



PROCEEDINGS

of the

9th ANNUAL NATIONAL WORKSHOP of

Japan International Co-operation Agency

"Sustainable Forest Management with People's Participation & Modernization of Management"

11th January to 12th January, 2017 Oberoi Grand, Kolkata & Cruise Paramhansa, Sundarban



West Bengal Forest and Biodiversity Conservation Society
Office of the Chief Project Director, WBFBC Project
Block: LB-2, Sector-III, Salt Lake City, Kolkata – 700106
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Foreword

Forests and biological diversity are among the most valuable resources that a country possesses. Sustainable management of forests by involving local forest-dependent communities has been a key objective of the Department of Forests, Government of West Bengal, that is at the forefront of innovations in forest conservation, including that of Joint Forest Management in India.

It was a privilege for the Department of Forests, Government of West Bengal to host the 9th Annual National Workshop on 'Sustainable Forest Management with People's Participation and Modernization of Management' on 11th & 12th January, 2017 at Kolkata & Sunderbans, West Bengal, through the JICA aided West Bengal Forest and Biodiversity Conservation Project (WBFBCP). The workshop provided a great opportunity for interaction, experience and knowledge sharing among representatives from twelve States where JICA assisted forestry or natural resource management projects are either planned or being implemented by Forest Departments.

I am pleased to find that the deliberations and discussions during the workshop highlighting the various facets of sustainable forest management and modern techniques have been well documented and a clear set of recommendations have emerged to inform the future course of action of both JICA and the State Governments and to serve as a point of reference.

I take this opportunity to thank JICA and WBFBCP for their support in organizing this workshop and congratulate the participants for their active participation. I hope that the lessons from the workshop would help improve the performance of the ongoing JICA assisted forestry projects and help streamline the design of future conservation projects.

(CHANDAN SINHA)

Principal Secretary

Department of Forests, Govt. of West Bengal

& Chairperson, WBFBC Society

Preface

It is a matter of great pleasure and pride that the West Bengal Forest and Biodiversity Conservation Society did host the 9th Annual National Workshop in Kolkata and Sundarbans. We thank Japan International Cooperation Agency (JICA) for entrusting with us the pleasant duty of hosting it. It would not be an exaggeration to say that the Annual National Workshop was an unqualified success.

The Annual National Workshop focused on the theme: Sustainable Forest Management with People's Participation and Modernization of Management. The discussions on this themes were lively and insightful. The pages of this proceedings will bear a testimony to that. The presentation from the donor agency outlining the guiding principles governing investment in the Forestry Sector in India, experience sharing of old JICA Project hosting states and apprehences of new states hosting JICA project made the discussion interesting. In fact a lot of questions were asked and answered by the participant states themselves without intervention of JICA authorities.

The presentation of case study added a new dimension to the seminar. The participant states learnt from other's success and failure. This sessions gave us an idea of what works in field and what doesn't.

It is a matter of pleasure that all participants liked the choice of venue and infrastructural arrangement, particularly the Sundarban leg of the programme. In the serene setting of biggest mangrove forests of the world the discussion on ways and means of saving India's forest wealth took a new dimension.

The West Bengal Forests and Biodiversity Conservation Society takes immense pleasure in arranging the workshop. It is thankful to all the participants and donor agencies whose active involvement made the workshop a grand success.

(DEBAL RAY)
Chief Project Director
WBFBC Project



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INAUGURAL SESSION

Proceedings of the 9th Annual National Workshop of Japan International Co-operation Agency

Dignitaries on the Dais

Mr. Basudeb Banerjee, IAS	Chief Secretary, Govt. of West Bengal & Chairperson, High Powered Committee, WBFBC Project
Mr. Mayasuki Taga	His Excellency, The Consul General of Japan in Kolkata
Mr. Kawasaki Inada	Director of South Asian Division- I, HQ at Tokyo, Japan
Ms. Sachiko Imoto,	Senior Representative, JICA India Office
Mr. Pradip Shukla, IFS	Principal Chief Conservator of Forests and Head of Forest Force, West Bengal
Mr. Chandan Sinha, IAS	Principal Secretary, Forest Deptt. Govt. of W.Bengal & Chairperson, West Bengal Forest and Biodiversity Conservation Society
Mr. Siddhartha Barari, IFS	Chief Project Director, West Bengal Forest and Biodiversity Conservation Project & Secretary, West Bengal Forest and Biodiversity Conservation Society
Mr. Vineet Sarin	Addl. Chief Development Specialist, JICA India



Inauguration of the Workshop

The Workshop was formally inaugurated by the Chief Secretary, Govt. of West Bengal and Chairperson, High Power Committee by lighting the ceremonial lamp on the dais. He was joined by the Consul General of Japan in Kolkata and other dignitaries on the dais.

