had seen a decline. The perceived ownership of forest and forest produce by rural community was a big impediment in forest protection efforts by authorities. The situation was further complicated by extreme geographical conditions of the state with two third of area under desert and human animal ratio of 1:1 resulting into increased migration from rural to urban areas.



Despite various weaknesses, Joint Forest Management (JFM) has become a dominant forest management mechanism in India during last two and a half - three decades, and has spread across the country. Based on the lessons learnt from the past forestry projects, in RFBP-2 people's participation has been ensured through formation of VFPMCs / EDCs/SHGs in all the project villages and by carrying out all the projective interventions through VFPMCs / EDCs. Self Help Groups (SHGs) have been formed under the poverty alleviation and livelihood improvement component.

One of the major impediments in the previous implemented projects was involvement of local community. Thus, for the first time, NGOs were involved to provide support for community mobilization and livelihood improvement activities in selected project villages. Before starting the project activities, MICROPLAN for each village was prepared by the NGO after PRA and RRA. Convergence possibilities with other government schemes for development of village were also explored by NGOs. Provision had been kept for undertaking Entry Point Activities for overall development of the selected village.

All these JFM efforts have led to some good initiatives by VFPMCs / EDCs for SFM, such as :

- Active participation in management of forest affairs of their territory.
- Strict adherence to bylaws with regard to:
 - Membership and membership fees.
 - Collection of penalty from the offenders of forest protection.
 - Work distribution and responsibility among members - cut and carry system for grasses
 - Collection and distribution of forest produces.
- Use of herbs & shrubs (Local flora) in tropical thorn forest for generating revenue through :
 - Grasses and Grass seeds
 - Leaves and branches
 - NTFPs - Aloe-vera, Tumba (Citrullus fruit), Ker-Sangari etc.

- Participation in regeneration of local endangered species like Gugal (Commiphora wightii) etc.
- Involvement in In-situ conservation of germ-plasm - GIB and Four Horned Antelope.
- Employing traditional practices like Kesar Chhanta, Oran etc. for ensuring forest protection.
- Establishment of small enterprises under livelihood improvement initiatives contributing to economic development of community and additional revenue for committee.
- Promotion of trade based activities at Eco tourism sites and Biological Parks.
- Support in checking illegal mining activities in their area.
- Promotion of practice of stall - fed rearing of livestock instead of open grazing in forest area by imposing strict norms and penalty.

These initiatives by VFPMCs / EDCs /SHGs have resulted in achieving the project objectives of enhancing the green cover in the state. The efforts gone in preparation of Microplans have yielded comprehensive village development documents. Various Entry Point Activities undertaken in project villages through VFPMCs/EDCs have helped in enhancing the rapport with the local communities and Meeting Centres constructed under project have provided a common platform for enhancing community involvement.



Tools for Monitoring and Evaluation

Monitoring and Evaluation component is an integral part of any successful project design. Monitoring is not an objective in itself, but is a means to help reach an objective. The purpose of monitoring and evaluation is to track implementation and outputs systematically, and measure the effectiveness of programs. It forms the basis for modification of interventions and assesses the quality of activities being implemented. It helps with identifying the most valuable and efficient use of resources and also checks compliance with the norms. In the process it produces a database that allows detection of trends and comparability.

The Monitoring and Evaluation component under RFBP-2 has provision for undertaking various activities w.r.t. quantitative and qualitative monitoring indicators mentioned in the project document. The major activities include:

- Compilation of base line data and periodic evaluations including mid-term / third party evaluations.
- Collection of GPS data of plantation sites and other assets created.
- Satellite image analysis for change detection.

Base Line Data

In order to ascertain the socio-economic and environmental impact of the project activities on the local inhabitants and ecological aspects of the project villages, a detailed village profiling and household level socio-economic survey in 100 sampled villages located in



different districts of Rajasthan was conducted. WAPCOS (A Government of India Undertaking) was selected for conducting the baseline survey. Out of these 80 were project and 20 were non project villages.

