



PROJECT

FOR

DEVELOPMENT OF WATER

CATCHMENT

THROUGH GREENING OF RAJASTHAN

UNDER

RIDF (PHASE-II)

2014-15 to 2018-19

FOREST DEPARTMENT

GOVERNMENT OF RAJASTHAN

Contents

| | |
|---|----|
| Contents | 1 |
| Executive Summary..... | 3 |
| CHAPTER - I: Introduction..... | 6 |
| 1.1 Country Context: | 6 |
| 1.2 Rajasthan State Context:..... | 6 |
| 1.3 Project Context:..... | 10 |
| 1.4 As Fulfillment Towards State Forest Policy: | 11 |
| CHAPTER-II: Project Objectives, Outcome and | 12 |
| Implementation Principles..... | 12 |
| 2.1 Project Objectives | 12 |
| 2.2 Expected Outcomes: | 12 |
| 2.3 Implementation Principles | 13 |
| 2.3.1 Cluster / Watershed Approach in Site Selection:..... | 13 |
| 2.3.2 Bottom-up Planning:..... | 13 |
| 2.3.3 Emphasis on Process Rather Than Target: | 14 |
| 2.3.4 Facilitation by NGOs: | 15 |
| 2.3.5 Furtherance to Agro-Forestry: | 15 |
| 2.3.6 Self Help Groups for Alternate and Enhanced Employment: | 16 |
| 2.3.7 Emphasis on Women and Socially Vulnerable Groups: | 17 |
| 2.3.8 Web Based Monitoring: | 17 |
| 2.3.9 Independent Monitoring And Evaluation:..... | 17 |
| 2.3.10 Fillip to Working plans implementation:..... | 18 |
| CHAPTER – III: Project Area:..... | 19 |
| 3.1 Project Area..... | 19 |
| CHAPTER- IV: Implementation Strategy and Action plan | 21 |
| 4.1 Preparatory Stage | 21 |
| 4.1.1 Preparation of Guidelines, Manuals | 21 |

| | |
|--|----|
| 4.1.2 VFPMC / EDC Constitution and Revival: | 21 |
| 4.1.3 NGO/ Consultant support for PRA and Microplans | 22 |
| 4.1.4 Micro-planning..... | 22 |
| 4.1.5 Entry Point Activities | 24 |
| 4.1.6 REDD+ / CDM Training..... | 24 |
| 4.1.7 Establish Monitoring Systems | 24 |
| 4.1.8 News Letter:..... | 25 |
| CHAPTER- V: Project Implementation | 26 |
| Afforestation:(Package:1)..... | 26 |
| 5.1.1Rehabilitation of Degraded Forests - I | 26 |
| 5.1.2 Rehabilitation of Degraded Forests - II | 26 |
| 5.1.3 Assisted Natural Regeneration | 26 |
| Technical Models: Cardinal Features..... | 26 |
| 5.1.4 Panchayat Land Plantations: | 27 |
| 5.1.5 Bamboo Productivity Enhancement operations: | 28 |
| 5.1.6 Buffer Area Development : | 28 |
| 5.1.7Package-1 related accessories and activities:..... | 29 |
| 5.2 Agro-forestry: (Package:2) | 29 |
| 5.3 Soil and Water Conservation Measures:(Package:3)..... | 30 |
| 5.3.1 SMC Works in forest areas and adjoining to forest areas | 31 |
| 5.3.2 SMC works in Wildlife Buffer areas | 32 |
| CHAPTER- VI: Strengthening Institutions..... | 33 |
| 6.1 Village level institutions: VFPMC, EDC and SHGs: (Package :4)..... | 33 |
| 6.2 Capacity Building for Forestry Personnel (Package: 5) | 34 |
| 6.3 Communication and Extension (Package: 6)..... | 35 |
| CHAPTER- VII : Monitoring and Evaluation : (Package:7) | 36 |
| 7.1 Project Monitoring..... | 36 |
| 7.2 Project Evaluation..... | 36 |
| 7.3 Institutional Mechanism for M&E:..... | 38 |

| | |
|---|-------|
| CHAPTER- VIII: Institutional Arrangement | 39 |
| CHAPTER- IX: Financial Requirements | 40 |
| CHAPTER- X : Outputs, Outcomes, Assumptions and Project Sustainability..... | 41 |
| ANNEXURES: (1 - 7)..... | 43-50 |

EXECUTIVE SUMMARY

Project Context:

Government of Rajasthan has proposed a massive greening of Rajasthan **"Project For Development of Water Catchment Through Greening of Rajasthan"** to NABARD under Rural Infra-structure Development Fund (RIDF tranche XVIII). Under the proposed project it is planned to treat about 159,000 hectares of degraded forest lands at a proposed project cost of Rs 988.47 Crores. NABARD has already sanctioned Phase-I of the project under RIDF- XVIII with a total cost of Rs 336.66 Crores for a period 2012-13 to 2016-17. Under Phase-I about 52,750 ha. was proposed to be covered. However, an area of 29894 ha. could be treated during 2012-13 and the remaining target of 22856 ha is being taken up in 2013-14.

As a sequel to the ongoing project Phase-I and to complete the greening programme, the Phase-II of the project has been proposed for the period from 2013-14 to 2018-19.

As fulfillment towards State Forest Policy:

Rajasthan State Forest Policy 2010, proposes to bring 20% of the geographical area of the state i.e. 68,448 sq.km. under tree cover. It has been mooted to realise ambitious target of greening the state through: massive restoration of degraded forests; encouraging natural forests; and agro-forestry in the non-forest land. The geographical area of the project area is 1,05,745 Km² and the forest area is 22,951 Km². Out of this 10,889 Km² is degraded forest which is 47.44% of the project forest area. This project, therefore, aims at restoring part of degraded forests besides other activities to restore the ecosystem in the project area.

Project Objectives:

1. To improve forest cover and enhance ecological services through intensive reforestation and natural forest protection.
2. To encourage Agro-forestry as key supplementary economic activity for sustainable development and as an adaptive measure to climate change mitigation.
3. To promote eco-development in villages around protected areas for sustaining livelihoods and Bio-diversity conservation.

4. To support alternate employment opportunities through community based self-help groups, skill development trainings.
5. To elicit peoples participation through Joint Forest Management (JFM).
6. Strengthen natural resource management through state of the art science based technologies like GIS and appropriate capacity building measure for staff.

Project Area:The project will be implemented in 17 of total 33 districts of the State. The districts are Alwar, Bharatpur, Dausa, Dholpur, Karauli, SawaiMadhopur, Tonk, Ajmer, Bundi, Baran, Kota, Jhalawar, Chittorgarh, Pratapgarh, Rajsamand, Sirohi (except Abu Tehsil) and Udaipur. Forest area in the project districts are mostly open and degraded forests of Aravali and Vindhyan hill systems.

Area Coverage:A total area of 43, 000 ha. is proposed to be taken up during the project period.

Financial Requirements:(Rs. In Lacs)

| S.No. | Name of Package | Amount |
|--------------|---|-----------------|
| 1 | Package- 1 Afforestation | 20731.32 |
| 2 | Package-2 Agro Forestry | 885.56 |
| 3 | Package-3 Soil & Moisture Conservation Structures | 1491.02 |
| 4 | Package-4 JFM Activities & Project Management | 771.00 |
| 5 | Package-5 Capicity Building | 203.80 |
| 6 | Package-6 Communication &Extention | 441.50 |
| 7 | Package-7 Monitoring & Evaluation | 680.00 |
| | Total (Package 1 to 7) | 25204.20 |
| | Add : 2% Price Escalation | 504.08 |
| | Sub Total | 25708.28 |
| | Add 5% Physical Contingency | 1285.42 |
| | Total NABARD Share | 26993.70 |
| | Calculation of State Share | |
| | 5% State Share of Package 1 to 7 | 1258.96 |
| | Add : 2% Price Escalation | 25.18 |
| | Sub Total | 1284.14 |
| | Add 5% Physical Contingency | 64.21 |
| | Total State Share | 1348.35 |
| | Grand Total (NABARD Share + State Share) | 28342.05 |

CHAPTER - I: Introduction

1.1 Country Context:

The National mission for a Green India was announced by Prime Minister as one of the eight missions under National Action Plan for Climate Change (NAPCC). Green India Mission puts “Greening” in the forefront in the context of Climate Change adaptation and mitigation, aiming to enhance system services like Carbon sequestration and storage, hydrological services and Bio-diversity along with provisioning services like fuel, fodder, timber and NTFPs. Green India Mission also recognizes importance of forests to the tribal and forest dwellers for their food, water, environmental and livelihood security. The mission is unique as it is primordial mission for the other missions. The key objectives of the mission are to achieve the following:-

- Improvement in quality of forest cover 5 m ha.
- Improvement in forest and tree cover on marginal agricultural lands / fallouts and other non-forest land under agroforestry /social forestry 3 m ha. Improved ecosystem services including Bio-diversity, hydrological services, Carbonsequestration.
- Management of public forests / non forests by community institutions.
- Diversification of forest based livelihood of about 3 million households living in and around forests.
- Enhanced annual CO₂ sequestration.

Rajasthan being the largest state with vast tracts of land and with lowest human density has vast potential in achieving the objectives of GreenIndia Mission.

1.2 Rajasthan State Context:

Rajasthan is the largest state in the country. It lies between 23° 30' and 30°11' north latitudes and 69°29' and 78°17' east longitudes. The geographical area of the state is 34.22 million ha. which is 10.41% of country's geographical area. The Aravallis, one of the oldest mountain systems, divide the state into two unequal parts. The Aravallis cover over 30% of the state. A vast expanse of arid and semi-arid tract lies in the west of the Aravallis. The Vindhyan hill system, another important hill range in the south-east of the state, drains into Chambal

and Banas rivers. Ravine formation is a very serious problem in the fragile sedimentary tracts of these rivers.

The physiography of Rajasthan is the product of long years of erosion and depositional processes. The present landforms and drainage systems have been greatly influenced and determined by the geological formations and structures. Four major physiographic regions can be identified within the state. The western desert region is characterized by arid landscape, barren hills, rocky structural plains, other sandy plains with alluvium layers underneath, sandy hummocks and low sand streaks, sand dunes of various kinds and inter-dunal plains. Most of the western sandy plain is covered with a thick mantle of aeolian sand, visible in the form of shifting and permanent sandy dunes. Aravalli hills constitute the most dominant hilly area of Rajasthan. The ranges run diagonally across the state in the south-west to north-east direction starting from Gujarat and ending in Delhi, covering a distance of about 690 Kms. Within Rajasthan, the ranges run from south-west to Khetri in the north-east for a length of about 550 Kms. Apart from the hills, other major landforms within this region are the rocky uplands, shallow to moderately deep alluvial plains and narrow alluvial plains at few locations.