Welcome Address by Mr. Chandan Sinha, IAS, Principal Secretary, Forest Deptt., Govt. of West Bengal & Chairperson, WBFBC Society

Welcoming everyone present and associated with

the workshop, Mr. Sinha briefly described the main objective and importance of the Annual National Workshop of JICA assisted projects. He hoped for a very



informative and interactive discussion in the workshop including sharing of experiences.

Address by Mr. Pradeep Shukla, IFS, Principal Chief Conservator of Forests & The Head of Forest Forces, West Bengal

Mr. Shukla, IFS, PCCF (HoFF), West Bengal apprised the audience with a brief description about the West Bengal Forestry and Biodervisity Conservation Project.

He mentioned that the project was formulated for eight years duration and formally launched by the Hon'ble Chief Minister, West Bengal in the year 2013. The Mid Term Review of the project has been completed in 2016 and due to procedural reason the project has been extended up to March, 2021. It was a well-structured project including the components like Central Nurseries, different types of Plantation models including rehabilitation of degraded Sal forests, involvement of Joint Forest Management Committees for participatory forest management and various aspects Biodiversity Conservation. The impact is quite visible in the field. He made special mention of forty odd number of modern nurseries capable of producing eight million of quality



planting materials for catering to afforestation of 12,000 Hectares per year. Taking cue from the success of nursery technique, the Forest Directorate has extended this model of nursery in other schemes undertaken in the state. Out of about 4500 JFMCs, in the state this project covers total 600 JFMCs or about 13 per cent of the total area managed under Joint Forest Management. Mr. Shukla expressed that this nursery network will also be helpful in dovetailing the distribution of high value tall seedlings under the State Government's scheme "Sabujshri".

He also made a brief mention that there are six plantation models for afforestation - four in South Bengal and two in North Bengal on forest areas and two plantation models outside forest areas under the Project. Almost 60% of the afforestation target has been achieved and the plantation quality has been improved due to utilization of quality planting materials.

He pointed out the successful use of modern technologies like use of GPS for survey, the digitization of forest boundaries protected by the JFMCs, customization of TALLY for preparation of accounts in computer, synchronization in accounts, advancement in Budget Control System in this project.

Mr Shukla mentioned that the Capacity Building of Human Resource like short-term and medium-term training in renowned institutes, regular meeting and training at grass-root level are also going on regularly. The key success is noteworthy in the field of MIS, viz. the introduction of on-line Plantation Journals and online Monitoring System.

While highlighting the creation of grassland in Protected Areas under Biodiversity Conservation component, Mr. Shukla acclaimed that these are among the best plantations created in recent times. Six ecological studies are in process under this project- ecology of elephants in South Bengal, ecology of elephants in North Bengal, ecology of Gaur in North Bengal, Impact of habitat improvement on the ecology of leopards in North Bengal and population dynamics, distribution & prey-predator relationship of tigers in North Bengal. Keeping in view the declining tiger population in North Bengal and excess elephant population in South Bengal resulting in increasing man-elephant conflicts, these studies will definitely throw some light for mitigating measures.

He mentioned that other issues like accommodation facility to staff, staff mobility etc. have been addressed to as per the project target. He expected for continuation of activities phase II the upcoming project which has been in principle approved by the Finance Department of the State Government. He hoped for a close relationship for a longer period and conveyed his thanks to JICA, Govt. of Japan, Govt. of India, Govt. of West Bengal and all who have actively co-operated in framing, financing and execution of the project.

Address by Mr. Mayasuki Taga, His Excellency, the Consul General of Japan in Kolkata

Mr. Mayasuki Taga, His Excellency, the Consul General of Japan in Kolkata expressed his pleasure for being invited to the programme. He mentioned that Japan is a very good partner of India and his Prime minister had announced 3.5 trillion Japanese Yen investment in India two years ago including ODA and private investments. ODA is, of course, a very important component of JICA assisted project which includes the big Metro Projects in Delhi, Chennai and Kolkata, East-West Corridor and



high –speed railway from Ahmedabad to Mumbai. People may think that implementing big projects are more important as those are much catchy but JICA is equally interested in comparatively smaller projects where JICA have gained experience in human resource development and capacity building. Sometimes it gives very good results when combination of financial investment as well as technical assistance occurs. In the field of the environment, biodervisity, forestry, soil and water conservation for future are also being taken care of in JICA assisted ODA loans. It is believed that the forestry projects in India are generally very successful and the West Bengal Forest and Biodiversity Conservation Project is also doing very well. He remarked, it is a matter of delight to be invited in this workshop where the participants will exchange views with each other and share experiences. He hoped that some effective and fruitful decisions will come up through various lively discussions. He concluded his lecture with thanks to all once again.

