



ODISHA FORESTRY SECTOR DEVELOPMENT PROJECT

PHASE – II

RATIONALISED DPR

FOREST AND ENVIRONMENT DEPARTMENT GOVERNMENT OF ODISHA

ODISHA FORESTRY SECTOR DEVELOPMENT PROJECT PHASE – II RATIONALISED DPR (DETAILED PROJECT REPORT)

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APPENDIX-2

	JAPANESE INTER		AL CO	OPERATION	AGENCY	(JICA)	
4	Pue is at Name	Part -1: P	roject	Summary	ten Devel		
1	Project Name		Ouisna Forestry Sector Development Project- Phase-II			t- Phase-II	
2	Project implementing Agency		Forest and Environment Department, Government of Odisha				
3	Central Line Ministry(in case of Central Sector Project)		Minist	ry of Environm	ent and F	orests (MoEF)	
	Administrative State		Fores	t and Environr	nent Depa	rtment, Gover	mment of
	Government(in case of	State	Odish	а			
	Sector Project						
4	Sectoral area of the project		Fores	t and Environr	nent secto	r	
5	Central Sectoral Line Ministry		Minist	try of Environm	ent and Fo	orests (MoEF)	
6	Broad objectives of the project		Improving the forest ecosystem by promoting sustainable forest management and biodiversity conservation through Joint Forest Management approach including institutional capacity development, thereby contributing to environmental conservation and harmonized socio- economic development of Odisha				
7	Location of the project (specify Districts)	1	Mayu Samb	rbhanj, Dhenka alpur, Subarna	anal, Angu apur, Bouc	II, Sundargarh, Ih, Ganjam an	, Jharsuguda, d Kendrapara.
8	Total estimated cost of the pro (in Rs.crore)	oject	Rs 99	8.258 Crore			
9	Components of total estimated	cost (in	Rs.cro	pre)	1		
	Source	Loan/C	redit	Grant	Equity	Other(Spe cify)	Total (in Rs.)
	JICA	Loar	า			- ,	849.055
	Government of Odisha			Grant			149.203
	Total estimated costs						998.258
10	 Total bilateral development assistance proposed: INR 998.258 Crore 16,474.2 Million JPY (1 INR=1.65 JPY) and Loan Component 14,012.0 Million JPY Additional technical cooperation component, if any and activities proposed to be implemented through technical cooperation. Nil 						
11	Project implementation period: The proposed project is planned for duration of 10 years, starting from 2017-18 to 2026-27 in consideration of capacities of stakeholders and time required to conduct activities in sustainable manners. The project will be divided into 3 phases; Preparatory Phase - 1 year (2017-18), (Implementation Phase -7 Years (2018-19 to 2024-25) and Consolidation Phase -2 Year (2025-26 to 2026-27).						
12	Whether any separate institutional arrangement is required to be established for implementation of the project? The Forest and Environment Department, Government of Odisha, through the Odisha Forestry Sector Development Society (OFSDS), will be responsible for the implementation of the Project. The OFSDS was constituted during 2006-07 at the state level and was registered as an autonomous independent Society in compliance with the Society Registration Act, 1860 for implementation of the OFSDP Phase-I project. The OFSDS will consist of a Governing Body (GB), a Project Management Unit (PMU), 14 Divisional Management Units (DMUs) and 50 Field Management Units (FMUs). The Society will work under the overall guidance and monitoring of the High Power Committee (HPC) headed by Chief Secretary, Odisha.						
13	Details of statutory clearances required for implementations of the project. Not Applicable						

Proforma for preparation of Preliminary Project Report For bilateral financial cooperation Request for seeking financial cooperation from

14	Statutory clearances obtained. Not Applicable
15	Details of debt sustainability clearance from the Department of Expenditure for State Sector project.

16 Details of previous phase(s), if any. Whether any impact assessment has been made for previous phase?

OFSDP-Phase-I was implemented with the loan assistance from Japan International Cooperation Agency (JICA) in 10 districts of Odisha i.e. Angul, Balasore, Bhadrak, Deogarh, Gajapati, Kandhmal, Keonjhar, Koraput, Rayagada and Sundergarh. Initially this project was for a period of seven years from 2006-07 to 2012-13, and thereafter extended up to 2014-15. The overall outlay of the project is Rs 802.30 Crore, with Ioan assistance from JICA for 13,937 Million JPY. The project completed implementation on 31st March, 2015. It has twin objectives of restoration of degraded forests and livelihood improvement of forest dependent community. The project has covered in 2426 Joint Forest Management Committees (JFMC) for interventions in forest restoration and community development. Summary of detailed activities up include restoration of degraded forests over 2,10,405 ha with Assisted Natural Regeneration, Block Plantations and Teak Plantation; Coastal Plantations over 2,920 ha with Mangrove and Casuarina, Eco-tourism Destination Development; Income Generation Activities in 7358 SHGs; Livelihood Improvements and Capacity Building.

The Impact Assessment Study of the Odisha Forestry Sector Development Project (ID-P173) was taken up jointly by All State Financial Services Pvt. Ltd and BASIX Consulting and Technology Services Ltd.. The overall objective of the assignment is to conduct an impact assessment, both physical and financial, of the first and second generation forestry sector projects in terms of the effectiveness and sustainability of the project components in achieving their goals. The assessment focused on (i)relevance, (ii) efficiency, (iii) effectiveness, (iv) impact, and (v) sustainability of all major project components. The result showed that Natural regeneration was very good invariably in all VSS as the protection had improved in every project villages and the overall average survival of various model of plantation was - 55-65%. The Soil and Moisture Conservation structures were effective and sprawling natural regeneration was observed in the vicinity of percolation pit, half-moon trench or staggered trench. In the JFM institutional matters, the VSS has become a key institution after the Gram Sabha and female representation on average was equal to that of male. The role of forest officials was that of a facilitator and the relationship with the Forest Department was between good. There was also significant improvement in the livelihood of the members of VSS and though reduction in number of households which were collecting firewood weekly was only 21%, there was significant reduction of firewood for sale in the market. All the SHGs have bank accounts, and 75% of SHG members are also having bank accounts. 98% SHGs have mentioned that their members are now in the habit of savings in comparison to 59% before the project. The final report of the Impact Assessment Study of the Odisha Forestry Sector Development Project (ID-P173) as submitted by the above firms is expected to be received from JICA office.

As per the socio-economic changes (between 2008 and 2013) documented in 2020 villages, literacy has increased by 24%, house with RCC roof by 41%, with asbestos roof by 35% with electrification expanding by 221%. Similarly access to water for drinking and agriculture has increased with increased in no of hand pumps by 21%, no of bore wells 188%, no of wells by 14%. Wellness of households as per participatory wealth ranking indicate a jump of 24% in well off group, 23% in manageable group, 8% in poor group, while there is a reduction of 10% in very poor category.

Part - II: Basic design of the project

Goals and objectives of the project and its linkages with government priority and Programmes

The proposed project will aim at improving the forest ecosystem by promoting sustainable forest management and biodiversity conservation through Joint Forest Management approach including institutional capacity development, thereby contributing to environmental conservation and harmonized socio-economic development of Odisha".

	To achiev	e th	e overall goal, OFSDP-II will adopt	the following objectives:			
	 Restore degraded forest and augment forest resources Secure sustainable forest management by improving forest administration, community organizations and other stakeholders Conservation and scientific management of the biodiversity Promoting inter-sectoral convergence Improve income of target forest dependents and their livelihood options 						
	The project wa	ct is is in	in conformity with Odisha's Forest applemented in 10 districts of the Statestics of	Sector Vision 2020 Document. The Phase-I of the ate. The Phase-II proposes to cover 11 districts			
18	Activities	s pr	oposed in the project.				
		1	Preparatory works	Preparatory works			
		2	Destantion of Destanded Forests	Strengthening of Executing Body (EB) and Capacity Building.			
		2	and Biodiversity conservation	Forest management under JFM mode			
				Biodiversity conservation and Science based management.			
		3	Supporting Activities	Capacity building of VSS, EDC and SHGs and Gender Training Infrastructure development REDD plus preparedness			
		4	Monitoring and Evaluation	Publicity and communication Monitoring and evaluation Phase out / phase in works			
		5	Consulting services	Consulting services			
19	 9 Quantifiable outputs and outcomes of the project. Expected outputs to be generated through the Project are: i) Enhanced ability of Odisha Forest Department; ii) Enhanced capacity of communities/VSSs/SHGs; iii) Enhanced ANR and plantation areas with improved regeneration of forests; iv) Conserved biodiversity; v) Increased flow of various forest products; and 						
		Re	storation of Degraded Forests	60,000 ha in 12 divisions			
			-	Assisting Natural Regeneration in 51,000 ha			
				Block Plantations in 9,000 ha			
		Bio	diversity Management	Biodiversity management in Bamra (Wildlife) Division Scientific research inputs for management in			
	Mangrove (Wildlife) Division						
Farm Forestry 10,000 ha benefiting 10,000 farmers Community and Tribal Development including capacity building of VSS Entry Point Activities in 1200 VSSs Income Generation activities in 3600 SHGs Livelihoods Improvements in 1200 VSSs							
20	Target po Directly be	pula enef	ation: iting a population of approximately	/ 6,00,000 in 10 districts			
21	Does the project require of sector adjustment policy formulation? If yes, give details.						

22 Whether any feasibility study/pre-appraisal/pre-investment study has been conducted? If yes, its details of its findings.

Yes. A preliminary study of the project has been undertaken by the Odisha Forestry Sector Development Society and through wiser multi stakeholder discussions. Further experience gained & lesson learnt from implementation of OFSDP-Phase-I has also gone into formulation of this project.

Financial and Economic benefits of the Project consists of the direct revenue accrued from 1) forest development activities, including timber and fuel wood production, 2) non timber forest products or agroforestry production, and income generation activities.

Other tangible benefits include incremental gain in water storage due to forest restoration activities, rise in water table and consequently increase in agriculture production in downstream areas. Other intangible benefits could include CO₂ sequestration, disaster prevention and mitigation.

23 Linkages with completed or ongoing project(s) of similar nature

SI. No	Name of the project	Implementatio n period	Quantifiable outcome achieved/ targeted		Total cost of the project (Rs. crore)
	Proposed Project				
	Completed projects	Odisha Forestry Sector	Restoration of Degraded Forests	2,10,405 ha	802.30
		Development	Coastal Plantations	2920 ha	
		Project- Phase-I	Farm Forestry	9497 ha	
			Ecotourism Destinations	5 Sites	
			Formation of JFMC	2426 nos.	
			Support to SHGs	7358 nos.	