Eastern plains cover most parts of Alwar, Bharatpur, Jaipur, Dholpur, Tonk, Sawaimadhopur, Bundi and Kota districts. The eastern plains have rich alluvial soils drained by seasonal rivers. Southern and south eastern Rajasthan is mostly a plateau. The Hadoti plateau having intrusions of black volcanic rocks and the Vindhyan extensions covering most parts of Jhalawar, Baran and Kota districts. The Malwa plateau also extends into the southern parts of Chittorgarh and Banswara districts.

The climate of Rajasthan varies from semi-arid to arid. Hyperthermic conditions prevail in the whole of the state. The mercury touches 49°C at some of the places during summer and drops below freezing point during winter. The rainfall pattern of the state is very erratic. Though, the average annual rainfall ranges between 200-400 mm, the annual rainfall received is as low as 150 mm in the extreme arid zones and as high as 1000 mm in the south-eastern part of the state. Most of the rainfall (60-80%) is received with the south-west monsoon in the period from July to September.

The total population of the State is 68.62 million (Census, 2011), which constitutes 5.67% of the country's population. The distribution of population in various regions is closely related to a number of factors, viz., climatic conditions, soil fertility, availability and development of means of transport and communication, growth of trade and other secondary and tertiary activities. Dispersal of population closely follows the pattern of annual rainfall regime which exhibits a consistent decreasing trend from east, south-east to west and north-west. It is only in the central parts of Rajasthan, that the area and population are proportionate. Human population density is 165 persons per sq. km., which is maximum in Bharatpur where there are 414 persons per square kilometre.

Rajasthan is rich in **animal wealth**. It has the distinction of having second largest population of cattle, sheep and camels of different breeds in the country, which is 49.14 million (Livestock Census, 2003). Livestock rearing is an important occupation of farmers to augment farm income. The ratio of livestock to human population is 1:1.149 whereas this ratio is 1:2.12 for the country. This shows the acute pressure of livestock on natural resources as well as on forests.

Land Use:The various parts of the state present a variety of land use patterns which exhibit, to a large extent, the availability of soil and water resources in the area and the human endeavors to harness them. Based on the availability of different types of land and their potential, site specific strategy plan as per the local factors. Of the total geographical land 48% is agricultural land and 9.56% is forest land.

Forest Area and Forest Cover: The forests of Rajasthan are basically of five types spread unequally in northern, southern, eastern and south-eastern parts. The state has teak forests which is northern most limit of teak zone in India. The forests are mostly edapho-climatic climax forests. Area by forest types is given in Table 1.1

Table- 1.1: Area byForest Type

| S.No | Type | Forest Area (Sq.km.) | % of Total Forest Area |
|-------|--|----------------------|------------------------|
| i | Dry teak forests. | 2247.87 | 6.87 |
| ii | Subsidiary edaphic type of dry tropical Anogeissuspendula forests. | 19027.75 | 58.19 |
| iii | Northern tropical dry deciduous mixed forests. | 9292.86 | 28.42 |
| iv | Tropical thorn forests. | 2006.23 | 6.14 |
| v | Sub-tropical evergreen forests. | 126.64 | 0.38 |
| TOTAL | | 32701.35 | 100 |

Based on the legal status 54.17% of land is protected forest and about 37.35% reserved forests and the rest 8.48% unclassified forests. As per 2011 Forest Survey of India report only about 14% of the forest area is having good forest cover, 35% of the forest areas are open with 10-40% canopy density and almost 51% of the forest areas are either in scrub form or degraded to heavily degraded form. The protected forests are under intense human pressure. Unclassified forest mainly lies in desert districts as well as in IGP area where plantations have been raised mainly on public wastelands.

District wise Forest Area and Forest Cover(Area in Km²)

| District | Geographic Area | Forest Area | Degraded Forest Area | % Degraded Forest Area |
|----------------------------|-----------------|-------------|----------------------|------------------------|
| Ajmer | 8481 | 613.1 | 337.1 | 54.98 |
| Alwar | 8380 | 1785 | 577.95 | 32.38 |
| Baran | 6992 | 2239.6 | 1149.6 | 51.33 |
| Bharatpur | 5066 | 434.94 | 198.94 | 45.74 |
| Bundi | 5550 | 1566.8 | 1113.8 | 71.09 |
| Chittorgarh and Pratapgarh | 10856 | 3227.2 | 1538.2 | 47.66 |
| Dhaulpur | 3033 | 638.45 | 219.45 | 34.37 |
| Jhalawar | 6219 | 1349.8 | 953.79 | 70.66 |
| Kota | 5443 | 1310.8 | 695.82 | 53.08 |
| Rajsamand | 3860 | 396.58 | NA | NA |
| S. Madhopur and Karauli | 10528 | 2739.8 | 1440.8 | 52.59 |
| Tonk | 7194 | 335.98 | 169.98 | 50.59 |
| Jhunjhunun | 5928 | 405.36 | 212.36 | 52.39 |
| Banswara | 5037 | 1236.7 | 861.67 | 69.67 |
| Barmer | 28387 | 627.22 | 458.22 | 73.06 |
| Bhilwara | 10455 | 778.76 | 556.76 | 71.49 |
| Bikaner | 27244 | 1249.1 | 1052.1 | 84.23 |
| Churu | 16830 | 71.22 | NA | NA |
| Dungarpur | 3770 | 692.73 | 440.73 | 63.62 |
| SriGanga Nagar | 20634 | 872.9 | 695.9 | 79.72 |
| Jaipur&Dausa | 14069 | 1228.3 | 597.29 | 48.63 |
| Jaisalmer | 38401 | 581.29 | 419.29 | 72.13 |
| Jalore | 10640 | 452.6 | 244.6 | 54.04 |
| Jodhpur | 22850 | 243.03 | 150.03 | 61.73 |
| Nagaur | 17718 | 240.93 | 121.93 | 50.61 |
| Pali | 12387 | 963.58 | 305.58 | 31.71 |
| Sikar | 7732 | 639.35 | 447.35 | 69.97 |
| Sirohi | 5136 | 1638.7 | 721.65 | 44.04 |
| Udaipur | 13419 | 4141.7 | 1026.7 | 24.79 |
| Total | 3,42,239 | 32701 | 16665 | 50.96 |

1.3 Project Context:

Government of Rajasthan has proposed a massive greening of Rajasthan "Project For Development of Water Catchment Through Greening of Rajasthan" to NABARD under Rural Infra-structure Development Fund (RIDF tranche XVIII). Under the proposed project it is planned to treat about 159,000 hectares of degraded forest lands at a proposed project cost of Rs 988.47 Crores. NABARD has already sanctioned Phase-I of the project under RIDF- XVIII with a

total cost of Rs 336.66 Crores for a period 2012-13 to 2016-17. Under Phase-I about 52,750 ha. was proposed to be covered. However, an area of 29,894 ha. could be treated during 2012-13 and the remaining target of 22,856 ha is being taken up in 2013-14.

As a sequel to the ongoing project Phase-I and to complete the greening programme, the Phase-II of the project has been proposed for the period from 2013-14 to 2018-19.

1.4 As fulfillment towards State Forest Policy:

Rajasthan State Forest Policy 2010, proposes to bring 20% of the geographical area of the state i.e. 68,448 sq.km. under tree cover. It has been mooted to realise ambitious target of greening the state through: massive restoration of degraded forests; encouraging natural forests; and agro-forestry in the non-forest land. The geographical area of the project area is 1,05,745 Km² and the forest area is 22,951 Km². Out of this 10,889 Km² is degraded forest which is 47.44% of the project forest area. This project, therefore, aims at restoring part of degraded forests besides other activities to restore the ecosystem in the project area.

CHAPTER-II: Project Objectives, Outcome and Implementation Principles

2.1 Project Objectives

1. To improve forest cover and enhance ecological services through intensive reforestation and natural forest protection.
2. To encourage Agro-forestry as key supplementary economic activity for sustainable development and as an adaptive measure to climate change mitigation.
3. To promote eco-development in villages around protected areas for sustaining livelihoods and Bio-diversity conservation.
4. To support alternate employment opportunities through community based self-help groups, skill development trainings.
5. To elicit peoples participation through Joint Forest Management (JFM).
6. Strengthen natural resource management through state of the art science based technologies like GIS and appropriate capacity building measure for staff.

2.2 Expected Outcomes:

Expected outcome of project are as under:

1. Improve the tree cover and contribute to the productivity.
2. Rejuvenate people's participatory movement and help in natural resource management, especially forest protection.
3. Contribute to Bio-diversity conservation of the region.
4. Contribute to income generation for the local communities which will help in reducing people's dependency on forests for livelihood.
5. Improvement of scientific forest management through GIS based technology.
6. Capacity building offorest personnel in using modern scientific technology.

2.3 Implementation Principles

2.3.1 Cluster / Watershed Approach in Site Selection:

Local community involvement is imperative for success of forestry development activities. There is general resistance to afforestation activities by

the local community mainly because of restriction on grazing and denial of access for fuel-wood. To address these local needs cluster approach will be adopted as a norm rather than exception and revenue village will be the basic unit of development. As far as possible available forest area under that particular gram panchayat will be taken up for plantation activity as a cluster. As the revenue village is also basic unit for all other development departments, integration of forest development with other developmental activities will be easier. Keeping in mind the current trends of watershed approach towards land development and management, degraded lands will be treated by taking up cluster of sites within a watershed.

The advantage of the watershed approach is that soil and moisture conservation helps in maximising productivity of the treated uplands as well as the downstream agricultural lands. The cluster approach will ensure maximum usufruct benefit flow to community and this will bring in positive environmental impacts leading to sustainable management of land resources.

Recently department has started implementing updated working plans in all the project districts. The areas will be treated as per the working plan prescriptions as far as possible.

2.3.2 Bottom-up Planning:

Project activities to be taken up in each village will be identified and incorporated in micro-plan of the village. A micro-plan will be comprehensive and it will cover all aspects of village natural resource development and socio-economic development of the local communities. The PRA will form the basis for preparation of the microplans. The micro-plan will be formulated by the village community themselves and facilitated by the Department with some supplementary help from local NGO. One micro-plan shall be prepared for one cluster, with separate treatment plans for each individual site within cluster. For maintaining consistency, all the micro plans shall be prepared as per the standard format decided and issued by the Department in this regard.

2.3.3 Emphasis on Process Rather Than Target:

The activities under the project will be taken up as a process rather than targets, which will include baseline survey, identification of project sites and VFPMCs/ EDC, formation of new VFPMCs/ EDCs in case there doesn't exist any

earlier, preparation of maps of the identified project site, training of staff and VFPMC/ EDC members, preparation of micro-plans, etc. The actual implementation of the project shall be taken up only in such clusters, where activities of the preparatory phase have been completed.