Mid-term / Third party evaluation

Mid-term evaluation / Study was conducted for evaluation of survival rate on randomly selected sites as well as for qualitative and quantitative assessment of various activities of the project and identification of areas for improvement. Under the Mid-term evaluation, systematic



stock taking and verification of physical outputs/ performance/ achievements and identification of process adherence and quality consciousness at various levels of project implementation were undertaken. As per the terms of reference, the Objectives of the Midterm evaluation were:

1. To assess the survival rate of the afforestation and other plantation related works.
2. To assess adherence to the procedures, construction, plantation and any other proceedings for asset creation in conformity with the guideline and procedures laid down under the project or defined by the government.
3. Stock taking of various assets created under the project in terms of quantity and quality.
4. To check the documentation, record keeping, reports relating to assets created at DMUs.
5. To identify and suggest areas for improvement and actions to be taken.

The study was conducted by Centre For Development Communication Studies (CDECS), Jaipur in September 2015. Major findings of the study were:

- Out of 104 sites evaluated the survival percentage of plants in 80 sample sites was 81% and above
- Survival percentage in 22 sample sites was in the range of 61% - 80% and in 2 sample sites in the range of 41% - 60%.

Geo-spatial Data Base Creation and Monitoring

As per the provisions of project, a fully functional GIS cell was established at the PMU. Another GIS cell was established at Jodhpur. The activities of GIS Cell include Forest Block GIS database creation, demarcation of Wildlife boundaries with their eco-sensitive zones, GPS training at DMU level and GIS database creation of plantation sites, Advance Action sites, Water Conservation Structures, Entry Point Activities etc. Besides this the GIS cell has been lending support to the department in providing GPS training and building capacity for GIS based monitoring of activities.

As part of project monitoring mechanism, apart from traditional field based monitoring, satellite image based monitoring is also being done to assess the status of plantations and forest condition as a result of project interventions. Considering the long gestation period in forestry and to get the marked changes in the growth of plants that can be detected by the satellite images it was deemed fit to monitor the changes after a gap of at least 3-4 years after plantations. The change detection analysis is being done to compare forest cover of plantation sites at 4th year (comparison between 0 year and 4th year after tree planting) and 7th year (between 4th year and 7th year) by using satellite images such as IRS LISS IV. The work has already begun for procuring IRS LISS-IV multispectral satellite images (pre geo-referenced) from National Remote Sensing Centre, Hyderabad.

Audited Financial Report for FY 2016-17

S.L.Gangwal & Co.

CHARTERED ACCOUNTANTS

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PHONE : { Off. 2705314
&
Res. 2710720

INDEPENDENT AUDIT REPORT

To
Project Director
RFBP II
Aravali Bhawan
Jhalana Institution
jaipur (Raj.)

We have audit the accompanying statement of expenditure (SOEs) of Rajasthan Forestry and Biodiversity Project (Phase II) of RAJASTHAN VANIKI EVAM JAV VIVIDHATA SANRAKSHAN SOCIETY's financed under loan agreement No. ID P221 for the year 2016-17. The SOEs are the responsibility of RAJASTHAN VANIKI EVAM JAV VIVIDHATA SANRAKSHAN SOCIETY's management. Our responsibility is to express an opinion on the SOEs based on our audit.

We conducted our audit in accordance with generally accepted auditing standards (or relevant national standards or practices). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the SOEs are free of material misstatement. An audit includes verifying the SOEs with accounting records and supporting documentation. We believe that our audit provides a reasonable basis for our opinion subject to notes and observation.

For & on behalf of S.L.Gangwal & Co.
Chartered Accountants
FRN.004649C



[S.L. Gangwal]
Partner
M.No. 070644

Date: 30/11/2017

Place: JAIPUR

Audited Financial Report for FY 2016-17

Rajasthan Forestry and Bio diversity Project-2 Statement of Expenditure for the Year 2016-17

S. NO.	ITEM	Expenditure in Rs.
1	2	3
1	AFFORESTATION	1203024699
2	AGRO FORESTRY ACTIVITIES	3574579
3	WATER CONSERVATION STRUCTURES	271452271
4	BIODIVERSITY CONSERVATION	117854960
5	POVERTY ALLEVIATION AND LIVELIHOOD IMPROVEMENT	8860134
6	CAPACITY BUILDING TRAINING & RESEARCH	6460753
7	COMMUNITY MOBILIZATION	101716979
8	PROJECT MANAGEMENT	26048083
9	MONITORING & EVALUATION	1308286
10	CONTRACTUAL PERSONNEL FOR PMU	24595856
	Total Expenditure (Eligible for Loan)	1764896600
	Less:- Taxes etc.	16471284
	Reimbursable Expenditure	1748425316
11	Deputation Staff for PMU (Not Eligible for Loan)	11114432
	Grand Total	1776011032