Address by Ms. Sachiko Imoto, Senior Representative, JICA India Office

Ms. Sachiko Imoto welcomed all participants of the 9th Annual National Workshop of JICA assisted forestry projects in India.

The title of the workshop Sustainable Forest Management

with People's participation & Modernization of Management she mentioned captures accurately the conviction JICA has gained through twenty-five years association with the Forestry sector in India. It is through people's participation or rather through peoples themselves protection of the forests and the surrounding ecosystems are achieved. Modern and scientific management of forest is the key for efficient utilization of available forest resources. As JICA portfolio in the forestry sector continues to grow with accumulative commitment of 225.8 billion Japanese Yens and 25 projects, so do our challenges to make the projects more effective, impact creating and above all sustainable. Accordingly, she



mentioned that the so-called fourth generation projects which the JICA is actively promoting there has to be an increased emphasis on the following – People and community based sustainable livelihood development for reducing forest dependency and improvement of the socio-economic conditions, Institutionalization of the inter-sectorial convergence for enhanced project impact, Biodiversity and Ecosystem conservation and for modernization of management, technology based planning, monitoring and evaluation for encouraging efficiency, accuracy and transparency in scientific forest management, Introduction of REDD+ readiness project to harness the benefit of REDD+ mechanism as and

when those become available for the increased benefit of the local communities and the mitigation of disaster management through the forests in hilly and coastal areas.

The 8th workshop held at Sikkim, in February, 2016 provided a set of recommendations on themes of sustainable forest management, livelihood security, institutional strengthening and capacity building, technology based monitoring and carbon financing. This was further discussed in the 7th Project Directors' meet held in Delhi in September, 2016. She expressed that, having had the opportunity to visit almost all the project sites of the continuing projects currently supported by JICA, she was convinced that it should not be restricted to business as usual, in order to capture the ground realities and to translate the discussions that are held in similar fora into actions on the ground. Series of ideas and innovative concepts are always generated but we need to exercise conscious efforts to assimilate such initiatives, reflect them in strategies and return them into actions again. Ms. Imoto reiterated that the Annual Workshops and the Project Directors' meetings are the platforms of such efforts. She expressed hope that various presentations that would be made during the fourth Technical Session followed by the Group Discussion shall further fine tune the previous recommendations given in the 8th Annual Workshop in Sikkim and the Project Directors' meet in Delhi, leading to an Action Plan for each one of us who are stakeholder in this project. She stated that every time a workshop is held, we advance one step further and evolve new initiatives. Thus, cross-learning and knowledge sharing are so important. She was glad to state, that based on Govt. of India's request, JICA was actively considering two more projects, viz., Odisha Forest Sector Project (Phase-II) and Nagaland Forest Management Project. If discussions go smoothly, both the States can sign agreement in the current financial year. Since these projects are formulated on the basis of the accumulated experiences and lessons learnt, she expressed confidence that they would add new dimensions on possible strategies and practices for sustainable forest management. Ms. Imoto made an important remark on the visit of the JICA President, Tokyo to India at the end of December, 2016, when he met several dignitaries like the Prime Minister of India and also the Chief Minister, Tamil Nadu. During his visit, the JICA India authorities had the privilege to introduce him to the forestry projects which were supported by JICA and he had spent a whole day among the communities in the forest. Afterwards, in the Board meeting he presented a report regarding his visit to India in which he specifically mentioned that he was impressed with the JICA assisted forestry activities in India, with particular recognition of activities for the women empowerment in inaccessible rural areas. She conveyed her deep gratitude to the organizers of the present workshop for taking initiatives and working very hard for organizing it. She also thanked the officials of Forest Dept all States who are participating in this workshop and wished everybody a very pleasant stay in Kolkata and visit to Sundarbans. Before concluding her speech, she conveyed her best wishes for every success of the workshop.

Release of the Proceedings of the 8th Annual National Workshop of JICA held in Sikkim on 29th February and 1st March, 2016

The Chief Secretary, Govt. of West Bengal officially



released the Proceedings of the 8th Annual National

Workshop held in Sikkim. This was followed by his Inaugural Address of the 9th Annual National Workshop of JICA.

Address by Mr. Basudeb Banerjee, IAS, Chief Secretary, Govt. of West Bengal

Shri Basudeb Banerjee, the Chief Secretary, Govt. of West Bengal expressed his pleasure for being able to remain present in the 9th Annual Workshop. From the available documents, he said, three very important words can be picked up which may be assumed as the key words of the workshop: sustainable, people's participation and modernization. The first two words are being discussed for the longest period of time during this session but re-focus on sustainability part of it is still needed. No development is possibly successful if in the medium to long term it causes damage to the environment which ultimately tells on the health, well-being and even in the income stream of our children and grandchildren. Secondly, if change is wanted for the sake of modernization, that also is not possible without people's participation.