The Micro Plan may include the following:

- It should be prepared for the cluster as a whole in a project mode and exclusive treatment plans for each plantation work site.
- Comprehensive profile of the village detailing the natural resources, ecological conditions, social conditions, poverty situation, physical infrastructure as well as human resources and skill sets available in the village.
- Analysis of past interventions in protection and management of forests, status of forests, fodder and fuelwood requirements as well as typology of land available for afforestation.
- Identification and prioritization of problems could be addressed either directly through the project or through convergence with other agencies and line departments.
- Selection of entry point activities to be undertaken in the village.
- Selection and mapping of different categories of land available for treatment under various afforestation models (Bio-diversity conservation activities in fringe villages). Ground survey using Geographical Positioning System (GPS) shall be conducted for the entire VFPMC/EDC area and shall not be restricted only to area selected for treatment.
- Selection of activities and areas to be covered under soil and moisture conservation.
- Identification of poor and forest dependent communities for poverty-alleviation and livelihood interventions, SHG formation, trainings, entrepreneurial trainings.
- The budget should include all the activities proposed for the entire project period, with phasing for each year.

2.3.4 Facilitation by NGOs:

Forestry projects involve long-term engagement of community starting with PRA, planning, plantation and continued protection of plantations for at least 5

years period. Forest department will complete all stages of the project: baseline data collection, conducting PRA, providing training to selected community members, providing regular mentoring support to the VFPMC/ EDC for implementing the project. Preparation of a micro-plan will be undertaken with involvement villagers and also forest department functionaries with supplementary help from local NGO. Local NGO is expected to provide the following services:

1. Assistance in selection of suitable village for carrying out the project activities.
2. Suitably and adequately mobilize people for various activities of the project and assist in formation of VFPMC and EDC in project villages.
3. Conduct PRA exercise to prepare micro-plan.
4. Facilitate micro-planning in project villages and document the micro plans of each project villages.
5. Assistance in regular review of the project and updating of Micro Plan.
6. Develop capabilities among the people to coordinate, manage, monitor and evaluate the progress of various components and activities of the project.
7. Assistance in identifying beneficiaries of various project components, especially those related to poverty alleviation and livelihood-improvement.

2.3.5 Furtherance to Agro-Forestry:

Agroforestry is considered evergreen agriculture which provides food security and environmental resilience. Agroforestry, as a widespread land-use adaptation, potentially support simultaneous production of fodder, food, fuel as well as act a security during drought periods. The improved tree cover will ultimately improve the Carbon sequestration also contribute to conservation of Bio-diversity. This synergetic activity, with enhanced peoples participation in greening, Bio-diversity conservation, livelihoods security, climate change adaptations make it perfectly fit for generating additional resources through Clean Development Mechanisms (CDM) of Carbon trading. This approach requires massive rural community participation in the taking up tree planting along with traditional agriculture. For this, seedlings of suitable tree species as per local demand will be distributed to people as per the policy of the government.

2.3.6 Self Help Groups for Alternate and Enhanced Employment:

Self Help Groups (SHGs) are instruments of holistic empowerment of the people especially women through social and economic and sometimes political dimensions. The SHGs are also considered as effective strategies for poverty reduction and women empowerment. SHGs are constituted both in VFPMCs and EDC villages. The SHGs are formed, supported by NGOs or government agencies by bringing together a group of people having common economic interests. The members are often trained in small savings, management of credit, entrepreneurial skills.

Based on the well-established SHGs principles, groups of 10-20 women or men who want to improve their living conditions will be constituted as SHG from their own savings and loan from financial institutions. The project will provide NGO support, awareness generation, group formation, providing training, conducting meetings, help identify business partner. The project shall provide assistance through NGOs to get loan from financial institutions.

The key functions of NGO for self-help groups and EDC will be

1. Identify the poor and communities dependent on forest and organize them in Self Help Groups (SHGs) in project villages.
2. Conduct training for SHG members on various institutional and management aspects of SHG.
3. Assist in developing sufficient and adequate linkages for skill up-gradation, marketing and also support in convergence with other government departments and schemes.
4. Support in collection and compilation of data and carry out regular monitoring and review the progress of project activities in line with the objectives of the project and ensure achievement of objectives within stipulated time frame.

2.3.7 Emphasis on Women and Socially Vulnerable Groups:

Women in rural areas are mostly dependent on forest lands from where they gather most of the forest produce both for subsistence and sale, therefore, participation of women is of immense significance for better forest management. Women are the victims of the environmental crisis but key partners in crisis management. The project will make special efforts to involve women and members of other vulnerable groups in the project. The project will strive to

expand employment opportunities for women and socially vulnerable groups, provide incentives like extending health services, e.g., holding medical diagnostic camps, labour saving technologies and water supplies in their villages through entry point activities.

2.3.8 Web Based Monitoring:

Web based information system can provide micro watershed level information in real time. The module comprises of basic database system and geographical interface which has all basic function and tools like search, query, identity, measurement. Large number of potential users can have access to existing GIS data; can also enhance the existing data. The application requires very little training and can be tailored for non-GIS users as well. Sound web based decision-making, monitoring system can reduce electronic data transfer time which is paramount principle. The web application developed will have full-fledged combination of tools for both spatial and non-spatial data. This web-based monitoring should be in tune with e-green watch data base and finally the data will be linked to the e-green watch portal.

2.3.9 Independent Monitoring and Evaluation:

Innovative M&E principles will be used for strengthening M&E in this proposed second phase of the project, which will also cover the monitoring and evaluation of activities taken up in phase-I. Independent regular internal monitoring will be carried out by APCCF (M&E). The village communities will also be trained in community based self-monitoring. Independent 3rd party evaluation studies will be encouraged, which will improve the transparency of implementation and will also provide critical recommendations for improvement of the project performance.

2.3.10 Fillip to Working plans implementation:

More or less all the project districts have approved working plans. All the project activities will be taken up as per approved working plans as far as possible.

CHAPTER – III: Project Area:

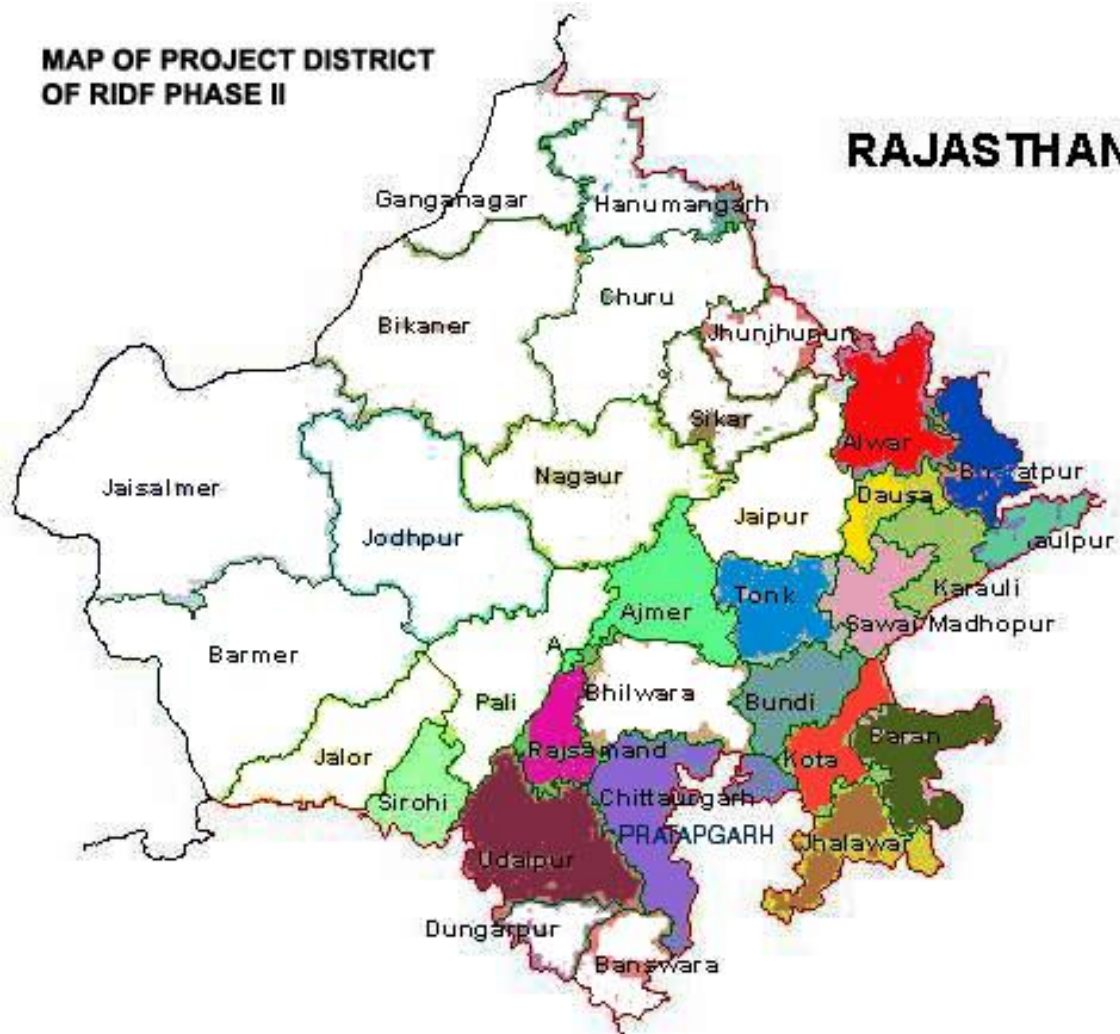
3.1 Project Area

The project will be implemented in 17 of total 33 districts of the State. The districts are Alwar, Bharatpur, Dausa, Dholpur, Karauli, SawaiMadhopur, Tonk, Ajmer, Bundi, Baran, Kota, Jhalawar, Chittorgarh, Pratapgarh, Rajsamand, Sirohi (except Abu Tehsil) and Udaipur. Forest area in the project districts are mostly open and degraded forests of Aravali and Vindhyan hill systems. The status of forests is as indicated in the table below:

| S.No | Name of the District | Forest area Sq km | Degraded Forest Sq Km | % Degraded Forests |
|------|----------------------|-------------------|-----------------------|--------------------|
| 1 | Alwar | 1785 | 578 | 32.38 |
| 2 | Ajmer | 613 | 337 | 54.98 |
| 3 | Baran | 2240.00 | 1150 | 51.34 |
| 4 | Bharatpur | 435 | 199 | 45.75 |
| 5 | Bundi | 1568 | 1114 | 71.05 |
| 6 | Chittorgarh | 1793 | 806 | 44.95 |
| 7 | Pratapgarh | 1663 | 732 | 44.02 |
| 8 | Dholpur | 638 | 219 | 34.33 |
| 9 | Jhalawar | 1350 | 954 | 70.67 |
| 10 | Kota | 1311 | 696 | 53.09 |
| 11 | Rajsamand | 397 | 119 | 29.97 |
| 12 | Sawai Madhopur | 953 | 384 | 40.29 |
| 13 | Karauli | 1810 | 1057 | 58.40 |
| 14 | Tonk | 330 | 170 | 51.52 |
| 15 | Dausa | 284 | 150 | 52.82 |
| 16 | Sirohi | 1639 | 722 | 44.05 |
| 17 | Udaipur | 4142 | 1502 | 36.26 |
| | Total | 22951 | 10889 | 47.44 |

**MAP OF PROJECT DISTRICT
OF RIDF PHASE II**

RAJASTHAN



Legend:

| | | | | | |
|------------|--|-------------|--|-------------|--|
| Alwar | | Ajmer | | Rajsamand | |
| Baran | | Bharatpur | | S.Madhampur | |
| Bundi | | Chittorgarh | | Karouli | |
| Pratapgarh | | Dholpur | | Tonk | |
| Jhalawar | | Kota | | Dausa | |
| Sirohi | | Udaipur | | | |

3.2 Map of the Project Area:

CHAPTER- IV: Implementation Strategy and Action plan

To improve the project performance due importance is to be paid to planning, institutional setup, training of the field functionaries and establishing monitoring systems before actual implementation. The DCF concerned and regional CCFs will ensure that all preparatory works are completed before the start of the project activities.