PROJECT COST		
COMPONENTS	OUTLAY (Rs in Crore)	
Preparatory Work	68.044	
Sustainable Forest Management	305.547	
Sustainable Biodiversity Management	12.500	
Livelihood Improvement	125.447	
Community Institutional Capacity Development	91.962	
REDD plus readiness	0.994	
Supporting Activities	133.792	
Phase-out and Phase-in Activities	5.000	
consulting services	36.488	
Total Implementation Cost	779.772	
Price escalation (3.7%)	28.852	
Physical Contingency (5%)	40.431	
Total JBIC Loan	849.055	
Front end fee	1.560	
Interest during construction (IDC)	12.280	
Administrative cost	135.363	
Grand total	998.258	

25	Detailed year-wise physical and financial target plan with quantifiable and qualitative (verifiable) target indicators. The target plan should also include year-wise utilization of proposed bilateral development assistance.				
	 Appendix-4, Para-15 and 17; and Annexure-I 				
26	Does the project involved land acquisition? If so, please indicate I. Total land to be acquired. II. Actual land acquired so far. III. Target Land acquisition completion date. IV. Is there any legal issue or any other obstacle being faced by the acquisition authority which could push the target dates mentioned? If so please write in detail.				
	No land acquisition is involved in implementation of OFSDP-II.				
27	Does the project involve resettlement and rehabilitation? If so, indicate its magnitude, cost and present status of plan.				
	No resettlement of the people is envisaged in the implementation of the project.				
28	Whether Environment Impact Assessment clearance required? If yes, whether the proposal to MoEF & CC has been submitted? If not, when it is likely to be submitted?				
	Odisha Forestry Sector Development Project (OFSDP), Phase-II is aimed at improvement of the forests and watershed areas of the State including climate change mitigation. All the activities to be carried out under the project will have a positive impact on the environment. Main activities include afforestation /reforestation of degraded lands along with steps to improve the livelihood of the forest dependent villagers and support activities leading to building up of the capacity of the community and the forest department to manage and use forests in a sustainable manner. EIA is not required for this project.				
29	Whether Forest clearance required? If yes, whether the proposal to MoE & F as been submitted? If not, when it is likely to be submitted?				
	Orissa Forestry Sector Development Project (OFSDP), Phase-II is aimed at improvement of the forests and watersheds of the State. No diversion of forest land for non-forest purpose is envisaged in the project. Forest clearance is not required for this project.				
30	Whether the private sector or NGO participation is also proposed in the project? If yes, please describe the nature of the proposed involvement?				
	Active involvement of NGOs is proposed for effective implementation and sustainable management of the Project; community organizing and strengthening Joint Forest Management committees. The NGOs are expected to play an important role in the Project because of their familiarity with the Project area, trust from community people, existing network (especially marketing network) and technical expertise. They are expected to provide specialized services such as: - Organizing Community - Environmental education and an awareness-raising - Livelihood assistance - Production assistance and micro credit management - Marketing assistance in NTFP - Conflict resolution in case of conflict - Development of training programmes, curriculum and manuals for VSS members.				
	 Specialized technical assistance. Organizing and facilitating workshops and focus groups meetings for the improvement of the project. Impact assessment. 				

31 Brief description on the effects and impacts on (i) environment including land, water, air, bio-diversity (ii) women and children (iii) employment (iv) poverty alleviation and (v) productivity and economic growth.

1. Environment including land water, air, bio- diversity & climate change mitigation	Orissa Forestry Sector Development Project, Phase-II (OFSDP-II) is aimed at improvement of the forests and watersheds of the State. All the activities to be carried out under the project will have a positive impact on the environment. Main activities include afforestation /reforestation of degraded lands and support activities leading to building up of the capacity of the community and the forest department to manage and use forests in a sustainable manner. This will have a positive impact on the wildlife and biodiversity of the State. There will be improvement in the quality of air as a result of implementation of the OFSDP-II. Further there is no possibility that the project will cause water pollution. This would also improve carbon sequestration thereby mitigate the climate change.
2.Women and children	The OFSDP-II aims at improving the living conditions of the people living in the project area. The project aims at improving livelihoods of the forest fringe dwellers and building the capacity of the people to manage the forests in a sustainable manner. The assets developed by the project will be shared by the community in an equitable manner. Around 3600 women SHGs will be supported under the project. These interventions will have positive impacts on Women and children of the project areas including empowerment of women.
3. Employment	OFSDP - II will generate ample wage employment in 1200 JFM villages while undertaking forest restoration and other supporting activities in the project areas.
4.Poverty alleviation	One of the main objectives of OFSDP-II is to improve the livelihoods and incomes of the forest fringe dwellers, thereby improving the socioeconomic conditions of the communities and alleviating poverty.
5.Productivity and economic growth	The project will restore the degraded forests lands and undertake biodiversity conservation interventions which will directly increase the productivity of forests and other natural resources, including enhancement of agriculture production and food security due to improvement of hydrological regime, thereby contributing to economic growth of Odisha. Further the project will also enhance the livelihoods and incomes of the communities in the project areas.

Signature

APPENDIX-4 DETAILED PROJECT REPORT ODISHA FORESTRY SECTOR DEVELOPMENT PROJECT-PHASE-II

1.0 Background

Forests play a vital role in maintaining ecological stability, water cycle, soil conservation, carbon sequestrations, thereby climate change mitigation and contribute significantly to Odisha's economy, especially to the livelihoods of forest-dependent communities which are mostly Scheduled Tribes. Odisha is rich in forest cover. As per the India State of Forest Report, 2015, the forest cover of the state is a total of 50,354 KM² which is 32.34 percent of the State's geographical area and consists of 7,023 KM² of very dense forests; 21,470 KM² of moderately dense forests and 21,861 KM² of open forests. There is a recorded increase of 7 KM² over the last report of 2013. Forest cover in Odisha is unevenly distributed. Forests are generally located in the districts situated in the Eastern Ghats, Central Table Land and Northern Plateau. The coastal districts with high population density have comparatively smaller areas of forests. With growing population, there has been tremendous pressure on forests, both for forest produce as well as for forest land. By the end of December 2011, 384 forest land diversion proposals covering an area of 39,720 ha forest land have been approved by Ministry of Environment and Forests for non-forest use. Odisha is the third largest producer of kendu leaf with an annual production of around 5 lakh quintals. Odisha has nine percent of the country's total bamboo forest cover and seven percent of the total growing stock of bamboo.

National Forest Policy 1988 mandates that 33 percent of the geographical area should be under forest cover. The Government has, however, taken several steps to maintain and develop a good forest cover. Some development initiatives include restoration of degraded forest lands, afforestation, development of village forests and introduction of social and farm forestry.

2.0 Biodiversity of Odisha

Odisha's biodiversity is rich and varied both in terms of wild flora and fauna and ecosystem types. The biodiversity is based on a diverse physiography that is broadly recognized as the northern plateau, the Eastern Ghats stretching southwest from the Mahanadi river, the central tableland with its river valley systems and the coastal plains.

The forest ecosystem constitutes the main terrestrial biome and is the repository of the most of the state's biodiversity. According to the vegetation pattern five major types of forests are identified, namely, tropical semi-evergreen, tropical moist deciduous, tropical dry deciduous, subtropical broad leaved hill forests, and littoral and swamp forests. The state's flora comprises of 2,757 species, of which 2,630 are flowering plants constituting more than 17 % of India's flowering plants. Key statistics regarding the state's plant diversity is given in the table below.

Attribute	Number of species
Total number of plant species	2,754
Endemic plant species	29
Wild species related to crops	66
Medicinal plant species	600
Rare and endangered species	144

Highlights of Odisha's Plant Biodiversity

Sources: Sahu et al., 1999; SG,2002

Sal *{Shorearobusta)* is the most dominant singular forest species, for which Odisha is also the southern most range of distribution. Representative forest plants include *Artocarpuslakoocha, Micheliachampaca, Syzygiumcuminii, Terminalia tomentosa, Adina cordifolia, Dalbergiapaniculata, Madhucaindica, Diospyrosmelanoxylon, etc.*

The fauna of Odisha stands out in the Indian subcontinent for its composition. Occupying the diversity of habitats ranging from semi-evergreen forests to the marine ecosystem are most of the megafauna of the subcontinent. The higher vertebrates of the state total 690 species, the number of species in each group and the related figures for India and the world are given in the table below.

SI no	Таха	Species
1	Mammals	86
2	Birds	475
3	Reptiles	110
4	Amphibians	19

Odisha's higher vertebrate biodiversity

The megamammals of Odisha include the Asian elephant (*Elephas maximum*, Gaur (*Bosgaurus*), Tiger (*Pantheratigris*), Leopard (*Pantherapardus*), Sambar (*Census unicolor*), Wild buffalo (*Bubalusbubalis*) and Nilgai(*Boselaphustragocamelus*), Spotted deer (*Axis axis*), the Blackbuck (*Antelope cervicapra*), Chowsingha(*Tetracerusquadricornis*) and Sloth bear (*Melursusursinus*), and the marine mammals include Irraweddy dolphin (*Orcaellabrevirostris*) and Dugong (*Dugong dugori*).

3.0 Forest Cover

The forest cover of the state based on the India State of Forest Report, 2015, published by Forest Survey of India is a total of 50,354KM²; which is consisting of 7,023KM² of very dense forests; 21,470KM² of moderately dense forests and 21,861KM² of open forests.

	Area (Sq Km)	% on Total Geographic Area
Very Dense Forest	7023	4.51%
Moderate Forest	21,470	13.70%
Open Forest	21,861	14.00%
Scrub	4499	2.80%
Non Forest Area	1,00,854	64.77%

4.0 Forestry Vision, 2020

The Forest and Environment Department in their Forestry Vision 2020 document, has the following salient features:

- i) Improved Forest Extent and Condition by increasing the forest cover on forest lands and tree cover outside forests mainly on private lands as well as non-forest public lands.
- ii) Sustainable Forest Management through Management plans, Working plans and Microplans.
- iii) Increased flow of NTFPs and timber and access of forest fringe dwellers to forest produce for sustainable livelihoods.
- iv) Biodiversity conservation strategies within Protected Areas and outside Protected Areas on a landscape level.
- v) Promotion of Joint Forest Management Strategies
- vi) Higher allocations, investment, insurance and incentives for better forest management.

Sources: Dutta, 1992; Ghosh, 1993; GOI, 2003; Islam&Rahmani, 2004; Saharia, 1981;

5.0 Odisha Forestry Sector Development Project (OFSDP)- Phase-I

5.1 Background of OFSDP in 2005

- Issues of serious concerns in Odisha Forestry Sector
- Degradation of quality forests
- Human-animal conflicts
- Limitation of Odisha Forest Department- Fund constraints, limited facilities and equipment, need for Capacity building and trainings
- Joint Forest Management -Under developed -absence of VSS Manual and System support to VSS
- Poverty- Forest dependence Social fragmentation- Underdeveloped Market Linkages & Enterprise for Forest Products

OFSDP-Phase-I was implemented with the loan assistance from Japan International Cooperation Agency (JICA) inIO districts of Odisha i.e. Angul, Balasore, Bhadrak, Deogarh, Gajapati, Kandhmal, Keonjhar, Koraput, Rayagada and Sundergarh. Initially this project was for a period of seven years from 2006-07 to 2012-13. Subsequently the project period was extended up to 2014-15. The overall outlay of the project is Rs 802.30 Crore, with loan assistance from JICA for 13,937 Million JPY. The project implementation completed on 31.03.2016. It has twin objectives of restoration of degraded forests and livelihood improvement of forest dependent community. The project has covered in 2426 Joint Forest Management Committees (JFMC) for interventions in forest restoration and community development. Summary of detailed activities up include restoration of degraded forests over 2,10,405 ha with Assisted Natural Regeneration, Block Plantations and Teak Plantation; Coastal Plantations over 2,920 ha with Mangrove and Casuarina, Eco-tourism Destination Development; Income Generation Activities in over 7000 SHGs; Livelihood Improvements and Capacity Building.