Mr. Banerjee said that was a pleasure to know that the team will visit Sundarbans during their technical sessions of this workshop and this is a nice time to visit that area. One can interact with the people in their natural surroundings. In West Bengal, there are a large number of man-animal conflicts, specifically man-elephant conflict which pains the Hon'ble Chief Minister also. Huge amount of work has been done in this regard. He extended his thanks to the Forest Directorate particularly to the officials who have contributed significantly in reducing such conflicts leading to the reduction of human casualties. It is known that focus on environmental aspects and forests had really started in early seventies and the actual forest setup as is seen today has come up during that period. It is very encouraging to see many young and capable officers during field visit in different districts, but still there is always scope of capacity building and learning what other states and countries are doing. He put on record the deep appreciations for the public investments which the Government of Japan and

JICA have been doing to West Bengal and other parts of India. He mentioned about the East-West Metro corridor, which is one of the largest projects where JICA is funding. But, sometimes smaller projects, like this one, where investment is about six billion yen, may have greater impact on larger number of people.

West Bengal is a state having certain attributes which makes it to stand apart from other states - firstly, this is the second most thickly populated state and secondly, this is the only state which spreads from the Himalayas to the Bay of Bengal. Obviously, there is huge biodiversity due to such a geographical spread. Thirdly, West Bengal was able to achieve participatory forest management and attained international fame in people's participation in forest management by setting up Forest Protection Committees. It is important to continue with those efforts not only in protecting the forests but also reducing the man-animal conflicts to the extent possible.

He mentioned that the Chief Minister of West Bengal has announced a scheme for connecting the forest with the community; whenever a child is born, he or she would be given a sapling, which initially the parents, and he or she afterwards, would tend and sustain the tree to exploitable stage so that a psychological as well as socio-economic connection is build up between next generation and forest. The distribution of saplings has already happening in all the districts after inauguration of this scheme. The importance of forest and biodiversity needs to be understood by the community. He concluded by mentioning the necessity of greening the urban areas in the districts of West Bengal in addition to Kolkata which is lucky for having excellent greenery what we call as 'Maidan'. Many urban areas of the districts lack proper vegetation. It is high time to plan smartly to plant the urban areas in beautiful manner and also teach people about the importance of forest, biodiversity and environment. He extended thanks to the organisers for providing such opportunity to be present in the workshop and also the Govt. of Japan and JICA for funding this project, the former being not only a good friend of India but also a great nation.

Vote of Thanks by Mr. Siddhartha Barari, IFS, Chief Project Director, West Bengal Forest and Biodiversity Conservation Project & Secretary West Bengal Forest and Biodiversity Conservation Society

The Chief Project Director (CPD) West Bengal Forest and Biodiversity Conservation Project and Secretary, West Bengal Forest and Biodiversity Conservation Society extended thanks to the delegates present in the dais - the Hon'ble Chief Secretary, Govt. of West Bengal, His Excellency the Consul General of Japan in Kolkata, the PCCF (HoFF), West Bengal, the Principal Secretary and the Chairperson of the Society, Mr. Vineet Sarin and Ms. Sachiko Imoto from JICA India Office and Mr. Inada who had come all the way from Tokyo to attend the programme. The CPD also thanked the senior officers



of the Forest Directorate, West Bengal - the PCCFs the Addl. PCCFs, the Circle-in-Charges and the Heads of the DMUs. He mentioned that, though expected, the Heads of some of the DMUs unfortunately could not make it because of some important works. He thanked them all and their support staffs who have taken this project a long way. The CPD also thanked all the participants from at least eleven States who had come to attend the workshop and the JICA authority for funding this project. Mr. Barari looked forward for a new association with JICA in the next project, which, he

stated, has been approved in principle by the Finance Department, Govt. of West Bengal. He mentioned that Forest Dept is working on it. Thank was also expressed for the support staffs who have worked very hard to put up the sessions, not only in Kolkata, but also in Sundarbans. This included the staffs of Sundarbans and Tiger Reserve. Lastly, the CPD thanked all and requested Mr. Basudeb Banerjee, the Chief Secretary, Govt. of



Sectional view of the Deligates

West Bengal, to inaugurate the exhibition. The distinguished delegates on dais were also requested to join in the inauguration of the exhibition outside the seminar hall.



Deligates insiside exhibition

Inauguration of the Exhibition in presence of the distinguished delegates

Shri Basudeb Banerjee, Chief Secretary Govt of West Bengal inaugurated the exhibition titled "West Bengal – Forest and People" in presence of all the distinguished guests. JFMC members from Gorumara Wildlife DMU and Buxa Tiger Reserve area participated in the exhibition with the products made by their SHG groups. The Chief Secretary enquired about the displayed products from the JFMC members who participated in the exhibition.