4.1 Preparatory Stage.

The proposed plantation activities are to be carried out by the DCFs concerned of the project districts with active involvement of VFPMCs / EDCs members. The activities briefly are:-

4.1.1 Preparation of Guidelines, Manuals:

- Detailed guidelines for implementation of the project have been prepared for the implementation of phase-I project. This will be strictly adhered to implement phase-II project. The department will also impart training for project implementation to all field functionaries.
- Expert services may also be hired to conduct workshop on Joint Forest Management activities.
- The Department will procure computers, other equipment's and customized software to establish, project management, integrated web based monitoring system. Training will be provided to staff for data collection, updating and report preparation.

4.1.2 VFPMC / EDC Constitution and Revival:

- All the project activities will be planned on a cluster or watershed basis. Cluster selection will be the paramount activity before other associated activities are taken up.
- Village Forest Protection and Management Committee (VFPMC) is a body formed by the village people for the protection, development and management of the forest. The existing VFPMCs will be involved to undertake the project activities in the project area. However, If there is no VFPMC or EDC in a particular village cluster, new committees will be constituted.

- Adequate number of meetings shall be held in a year for the executive committee and one general body. The committee meeting will ensure women and weaker section participation.
- Local NGOs shall be associated with community mobilisation, capacity building and for internal monitoring purpose. The NGO association will help in long term sustainability of the project.

4.1.3 NGO/ Consultant support for PRA and Microplans

NGO participation will improve project performance, transparency and acceptability. NGOs/ Consultants may be hired by DCF as per the need and requirement of the project. The consultants/NGOs will be selected on the basis of competitive bidding and selection process.

The selected NGO will assist forest department in completing the following works:-

- The NGO will help the local field functionary to complete the mapping process in all the villages proposed in Phase-II. The NGO will also help the field functionaries in collection of the primary data for completion of microplanning and treatment map preparation.
- The NGOs will help conduct PRA in villages where the activities under the project are envisaged.

4.1.4 Micro-planning

Micro planning is the cornerstone of the Project. Most of the microplans in the project districts have been prepared for the implementation of project activities in phase-I. However, as per the necessity, new villages will be selected for the preparation of microplans. To make the micro-plans widely acceptable meetings will be held with village community to have consensus as far as possible. The approved micro plans will form the basis of the implementation of the project in the village.

The process of micro planning will be as under:

1. Preparation of a micro plan shall be undertaken by an NGO with involvement of majority of villagers in presence of Forest Department officers after extensive Participatory Rural Appraisal and Rapid Assessment and Situation Analysis. Micro Planning shall be followed in the process of

Community Problem Analysis, Visioning, Goal setting, SWOT Analysis, and Resources Planning.

2. Activities such as in-situ conservation and habitat restoration with in protected areas will be directly implemented by the Department. Livelihood Improvement and Capacity Development component will be undertaken in all project villages.

3. Works will be undertaken in the project area as per the prepared microplans and VFPMC constituted. However, the Department may select villages where new VFPMC can be constituted under the project.

4. A micro plan of a village will be approved by the concerned Deputy Conservator of Forests. The budget allotment will be done only after obtaining complete project proposals along with the budget requirement for the entire project period.

5. The VFPMC/EDC will be adequately supported in terms of scaling up of capabilities, building of adequate competencies and skill up-gradation, by the departmental functionaries and the designated NGO in effectively carrying out its functions.

6. A Regular monitoring, evaluation and appraisal of the work will be carried out at various levels and at different times to ensure effective and efficient utilization of project funds as also attainment of project objectives.

7. Regional CCFs and DCF will coordinate with concerned line department /agencies to achieve synergy and to facilitate works identified during the Micro Plan process. Since project activities are envisaged on Community land and Village Pasture land also adequate written consent would be sought from owner department i.e. Revenue Authorities in case of Community land, Gram Panchayat in case of village pasture land.

8. The maintenance of assets created during the project period will be done by the VFPMC. A Corpus Fund will be created with the VFPMC for the purpose. The corpus fund will be generated through income from usufruct sharing and benefits from forest area as per JFM agreement. The VFPMC is expected to use the interest generated from the fund for the maintenance of the assets under the guidance of the Forest Department. Adequate training and orientation in this regard shall be provided to the members of VFPMC during the course of project implementation.

4.1.5 Entry Point Activities

Entry Point Activities are to be undertaken to build trust and generate the interest of the community during the early stages of the project. Instructions in respect of EPA have been circulated by the department for the phase-I project. However, in case of certain EPA activities which, have not been listed, the design and cost estimates of the selected EPA will be prepared by the Range Officers in consultation with NGO and VFPMC which will be approved by DCF. Further, the community assets created under Entry Point Activities would be handed over to the Gram Panchayat for further maintenance.

4.1.6 REDD+ / CDM Training and Identification of Pilot Projects

Improved Agro-forestry practices combined with climate change mitigation measures are key strategies proposed under the project. To improve the pace of implementation department will select about 10 officers and train them in REDD+ and CDM procedures. Department shall identify consulting firm/ institution for developing CDM / REDD+ plan-vivo projects. The department will also conduct consultative workshops to identify appropriate research projects.

4.1.7 Establish Monitoring Systems

To develop web-based GIS monitoring system, there is need for collection of baseline data, against which the project impact can be assessed and activities can be monitored in a better way. This involves cadastral mapping, generation of layers such as water bodies, roads, settlements, forest area, DEM, water ridge lines etc. This involves purchase of satellite data and GIS techniques. The generation of thematic layers can be done through in-house facility or through out-sourcing. Primary data connected with project activity like plantation sites, water retention structures can be done by forest staff or participating NGO. Web based monitoring system involves GIS and MIS. This involve special software development for proper database design, interface design and development along with GIS server management, migration of baseline data, testing of the developed system, installation of finally approved server. Key components of the activities are:

1. Generation of baseline data
2. Procurement of GPS

3. Purchase of satellite data
4. Staff training in open source GIS and RS
5. Procure servers and Web- GIS software
6. Establish computer systems up to Range level
7. Establish broadband network
8. Data migration, generation of layers
9. Develop, test and install web-based monitoring system

4.1.8 News Letter:

Dissemination of information regarding the project, especially about objectives, implementation strategies, processes, needs to reach up to all stakeholders. This is best done through starting exclusive project pages within the existing forest newsletter. The project will help in redesigning the newsletter, get published for wider publicity.

CHAPTER- V: Project Implementation

The ecological restoration will be done through massive afforestation activities. Based on the availability of the rootstock appropriate plantation models will be used for treating the area. The overall scheme of afforestation will follow guidelines envisaged in State Forest policy 2010 and JFM guidelines.

The model selection suitable for particular site will be followed as per the working plan prescriptions as far as possible.

Afforestation (Package-1)

Specific Criteria for Selection of Models:

Based on general criterion which will be common for all components of project, the specific criteria for site selection for each project component will be as follows:

5.1.1 Rehabilitation of Degraded Forests – I

- Crown density of existing crop should be between 0% -10%.
- Lesser availability of root stock
- Scope for planting 400-500 plants per Ha.

Under this component it is proposed to cover an area of **10,000 ha**.of degraded forest in the project districts.

5.1.2 Rehabilitation of Degraded Forests - II

- Crown density of existing crop should be between 10% - 40%.
- There should be scope for planting 200-300 plants per Ha.

Under this component an area of **12,000 ha**.is proposed to be treated.

5.1.3 Assisted Natural Regeneration

- Crown density of existing crop should be above 40%
- Availability of sufficient root stock.
- There should be scope for planting about 150-200 plants per Ha.

An area of **10,000 ha**.is proposed to be treated under this component.

Technical Models: Cardinal Features

1. The activities to be undertaken under different models are clearly spelt out in the model cost estimates of the respective models. These models

are only for guidance and site treatment may vary as per site requirement.

2. The existing RDF-I, RDF-II and ANR models have provision only for ditch fencing or loose stone wall fencing for boundary. There is no provision for pucca wall fencing. However, in areas, vulnerable for encroachments pukka boundary wall will be constructed under MNREGA or other schemes of the department.
3. To facilitate consolidation of forest boundaries DGPS/ DNSS survey will be carried out to fix the boundaries and record coordinates for future reference.
4. Any item which is not required on any site due to technical reasons may be excluded while implementation and provided amount will be surrendered.
5. Any deviation from model will be permitted only after approval of next higher authority.
6. The sites will be chosen according to the specific requirements of the respective models and vice-versa.
7. The activities which are presently being executed will be strictly followed in the following sequential order: Proper selection of site; Formation of Village Forest Protection and Management Committee; Preparation of Microplan of the village; Survey of the area; Preparation of treatment plan and cost estimate of site; Execution of the work and Periodic monitoring of growth and survival of plants.
8. During the execution involvement of local people, NGO participation, model suitability, preference to indigenous species, maintenance of plantations according to silvicultural practices, etc. will be ensured.

5.1.4 Panchayat Land Plantations:

Development of community lands and panchayat lands make the villages sustainable and self-reliant for their own fodder and fuel-wood needs. This improved productivity on community lands will also reduce dependency on forests. Plantation activities on community lands always help in fostering relationship between forest department and community. To involve the community and enhance cooperation, plantation activities will be taken up on village lands.

Under this component an area of **1,000 ha.** of Panchayat land is proposed to be treated.

5.1.5 Bamboo Productivity Enhancement operations:

Bamboo is natural associate in semi-arid dry deciduous forests of the project districts. Heavy exploitation, lack of cultural activities for improving the crop, led to decrease in bamboo yield. It is important to conserve the degraded ravines and improve the productivity of natural bamboo forest areas. Bamboo is well suited and polycyclic harvesting crop, reported to yield 20 times more revenue than timber in the same area. The interlocking roots of bamboo and leaf deposits inhibit soil erosion. All the more harvesting of bamboo starts after 7 to 8 year. An area of **5000 ha.** will be taken up for Bamboo productivity enhancement operation. The bamboo improvement models prevalent in the department will be used.