5.2 How OFSDP has functioned?

- Forestry project not in isolation- inter-sectoral linkages strengthened for large impact. Strengthening JFM issues - legal, empowerment, and relationship with village institutions, Gram Panchayat, & Government
- Micro-planning- Participatory and ownership of community Accountability, Reliability & Transparency.
- Environmental awareness of local landscape.
- Marketing linkages on productions.
- Innovations and harmonisations.
- Focus on consolidation and sustainability of VSS as Institution.

The Performance Review undertaken by independent evaluators found the project interventions to be relevant and best fit around all components, significant achievement in project results as envisioned, efficient translation of employed inputs into desired outputs and cost effective service delivery of the interventions. The project has achieved substantial progress in Sustainable Forest Management. There has been observed an increase in natural capital for nearly 71% HH, financial capital increase in 30 % HH, human capital appreciation for 26% HH, while overall status of the livelihood assets appreciation for 14% HH. A greater evenness and more biodiverse nature of the forest community, better regeneration status in the treated forest lands and higher variability in survival of seedlings planted. At the village level, the independent impact

evaluations observed a clear equity focus through participatory micro-planning; well defined systems for documentation; along with transparency in decision-making and financial transactions.

Evaluation of Income Generating Activity component indicated increased SHG federations/clusters for mobilization and aggregation of Non Timber Forest Produce and increased ability to negotiate with traders through higher volumes. At SHG level, there have been engagements in wide range of activities as per local market demand, which has resulted in increased cash inflows supplementing household income. There has been easy access of credit at the door step from the revolving funds provided under the project thereby contributing to financial inclusion and generating self-confidence of women with opportunity for livelihood enhancement. Overall a process of economic empowerment of the SHG women was noted as a very important output as women have gained a lot of confidence in dealing with traders.

As per the socio-economic changes (between 2008 and 2013) documented in 2020 villages, literacy has increased by 24%, house with RCC roof by 41%, with asbestos roof by 35% with electrification expanding by 221%. Similarly, access to water for drinking and agriculture has increased with increased in no of hand pumps by 21%, no of bore wells 188%, no of wells by 14%. Wellness of households as per participatory wealth ranking indicate a jump of 24% in well off group, 23% in manageable group, 8% in poor group, while there is a reduction of 10% in very poor category.

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5.3 OFSDP Experience

- NTFPs have become a focus of interest in their own right. Although they still carry a 'poverty' tag as poor rural communities depend on them to support subsistence economy, their overall value - ecological, social and commercial - are now being appreciated more by VSS with JFM.
- VSS, their executive committee members, and SHGs/ User Groups are playing active roles in negotiating transactions of forest usufruct on state-owned forest lands as well as on IGAs of Forest products/ non forest products.
- NGOs and Panchayats too are finding useful roles in JFM.

- The Forest officials especially at Village level have gained experience on the multiple numbers of actors and institutions that are involved in the forest dialogue.
- Growing clarity on land ownership, benefit sharing mechanisms, acquisition and transaction on forest assets in VSS/EDC
- Encouraging financial opportunities that allow the provision of credit, microfinance by community, enabling and empowerment capabilities
- Technology based monitoring of the field level interventions for improvement of natural resources provides effective tool for concurrent monitoring and checks overlaps.

The OFSDP model of implementation provides an example of beginning of socio-economic returns from forest ecosystem restoration through VSS Micro-planning & execution by communities in deeply poverty stricken villages. It has made them to understand about heavy forest degradation due to unsustainable farming practices on encroachments and of over-exploited forest resources. The issues of erosion and water harvesting are getting their attention for more SMC works. A restoration investment from project has been able to rejuvenate the land, resulting in income for people living within the restoration area. As a result of the restoration project, a good number of households are lifted out of poverty and overall employment rates, notably for women, increased significantly. During the extension phase, this is getting get further intensified. Therefore, OFSDP model of Sustainable management capacity building with communities stake-holding needs to be further strengthened in Odisha with wider coverage with objectives of

"The stewardship and use of forests and forest lands (JFM & non JFM mode) in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions at local levels, and that does not cause damage to other's forests ecosystems".

Japan International Co-operation Agency (JICA) while assisting Governments for environmental improvements from forestry sector services as well as for livelihood improvements of impacting forestry communities currently also identifies biodiversity conservation and climate change &mitigation as emerging focal areas.

6.0 Odisha Forestry Sector Development Project (OFSDP)- Phase-II

6.1 Needs Analysis

6.1.1 Need of Restoration and Sustainable Management of Forests

Odisha's forests are of high biodiversity value especially when compared with the recent global trend of species decline. Forty-four mammal species found in Odisha are not seen anywhere else in the world. Similarly there are 55 bird species endemic to the state. Odisha's forests are home to the more charismatic large mammals, most of which are endangered, on the Indian subcontinent. Of the 2,630 species of flowering plants found in the state, about 5.5% are either rare or endangered at the global level. These forests hold large numbers of medicinal plants and wild relatives of crop plants. The sustainable management of such forests is crucial not only for the state but also beyond, especially since biodiversity is increasingly being recognized as a global heritage.

Apart from causing the decline of biodiversity, the forest degradation leads to lowering its inherent economic value as a source of timber/non-timber products,

socio-economic value as a source for livelihood for forest dependents and environmental functions for the public such as mitigating soil erosion, mitigating flood peaks, providing increased and prolonged base flow, and maintaining quality water. Although conventional market economics does not have mechanisms to recognise the full value of ecosystem services provided by the forests, it is obvious that what is at stake is an enormous economic resource with both realized and potential values.

The value of the Project could be judged from the viewpoint of contributing to carbon sink, sequestration, reduction of emissions due to degradation & deforestation making the state REDD+ ready.

6.1.2 In need of ecological security

Odisha is frequented by natural disasters of various kinds- floods, droughts, cyclones, coastal floods, heat waves etc. Between 1963 and 2013, 16 such major disasters occurred in the state causing heavy human toll and widespread destruction. The recurring natural calamities remain a critical impeding factor in the long term development of the state. Deforestation is deemed as one of the causative factors in the genesis of floods and drought. In addition, the coastal woodlands would have provided a green break against the cyclones and tsunami.

The protection and augmentation of forests in the state is imperative in the disaster-prone Odisha to reduce the damage and intensity of natural disasters.

6.1.3 In need of enhancing livelihood security

Odisha has a high proportion of population belonging to below the poverty line (BPL). Although BPL rate in the state has declined from 66 % to 37 % during 1973-2013 (NSSO data), the regional differences within the state have been increasing. In coastal Odisha, BPL has declined at about the same rate as the national average. The rate of reduction has been less in the inland rural area, especially the northern and southern regions. Higher BPL rates are concentrated among the scheduled cast (SC) and scheduled tribe (ST) population. Forests and trees have customarily played an essential role in the livelihood particularly of the local poor in the state. The majority of this group depends fully or in part on forest resources to meet their subsistence needs. Also, small scale manufacturing of forest-based products provides an important source for the rural non-farm dependent poor group. Forest-based activities provide substantial means for survival under the deprived livelihood situation in the state. Such activities have been seriously threatened due to on-going forest degradation.

Considering the close link between local poor and forest degradation, providing means for poverty alleviation in a sustainable manner should be an integral part of restoration of the degraded forests and sustainable forest management.

6.1.4 Rehabilitation of forest & climate change

Rehabilitation of degraded forest would enhance the sequestration of carbon, thereby contribute to climate change mitigation.

7.0 Project Rationale:

The proposed Project named Odisha Forestry Sector Development Project-Phase-II for financial assistance from Japan International Cooperation Agency (JICA) is designed to strengthen the forestry sector of the State through forest conservation, development and sustainable use through community participation, and improving livelihoods of forest dependent communities with long term goals of Environmental Conservation and Poverty Alleviation. The following highlights the project rationale:

- Conformance with Odisha's Forestry Vision
- Improvement of quality of forests and wildlife in the State
- Expected contribution of OFSDP-Phase-II to poverty alleviation
- OFSDP-Phase-II as a measure to reach out to socially marginal communities
- Complementary effect on JICA assisted OFSDP-Phase-I
- Capability of Odisha Forest Department
- Global movement and JBIC policy
- Necessity of Japanese assistance
- Climate change mitigation
- Sustainable development goal

8.0 **Project Goal and Objectives:**

The proposed project will aim at improving the forest ecosystem by promoting sustainable forest management and biodiversity conservation through Joint Forest Management approach including institutional capacity development, thereby contributing to environmental conservation and harmonized socio-economic development of Odisha".

To achieve the overall goal, OFSDP-II will adopt the following objectives:

- i) Restore degraded forest and augment forest resources
- ii) Secure sustainable forest management by improving forest administration, community organizations and other stakeholders
- iii) Conserve and scientifically manage the biodiversity
- iv) REDD plus preparedness
- v) Promoting inter-sectoral convergence
- vi) Improved income of targeted forest dependents and their livelihood opportunities & food security.

9.0 **Project Approach and Strategy**

9.1 Contiguous JFM Areas

Geographically contiguous forestlands that are not dispersed are selected to realize the efficiency of project implementation and substantial project impacts. In this context, a watershed approach will be adopted at the division level and a cluster approach will be undertaken at the VSS level for JFM site selection.

9.2 Holistic Approach with Integrated Project Components

The Project will be designed as one with integrity: components of the Project will be constituted to achieve the multiple Project goals with due attention being given to having a comprehensive impact and provide fundamental progress to the lives of local people. For this, the Project components will not focus only on the main component of conservation /restoration of the forests and poverty alleviation but also other supporting components such as institutional strengthening, capacity building of VSSs, community development and researches, and will be designed to organically link with each other to secure the multiple effects. To strengthen VSS as a village level institution, develop a micro plan with multi-sectoral convergence.

The scope of each component will be confined to activities that will directly and indirectly

contribute to the achievement of the Project goals.

9.3 Poverty Alleviation

Recognizing close linkage between rural poverty and forest degradation in the Project area, one of the Project goals is to facilitate poverty alleviation. This basic philosophy will shape a salient feature of the Project. The Project, therefore, will stress livelihood development through the promotion of IGA, improvement of small-scale village infrastructure and mitigation of natural disasters. Resolute steps would be taken for sustainability of IGA activities. The SHG would be federated in to clusters and professional support would be provided to bridge the value chain and marketing of product including branding. The sustainability of the SHG activities is key for women empowerment and participation of women in the project.

9.4 Needs-Based Interventions to Forests and Forestlands

As adopted and up scaled in OFSDP-I, the type and mode of forest interventions will be determined an area specific needs basis. The most appropriate type of forest intervention will be chosen among those such as forest conservation and protection, ANR, or block plantation/artificial regeneration etc., in accordance with the forest conditions (dense, open or scrub forest). The purpose of the intervention should be distinctive: either soil/water conservation-oriented or production-oriented taking into account the slope categories (steep/hilly or undulating/flat) and location of the forest, i.e. whether the forest/forestland is located at crucial watersheds or not. The type and purpose of intervention will influence the selection of species, the micro planning and IGA activities under the Project.