Exhibition on " WEST BENGAL-FOREST & PEOPLE"



Dignitaries and delegates inside exhibition



Inauguration of Exhibition



Inside Exhibition



Nineth Annual National Workshop of JICA on

"Sustainable Forest Management with People's Participation & Modernization of Management"

PROCEEDINGS OF THE TECHNICAL SESSIONS

TECHNICAL SESSION - 1 OVERVIEW OF JICA PROJECTS

Sl.	Topic	Presenter
1st Presentation	Overview of West Bengal Forest and Biodiversity Conservation Project	Shri S.Barari, IFS, Chief Project Director, WBFBC Project
2nd Presentation	Overview of JICA Forestry Projects in India	Shri V. Sarin, Addl. Chief Developmental Specialist, JICA India

1st Presentation:

Overview of the West Bengal Forest & Biodiversity Conservation Project

Mr. Siddhartha Barari, APCCF and CPD, WBFBCP presented a brief outline of the West Bengal Forest &



Biodiversity Conservation Project which started in the year 2012-13, with 8 years projected duration and comprised of three phases - Preparatory, Implementation and Closing phases. The total estimated cost of the Project is Rs.406 Crores (Rs.4060 Million). Presently, the project is in Implementation phase. There are five broad components under the Project - Afforestation is the largest component having about 39% of the total budget. The other components are — Biodiversity Conservation, Community Development, Institutional Capacity Development and Consulting Services. After the Mid-Term Review, the project period has been extended by one more year i.e., up to March, 2021. The organizational set up is almost like other states and there is a registered Society with a Governing Body chaired by the Principal Secretary, Department of Forests. The Society has 36 nos. of Divisional Management Units (DMUs) headed



by the Divisional Forest Officers of the concerned Forest Divisions, around 175 Range level Field Management Units (FMUs) and a Project Management Unit (PMU) headed by the Chief Project Director who is also the Secretary of the Society. There is an Advisory Committee, The High Power Committee chaired by the Chief Secretary, Govt. of West Bengal.

The CPD informed that there are six models of Plantations on forest land (total target 18975 Hectares) - A1 to A4 in South Bengal and A5 & A6 in North Bengal and two models for Tree Plantation Outside Forest Areas (TPOFA) (total target 1500 Hectares). It was apprised that A1 model or clonal (Eucalyptus) plantation (target- 450 Hectares) has already been completed and that each of the models of South Bengal is backed up with soil-moisture conservation works, which is in-built in the model prescription. Also the plantations are raised with one-year old Quality Planting Material (QPM), i.e; seedlings raised in central nurseries. The total production capacity of the 40 odd units of central nurseries is about 80 lakh seedlings.

While mentioning about model A6—Sal and associates in North Bengal—he observed that the model was a deviation from the traditional practice of raising Sal plantation in North Bengal. He also expressed that some comparative study need to be done on the two practices.

The CPD reported that the training of staff and SHGs on various subjects including microplanning, GPS usage for FPC boundary demarcation etc. was a success. He mentioned that the Head of WBSRLM has agreed to

co-operate with the project authority for training of SHG and NGOs. The accounting system is Tally based, customized to the project needs and this is working well.

[Presentation in Annexure 1]

2nd Presentation:

Overview of JICA Forestry Projects in India

Mr. Vineet Sarin, Addl. Chief Development Specialist, JICA India Office, provided a detailed history of JICA support to forestry sector in India since early 1990's, and how the nature and focus of projects has changed over the years. He informed that two new projects will be there soon in Nagaland and Odisha, and five more proposals are in the pipeline. He reiterated the focus of



third generation projects, which has started since 2013, had increased emphasis on livelihood development, technology based management, focus on biodiversity and agro-forestry, REDD+ readiness, disaster mitigation, institutionalization of inter-sectorial convergence and inbuilt 'sustainability plan'. While appreciating the impressive achievements of JICA funded projects, he pointed certain areas of concern, where more attention is needed. Those include lack of in-house expertise for livelihood development; reluctance to engage NGOs, difficulties in achieving convergence; inability to focus on marginalized sections of the communities etc. He expressed the hope that this workshop would take forward the recommendations provided in Gangtok, with a detailed action plan for implementing those recommendations.

[Presentation in Annexure 2]

TECHNICAL SESSION -2 COMMUNITY PARTICIPATION IN JICA ASSISTED PROJECTS

Chair: Dr. A.K.Pattanaik, IFS, Chief Project Director/OFSDP Co-Chair: Shri Vineet Sarin, Addl. Chief Development Specialist, JICA India

Sl.	Topic	Presenter
1st Presentation	Sustainable Forest Management through Peoples' Participation and Modernisation of Management.	Shri Sanjay Kumar Srivastava, IFS, APCCF & PD/TBGP
2nd Presentation	Sustainable Forest Management through Peoples' Participation in Rajasthan Forestry and Biodiversity Project (Phase-2)	Shri R.K.Goel, IFS, PD/RFBP
3rd Presentation	Community Strengthening in Forest Protection	A.C.Keshavamurthy, IFS, Addl. PCCF, Karnataka.