5.1.6 Buffer Area Development:

Except for Desert National Park (DNP) and Thalchapar sanctuary all protected areas of the state are situated within the project area districts. Degradation of natural wildlife habitats is widespread in the project area. As a result the Bio-diversity rich Sanctuaries and National Parks (PAs protected areas) are isolated and there is no smooth gene flow for maintaining genetic Bio-diversity. The protected areas adjoining the human habitations are severely degraded owing to heavy biotic pressure. These buffer areas are thus not able to support much of wildlife leading to increased human-wildlife conflict. This situation will have profound implications for conservation of the rich biota of the region. To reduce human wildlife conflict, improve the habitat conditions, buffer areas will be developed as an appropriate landscape management strategy. Afforestation and allied activities will be taken up to restore natural vegetation in such degraded parts of protected areas. The following general principles will be observed while restoring the corridors:

- Identify and delineate buffer at landscape level prepare maps on 1:50,000 scale for monitoring and management
- Identify villages/ settlements within the corridor/ buffer
- Ascertain the legal status
- Involve local NGO, Public institutions and build public trust
- Establish / revive eco-development committees

- Prepare detailed buffer restoration plans online with working plans of adjoining protected areas
- Share the corridor restoration plan with local communities
- Initiate eco-development activities
- Entry point activities
- Implement greening activities
- RDF-I and ANR models will be used for restoring the corridors
- Areas adjoining to human settlements, where there are high incidence of conflict are reported, pukka wall construction can be taken up with financial help from other ongoing programmes.

Under the buffer area development component a total area of **5,000 ha** is proposed to be treated under the project.

5.1.7 Package-1 related accessories and activities:

Under package-1 a no. of accessories and activities will be required. This will include purchase of GNSS survey equipment, hand held PDA, Flatbed Scanner, purchase of computers, laptops, work stations, software and customization besides training of staff, PRA, NGO institutional support, entry point activities etc. The forest area taken up under the projects will be surveyed using Global Navigation Satellite System (GNSS) or Digital Global Positioning System (DGPS) to determine actual location of boundary pillars. The pillar location coordinates will be useful in recording the exact location of the pillars in the records.

5.2 Agro-forestry: (Package-2)

Community development through holistic farm practices is one of the key objectives of the project. Holistic farming is viable and sustainable for providing constant source of income even during drought periods. Rajasthan, being dry State, which receives scanty rainfall is vulnerable to frequent droughts. Farmers are dependent on pure agricultural crops and thus are more susceptible for such nature vagaries. Suggested holistic agriculture include 33% of agriculture, 33% of land under horticulture, 11% land under nitrogen fixing trees, 11% trees for fodder, 6% for short duration trees and 6% land under long duration trees. This judicious mix of agriculture, horticulture and forestry is best suited for farmers in project area.

Government of Rajasthan has abolished all restrictions on the transit of the wood products from agricultural fields to market and this is an enabling environment for the rural community to reap the benefits from their agri-practices. Only 9.56% of geographical land of Rajasthan is under legally defined forest area and only about half of it has good forest cover. In 2010 Forest Policy State Government has proposed to bring 20% of geographical land under tree cover.

This ambitious goal of Rajasthan Forest Policy 2010 of having 20% of geographical area under tree cover is possible only through appropriate agro-forestry interventions. The agro-forestry component will include seedling distribution of suitable tree species as per the demand of the farmers as per the policy of the government. Under this package development of SOP and nursery manual will be undertaken besides distribution of 50 lakh seedlings, creation of 7 new nurseries cum demonstration centers and support for development of 20 nurseries will be taken up. To give impetus for resizing of medical plants 17 nurseries will be developed besides training of 500 field staff. As Clean Development Mechanism (CDM) and REDD+ is increasingly becoming important aspect 10 officers will be deputed for training in CDM and REDD+.

5.3 Soil and Water Conservation Measures :(Package-3)

The project is implemented in eastern districts of the state which receive moderate rain fall often spread in two months. The heavy rainfall in a short span allows very little water to percolate. Hard rocky underground combined with black cotton soils in majority of places adds to the percolation problem. The heavy population pressure led to heavy deforestation and land use change. These hostile conditions are inimical to good growth of vegetation, and drought are very hard to cope with. Hence priority for this region is to conserve the precipitation in-situ, so that water regime improved with least effort.

The practices for in-situ soil and moisture conservation will be selected keeping in mind the following objectives:-

- Reduction of runoff from the catchments to improve moisture regime in the area.
- Prevention of soil erosion, land degradation and enhancing productivity and land use capability.

- To make available moisture for optimal plant growth and also provide drinking water to the Wild Animals in corridors through-out the year, especially during summer when other natural sources of water get dried up.
- To preserve the Flora and Fauna of the project area.
- To recharge ground water in the project area as well as in the peripheral areas and nearby villages.

5.3.1 SMC Works in forest areas and adjoining to forest areas

The proposed soil and water conservation measures will be implemented after carefully considering the following points:

1. Care should be taken so that SMC structures do not restrict the flow of water to major reservoirs of the area. The guidelines issued for construction of SMC in compliance to Honorable High Court will be strictly adhered.
2. Village common lands should be treated on priority basis.
3. Upper reaches: Masonry check-dams, loose boulder with gabion will be constructed in the upper reaches of the drainage lines for gulley control and checking the velocity of run-off and reducing silt flow with run-off.
4. Lower reaches: Percolation Tanks, Water harvesting structures, etc will be constructed in the lower reaches to stabilize the nallahs and impound water for water resource augmentation.
5. In the areas, peripheral to the forest lands upto 500 meters (non-forest lands/ agricultural lands) contour bunding is proposed for increasing the time of concentration of run-off for in-situ moisture conservation for enhancing agricultural productivity. About 125 meters contour bunding will be constructed per hectare. Field outlets will be provided at suitable places for removal of excess water with non-erosive velocity.

5.3.2 SMC works in Wildlife Buffer areas

Soil and Water Conservation Structures will be constructed strategically, to enhance water resource augmentation and top soil moisture regime to enhance the growth of plants in the project area. The structures shall be constructed as per the soil conservation principles and the site conditions. To reduce the

dependency of local people on the forest areas, such structures will also be taken up in non-forest areas.

Under package-3 a number of soil and moisture conservation structures such as Contour Bunding with Field Outlet (10,000 ha.), Check Dam (400 no.), Farm Ponds (200 no.), Loose Boulders with Gabion Structure (100 no.), Percolation Tank (100 no.) and Water Harvesting Structures (100 no.) will be constructed in forest and wild life corridor areas. Contour Bunding construction of Farm Ponds and Percolation Tanks will be undertaken in the agriculture fields within a radius of 500 meters of the afforestation sites.

CHAPTER- VI: Strengthening Institutions

Joint Forest Management Committees (JFM), Eco-development Committees (EDC) and Women Self Help Groups (SHG).

6.1 Village level institutions: VFPMC, EDC and SHGs: (Package:4)

Most of the villages in the remote forest areas particularly in tribal region of the project are quite underdeveloped with regard to infrastructural facilities. Lowest forest functionaries i.e., Forest Guards, who are working in the area, have a close understanding of the local people and their problems, being the only Government representative available in such areas, people approach them for most of their problems. Gradual depletion of natural resources in such areas creates much more problems downstream in the watersheds.

The micro-planning exercises which have been carried out in earlier afforestation activities have clearly indicated that in the interior areas there are many problems mainly because of remoteness and poor infrastructure development. These problems generally overwhelm the forestry related problems. If these problems remain untouched, people's attitude remains neutral towards forestry activities and it becomes very difficult to seek their active co-operation. If, few of these problems are solved then seeking peoples active participation for forest conservation and development becomes very easy. Implementation of infrastructure development activities in the project area particularly tribal areas will also improve the quality of life in such areas. Most of the VFPMCs in these villages are active because of the welfare activities which are undertaken in the village. Over last few decades government has encouraged community participation through joint forest management. This proved to be a win-win situation for people and forests, for the community is benefited of the forest produce and the forests got required protection for development. The implementation strategy followed for the project will be as under:

1. Constitute new VFPMC committees in areas where there are no committees or revive the existing committees. Facilitate regular meetings and train executive members.
2. Conduct awareness camps and facilitate formation of Women self-help groups, provide institutional support for SHG so that the women groups conduct the group activities, start economic entrepreneurial activities.

3. Eco-development committees will be constituted in villages adjoining protected areas. The eco-development committees will also work as user groups and the members will be trained in alternate economic activity. The project will provide institutional support in terms of NGO for conducting meeting, awareness activities.
4. To bring in new knowledge from other successful VFPMCs and EDCs, the department will organise study tours for VFPMCs and EDCs members.
5. Department will document successful VFPMCs and EDCs activities through case studies, short films, presentations.

6.2 Capacity Building for Forestry Personnel (Package 5.0)

Effective project implementation and success of the project depends on the capability of the project personnel. Proper understanding of the project objectives, expected outputs, processes to be followed is very vital for ensuring the success of the project. Various trainings have been proposed to upgrade the forest personnel's skills in project implementation, afforestation, project monitoring and in getting research conducted through collaborative process. These capacity building trainings are in addition to the trainings prescribed under agro-forestry, and JFM consolidation packages. The key strategies for staff's skill for project management and monitoring will be as follows:

- Project implementation trainings to Forest guards, foresters, forest range officers.
- Survey, preparation of treatment plan and afforestation techniques and maintenance of mandatory records.
- Department will organise exchange visits to other similar project sites within the state and outside the state.
- Project will support research activities, topic relevant to the project objectives through the department or through other institutions.
- Project will procure books, periodicals relevant for upgrading the literature available.
- Project implementation staff engaged in maintenance of records, monitoring reports, budget control will be trained.

6.3 Communication and Extension (Package 6)

Extension is considered as a non-formal educational process. These forestry extension methods disseminate necessary knowledge and technology to designated target groups. Extension and communication techniques are important media for expansion of forest knowledge and project knowledge. Planning extension is prerequisite for success of the project. The key activities for effective communication and extension will be as follows:

- Conduct project workshops at state level, regional level and district level to disseminate information about the project.
- Conduct special workshops for public representatives, media personnel for wide publicity and increase the transparency.
- Provide documentation equipment like camera, data storage capacity up to range level, publicity equipment at regional level and HQ level.
- Revive the forestry newsletter and publish news, views and other development related stories for all stakeholders and public.
- Forest Department will prepare brochures, technical guidelines, manuals, posters relevant for the project success.
- Forest Department will engage professional institutions or individuals to document success stories of the project.
- Kisanchoupals in the rural areas is the best forum for dissemination of information to farmers. Project will support at least 6 choupals per cluster per year. Subject matter specialists, other Development Department's staff will be invited for discussing various issues of the farmers.