The mode of interventions will be determined depending on geographical distance of intervention sites from villages. Were the intervention site is accessible from the villages, the participatory approach (JFM) will be adopted. If the site is beyond an accessible distance from the village concerned, the forest intervention and management will be conducted by OFD.

9.5 Emphasis on Capacity Building for People-Led Forest Management

Particular attention will be paid to institutional strengthening and capacity building of the VSSs so that forests/forestlands in the Project area could be managed in a sustainable manner by both the OFD and the VSSs as equal partners. The capacity building for members of the VSS aims to increase their capabilities to an extent that the JFM area concerned could be managed by themselves with minimum assistance from the government after the Project finishes. The Project will therefore be designed to provide significant responsibilities to the VSS members, adequate capacity development including plan formulation, intervention, and management of the JFM area allotted to the VSS so as to develop their planning and management skills.

9.6 Effective Project Implementation and Management

The Odisha Forestry Sector Development Society (OFSDS), established for implementation of the OFSDP Phase-I, will be implementation platform for Phase-II. The OFSDS has the existing Operation Manual and the administrative and financial procedures for smooth Project implementation of Phase-II interventions.

10.0 The Project Area

The Project proposes to cover forests and forest areas including Protected Areas in

i. 12 Forest divisions namely Baripada, Rairangpur, Karanjia, Dhenkanal, Athamalik,

Sundergarh, Jharsuguda, Sambalpur, Subarnapur, Boudh, Ghumsur(North), Ghumsur (South)covering all the major project component including restoration of degraded forests and farm forestry.

ii. Two Wildlife divisions namely Bamra (WL), Mangrove Forest (WL) Division, Rajangar for Biodiversity Conservation; development of a monitoring protocol and knowledge based management in Bhitarakanika and piloting of SATOYAMA Initiatives in Bamara (WL) Division.

SI	Forest Division	District	Major Project Components Covered
1	Baripada	Mayurbhanj	All project
2	Rairangpur		components including
3	Karanjia		Restoration of
4	Dhenkanal	Dhenkanal	Degraded forests and
5	Athamalik	Angul	Farm Forestry
6	Sundergarh	Sundargarh	
7	Jharsuguda	Jharsuguda	
8	Sambalpur	Sambalpur	
9	Subarnapur	Subarnapur	
10	Boudh	Boudh	
11	Ghumsur (North)	Ganjam	
12	Ghumsur (South)	Ganjam	
13	Bamra (WL)	Sambalpur	Biodiversity
14	Mangrove Forest (WL) Rajnagar	Kendrapara	Management



11.0 Project Period

The proposed project is planned for duration of 10 years, starting from 2017-18 to 2026-27 in consideration of capacities of stakeholders and time required to conduct activities in sustainable manners. The project will

be divided into 3 phases; Preparatory Phase -1 year (2017-18) Implementation Phase -7 Years (2018-19 to 2024-25) & Consolidation Phase -2 Years (2025-26 to 2026-27).

12.0 Proposed Project Components

The proposed Project components are categorised into five parts: i) preparatory works; ii) Restoration of Degraded Forests iii) supporting activities; iv) monitoring and evaluation; v) consulting services.

1	Preparatory works	Preparatory works					
		Strengthening of Executing Body (EB)					
2	Restoration of Degraded Forests	Forest management under JFM mode					
		Forest management under non-JFM mode					
		Farm forestry					
		Biodiversity conservation and science based management of protected area.					
3	Supporting Activities	Capacity building of VSS					
		Infrastructure development					
		REDD plus preparedness					
		Publicity and communication					
4	Monitoring and Evaluation	Technology based Monitoring and evaluation					
		Phase out / phase in works					
5	Consulting services	Consulting services					

12.1 Main purpose of the Project Component

No.	Component	Purpos	e	Lead Activity				
1	Preparatory Works	1.1	Constitution of PMU, DMU, FMU	This component includes following activities:				
		1.2	Deployment of Staff for PMU, DMU, FMU	OFSDS 1.1.2. Selection of project sites and identify possible areas and VSSs/EDCs				
		1.3 1.4	Procurement of PMC Orientation for PMU/ DMU/ FMU	1.1.3. Preparation of necessary manuals, guidelines and plans 1.1.4 Constitution and strengthening of				
		1.5	Identification of VSSs	VSS				
		1.6 1.7	Survey and Demarcation Revisiting of Project Manuals	1.1.5. Selection and deploy of PNGOs, Animators				
		1.8 1.9 1.10	Micro Planning Annual Planning	1.1.6. Micro planning 1.1.7. Deployment of NGOs for Community Development and SFM				
2	Questa in a h la	21 1	EM Modo	2.1 includes following activities				
2	Forest	Z.1 J		2.1.1. Treatment Area/ Drainage Line				
	Management			Specific Planning & Monitoring				
	Ū.			2. 1.2. Drainage Line Treatment (Ex-situ SMC Work)				
				2.1.3. ANR				
				2.1.4. Block Plantation				
				2.1.5. Fire Protection				
		2.2 N	on JFM Mode	2.2 includes following activities				
				2.2.1. Consolidation and Demarcation of Forest Boundaries				
				2.2.2. Construction /up gradation of				

		2.3 Farm Forestry	 Permanent Nurseries to Hi-tech nursery 2.2.3. Drainage Line Treatment (Ex-situ SMC Work) 2.3 includes following activities 2.3.1. Promotion of pulpwood model 2.3.2. Promotion of Timber/ TBO/ NTFP/ Agro-Horti-Forestry Model
3	Sustainable Biodiversity Management	3.1. Sustainable biodiversity Management incorporating concept of SATOYAMA model	 3.1 includes following activities: 3.1.1. Biodiversity Inventory 3.1.2. Valuation of Ecosystem Services 3.1.3. Supporting Sustainable Farming Practices 3.1.4. Biodiversity Conservation 3.1.5. Revitalization of Traditional Knowledge 3.1.6. Community based Ecotourism
		3.2 Establishment of Scientific Monitoring System in Mangrove Forest (Wildlife) Division	 3.2 includes following activities: 3.2.1. Development of a monitoring protocol 3.2.2. Development of Ecosystem Health Report Card 3.2.3. Capacity development of Forest personnel &EDC 3.2.4. Steps would be taken for assessment of replication of EHRC as a monitoring and management tool in other protected areas.
4	Livelihood Improvement	4.1 Community Development Fund	 4. 1.1 Community Development Fund to be utilised according to the micro plan/annual plan 4.1.2. Mobilization of SHGs
		4.2 Promotion of IGAs	4.2.1. Revolving Fund Assistance to SHGs4.2.2. Infrastructure Development
		4.3 Promotion of Product Cluster at DMU Level	 4.3 includes following activities: 4.3.1. Institution Development 4.3.2. Market Linkage 4.3.3. Common Facility Centre (CFC) 4.3.4. Coordination and Facilitation
		4.4 NTFP Based Livelihood Interventions	 4.4 includes following activities: 4.4.1. Inventorying of NTFP 4.4.2. Developing NTFP Strategy 4.4.3. R&D works on NTFP 4.4.4. Business Development Services
		4.5 Livelihood Resource Centre (LRC) at PMU.	4.5 includes following activities:4.5.1. LCR Staff

			 4.5.2. Market Survey and Value Chain Assessment 4.5.3. Business Plan Development for LRC 4.5.4. R&D and Product Development 4.5.5. Corpus Fund 4.5.6. Facilitation of CSR/ Private Sector Partnership 4.5.7. LRC Business Plan Review and Advisory Committee Meetings
		4.6 Revisiting of Micro plan (4" year)	
5	Capacity Development	5.1 Institutional Capacity Development of VSS/ EDC	5.1 includes following activities:5.1.1. Training5.1.2. Exposure visits (within the DMU, within the State, Outside of the State)
		5.2 Institutional CapacityDevelopment of SHGs5.3 Gender Training	5.2 includes following activities:5.2.1. Skills Training5.2.2. Exposure visits (within the State, outside of the State)
			5.3 includes following activities:5.3.1. Trainings for VSS/ EDC5.3.2. Trainings for SHGs5.3.3. SHG Skill Training
6	REDD+		 Baseline - Satellite Imagery analysis will be done during 1.6 Driver assessment - Action planning will be done during 1.10 6.1 FRL 6.2 MRV 6.3 CMRV 6.4 SIS 6.5 Capacity Development
7	Supporting Activities	7.1 Institutional and Project Management Support	7.1 includes following activities:7.1.1. Strengthening of PMU Office7.1.2. Strengthening of DMU Office7.1.3. Strengthening of FMU Office7.1.4. Strengthening of Circle Office
		7.2 Capacity Building of Executing Agency	 7.2 includes following activities: 7.2.1. Training Plan Development 7.2.2. Regular Trainings 7.2.3. Refresher Trainings 7.2.4. Exposures 7.2.5. Overseas Training/ Exposure 7.2.6. National Workshops/ Seminars 7.2.7. Impact Assessment - Capacity Building

		7.3 Monitoring and Evaluation 7.4	7.3 includes following activities:7.3.1. Technology based monitoring7.3.2. Impact Assessment7.3.3. Audits				
			 7.4 includes following activities: 7.4.1. Knowledge Management Support 7.4.2 Internal Communication Support 				
		Communication/ Publicity	7.4.3. External Communication Support				
8	Phase-Out/	8.1 Preparation of Phase-Out/ Phase-	This component includes following activities:				
	Phase-In	In Manual	8.1.1. Institutional capacity development at				
			the community level				
			8.1.2. Asset transfer				
		8.2 Creation of the Asset Inventory					
		8.3 Phase-Out Training for VSS/					
		EDC/SHGs					
9	Consulting		9.1. Consulting services to provide				
	Services		the technical and managerial assistance				
			to the Project Management Unit of				
			9.2. Duration of the consulting services:				
			5 years				

13.0 No of VSS proposed to be targeted

SI No	District	Forest Division	No. of VSS proposed
1	Mayurbhanj	Baripada	150
2		Rairangpur	100
3		Karanjia	100
4	Dhenkanal	Dhenkanal	150
5	Angul	Athamalik	75
6	Sundergarh	Sundergarh	150
7	Jharsuguda	Jharsuguda	80
8	Sambalpur	Sambalpur	100
9	Subarnapur	Subarnapur	75
10	Boudh	Boudh	60
11	Ganjam	Ghumsur South	60
12		Ghumsur North	100
		Total	1200

14.0 Physical Quantities targeted on project components

Components	Unit	Project Target		
Restoration of Degraded Forests in 12 divisions	ha	60,000 ha		
ANR	ha	51,000 ha		
Block Plantations	ha	9,000 ha		
Farm Forestry	ha	10,000 ha		
Formation of VSS / EDCs	no	1200		
EPA (VSS)	no	1200		
IGA (SHG)	no	3600		

Detailed component wise, work quantity shown at Annexure-I.

15.0 Institutional Framework

The Forest and Environment Department, Government of Odisha, through the Odisha Forestry Sector Development Society (OFSDS), will be responsible for the implementation of the Project. The OFSDS was constituted during 2006-07 at the state level and was registered as an autonomous independent Society in compliance with the Society Registration Act, 1860 for implementation of the OFSDP Phase-I project. The OFSDS will consist of a Governing Body (GB), a Project Management Unit (PMU), 14 Divisional Management Units (DMUs) and 50 Field Management Units (FMUs).