1st Presentation:

Sustainable Forest Management through Peoples' Participation and Modernisation of Management.

Presenter: Shri Sanjay Kumar Srivastava, Project Director, TBGP

Though the state of Tamil Nadu can boast of being one of the biodiversity hotspots with the presence of Western Ghats, a UNESCO heritage site in terms of plethora of floral and faunal attributes, the forest has suffered a great deal due to biotic interference. Causes of degradation of forests are primarily attributed to i) removal of forests resources by head load, ii) forest fire and iii) grazing.

With the objective of re-growing the under-stocked areas in the state through community participation, Tamil Nadu Afforestation Programme (TAP) was conceptualized in the year 1997, which was eventually extended to phase-2 as well.

Phase of project	Project period	Time	Budget outlay
Phase-1	1997-98 to 2004-05	8 years	688 crores
Phase-2	2004-05 to 2012-13	8 years	570 crores
TBGP (TN Biodiversity Conservation and Greening project)	2011-12 to 2018-19	7 Years	686 Crores

TAP has been unique of its kind in the state, as the State Forest Department started treating the forests on JFM principle for the first time. Initially forestry operations were dealt through the contractors. With the introduction of phase-1 of TAP, the village communities were involved in protection of forests, which were treated in watershed approach.

Project areas were identified and Village Forest Committees (VFCs) were constituted through PRA exercises. The focus of the project was on the massive planting operation and soil-moisture conservation.

A total of 4,80,000 ha. of degraded forests was treated during Phase-1, while another 2,00,000 ha. of degraded forests was brought under Phase-2 for improvement of the same. Alternate employment was generated through Income Generation Activity (IGA) and Community Development works. Inter departmental co-ordination through inter-sectoral linkages was carried out for socioeconomic upliftment of villages through JFM. During phase-1, 1357 VFCs were formed, while another 960 VFCs were formed during phase-2.

A total of 7000 SHGs, mostly women SHGs, were

involved to motivate and 6,00,000 (apprx.) forest villagers were connected with the job of protection of forests and restoration of environment, which produced a good dividend as reflected from the satellite images. Monitoring was done with the help of GIS data and remote sensing. During phase-1 and phase-2 of TAP, emphasis was put

on water regime development. About 23,000 check dams were constructed during phase-1 and 5,000 check dams were constructed during phase-2 of TAP, to enrich ground water table regime. Basically the state of Tamil Nadu is water deficient, and occasional failure of North-East monsoon does have an adverse impact. So such type of water harvesting structure not only helps in capturing rain water but also enriches the ground water table regime. Thus, the check dams brought about a change in cultivation pattern.

To develop partnership with people, lot of works were under taken under community development component in buffer zone, involving 600 odd groups, with allocation of Rs. 50 crores approx., which helped in generation of 80 million mandays.

A sum of Rs. 115 crores was spent towards IGA loan, which was revolved to 180 crores. The rate of recovery

was not appreciable but later on during phase-2, recovery upto 95% could be made.

Inter-sectoral linkages were established for achieving convergence with 22 other department in 946 villages, against an expenditure of Rs. 41 crores in phase-1 and Rs.298 crores in phase-2 to facilitate programme level dove tailing of funds and objective at the field level and achieve synergy. A State Level Co-Ordination Committee was formed under the chairmanship of the Chief Secretary which is very effective in taking policy decisions and to bring about effectiveness of convergence of the project

activity with other Government departments. Out of 2317 villages, 90% villages were covered during phase-1 and phase-2 of TAP.

With implementation of phase-1 and phase-2 of TAP the project authorities has created an impact in the forest fringe villages in areas like women empowerment, upliftment in quality of life

and overall integrated development. 100% NTFP were given to VFCs while 90% of timber and poles were also giving to the beneficiaries as usufructs.

Phase-1 of TAP has consequently been awarded with national recognition viz., Indira Priyadarshini Vrikshamitra prize and also conferred with grade A by JICA in project evaluation.

Project-2 Tamil Nadu Biodiversity Conservation and Greening Project was conceptualised from 2011-12 in order to strengthen biodiversity conservation by improving eco system management capacity in the forest area as well as undertaking tree planting outside recorded forest area so as to achieve environmental conservation with harmonised socio-economic development and ecological sustainable development for meeting the criteria of National Forest Policy to bring 33% geographical area of the state under tree cover.