CHAPTER- VII: Monitoring and Evaluation (Package-7)

Monitoring is integral part of management of the project which will act as real-time feedback mechanism. Monitoring is a process of measuring, recording, collecting, processing of information mechanism which acts as realistic feedback for necessary corrections of the system from which the information is generated. It continuously tracks, processes performance and provides information on whether progress is being made towards achieving the results. On the contrary evaluation is the periodic assessment of the performance of the project in terms of efficiency, impact and relevance of results with expected outputs. Evaluation relies on data generated through monitoring activities, special studies and other sources. The project implementation shall place more emphasis on monitoring which will include checking processes progress, regular assessment of project specific outputs, provide regular feedback for incorporating the lessons learned in to the project implementation and improving the performance.

7.1 Project Monitoring

Many conservation and natural resource management institutions have developed set standards for an effective monitoring and evaluation system, with in-built linkages to Project design, planning and implementation. Quantitative performance indicators, desired standards, processes involved in achieving the stated results are set as prerequisites for monitoring. It will include a concrete and fully budgeted monitoring plan.

7.2 Project Evaluation

The project evaluation will be done based on well-defined success indicators and project impact. The independent Mid-term and terminal evaluation will be undertaken.

Key Activities for Monitoring and Evaluation for RIDF Phase-II

1. **Concurrent Progress Monitoring:** Input/ output monitoring will include project's physical and financial progress reports.
2. M&E wing of the department will undertake evaluation of works, both advance action and planting.
3. **Web-based Monitoring:** Input-output monitoring and regular reporting would be supported by a web-enabled, GIS based computerized management information system (MIS) which would be an integral part

of the M&E system, integrated into the overall MIS systems. To develop Web-GIS based monitoring system, there is a need of collecting baseline data against which impact can be assessed and activities can be monitored. This will involve data generation such as cadastral mapping, generation of layers such as water bodies, roads, settlements, forest area, DEM , watershed ridge lines etc. This stage will involve use of satellite data and GIS techniques.

4. **Capacity Building for M&E:** Department will develop in house capabilities for impact assessment. GIS will also be used in preparing treatment plans on cadastral map scale, all the physical structures constructed, development activities carried out will be marked using GPS. Project related information and updates will be uploaded on web on a regular basis.
5. **Process Monitoring and Pathway Analysis:** Preparation of operations manual, selection of NGOs, community mobilisation, Entry point activities, training, strengthening of VFPMC/ EDCs,PRA and baseline survey, participatory project planning, project implementation, self-assessment, gender and other marginal community participation.
6. **Participatory Monitoring and Evaluation:** At least 4-6 Community members will be trained in monitoring and evaluation techniques. The community members will be encouraged to do periodic monitoring of the activities and prepare self-assessment reports.
7. **Thematic Studies and Case-studies:** Independent specialised studies will be assigned to subject specialists for in depth study and recommendations. The studies will be to improve the understanding of the project and suggest mechanisms to improve performance. These can also lead to summarising the impacts and presenting to wider audience.
8. **Impact Evaluation:** Evaluation studies will be carried out specifically to look at the impact of the project, including survival % of the plants in the afforested areas, increase in vegetation cover, number of surface water bodies successfully retained water, improved employment opportunities for the communities, improved functioning of VFPMCs/ EDCs, increased income for the community members, gender empowerment, empowerment of marginalized communities, increased awareness and skills at the grass root level etc.Satellite image monitoring is cost

effective and transparent monitoring system for large area. Satellite imageries of the project area, at the start of the project, third year of the project, and after 5th year of the project will be procured and used for assessing the true impact.

7.3 Institutional Mechanism for M&E:

Exclusive monitoring and evaluation unit exists for the evaluation of all developmental projects. The unit is headed by APCCF (M&E) reporting to PCCF (TREE). To improve transparency and objectivity the APCCF (M&E) will be responsible for independent monitoring and evaluation. The state level unit will be responsible for monitoring of identified activities and evaluation of the project. Following the principles of good monitoring mechanism, the results will be communicated at the appropriate level for necessary improvement in the implementation of the project.

CHAPTER-VIII: Institutional Arrangement

APCCF (Development) will be in-charge of the project and will be responsible for planning, implementation, monitoring, preparation of the reports, coordination with State Government and NABARD. He/ She will be assisted by CCF (Plan), CCF (JFM & EGS).

- CCF (Plan) through DCF (NABARD) will help in preparation of Annual plan of operations, preparation of TOR for various collaborations, consultancy services, plan allocation, budget release, reimbursement claims, monitoring progress and preparation of reports for various stakeholders.
- The regional CCFs will be supported by expert consultants hired as and when required for Agro forestry, Natural resource management including (JFM and EDC), HRM for coordinating trainings.
- There is shortage of project staff at all levels of project implementation. The project will also provide one person at regional level and one person at division level for project data base management. The persons to be engaged in project should be familiar with computers, record keeping and report preparation.
- The Department has already established NABARD cell under DCF (NABARD) for project management at the headquarter at Jaipur. It will be suitably strengthened.

CHAPTER-IX: Financial Requirements

RIDF- XIX: ABSTRACT OF THE PHASE- II

| S.No. | Name of Package | Amount (Rs. In Lacs) |
|--------------|---|---------------------------------|
| 1 | Package- 1 Afforestation | 20731.32 |
| 2 | Package-2 Agro Forestry | 885.56 |
| 3 | Package-3 Soil & Moisture Conservation Structures | 1491.02 |
| 4 | Package-4 JFM Activities & Project Management | 771.00 |
| 5 | Package-5 Capicity Building | 203.80 |
| 6 | Package-6 Communication &Extention | 441.50 |
| 7 | Package-7 Monitoring & Evaluation | 680.00 |
| | Total (Package 1 to 7) | 25204.20 |
| | Add : 2% Price Escalation | 504.08 |
| | Sub Total | 25708.28 |
| | Add 5% Physical Contingency | 1285.42 |
| | Total NABARD Share | 26993.70 |
| | Calculation of State Share | |
| | 5% State Share of Package 1 to 7 | 1258.96 |
| | Add : 2% Price Escalation | 25.18 |
| | Sub Total | 1284.14 |
| | Add 5% Physical Contingency | 64.21 |
| | Total State Share | 1348.35 |
| | Grand Total (NABARD Share + State Share) | 28342.05 |
| | | |

CHAPTER- X:Outputs, Outcomes,Assumptionsand Project Sustainability

The RIDF Phase-II project envisages targets to increase productivity of natural forests in the project area and improve the tree cover. The project will improve growing stock in 32,000 ha of degraded forests besides plantation activities in 1000 ha of Panchayat land. Chittorgarh, Pratapgarh and Udaipur districts are very rich in bamboo crops. Therefore, an area of 5000 ha. has been kept for bamboo cultural operations for the improvement of bamboo stock in the state.

Under the project 5000 ha of wildlife corridor will also be treated which will help in establishing effective links between various protected areas, in the eastern landscape.

The soil and moisture conservation works will improve the water regime in the project villages thus improving the farm yields.

The project is focused more on the process and capacity building, the JFM trainings, project implementation, nursery techniques and afforestation and GIS based monitoring. Training will add to the capacity building of the forest personnel.

The digital integration of project data with base data of the forest department will improve the forest management leading to good governance. Various forestry and non-forestry activities in the villages will provide employment opportunities to the families residing in the vicinity of the project area.

The implementation of the project in the project districts will generate employment at the doorstep of the people living in and around the project districts thus supplementing their income and securing their livelihoods. The production of palatable grasses in the area will help in the availability of fodder for the cattle in the project area. Availability of fuel wood, non-timber forest produce and fruits will also be available to the local people especially the weaker section of the society like women and tribals once the activities of the project is completed.

Assumptions for success of the project:

The success of the project certainly depends on the management, adherence to process, time schedule, quality of monitoring, feedback and mechanism for corrective measures including enabling environment. It is

assumed that Government of Rajasthan and NABARD will provide full support to the activities and processes. The department deputed proper personnel as per the management structure and establishes the project management unit. The forest department adheres to the preparatory phase and completes all trainings in time, prepares guidelines, manuals and disseminate information to all functionaries. Proper, competent NGOs are selected in a transparent manner and engage them effectively for community mobilisation, in JFM, SHG activities.

Sustainability: The project activities are carried out in participatory mode, the local communities will have full stake in all the activities. The benefits of the forests will be shared with community as per JFM resolution hence the communities will continue to protect the forests.

The eco-development committees will get benefited through SHG training, entrepreneurial activities. The farmer user groups are incentivized for raising tree crops during first five years. This will ensure the survival of the trees. CDM projects will help in raising additional fund flow to the rural communities this added attraction will sustain agro-forestry projects. Digitisation of forest land data is on going process, the project data will be helpful in updating the data. The customised software developed will be used by forest department for future management.