The PMU at the state level will guide and manage Project implementation in the OFSDS. The society will be guided and regulated by High Power Committee (HPC) which will be the highest decision-making body for Project policies and coordinate with the other relevant agencies. Governing Body (GB) will be responsible for monitoring the progress of disbursement of the Project implementation. At the field level, DMUs will supervise and monitor the activities of FMUs, while the FMUs will be the front line of the Project implementation. A District Advisory Committee will be organized for each of the District covering DMU(s) to monitor Project implementation through inter-sectoral convergence.

New VSSs will be formed and existing ones will be revitalized as main proponent for Project implementation. Each VSS would have a three SHGs who will participate in income generating activities (IGAs) under the Project. Organizations such as other government agencies, academies/research institutes, NGOs, other donor agencies, etc. are expected to support the DMUs and FMUs as assisting organizations for the Project. A project consultant will be employed to assist and advise the OFSDS for smooth and quality Project implementation. The overall framework of project implementation is shown below.



16.0 PROJECT COST Summary of

16.1 Cost Estimate

The total project investment cost is estimated to be **Rs. 998.258 Crore.** The project cost breakdown is summarized below. Detailed cost breakdown and work quantity is placed at *Annexure-I.*

	Component	LC	% of Grand Total
1	Preparatory Works	680,437,250	7%
2	Sustainable Forest Management	3,055,466,466	31%
3	Sustainable Biodiversity Management	125,000,000	1%
4	Livelihood Improvement	1,278,471,200	13%
5	Capacity Development	895,782,302	9%
6	REDD+ Readiness	9,934,150	0.1%
7	Supporting Activities	1,337,921,887	13%
8	Phase-Out/ Phase-In	50,000,000	1%
9	Consulting Services	364,875,490	4%
10	Base Cost (Eligible Portion)	7,797,888,744	78%
11	Price Escalation (3.7%)	288,521,884	3%
12	Physical Contingency (5%)	404,320,531	4%
13	Eligible Portion (10 thru 12)	8,490,731,159	85%
14	Front End Fee	15,595,777	0.2%
15	Interest During Construction (IDC)*	122,803,834	1.2%
16	Administrative Cost	1,097,161,920	11.0%
17	Taxes	256,490,235	2.6%
18	Grand Total	9,982,581,325	100%

Summary of Project Cost

16.2 Conditions and Assumptions

The project costs are estimated based on the following conditions.

a) The project costs in the Project period of eight years are estimated based on

November 2016 constant prices in Indian Rupees.

- b) The exchange rate of Rs. 1.0 = JPY 1.63 as of November 2016 is applied.
- c) The unit cost for each sub-component and activity was estimated on the basis of

detailed cost breakdown for each unit cost.

16.3 Cost Component

16.3.1 JICA Loan Component

The major part of project cost is the cost for all components of the activities, including Preparatory Works, Strengthening of Executing Body, Capacity Building of VSS, Community/Tribal Development, Biodiversity Conservation, Forest Management under JFM Mode, Forest Management under Non-JFM Mode, Farm Forestry Development, REDD plus preparedness, Publicity and Communication, Monitoring and Evaluation and Phase-out / Phase-in Work. The total cost of all

these components is estimated to be **Rs.849.056 Crores.** This component will be met from the JICA loan component.

16.3.2 Government Share (Administration Costs)

Administration costs consist of cost of salary and establishment of Government staff engaged for project activities at PMU, DMUs and FMUs, as well as direct costs that would include fuel, travel expenses and expenses for supporting staff etc. and also includes the taxes paid on account of implementation and the interest during construction. This would be borne by the State Government.

Year 2 Component Year I Year 3 Year 4 Year5 Year 6 Year 7 Year 8 Year 9 Year 10 Total 7.48 10.89 1.36 4.76 13.61 10.21 8.17 6.80 3.40 1.36 68.04 1 Preparatory Works Sustainable 6.11 21.39 33.61 48.89 61.11 45.83 36.67 30.55 15.28 6.11 305.55 2 Forest Management 0.25 0.88 1.38 2.00 2.50 1.88 1.50 1.25 0.25 12.50 3 Sustainable 0.63 Biodiversity Management 4 Livelihood 2.56 8.95 14.06 20.46 25.57 19.18 15.34 12.78 6.39 2.56 127.85 Improvement 1.79 6.27 9.85 14.33 17.92 13.44 10.75 8.96 4.48 1.79 89.58 5 Capacity Development 6 REDD+ 0.02 0.07 0.11 0.16 0.20 0.15 0.12 0.10 0.05 0.02 0.99 Readiness 2.68 9.37 14.72 21.41 26.76 20.07 16.06 13.38 6.69 2.68 133.79 7 Supporting Activities 0.35 0.55 0.80 0.50 0.10 8 Phase-Out/ 0.10 1.00 0.75 0.60 0.25 5.00 Phase-In 0.00 1.82 5.47 12.77 10.95 5.47 0.00 0.00 0.00 0.00 36.49 9 Consulting Services 53.86 10 Base Cost 14.87 87.24 131.70 159.61 116.97 89.20 74.33 37.17 14.87 779.79 0.58 2.02 3.17 4.62 5.77 4.33 3.46 2.89 1.44 0.58 11 Price Escalation 28.85 (3.7%) 0.81 2.83 4.45 6.47 8.09 6.06 4.85 4.04 2.02 0.81 12 Physical Contingency 40.43 (5%) 13 Eligible Portion 16.25 58.71 94.86 142.78 173.46 127.36 97.51 81.26 40.63 16.25 849.07 (10 thru 12) 0.03 0.11 0.17 0.25 0.31 0.23 0.19 0.16 14 Front End Fee 0.08 0.03 1.56 0.25 0.86 1.35 1.96 2.46 1.84 1.47 1.23 0.61 0.25 12.28 15 Interest During Construction(IDC)* 16 Administrative 2.19 7.68 12.07 17.55 21.94 16.46 13.17 10.97 5.49 2.19 109.72 Cost Taxes 0.51 1.80 2.82 4.10 5.13 3.85 3.08 2.56 1.28 0.51 25.65 17 998.25 18 Grand Total 19.24 69.15 111.27 166.66 203.30 149.74 115.41 96.18 48.09 19.24

16.4 **Tentative Annual Cost Schedule**

The annual cost disbursement schedule is shown below:

16.5 **Financial Plan**

Basing on the JICA funding policy, administration cost and taxes and duties relating to the Project activities will not be covered by loan. As a result, total cost to be born by Government of Orissa (GOO) is estimated at Rs. 149.203 Crore, while the total cost to be covered by the loan is estimated at Rs. 849.055 Crore (13584.90 Million JYP; 1 INR=1.63 JPY equivalent).

17.0 Risk Analysis

- 1. Mitigation of damages from natural disaster would be influenced by uncontrolled factors, such as precipitation and frequency of cyclones.
- 2. The law and order situations in the project areas would have influence in the project implementation. The activities of Naxalites and extreme Maoists in the project areas should be monitored closely.
- 3. Positive impact of OFSDP-Phase-II on poverty alleviation would take a long time to be apparent. The project would also look at the impacts beyond the project life.

18. Sustainability

18.1 Phase-Out / Phase-In Plan of VSS

The project will be focusing on empowering the VSSs so that they become selfsustaining financially and organizationally for enabling People-Led Forest Management. Particular attention would be paid to institutional strengthening and capacity building of the VSSs so that forests could be managed in a sustainable manner by both the Forest Department and the VSSs as collaborators. The "Phasing over" strategies will be in a way an integral part of the Project's design and implementation; some of which are explained below.

18.1.1 Capacity Building and Organizational Development of VSS:

The capacity building for the VSS members will be designed to increase their capabilities to an extent that they could manage the JFM areas by themselves with minimum assistance from the government after the Project exits. The Project will provide significant responsibilities to the VSS members during the course of implementation, including plan formulation, intervention, and management of the JFM area allotted to the VSS so as to develop their planning and management skills. In addition to his credible micro plan would be formulated with inter-sectoral convergence.

18.1.2 VSS Management Manual

In order to enable VSSs to manage their respective JFM areas, organizations and forests; a standard VSS Management Manual which was piloted and up scaled successfully in OFSDP-Phase-I, will be used across all project VSS. The manual will be used by VSS members to cover a range of thematic areas including Maintenance of records, Financial management, Conducting meetings, Duties and responsibilities of VSS functionaries, Conflict resolution mechanisms, Forest protection and management arrangements, Sustainable harvesting practices, Benefit-sharing arrangements, Alliance building and interface with different agencies/institutions, Resource mobilisation etc.

18.1.3 Village Forest Development Fund (VFDF):

The Project will create a Village Forest Development Fund in each VSS for continuing VSS activities and making VSS self-sustaining beyond

Project duration. VFDF will be created out membership contributions, User fees, sale of forest produces, interest earned. The VFDF is a key component under the project to address sustainability, where in the funds will be utilised for forest resource management, maintenance of community assets and VSS management expenses. The operational guideline of the VFDF is designed to manage and regulate the utilisation of the fund in perpetuity.

18.2 Phase-Out / Phase-In Plan of SHGs

The promotion of Self Help Groups (SHG) and implementation of Income Generation Activity (IGA) component under the Project is aimed to make the SHGs financially self-sustaining micro enterprises. The Project will promote and support over 9,000 SHGs and around 50 SHG Clusters to undertake micro enterprises involving forest based products, farm based products and other tertiary activities. These SHGs over the project period will receive intensive technical assistance and market support from the Project. The trajectory of implementing the IGA under the project will emphasize on the vital steps undertaken for Market Research, Institutional Strengthening of SHGs, Revolving funds, Micro enterprise development and business planning, Market linkage support and formation of SHG clusters for gaining economies of scale. Many "Phasing over" strategies for the SHGs will be incorporated during the implementation phase of the project. These strategies would prepare the SHGs to undertake operations without assistance after project withdraws.

APPENDIX-5

Strategy	Indicators	Source/ Means of Verification	Assumptions/ Risks
Goal		1	
The forest ecosystem in Odisha is sustainably improved.			Macro economy of Odisha is stable.
Purpose			
 To enhance sustainable forest and biodiversity management practices and livelihood improvement in the project areas 	 Crown density of Forest's within the project area is maintained and changes from open to moderately close &close forest is reduced by minimum of 40% by end of the Project (EoP). Improved species diversity over the project areas with reduced biotic interface Increase of at least 50% in real income of the House Holds and 50% of below poverty level families showing sustainable increase in assets in the project area by EoP. 	 Impact Assessment by GIS based data. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring. 	 There is no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes.
Outputs:			
 Improvement of the forest in degraded forest areas 	 Size of degraded forest is reduced by 40% in the project area by EoP. Area affected by forest fire is reduced by 50% by EoP. Soil Erosion in tons/ hec. is reduced by 30% in the catchment of the project area by EoP. 	 Impact Assessment by GIS based data. External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring 	 There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.
 To enhance livelihoods to the forest fringe dwellers 	 At least 75% of the Self Help Groups graduate to Grade-A (NABARD rating) after 5 years of formation and at least 50% access to institutional credit. At least 80% Households report, 30% increase in income from off farm enterprises by EoP. Agricultural productivity in the programme area is sustainably increased by at least 100% with cropping intensity increased to 1.25 by EoP. Decrease in incidence of lean season food shortages by all the HH and at least 20% reduction in 	 External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring 	 There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.