TBGP was designed to consider biodiversity conservation as first priority and every component needs be linked with biodiversity conservation. Sixty three villages were identified for the purpose out of which 30 villages having EDCs are being managed under KMTR model and 33 tribal villages are managed under TAP model. Microplans have been prepared and works are under implementation for ecological sustainable development as a component of biodiversity Conservation. Community based ecotourism are being promoted in 25 sites. ETMCs have been formed and microplans have been prepared for all sites.

For increasing natural resource base and to establish tree base farming system and to strengthen technical capability of farmers, tree cultivation have been undertaken in private lands. Four thousand six villages were covered under this component by planting 485 lakhs of seedlings in private lands. RRA, small entry point

activity microplan preparations were done before undertaking planting activities under TCPL. Block plantation, bund plantation and inter cropping plantation were under taken to achieve the target. Nearly 1.09 lakh ha of farm lands have been covered involving 60482 farmers. A total of Rs. 1.73 crores have been distributed as incentive. There are three models—Block planting, Bund planting and Intercrop planting. The President of JICA visited the sites and appreciated the efforts undertaken under TBGP. [Presentation in Annexure 3]

2nd Presentation:

Sustainable Forest Management through Peoples' Participation in Rajasthan Forestry and Biodiversity Project (Phase-2)

Presenter: Mr R.K.Goel, Project Director, RFBP

On having elaborated the traditional culture of forest protection by communities in Rajasthan under the name and style of 'Kesar Chhanta' and 'Oran' for ensuring forest protection, Shri Goel, PD/RFBP initiated his submission. The reason for denudation and dereliction of forests has been attributed towards uncontrolled population growth leading to conversion of forest lands for agriculture and rearing of cattle.

However based on the experiences of the last projects, RFBP-2 has been conceptualised through formation of VFPMCs/ EDCs/SHGs in the project areas.

Objective of RFPB: The objective of the project is

enhance forest area and livelihood opportunities of the forest dependant people and to conserve biodiversity by under taking afforestation and biodiversity conservation measures through JFM approach, thereby contributing to environmental conservation and socioeconomic development of Rajasthan.



Efforts are being made for livelihood improvement through formation of 1950 SHGs. For the first time, NGOs have been involved to provide support for community mobilisation and livelihood improvement activities in selected project villages.

Villages have been selected where new VFPMCs/EDCs could be formed. Before starting the project activities, microplan for each project village has been prepared by the NGO after PRA and RRA.

Convergence possibilities with other Govt. schemes were explored by the NGOs. Provision has been kept for undertaking entry point activities for overall development of the selected villages. 588 VFPMCs and 62 EDCs were established.

To ensure active participation of VFPMCs/EDCs in management of forest affairs of their territory, strict adherence to by-laws were ordered with regard to membership, membership fees and collection of penalty



from the forest offenders. Work distribution and responsibility was made among members – cut and carry system for grass collection and distribution of forest produces. For generating revenue through use of herbs & shrubs (local flora) in tropical thorn forest, viz: grasses and grass seeds, leaves and branches, NTFPs – Aloe vera, Tumba (Citrullus *fruit*), Ker-Sangari etc. Participation of local community was ensured for regeneration of local endangered species like Gugal (Commiphora wightii) etc. *In-situ* conservation of germplasm – Great India Bustard and Four Horned Antelope has been initiated.

All these activities have resulted in increasing forest cover by 85 sq km. Microplans prepared have yielded comprehensive village development documents. Meeting centers have provided a common platform for enhancing community involvement. Value addition in products like Ker, Sangari, Beans, Grass seeds, Wool, Milk and its by-products was possible due to involvement of clusters of various SHGs.

[Presentation in Annexure 4]

3rd Presentation:

Community Strengthening in Forest Protection

Presenter: Mr. A.C.Keshavamurthy, IFS, Addl. PCCF, Karnataka

With the objective of bringing about ecological restoration and facilitating livelihood improvement through JFM

and achieving biodiversity conservation in 30 district of the state, Karnataka Sustainable Forest Management and Biodiversity Conservation Project (KSFMBCP) was launched in the year 2005-06 for a project period of 10 years that is up to 2014-15. Of the total outlay of Rs. 745 crores, Rs.131.734 crores (almost 17.68%) was State share. A total of 1222 VFCs and 73 EDCS were formed during this project for undertaking afforestation work over 187000 ha (app) on the experiences gained on JFM working. A comprehensive govt. order enhancing the share of forest resources to VFCs was issued.

Forest Produce	VFC	Govt.
NTFP	90%	10%
Forest produce from plantations created prior to		
VFC formation (Excluding Teak Plantations)	50%	50%
Forest produce from natural growth prior to VFC formation		
(Excluding valuable species; Sandal wood, Pterocarpus,		
Teak, Terminalia and	F00/	500/
Lagerstroemia)	50%	50%
Forest produce from the assets created after VFC formation	75%	25%

KSFMBC project envisages formation of SHGs under VFCs / EDCs aiming at

- providing alternate sources of income through IGA;
- enhancing household economy of forest resource dependent people;
- enhancing participation of women and other weaker sections in decision- making.