For S.L. Gangwal & Co.
Chartered Accountants
FRN: 004649C

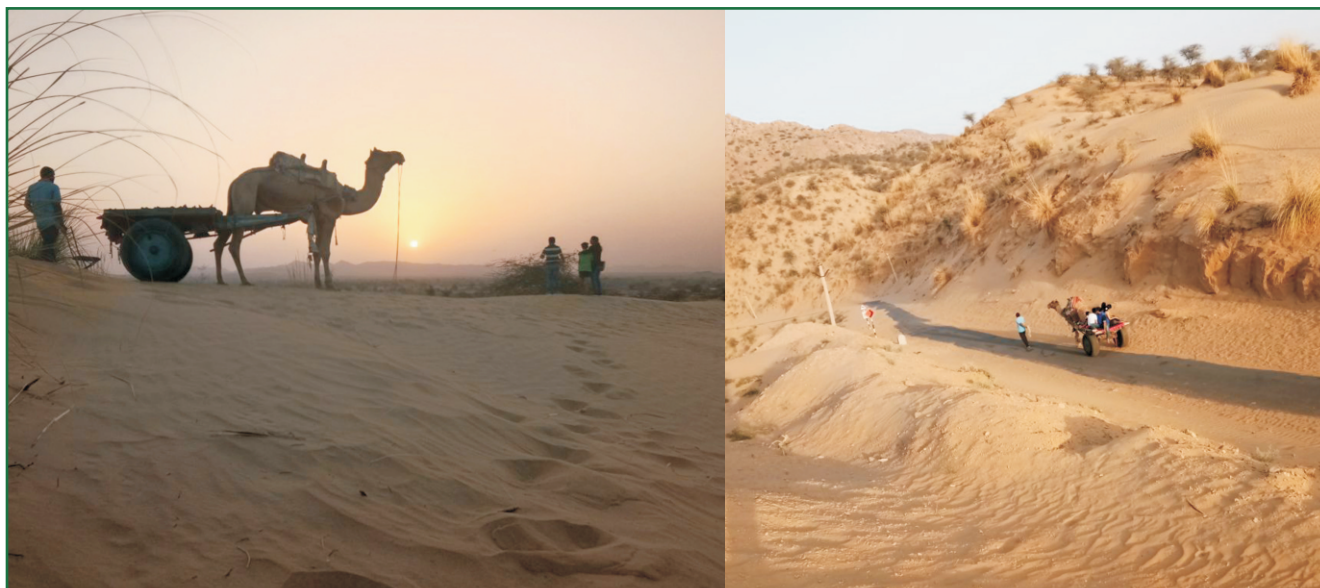


[S.L. Gangwal]
PARTNER
M.No. 070644
Date: 30-11-17
Place : Jaipur


Dy. Project Director (Administration)
Rajasthan Forestry & Bio-Diversity Project-2
Jaipur

Project Images

Income Generation Activities



Sand Dune safari on camel cart as IGA by SHG at Jalore DMU



Leather footwear making at
Nechwa, DMU Sikar



Cotton yarn spinning and handloom
work at DMU Jaipur (North)

Water Conservation Structure



Anicut Type -II, Upalpada Amarthun, Ghatol, Banswara



Anicut at Sarana Nala Panther Point
WL Chittorgarh



Anicut at Jakham, WL Chittorgarh

Van Mahotsav 2017 at Jaipur



Hon'ble Chief Minister addressing at 68th Van Mahotsav



Hon'ble Chief Minister inquiring about products made by SHGs



SHGs displaying their products

Capacity Building & Training



Exposure Visit to Uttarakhand



VFPMC Training, Jaipur (North)



Exposure Visit to Gujarat

Visits by JICA review mission and delegates



JICA review mission at PMU discussing project progress



JICA Review Mission at plantation site in Dungarpur DMU



Demonstration of IGA to members of ODA third party evaluation survey team.

तस्मा अरं गमाम वो यस्य क्षयाय जिन्वथ ।
आपो जनयथा च नः ।।

O Water, when your invigorating essence goes to one affected by weakness, it enlivens him,

O Water, you are the source of our lives.





Rajasthan Vaniki Evam Jaiv-Vividhata Sanrakhshan Society

1207/Jaipur, 2010-11

Arawali Bhawan, Jhalana Institutional Area, Jaipur 302004