				-			
3.	To strengthen the VSS and empower the communities by capacity development in the collective decision making for sustainable management of local resources To improve governance	•	incidence of severe malnutrition amongst children (0 to 36 months) by EoP. At least 80% of House Holds have access to a safe source of drinking water within 100 meters. 1200 VSS are organized/ reconstituted and enter into MoU with the forest department for sustainable management and use of usufructs rights by EoP. At least 75% of the VSS so formed are effectively functioning and regularly audited by EoP. Increased participation of women in development and implementation of Micro Plans, Annual Action Plan and VSS decision making. At least 75% of the VSS are actively engaged in maintenance of project created assets by EoP.	•	Impact Assessment by MIS based data. External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring	•	There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.
5.	To enhance the capacity of other stakeholders	•	500 nos. of staff members of PMU, DMU, FMU are effectively trained and capacited to manage the project. Sufficient Infrastructure in shape of buildings, professional manpower communication and vehicle is at the disposal of PMU/DMU/FMU.	•	Impact Assessment by MISbased data. External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring	•	There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.
6.	To enhance biodiversity in the project areas	•	Sustainable Bio Diversity Management based on the outcome of scientific studies to bridge the knowledge gaps inprotected areas. Reduction in incidence of man-animal conflict.	•	Impact Assessment by GIS & MIS based data. Through census &assessment. External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring	•	There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.

7.	To facilitate the implementation and monitor the progress/ impacts of the project interventions	•	Project interventions with all physical targets achieved within project period. All the 1200 VSS/EDC fully capacitated and are capable of taking up the project activities. Forest staff up to the forest section level are fully aware of project objectives and capable of monitoring the result/ impact of the project implementation. Knowledge gap in the process of forest degradation addressed. MIS & GIS developed concurrently to be capable of comparing the final outcome of the project with base line data.	•	Impact Assessment by GIS & MIS based data. External evaluation by independent agencies. Report of DMU and FMU. Annual outcome survey Output to purpose monitoring	•	There are no major natural disaster that adversely impact the project areas. There is continued commitment by Government and its agencies to implement other programmes. The law and order situation is stable.
Act	ivities	-				1	
1.	Sustainable Forest Management Non JFM Mode JFM Mode Farm Forestry REDD+	•	10,000 hectors of Farm Forestry 51,000 hectors plantation under ANR 9,000 hectors of block plantation				
2.	Livelihood Improvement	•	Income Generating Activities in 3600 SHGs EPA in1200 VSS Off Farm enterprises covering 30% of HH in 1200 VSS Enhancing agricultural productivity in 1200 villages.				
3.	Strengthening Institutions - Community Institutions: VSS/EDC/ SHG	•	Formation of VSS/EDC in 1200 villages Formation and strengthening of 3600 SHGs Preparation of 1200 Micro Plans				
	 Executing agency: FMU/ DMU/ PMU 	•					
4.	Sustainable Biodiversity Management Science based management Habitat management	•	Scientific field based research, studies and monitoring in 1 Protected Area. Sustainable Biodiversity management practices by incorporating Satoyama Philosophy in one pilot in 1 Protected Area.				
5.	 Supporting Activities Capacity Building of the Stakeholders M&E/ MIS/ GIS Publicity Communication Research 						

ODISHA FORESTRY SECTOR PROJECT PHASE-II PROJECT COST DETAILS

Annexure - I

Sub-	Main Antivity	l Init	Quantity	Unit cost	Cost
Compon		Unit	Quantity	Rs	Rs
Compone	ent 1: Preparatory Works				680437250
1.1	Constitution of PMU, DMU, FMU and deployment of Staff				
1.2	Deployment of NGOs for Community Development and SFM	FMU-Years	200	12,78,600	228000000
1.3	Procurement of PMC (refer Component 9)		1	1 00 000	100000
1.4	Identification of VSSs (By PMU/ DMU/ FMU)			1,00,000	100000
1.0	1) Batch-1	VSS/ EDC	300	0	
	2) Batch-2	VSS/ EDC	500	0	
	3) Batch-3	VSS/ EDC	400	0	
1.6	Survey and Demarcation			0	118202250
	1) Survey and Demarcation	VSS/ EDC	1,200	24,150	27600000
	2) Mapping 1:5000 Scale		1,200	31 52 363	3002250
	3) GPS Survey of Treatment Area	VSS/ EDC	1,200	3,450	3600000
1.7	Review and Revision of Project Manuals/ Training materials	LS	10	4,12,000	4120000
	-				
1.8	Engagement of VSS/ EDC Animators				252000000
	1) Batch-1		000	1 00 000	6300000
	a) Core Period (3 years)		300	1,80,000 30,000	5400000
	D) Follow-up/ Friase-out Periou (i year)	V33/ EDC	300	30,000	105000000
	a) Core Period (3 years)	VSS/ EDC	500	1.80.000	90000000
	b) Follow-up/ Phase-out Period (1 year)	VSS/ EDC	500	30,000	15000000
	3) Batch-3				84000000
	a) Core Period (3 years)	VSS/ EDC	400	1,80,000	72000000
	b) Follow-up/ Phase-out Period (1 year)	VSS/ EDC	400	30,000	1200000
1.9	Micro Planning			05.400	3000000
	1) Batch-1	VSS/ EDC	300	25,100	7500000
	2) Batch-2	VSS/ EDC	500	25,100	12500000
1 10	3) Batch-3 Revisiting Micro Planning (after 4th year)	V99/EDC	400	20,100	12000000
1.10	1) Batch-1	VSS/ EDC	300	10,000	3000000
	2) Batch-2	VSS/ EDC	500	10,000	500000
	3) Batch-3	VSS/ EDC	400	10,000	400000
1.11	Annual Planning				33000000
	1) Batch-1	VSS/ EDC	300	27,500	8250000
	2) Batch-2	VSS/ EDC	200 400	27,500 27,500	13750000
1.12	Social and Environmental Consideration	V00/ LD0	400	21,000	3015000
-	1) Expert Remuneration for Environmental Monitoring	man-days	180	17,250	2700000
	2) Travel of Expert for Environmental Monitoring	man-days	90	4,025	315000
Compone	ent 2: Sustainable Forest Management				3055466466
2.1	JFM-Mode				2682600382
2.1.1	Site Specific Fian (SSF) & Monitoring	VSS or 100ha	1 200	4 165	4968000
	2) Treatment area monitoring (2nd year)	VSS or 100ha	1,200	3.710	4422000
	3) Treatment area monitoring (4th year)	VSS or 100ha	1,200	3,710	4422000
2.1.2	Drainage Line Treatment (Ex-situ SMC Work)				110137477
	1) JFM Mode Model Drainage Line Treatment (DTL)		4 500	00.050	00001700
	a) DTL Establishment	ha	1,500	60,353 8 058	89201780 11040510
	c) DTL Maintenance 2 (after 3 vrs. of establishment)	ha	1,500	6.035	8926178
	JFM Treatment Area	ha	60,000	0,000	00201.2
2.1.3	ANR	ha	51,000		1786721760
	1) ANR with no gap planting				
	a) 0 year Advance Work	ha	15,300	1,905	29070000
	b) 1st year Plantation Work & balance advance works	ha	15,300	9,125	139230000
	c) 2nd year maintenance work	ha	15,300	3,515	53550000
	d) 3rd year maintenance work	na ha	15,300	2,713	10710000
	2) ANR with 400 seedlings/ha gap planting	IId	10,000	105	107 10000
	a) 0 year Advance Work & seedling/ nursery	ha	25,500	4,982	125837400
	b) 1st year Plantation Work & balance advance works	ha	25,500	20,452	517588800
	c) 2nd year maintenance work	ha	25,500	7,714	193647000
	d) 3rd year maintenance work	ha	25,500	3,515	89250000
	e) 4th year maintenance work	na	25,500	705	17850000
	a) 0 year Advance Work	ha	10 200	8 058	81289920

Sub-	Main Assister	11		Unit cost	Cost
Compon	Main Activity	Unit	Quantity	Rs	Rs
_	b) 1st year Plantation Work & balance advance works	ha	10,200	31,485	318191040
	c) 2nd year maintenance work	ha	10,200	11,807	118197600
	d) 3rd year maintenance work	ha	10,200	4,315	43860000
	e) 4th year maintenance work	ha	10,200	705	7140000
2.1.4	Block Plantation	ha	9,000		760337145
	1) Fuel and Fodder Plantation				
	a) 0 year Advance Work	ha	6,300	33,602	210057750
	 b) 1st year Plantation Work & balance advance works 	ha	6,300	34,582	215523000
	c) 2nd year maintenance work	ha	6,300	16,160	101808000
	d) 3rd year maintenance work	ha	6,300	11,455	71190000
	e) 4th year maintenance work	ha	6,300	3,700	23310000
	2) NTFP Plantation				
	a) 0 year Advance Work	ha	2,250	5,182	11553300
	 b) 1st year Plantation Work & balance advance works 	ha	2,250	28,289	63144225
	c) 2nd year maintenance work	ha	2,250	9,761	21579750
	d) 3rd year maintenance work	ha	2,250	3,915	8775000
	e) 4th year maintenance work	ha	2,250	705	1575000
	3) Other Block Plantation				
	a) 0 year Advance Work	ha	450	22,286	9962640
	 b) 1st year Plantation Work & balance advance works 	ha	450	23,524	10480680
	c) 2nd year maintenance work	ha	450	12,382	5473800
	d) 3rd year maintenance work	ha	450	9,521	4239000
	e) 4th year maintenance work	ha	450	3,705	1665000
2.1.5	Fire Protection				11592000
	1) Fire Line (FL) Construction and Maintenance	km			
	a) FL Construction (4 mt. wide)	km	1,710	1,800	3078000
	b) FL maintenance; 2nd year	km	1,710	800	1368000
	c) FL maintenance; 3rd year	km	1,710	800	1368000
	d) FL maintenance; 4th year	km	1,710	800	1368000
	2) Provision of Incentive Measures				
	a) Batch-1 (25% VSS each year; for 3 years)	VSS	225	4,900	1102500
	a) Batch-2 (25% VSS each year; for 3 years)	VSS	375	4,900	1837500
	a) Batch-3 (25% VSS each year; for 3 years)	VSS	300	4,900	1470000
2.2	Non JFM Mode				220526084
2.2.1	Consolidation and Demarcation of Forest Boundaries				23313106
	1) Consolidation and Demarcation of Forest Boundaries	km	1,898	9,227	16977504
	2) Maintenance of Forest Boundaries	km	1,898	3,421	6335602
2.2.2	Construction /Improvement of Permanent Nurseries				110922336
	a) Construction of Permanent Nurseries	nursery	6	146,25,546	84058608
	b) Maintenance of Permanent Nurseries	nursery	6	7,31,277	4202928
	c) Root Trainer / Material Replacement	nursery	6	39,37,645	22660800
2.2.3	Non-JFM Drainage Line Treatment (DLT) (Ex-situ SMC Work)				86290642
	a) DLT Establishment	ha	750	97,165	72014082
	b) DLT Maintenance 1 (after 1 yr. of establishment)	ha	750	10,561	7838960
	c) DLT Maintenance 2 (after 3 yrs. of establishment)	ha	750	8,687	6437601
2.3	Farm Forestry				152340000