| | | | | | | | | | | | | | | | | |
|-----|---|---------|--------------|-----------------|--|-------|-------|-------|-------|-------|---------------|---------------|---------------|---------------|--------------|----------------|
| | Advance action | 1st yr | | 42797.00 | | 1,000 | | | | | 427.97 | | | | 427.97 | |
| | Planting | 2nd yr | | 23742.00 | | | 1,000 | | | | | 237.42 | | | 237.42 | |
| | Maintenance 1 | 3rd yr | | 6520.00 | | | | 1,000 | | | | | 65.20 | | 65.20 | |
| | Maintenance 2 | 4th yr | | 1184.00 | | | | | 1,000 | | | | | 11.84 | 11.84 | |
| | Maintenance 3 | 5th yr | | 1184.00 | | | | | | 1,000 | | | | | 11.84 | |
| | | | Total | 75427.00 | | | | | | | 427.97 | 237.42 | 65.20 | 11.84 | 11.84 | 754.27 |
| 1.5 | Bamboo Productivity Enhancement Operation | 5,000 | Ha. | | | | | | | | | | | | | |
| | Advance Action | 1sty yr | | 23367.00 | | 2,000 | 1,000 | 1,000 | 1,000 | | | 467.34 | 233.67 | 233.67 | 233.67 | 1168.35 |
| | Maintenancie 1 | 2nd yr | | 1312.00 | | | 2,000 | 1,000 | 1,000 | 1,000 | | | 26.24 | 13.12 | 13.12 | 65.60 |
| | | | Total | 24679.00 | | | | | | | 467.34 | 259.91 | 246.79 | 246.79 | 13.12 | 1233.95 |
| 1.6 | Buffer Area Development (RDF I) | 2,000 | Ha | | | | | | | | | | | | | |
| | Advance Action | 1st yr | | 30884.00 | | 2,000 | | | | | | 617.68 | | | | 617.68 |
| | Planting | 2nd yr | | 18270.00 | | | 2,000 | | | | | | 365.40 | | | 365.40 |
| | Maintenance 1 | 3rd yr | | 4650.00 | | | | 2,000 | | | | | | 93.00 | | 93.00 |
| | Maintenance 2 | 4th yr | | 1470.00 | | | | | 2,000 | | | | | 29.40 | | 29.40 |
| | Maintenance 3 | 5th yr | | 1470.00 | | | | | | 2,000 | | | | | 29.40 | 29.40 |
| | | | Total | 56744.00 | | | | | | | 617.68 | 365.40 | 93.00 | 29.40 | 29.40 | 1134.88 |
| 1.7 | Buffer Area Development (ANR) | 3,000 | Ha | | | | | | | | | | | | | |
| | Advance action | 1st yr | | 29350.00 | | 3,000 | | | | | | 880.50 | | | | 880.50 |
| | Planting | 2nd yr | | 6917.00 | | | 3,000 | | | | | | 207.51 | | | 207.51 |
| | Maintenance 1 | 3rd yr | | 2711.00 | | | | 3,000 | | | | | | 81.33 | | 81.33 |
| | Maintenance 2 | 4th yr | | 1458.00 | | | | | 3,000 | | | | | 43.74 | | 43.74 |
| | Maintenance 3 | 5th yr | | 1458.00 | | | | | | 3,000 | | | | | 43.74 | 43.74 |
| | | | Total | 41894.00 | | | | | | | 880.50 | 207.51 | 81.33 | 43.74 | 43.74 | 1256.82 |
| 1.8 | Package 1 related Accessories and Activities | | | | | | | | | | | | | | | |
| a | Purchase of GNSS Survey Equipments | 2 | No. | 2500000.00 | | 2 | | | | | | 50.00 | | | | 50.00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---------------|------------|-----------|-------|---------------------------|------|------|------|------|--------|----------|---------|---------|--------|--------|-----------------|
| b | Purchase of hand held PDA | 50 | No. | 70000.00 | 50.00 | | | | | | 35.00 | | | | | | 35.00 |
| c | GPS Training to Staff and Community Leaders | 1000 | No. | 2000.00 | 500 | 500 | | | | | 10.00 | 10.00 | | | | | 20.00 |
| d | Procurement of Equipments (Computers, Laptops, Accessories and Backups) | 25 | No. | 150000.00 | 25 | 25 | 25 | 25 | 25 | 25 | 37.50 | 37.50 | 37.50 | 37.50 | 37.50 | 37.50 | 225.00 |
| e | PRA in Selected Villages | 1000 | No. | 10000.00 | 500 | 500 | | | | | 50.00 | 50.00 | | | | | 100.00 |
| f | NGO Institutional Support | 1000 | No. | 10000.00 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 600.00 |
| | TOTAL AFFORESTATION ACTIVITIES | 43,000 | Ha. | | | TOTAL OF PACKAGE 1 | | | | | 232.50 | 12242.07 | 4928.60 | 1686.08 | 937.87 | 704.20 | 20731.32 |

PACKAGE 2 : AGRO FORESTRY ACTIVITIES

| S. NO. | TYPE OF WORK | TOTAL TARGET | UNIT | UNIT COST (IN RS.) | YEARWISE PHYSICAL TARGETS (Ha) | | | | | | FINANCIAL OUTLAYS (Rs. in lacs) | | | | | | Total (Rs. In Lacs) | |
|--------|---|--------------|------|--------------------|--------------------------------|-----------------------------|-------|-------|-------|---------------|---------------------------------|---------------|---------------|--------------|--------------|---------------|---------------------|---------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | | |
| 2.1 | Development of SOP, Nursery Manual | 1 | No. | 200000.00 | | 1 | | | | | | 2.00 | | | | | 2.00 | |
| 2.2 | Seedling Distribution | 50 | LACS | | | | | | | | | | | | | | | |
| | | 1st yr | | 577027.00 | 25 | 25 | | | | | 144.26 | 144.26 | | | | | | 288.52 |
| | | 2nd Yr | | 130098.00 | | 25 | 25 | | | | | 32.52 | 32.52 | | | | | 65.04 |
| | | | | 707125.00 | | | | | | | | 144.26 | 176.78 | 32.52 | | | | 353.56 |
| 2.3 | Creation of New Nursery cum Training and Quality Planting Material Demonstration Centres at Regions | 12 | No. | | | | | | | | | | | | | | | |
| | | 1st yr | | 1500000.00 | 6 | 3 | 3 | | | | 90.00 | 45.00 | 45.00 | | | | | 180.00 |
| | | 2nd yr | | 500000.00 | | 6 | 3 | 3 | | | | 30.00 | 15.00 | 15.00 | | | | 60.00 |
| | | | | 2000000.00 | | | | | | | | 90.00 | 75.00 | 60.00 | 15.00 | | | 240.00 |
| 2.4 | Support to Existing Nurseries | 25 | No. | | | | | | | | | | | | | | | |
| | | 1st yr | | 200000.00 | 25 | | | | | | 50.00 | | | | | | | 50.00 |
| | | 2nd yr | | 200000.00 | | 25 | | | | | | 50.00 | | | | | | 50.00 |
| | | 3rd yr | | 200000.00 | | | 25 | | | | | | 50.00 | | | | | 50.00 |
| | | 4th yr | | 200000.00 | | | | 25 | | | | | | 50.00 | | | | 50.00 |
| | | 5th yr | | 200000.00 | | | | | 25 | | | | | | 50.00 | | | 50.00 |
| | | | | 1000000.00 | | | | | | | | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | | 250.00 |
| 2.5 | Nursery Techniques Training to Forest Staff | 500 | No. | 5000.00 | 100 | 100 | 100 | 100 | 100 | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | | 25.00 | |
| 2.6 | Personnel Training in CDM / REDD+ | 10 | No. | 150000.00 | | 10 | | | | | | 15.00 | | | | | 15.00 | |
| | TOTAL AGRO FORESTRY | | | | | TOTAL OF PACKAGE - 2 | | | | 289.26 | 323.78 | 147.52 | 70.00 | 55.00 | | 885.56 | | |

PACKAGE 3 : SOIL & MOISTURE CONSERVATION STRUCTURES

| S. NO. | TYPE OF WORK | TOTAL TARGET | UNIT | UNIT COST | PHYSICAL TARGETS | | | | | | FINANCIAL OUTLAYS Rs. in lacs | | | | | | Total (Rs. In Lacs) |
|--------|---|--------------|---------|-----------|------------------|-----------------------------|-------|-------|-------|-------|-------------------------------|---------------|----------------|-------|-------|-------|---------------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | |
| 3.1 | Contour bunding With Field Outlet | 7,500 | Per Ha. | 7475.00 | | 2,500 | 5000 | | | | | 186.88 | 373.75 | | | | 560.63 |
| 3.2 | Check Dams | 300 | No | 21275.00 | | 100 | 200 | | | | | 21.28 | 42.55 | | | | 63.83 |
| 3.3 | Farm Pond | 150 | No | 37375.00 | | 50 | 100 | | | | | 18.69 | 37.38 | | | | 56.07 |
| 3.4 | Loose Boulder with Gabion | 75 | No | 62675.00 | | 25 | 50 | | | | | 15.67 | 31.34 | | | | 47.01 |
| 3.5 | Percolation Tank (PCT) | 75 | No | 173650.00 | | 25 | 50 | | | | | 43.41 | 86.83 | | | | 130.24 |
| 3.6 | Water Harvesting Structures (WHS) | 75 | No | 347300.00 | | 25 | 50 | | | | | 86.83 | 173.65 | | | | 260.48 |
| | | | | | | | | | | | | | | | | | |
| | Soil and Moisture Conservation Activities in Wildlife Corridor Areas | | | | | | | | | | | | | | | | |
| 3.7 | Contour Bunding With Field Outlet | 2,500 | Per Ha. | 7475.00 | | 500 | 2000 | | | | | 37.38 | 149.50 | | | | 186.88 |
| 3.8 | Check Dams | 100 | No | 21275.00 | | 20 | 80 | | | | | 4.26 | 17.02 | | | | 21.28 |
| 3.9 | Farm Pond | 50 | No | 37375.00 | | 10 | 40 | | | | | 3.74 | 14.95 | | | | 18.69 |
| 3.10 | Loose Boulder with Gabion | 25 | No | 62675.00 | | 5 | 20 | | | | | 3.13 | 12.54 | | | | 15.67 |
| 3.11 | Percolation Tank (PCT) | 25 | No | 173650.00 | | 5 | 20 | | | | | 8.68 | 34.73 | | | | 43.41 |
| 3.12 | Water Harvesting Structures (WHS) | 25 | No | 347300.00 | | 5 | 20 | | | | | 17.37 | 69.46 | | | | 86.83 |
| | TOTAL | | | | | TOTAL OF PACKAGE - 3 | | | | | | 447.32 | 1043.70 | | | | 1491.02 |

PACKAGE 4 : JOINT FOREST MANAGEMENT ACTIVITIES AND PROJECT MANAGEMENT

| S. No. | TYPE OF WORK | TOTAL TARGET | Unit. | UNIT COST | Physical Targets | | | | | | Financial Outlays | | | | | | Total (Rs. In Lacs) |
|--------|---|--------------|-------|-----------|------------------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|---------------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | |
| 4.1 | VFPMC Constitution and Revival | 250 | No. | 2000.00 | 50 | 200 | | | | | 1.00 | 4.00 | | | | | 5.00 |
| 4.2 | EDC Constitution and Revival | 100 | No. | 2000.00 | 40 | 60 | | | | | 0.80 | 1.20 | | | | | 2.00 |
| 4.3 | Constitution of Self Help Groups (Motivational Meetings, Public Mobilisation) | 200 | No. | 1000.00 | | 100 | 50 | 50 | | | | 1.00 | 0.50 | 0.50 | | | 2.00 |
| 4.4 | Training to SHG Members @ 10 members per Group with follow up | 200 | No. | 30000.00 | | 100 | 50 | 50 | | | | 30.00 | 15.00 | 15.00 | | | 60.00 |
| 4.5 | Training for Eco development committees | 100 | No. | 30000.00 | | 75 | 25 | | | | | 22.50 | 7.50 | | | | 30.00 |
| 4.6 | Institutional Support to SHG's 200 Groups | 200 | No. | 25000.00 | | 100 | 50 | 50 | | | | 25.00 | 12.50 | 12.50 | | | 50.00 |
| 4.7 | Institutional support to Eco Development Committees | 50 | No. | 25000.00 | | 20 | 10 | 10 | | | | 5.00 | 2.50 | 2.50 | | | 10.00 |
| 4.8 | Updating of JFM Manual (Workshop & Printing) | 1 | No. | 300000.00 | | 1 | | | | | | 3.00 | | | | | 3.00 |
| 4.9 | Updating of Eco-development Manual (Workshop & Printing) | 1 | No. | 150000.00 | | 1 | | | | | | 1.50 | | | | | 1.50 |
| 4.10 | JFM Refresher Trainings @ 1 in each division | 20 | No. | 50000.00 | | 20 | | | | | | 10.00 | | | | | 10.00 |
| 4.11 | Socio-Economic Survey (PRA) and Baseline data | 250 | No. | 10000.00 | 50 | 100 | 100 | | | | 5.00 | 10.00 | 10.00 | | | | 25.00 |
| 4.12 | Socio-Economic Survey (PRA) and Baseline data for Eco Development Committees | 100 | No. | 10000.00 | 20 | 40 | 40 | | | | 2.00 | 4.00 | 4.00 | | | | 10.00 |