Sub-	Main Activity	Unit	Quantity	Unit cost	Cost
2.3.1	Promotion of Mixed Model			KS	14040000
2.0.1	1) Batch-1				14040000
	a) Plantation	ha	2,500	18,000	45000000
	b) Incentive (90% survival rate)	ha	2,500	5,400	13500000
	2) Batch-2				
	a) Plantation	ha	4,000	18,000	7200000
	b) Incentive (90% survival rate)	ha	4,000	5,400	21600000
	3) Batch-3		0.500	10.000	
	a) Plantation	ha	3,500	18,000	6300000
232	Scientific management of Bamboo involving VSSs		3,500	41 00 000	11940000
		2	-	,,	
Compone	ent 3: Sustainable Biodiversity Management				125000000
3.1	Sustainable Biodiversity Management incorporating concept of	Site	1	500,00,000	5000000
32	Establishment of Scientific Monitoring System at Bhitarkanika	vear	5	150 00 000	7500000
v .=		, <u> </u>		0	
Compone	ent 4: Livelihood Improvement				1254471200
4.1	Community Development Fund		200	4 00 000	48000000
	b) Batch-2	VSS/ EDC	500	4,00,000	20000000
	c) Batch-3	VSS/ EDC	400	4,00,000	16000000
4.2	Promotion of IGAs				363600000
4.2.1	Identification and formation of SHGs				3600000
	a) Batch-1	VSS/ EDC	300	3 000	900000
	b) Batch-2	VSS/ EDC	500	3,000	1500000
	c) Batch-3	VSS/ EDC	400	3,000	1200000
4.2.2	Revolving Fund for SHGs		200	2 00 000	36000000
	b) Batch-2	VSS/EDC	500	3,00,000	15000000
	c) Batch-3	VSS/ EDC	400	3,00,000	12000000
4.4	NTFP Based Livelihood Interventions	DMU	0	0.02.000	9500000
4.4.1	Inventorying of NTFP	PMU	0	9,93,000	5400000
4.4.3	Business Development Services including R&D	PMU	1	30,00,000	3000000
4.5	Livelihood Resource Centre (LRC)			, ,	398552000
4.5.1	Staff of LRC	years	5	26,40,000	13200000
4.5.2	Business Plan Development for LRC	LS	1	10,67,200	928000
4.5.3	Livelihood Development Fund (with PMU)	products	5	14,49,000	37600000
	1) Cluster Revolving Fund	LS	1	250,00,000	25000000
	2) Cluster Development Fund	LS	1	250,00,000	2500000
	3) Cluster Corpus Fund	LS	1	500,00,000	5000000
455	4) IGA Infrastructure for SHGs with VSS Eacilitation of CSR/ Private Sector Partnership	VSS/EDC	1,200	2,30,000	276000000
4.5.6	LRC Business Plan Review and Advisory Committee Meetings	meetings	8	1 38 000	1104000
4.6	Annual Partner NGOs Review Meeting	vears	8	3.52.400	2819200
		-		, ,	
	and 5. One of the Development				040047000
Compone	ent 5: Capacity Development			0	919617302 122003842
5.1.1	Training Plan Development			0	122003042
	1) National (by PMC)			0	
	2) Overseas (by PMC)			0	0.4.4.0.0.0.0
ə.1.2	regular Trainings				24186960
	a) Managerial/ Skill Improvement	batches	6	5.34.040	3020640
	b) Technical/ Engineering	batches	5	6,10,000	2870000
	c) M&E/ MIS, GIS	batches	7	6,86,200	4488400
	d) Gender Training	batches	6	5,34,040	3020640
	a) Managerial/ Skill Improvement	batches	10	2,36,710	2220400
	b) Technical/ Engineering	batches	10	2,82,490	2640400
	c) M&E/ MIS, GIS	batches	12	3,33,290	3706080
	a) Gender Training 3) Environemntal and Social Consideration	batches	10	2,36,710	2220400
	a) Environemntal and Social Consideration Training (PMU)	training	10	34.166	338375
	b) Environemntal and Social Consideration Training (DMU)	training	120	23,966	2836500
5.1.3	Refresher Trainings		T		14235200
	1) PMU/ DMU a) Managerial/ Skill Improvement	batches	A	5 24 040	2012760
	b) Technical/ Engineering	batches	4	6.10.000	2013760
	c) M&E/ MIS, GIS	batches	5	6,86,200	3206000
	d) Gender Training	batches	4	5,34,040	
	a) Managerial/ Skill Improvement	batches	6	2 36 710	13322/10
l	1 / ···································		· · · ·	_,00,110	. 5522 40

Sub-	Main Activity	l Init	Quantity	Unit cost	Cost
Compon	Main Activity	Unit	Quantity	Rs	Rs
	b) Technical/ Engineering	batches	6	2,82,490	1584240
	c) M&E/ MIS, GIS	batches	8	3,33,290	2470720
	d) Gender Training	batches	6	2,36,710	1332240
	3) Environemntal and Social Consideration				
	 a) Environemntal and Social Consideration Training (PMU) 	training	10	37,428	371000
	 b) Environemntal and Social Consideration Training (DMU) 	training	120	26,228	3108000
5.1.4	Exposures				76981982
	1) National/ Outside State (PMU/DMU/FMU)				
	a) JICA assisted states	batches	10	11,08,900	10444000
	 b) States having Inter-sectoral/ Livelihoods models 	batches	6	11,08,900	6266400
	2) Overseas	batches	3	124,16,530	37249590
	3) Hi-Tech Nursery exposure	times	24	5,45,265	12595680
	4) Drainage Line Treatment/ SMC work exposure: Non-JFM	times	24	1,08,882	2406072
	5) Drainage Line Treatment/ SMC work exposure: JFM	times	80	1,08,882	8020240
5.1.5	National Workshops/ Seminars	stage	1	38,84,963	3754800
5.1.6	Impact Assessment - Capacity Building	stage	3	10,90,545	2844900

Sub-	Main Activity	Unit	Quantity	Unit cost	Cost
Compon	Main Activity	Unit	Quantity	Rs	Rs
5.2	Community Institutions				739522300
5.2.1	Promotion of IGAs				295680000
	1) Training on SHG Governance and Management			10.000	
	a) Batch-1	VSS/ EDC	300	43,200	12960000
	b) Batch-2	VSS/ EDC	500	43,200	2160000
	2) Orientation on Government Schemes	V33/ EDC	400	43,200	17260000
	a) Batch-1	VSS/ EDC	300	1 05 600	31680000
	b) Batch-2	VSS/ EDC	500	1,05,600	52800000
	c) Batch-3	VSS/ EDC	400	1,05,600	42240000
	3) Training on Convergence Meeting				
	a) Batch-1	VSS/ EDC	300	97,600	29280000
	b) Batch-2	VSS/ EDC	500	97,600	48800000
	c) Batch-3	VSS/ EDC	400	97,600	39040000
5.2.2	Skill Training to promote IGAs				361735000
	1) Exposure Visit to successful IGAs	FMU	50	3,00,000	1500000
	2) Training on Business Plan Development	FMU	50	2,08,000	10400000
	3) Skill Training of Master Trainers	FMU	50	1,12,500	5625000
	4) Skill Training of SHG Members			(= 0.00	
	a) Batch-1	VSS/ EDC	300	45,000	13500000
	b) Batch-2	VSS/ EDC	500	45,000	22500000
	C) Balch-3	VSS/EDC	400	45,000	1800000
	a) Batch-1	VSS/ EDC	300	12 000	1260000
	b) Batch-2	VSS/ EDC	500	42,000 42,000	2100000
	c) Batch-3	VSS/ EDC	400	42,000	16800000
	6) Training on Sustainable NTFP Harvesting Practices			12,000	
	a) Batch-1	VSS/ EDC	300	59,200	17760000
	b) Batch-2	VSS/ EDC	500	59,200	29600000
	c) Batch-3	VSS/ EDC	400	59,200	23680000
	7) Training on Post Harvest Management Practices				
	a) Batch-1	VSS/ EDC	300	59,200	17760000
	b) Batch-2	VSS/ EDC	500	59,200	29600000
	c) Batch-3	VSS/ EDC	400	59,200	23680000
-	8) Training on Micro Enterprise Management	1/00/ 550		00.000	00040000
	a) Batch-1	VSS/ EDC	300	68,800	20640000
-	D) Batch-2	VSS/EDC	500	68,800	34400000
	C) Datch-S	VSS/EDC	400	33 400	1670000
523	Training of VSS/ EDC	TIVIO	50	55,400	47559300
5.2.5	1) Training need analysis and module development	PMU	1	5 69 050	520300
-	2) Re-organisation of VSS - batch 1 and 2 - 2 nos per DMU	batches	24	20,950	492000
	3) Microplanning: TOT - Module 1 and 2	DMU	12	1.58.700	1872000
	4) Orientation of VSS/ EDC on Microplanning	VSS/ EDC	1,200	5,150	600000
	5) Documentations and maintenance records – TOT	Circle	6	1,47,250	870000
	6) Documentation & Maintenance of VSS records - 7 per FMU	batches	350	16,050	5512500
	7) Forest protection and management (Basic) - 7 per FMU	batches	350	19,550	6737500
	8) Sustainable Biodiversity Management - 2 nos. per FMU	batches	100	21,050	2075000
	9) Orientation of VSS/ EDC members	VSS/ EDC	1,200	3,650	4200000
	10) Social Audit 11) Community Disaster Management 2 nos. ner EMU	VSS/EDC	1,200	3,650	4200000
	12) Wildlife Human Conflict		1 200	21,050	2075000
	13) Workshop of VSS/EDC Leaders - 2 nos per DMU	times	60	38 450	2280000
	14) Workshop of VSS/EDC Leaders - 6 nos per FMU	times	300	16 050	4725000
5.2.4	Exposure visits (within the DMU) - by DMU	batches	240	11.350	2688000
5.2.5	Exposure visits (within the State) - by PMU	batches	120	51.050	6072000
5.2.6	Exposure visits (Outside of the State)	DMU	12	1.51.100	1788000
5.2.7	Gender Training			,,- -	24000000
	1) VSS/ EDC	VSS/ EDC	1,200	5,150	600000
	2) SHGs	SHGs	3,600	5,150	18000000
5.3	Training of Partner NGOs on promotion of IGAs				1744660
	1) Orientation on Facilitating Convergence	times	2	4,23,600	847200
L	2) Training for implementation of Small IGAs through SHGs	times	2	2,71,800	543600
ļ	3) Training on Cluster Development	times	2	1,13,250	226500
5.4	4) Exposure Visit on Cluster Development	times	1	1,27,360	127360
5.4	I raining of Animators	E AL L		00.400	4800000
	Orientation on Facilitating Convergence Section of Small ICAs through Clifford	FINU	50	38,400	1920000
5.5		FIVIU	50	000,1C	200000
5.5	Institution Development		├		29034000
3.3.1	1) Exposure Visit to Clusters / Producer Organizations		10	1 00 000	1202004000
	2) Formation and strengthening of Producer Organizations		12	1 10 250	1206000
	3) Revolving Fund Assistance		12	20 00 000	240000
5.5 2	Skill Training		12	20,00,000	3030000
5.0.2	1) Skill Training of Master Trainers	DMU	12	1 23 750	1350000
<u> </u>	2) Skill Training of Members	DMU	12	1 40 000	1680000
5.6	Quality enhancement of Kendu Leaf	DMU	3	8.30.000	2490000

Sub-	Main Activity	Unit	Quantity	Unit cost	Cost
Compon	Technica of Examples for Examples			Rs	Rs
5.7	1 raining & Extension of Farm Forestry	-	┥──┤		1000000
	a) Batch-1	ha	2,500	1,000	2500000
	b) Batch-2	ha	4,000	1,000	4000000
	c) Batch-3	ha	3,500	1,000	3500000
5.8	Capacity Development - REDD+ Readiness				9422500
	1) National Level Training	batches	2	5,10,113	914500
	2) Division Level Training	hatches	48	24 150	8508000 1104000
	b) GPS	batches	48	35,044	1602000
	c) MIS	batches	48	35,044	1602000
	d) Awarness Generation Workshops	times	240	18,375	4200000
Compone	ant 6: REDD+ Readiness			10 70 700	9934150
	1) Purchasing of Satellite Imageries	I.S.	225	10,72,733	1021650
	2) Biomass Survey 3) Riodiversity Inventory	ls	1	80 50 000	700000
Compone	ent 7: Supporting Activities	1.0.	+ <u>'</u>	00,00,000	1337921887
7.1	Institutional and Project Management Support	1	1 1		1171910187
7.1.1	Strengthening of PMU Office				218244976
	1) Equipment/ Office automation/ Gadgets	l.s.	1	51,64,600	4918667
	2) Refurbishing of PMU office - turniture/ tixtures	nos.	1	19,51,950	1859000
	3) PMU Building	PMU	+ 1	119 52 186	11519920
	b) Maintenance of Extended PMU building	time		2.39.044	230398
<u> </u>	c) Renovation of Existing PMU building.		1	44,04,875	4329975
	d) Existing PMU building renovation	time	1	88,098	86600
ļ	4) Vehicles for Project at PMU level (12 nos.)	l.s.	1	131,25,000	12500000
ļ	5) Human Resource Support - PMU	months	120	7 65 624	70801200
	b) Outsourcing	months	120	9 86.213	102909216
7.1.2	Strengthening of DMU Office	Inonale			297509109
	1) Equipment/ Office automation/ Gadgets	DMU	12	11,22,905	12833200
	2) Refurbishing of DMU office - furniture/ fixtures	DMU	12	4,35,225	4974000
	3) DMU Building			15.07.444	47507005
	a) DMU Building Extension	DMU	12	15,07,144	1/52/895 350558
	4) Vehicles for project at DMU level (one per DMU)	DMU	12	9.97.500	12833200
	5) Human Resource Support - DMU		1		
	a) Contractual/ Direct Hiring	months	1,440	1,25,925	157680000
	b) Outsourcing	months	1,440	72,921	91310256
7.1.3	Strengthening of FMU Office			10.01.000	656156102
	1) Equipment/ Uttice automation/ Gadgets	FMU	50	10,21,230	48630000
	3) FMU Building			2,07,020	12120000
	a) FMU Building Extension	FMU	50	7,87,049	38368924
	b) FMU Building Extension Maintenance (after 3rd yr.)	time	50	15,741	767378
	4) Vehicles for project at FMU level (Motor Cycles - 2 per FMU)	nos.	<u> </u>	78,750	
	5) Human Resource Support - FMU		0.000	co. oco	22050000
	a) Contractual/ Direct Hiring	months	6,000	0∠,903 43,655	228500000
7.1.4	Strengthening of Circle Office	Попша	0,000	40,000	221107000
	1) Equipment/ Office automation/ Gadgets	1	1 1		
	2) Refurbishing of Circle office - furniture/ fixtures				
7.2	Monitoring & Evaluation (M&E)	Τ	\Box		136717100
7.2.1	Monitoring		\downarrow		84252450
	1) Concurrent Monitoring and Periodic Reviews	maatingo	114	5 512	509500
		meetings	1 296	ت 5,515 1 313	1620000
	c) FMU	meetings	10,800	315	3240000
	d) VSS (one per week by each)	†			
	i) Batch -1 (300 nos.)	meetings	1,24,800	50	6240000
	ii) Batch -2 (500 nos.)	meetings	1,82,000	50	9100000
	III) Batch -3 (400 nos.)	meetings	1,24,800	00 893	183600
	f) HPC/.IICA (2 nos - one per year by each)	meetings	36	4.463	153000
	q) APCCF (M&E & IV), OFD (one per year)	meetings	9	5,775	49500
	2) Inter-sectoral Coordination Meetings	†			
	a) Principal Secretary (Planning & Coordination)	meetings	36	4,463	153000
	b) District Magistrate/ ADM (10 nos.)	meetings	360	1,050	360000
	c) Block Development Ufficer (40 blocks)	meetings	4,320	225	972000
	4) Computerized MIS & GIS staff (in-house development)	LS	1	209.76.000	18240000

Sub-	Main Antivity	Unit	Quantity	Unit cost	Cost
Compon	Main Activity	Unit	Quantity	Rs	Rs
	5) Computerized Accounting System				
	a) PMU	PMU	1	4,61,480	405200
	b) DMU	DMU	12	1,02,690	1087200
	c) FMU	FMU	50	1,02,690	4530000
	6) GIS	l.s.	1	37,17,473	3540450
	7) Annual Strategy Planning & Review Workshops	DMU	0	0.00.500	0040000
	a) PMU	PMU	400	3,86,500	3240000
7 2 2		DIVIO	108	2,33,750	24300000
1.2.2	1) Annual Outcome Assessments	vear	8	10 90 545	7586400
	2) Baseline and Impact Surveys	yeai	0	10,50,545	7300400
	a) Socio-economic/ Gender Surveys				
	i) Baseline	stare	1	27 91 395	2427300
	ii) Impact (mid and end-term)	stage	2	31.24.895	5434600
	b) Physical Surveys	g-		.,,	
	i) Baseline	stage	1	29.11.455	2531700
	ii) Impact (mid and end-term)	stage	2	33,28,330	5788400
	3) Thematic and Short Studies	stage	5	9,90,495	4306500
7.2.3	Audits				14455600
	1) Social Audits				
	a) Batch -1	meetings	300	1,575	450000
	b) Batch -2	meetings	500	1,575	750000
	c) Batch -3	meetings	400	1,575	600000
	2) Statutory Financial Audits				
	a) PMU/ DMU/ FMU	audits	10	5,83,625	5075000
	b) VSS		000	0.000	053000
	Batch -1	audits	300	3,669	957000
	Batch -2	audits	400	3,009	1276000
	3) Concurrent Audits	audits	400	5,003	1270000
	a) PMU	audits	20	51 693	899000
	b) DMU	audits	240	13,674	2853600
	4) Grievance Redressal, RTI and Public Disclosure			0	
7.3	Communication/ Publicity				29294600
7.3.1	Knowledge Management Support				6880000
	1) Design & Development of IEC material	year	8	4,14,000	2880000
	2) Printing of IEC material	year	8	5,25,000	4000000
7.3.2	Internal Communication Support				799600
	1) Equipment and aids	sets	1	4,15,750	400000
	2) Bulk SMS/ email services	year	9	51,060	399600
7.3.3	External Communication Support				21615000
	1) Folk Media		200	4.025	1050000
	a) Batch 2	VSS/ EDC	500	4,025	1750000
	c) Batch -3	VSS/EDC	200	4,025 1 025	1/10000
	2) Print Media	vear	400	1 15 000	80000
	3) Electronic media (Radio/ TV)	year	8	1.61.000	1120000
	4) Newsletter/ Magazine	year	9	3,60,125	3082500
	5) Short films	films	5	2,58,750	1125000
	6) Exhibitions/ Melas - participation support	events	24	1,89,000	4320000
	a) Product Conclaves	nos	6	2,80,000	1680000
	7) Workshop/ Seminars	events	8	70,375	540000
	8) Publications	year	9	6,06,625	4747500
Compone	ent 8: Phase-Out/ Phase-In				5000000
8.1	Preparation of Phase-Out/ Phase-In	LS	1	500,00,000	5000000
	Creation of the Asset Inventory and Manuals Deviating Misse Diagrams				
	2) Revisiung Micro Planning				
	3) Phase-Out Training for VSS/ EDC/ SHGS			0.00.000	
8.2 Compose	unt 9: Conculting Services	V33/ EDC	-	2,00,000	264076400
Compone			1	3618 75 100	364875490
		1.5.		0040,70,490 0	50407 5490
Compone	ent 10: Front End Fee	1		0	15595447
	maximum 0.2% of Loan Amount	ls	1	155,95,447	15595447
	0.2%	1		, ,	

Sub-	Main Astivity	1114	Quantity	Unit cost	Cost
Compon		Unit	Quantity	Rs	Rs
Compon	ent 11: Administrative Cost (State Share)				1097161920
11.1	PMU Administrative Cost				
	a) Salary	months	120	11,73,040	140764800
	b) Operation Cost	months	120	5,80,000	69600000
11.2	DMU Administrative Cost (12 nos.)				
	a) Salary	months	1,440	80,848	116421120
	b) Operation Cost	months	1,440	1,20,000	172800000
11.3	FMU Administrative Cost (59 nos.)				
	a) Salary	months	6,000	27,776	166656000
	b) Operation Cost	months	6,000	70,500	42300000
11.4	Circle Administrative Cost (6 nos.)				
	a) Salary	months	-		
	b) Operation Cost	months	720	11,000	7920000
Compon	ent 12: Administrative Cost (Taxes)				256471335

Compone	PROJECT COST ABSTRACT	
1	Preparatory Works	6804,37,250.00
2	Sustainable Forest Management	30554,66,465.62
3	Sustainable Biodiversity Management	1250,00,000.00
4	Livleihood Improvement	12544,71,200.00
5	Capacity Development	9196,17,302.00
6	REDD+ Readiness	99,34,150.00
7	Supporting Activities	13379,21,886.69
8	Phase-Out/ Phase-In	500,00,000.00
	Sub-total (1)	74328,48,254.32
9	Consulting Services	3648,75,490.16
	Sub-total (2)	3648,75,490.16
	Base Cost (Eligible Portion)	77977,23,744.48
	Price Escalation (3.7%)	2885,15,778.55
	Physical Contingency (5%)	4043,11,976.15
	Eligible Portion (10 thru 12)	84905,51,499.18
10	Front End Fee	155,95,447.49
	Interest During Construction (IDC)*	1228,01,122.44
11	Administrative Cost	10971,61,920.00
12	Taxes	2564,71,335.00
	Grand Total	99825,81,324.10