| | | | | | | | | | | | | | | | | | |
|------|--|-----|-----|-----------|----|-----------------------------|-----|----|----|----|---------------|---------------|---------------|--------------|-------------|-------------|---------------|
| 4.13 | Support to VFPMCs including Entry Point Activities | 250 | No | 150000.00 | 50 | 100 | 100 | | | | 75.00 | 150.00 | 150.00 | | | | 375.00 |
| 4.14 | Support to Eco-Development Committees including Entry Point Activities | 50 | No. | 150000.00 | | 20 | 20 | 10 | | | | 30.00 | 30.00 | 15.00 | | | 75.00 |
| 4.15 | Honorarium to NGOs for JFM | 250 | No | 25000.00 | 50 | 100 | 100 | | | | 12.50 | 25.00 | 25.00 | | | | 62.50 |
| 4.16 | Honorarium to NGOs for Eco Development Committees | 100 | No. | 25000.00 | 20 | 40 | 40 | | | | 5.00 | 10.00 | 10.00 | | | | 25.00 |
| 4.17 | Documentation | 20 | No | 25000.00 | | 20 | 20 | 20 | 20 | 20 | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 25.00 |
| | Total JFM | | | | | TOTAL OF PACKAGE - 4 | | | | | 101.30 | 337.20 | 272.00 | 50.50 | 5.00 | 5.00 | 771.00 |

PACKAGE 5 : CAPACITY BUILDING

| S. No. | TYPE OF WORK | TOTAL TARGET | Unit Cost in Lac Rs. | UNIT COST | Physical Targets | | | | | | Financial Outlays | | | | | | Total (Rs. In Lacs) |
|--------|---|--------------|----------------------|------------|------------------|-----------------------------|-------|-------|-------|-------|-------------------|--------------|--------------|--------------|--------------|--------------|---------------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | |
| 5.1 | Training of FG & Forester and RO for Project Implementation | 1200 | No. | 5000.00 | 350 | 300 | 300 | 150 | 100 | | 17.50 | 15.00 | 15.00 | 7.50 | 5.00 | | 60.00 |
| 5.2 | Training in Modern Survey Techniques and DPR Preparation | 100 | No. | 10000.00 | 100 | | | | | | 10.00 | | | | | | 10.00 |
| 5.3 | Project Monitoring Training | 200 | No. | 1400.00 | 100 | 40 | 40 | 20 | | | 1.40 | 0.56 | 0.56 | 0.28 | | | 2.80 |
| 5.4 | Exchange Visits within State | 5 | No. | 100000.00 | | 1 | 1 | 1 | 1 | 1 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 5.00 |
| 5.5 | Collaborative Research Activities | 3 | No. | 600000.00 | | | 1 | 1 | 1 | | | | 6.00 | 6.00 | 6.00 | | 18.00 |
| 5.6 | Books and Periodicals | 5 | LS | 1000000.00 | | 1 | 1 | 1 | 1 | 1 | | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 50.00 |
| 5.7 | Exchange Visit to Out Side State | 5 | No. | 300000.00 | | 1 | 1 | 1 | 1 | 1 | | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 15.00 |
| 5.8 | Stationery and Printing | 5 | LS | 500000.00 | | 1 | 1 | 1 | 1 | 1 | | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 25.00 |
| 5.9 | Quarterly Technical Seminar at Headquarter Seminar | 24 | No. | 50000.00 | 1 | 5 | 5 | 5 | 4 | 4 | 0.50 | 2.50 | 2.50 | 2.50 | 2.00 | 2.00 | 12.00 |
| 5.10 | Quarterly Technical Seminar at Regional Level | 24 | No. | 25000.00 | 1 | 5 | 5 | 5 | 4 | 4 | 0.25 | 1.25 | 1.25 | 1.25 | 1.00 | 1.00 | 6.00 |
| | TOTAL | | | | | TOTAL OF PACKAGE - 5 | | | | | 29.65 | 38.31 | 44.31 | 36.53 | 33.00 | 22.00 | 203.80 |

PACKAGE 6 : COMMUNICATION & EXTENSION

| S. No. | TYPE OF WORK | TOTAL TARGET | Unit | UNIT COST | Physical Targets | | | | | | Financial Outlays | | | | | | Total (Rs. In Lacs) | |
|--------|--|--------------|------|------------|------------------|----------------------------|-------|-------|-------|-------|-------------------|-------|---------------|--------------|--------------|--------------|---------------------|---------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | | |
| 6.1 | Workshop One in Each District Per Year | 85 | Nos. | 70000.00 | | 17 | 17 | 17 | 17 | 17 | | 11.90 | 11.90 | 11.90 | 11.90 | 11.90 | 59.50 | |
| 6.2 | Workshop at State Level | 5 | Nos. | 400000.00 | | 1 | 1 | 1 | 1 | 1 | | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 20.00 | |
| 6.3 | Documentation Equipment (Camera+ | 100 | Nos. | 20000.00 | | 100 | | | | | | 20.00 | | | | | 20.00 | |
| 6.4 | Publicity Equipment (LCD, Videoplayer, Sound System) | 7 | Nos. | 150000.00 | 7 | 7 | | | | | | 10.50 | | | | | 10.50 | |
| 6.5 | Quarterly News Letter | 20 | Nos. | 20000.00 | | 4 | 4 | 4 | 4 | 4 | | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 | 4.00 | |
| 6.6 | Publication of Brochures, Information Booklets, Guidelines, Manuals Per Year | 5 | Nos. | 200000.00 | | 1 | 1 | 1 | 1 | 1 | | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 10.00 | |
| 6.7 | Documentation of Success Stories and Publication | 25 | Nos. | 50000.00 | | | | 5 | 10 | 10 | | | | 2.50 | 5.00 | 5.00 | 12.50 | |
| 6.80 | Kisan Choupal (6 Choupal for one cluster in each year) | 6000 | Nos. | 3000.00 | | 1500 | 1500 | 1500 | 1500 | | | 45.00 | 45.00 | 45.00 | 45.00 | | 180.00 | |
| 6.90 | Expenses for Documentation and Reporting | | LS | 2500000.00 | | 1 | 1 | 1 | 1 | 1 | | 25.00 | 25.00 | 25.00 | 25.00 | 25.00 | 125.00 | |
| | TOTAL | | | | | TOTAL OF PACKAGE -6 | | | | | | | 119.20 | 88.70 | 91.20 | 93.70 | 23.70 | 441.50 |

PACKAGE 7 : MONITORING AND EVALUATION

| S. No. | TYPE OF WORK | TOTAL TARGET | Unit | UNIT COST | Physical Targets | | | | | | Financial Outlays | | | | | | Total (Rs. In Lacs) | |
|--------|--|--------------|------|-----------|------------------|-----------------------------|-------|-------|-------|-------|-------------------|-----------------|----------------|----------------|----------------|---------------|---------------------|---------------|
| | | | | | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | 2013-14 | 14-15 | 15-16 | 16-17 | 17-18 | 18-19 | | |
| 7.1 | Workshop to Finalise Indicators, Monitoring Methodology & Preparation of Manuals and Dissemination | 1 | LS | 300000.00 | | 1 | | | | | | 3.00 | | | | | 3.00 | |
| 7.2 | Monitoring Review Meetings State Level | 10 | LS | 20000.00 | | 2 | 2 | 2 | 2 | 2 | | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 2.00 | |
| 7.3 | Evaluation Studies 3rd & 5th years and Report Writing | 400 | LS | 25000.00 | | | | 200 | | 200 | | | | 50.00 | | 50.00 | 100.00 | |
| 7.4 | Social Impact Study | 8 | LS | 100000.00 | | 2 | 2 | 2 | 2 | | | 2.00 | 2.00 | 2.00 | 2.00 | | 8.00 | |
| 7.5 | Ecological Impact Study 3rd Year and 5th Year | 2 | LS | 200000.00 | | | | 1 | | 1 | | | | 2.00 | | 2.00 | 4.00 | |
| 7.6 | Establishment of Web Based Monitoring Systems | | LS | 177.00 | | 1 | | | | | | 177.00 | | | | | 177.00 | |
| 7.7 | Development of Web based Monitoring & Review | | LS | 386.00 | | 1 | | | | | | 386.00 | | | | | 386.00 | |
| | TOTAL MONITORING & EVALUATION | | | | | TOTAL OF PACKAGE - 7 | | | | | | | 568.40 | 2.40 | 54.40 | 2.40 | 52.40 | 680.00 |
| | TOTAL OF ACTIVITIES (1 to 7) | | | | | | | | | | 652.71 | 14076.28 | 6527.23 | 1988.71 | 1126.97 | 807.30 | 25204.20 | |
| | Add: Price Escalation 2% every year (Progressive) | | | | | | | | | | 13.05 | 281.53 | 130.54 | 39.77 | 22.54 | 16.15 | 504.08 | |
| | Sub Total | | | | | | | | | | 665.76 | 14357.81 | 6657.77 | 2028.48 | 1149.51 | 823.45 | 25708.28 | |
| | Add : 5% Physical Contingency | | | | | | | | | | 33.29 | 717.89 | 332.89 | 101.42 | 57.48 | 41.17 | 1285.41 | |
| | Total (NABARD Share) | | | | | | | | | | 699.05 | 15075.70 | 6990.66 | 2129.91 | 1206.98 | 864.62 | 26993.70 | |

Calculation of State Share 5%

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---------------|-----------------|----------------|----------------|----------------|---------------|-----------------|
| | Add: 5% State Contribution of the Project Cost | | | | | | | | | | 32.64 | 703.81 | 326.36 | 99.44 | 56.35 | 40.37 | 1258.96 |
| | Add: Price Escalation 2% every year (Progressive) | | | | | | | | | | 0.65 | 14.08 | 6.53 | 1.99 | 1.13 | 0.81 | 25.18 |
| | Sub Total | | | | | | | | | | 33.29 | 717.89 | 332.89 | 101.42 | 57.48 | 41.17 | 1284.14 |
| | Add 5% Physical Contingency on State Share | | | | | | | | | | 1.66 | 35.89 | 16.64 | 5.07 | 2.87 | 2.06 | 64.21 |
| | Total of State Share | | | | | | | | | | 34.95 | 753.78 | 349.53 | 106.50 | 60.35 | 43.23 | 1348.35 |
| | Grand Total (NABARD + State Share) | | | | | | | | | | 734.01 | 15829.48 | 7340.20 | 2236.40 | 1267.33 | 907.85 | 28342.04 |