About Rs 1234 lakh were distributed to 1222 VFCs during project period and 48,166 beneficiaries received loan from VFC (revolving fund) to generate income. Out of Rs. 3650 lakhs as gained through sale of forest

produces through auction sale, Rs. 2137 lakh was VFC share as per Govt. order.

After initiation of this project, about 2842 ha of forest land was freed from encroachment and quantum of illicit felling could been reduced to considerable extent. Number of fire incidences has also reduced to 163 in 2012-13 from 589 in 2005-06.

Only 41 poaching cases have been registered in 2012-13 against 78 such cases registered during 2005-06. Natural land scape having potential for eco-tourism has been developed as a spot to augment good income for the VFC members. Giving details of the benefit sharing under JFM of the state, the speaker highlighted various issues which requires to be addressed, including—

- structure of sharing of forest resources with the community,
- sufficient corpus fund for the VFC,
- providing market supports to NTFPs,
- developing infrastructure to support marketing of VFC product,
- exposure visit of VFC members for capacity building and knowledge sharing.

[Presentation in Annexure 5]

Comments on the topics presented in the session

- 1. Mr Dharmendra Prakash, APCCF, Nagaland sought a clarification from Mr. Srivastava on the mode of channelizing the convergence funds, whether it was through Forest Department, pointing out that the mind-set of departmental 'feudalism' is a major hindrance, and the field functionaries of the departments do not have the liberty to address this. Mr Srivastava reiterated that review by Chief Secretary, especially of the district level meetings chaired by the Collector, was critical in the success achieved in convergence in Tamil Nadu.
- 2. Mr. Subhendu Bandyopadhyay, WBFBCP, wanted to know if there has been any in-built mechanism

for re-investing part of the sale proceeds generating from sale of forest produces for re-generation or under taking afforestation programme during post project period. He also wanted to know if a Memorandum of Understanding is required to be executed for acquiring fallow lands of the farmers. Mr Srivastava expressed his apprehension that the particular component may fizzle out in case restriction on utilising the sale proceeds of the usufructs are imposed. He preferred to leave it to the discretion of the farmers. He pointed out that the farmers will undertake afforestation programme on the fallow land on their own if sufficient profits are generated. He also mentioned that a consent letter is always opted for before undertaking afforestation programme on the fallow lands of the farmers.

- 3. Co-chair, Mr. Sarin expressed his appreciation for the success achieved by Tamil Nadu in SHG related work as well as convergence. He also opined that Karnataka having completed two phases of JICA funded project, needs to come up with strategies and solutions instead of issues and problems, which have been there for long.
- In the end, chair of the session. Dr Pattanaik 4. summarised the presentations highlighting the key take-away from each. He emphasised that achieving effective participation of communities and creating sustainable IGAs are key focus of the third generation projects. He said, in his experience, if the FPCs can develop as credible and capable organisation, set interested to involve in their programme and seek their support, and they could also function as de-facto Village Development Committee. He also pointed out the importance of a block level coordination committee to manage convergence related issues, together with enabling government order. While appreciating Rajasthan for utilizing traditional conservation culture for JFM, he also expressed the need for Karnataka to address issue faced in earlier projects in phase-3.

TECHNICAL SESSION -3 [LIVELIHOOD DEVELOPMENT]

Chair: Dr. Thomas Chandy, I.F.S. Principal Secretary and P.C.C.F, Sikkim Co-Chair: Mr Anuraag Sinha, Lead Development Specialist, JICA India

Sl.	Topic	Presenter
1st Presentation	Odisha Forestry Sector Development Project An Overview	Dr. Pradeep Raj Karat, CF & JPD, OFSDP
2nd Presentation	Tripura Forests Environmental Improvement and Poverty Alleviation Society—An Overview	Mr. G. H. Raju, PCCF and CEO & PD, TFEIPAP
3rd Presentation	Swan River Integrated Watershed Mgmt. Project— An Overview	Dr. Suresh Kumar, CPD SRIWMP
4th Presentation	Livelihood Development in Sikkim Biodiversity Conservation &Forest Management Project (SBFP)	Mr. Udai Gurung, APD, SBCFMP

1st Presentation:

Odisha Forestry Sector Development Project —An Overview

Presenter: Dr Pradeep Raj Karat, IFS, C.F and Joint Project Director, OFSDP

With the objective of restoration of degraded forests and improvement of income level of villagers by promoting sustainable forest management, with larger goals of improving environment and alleviating poverty, this particular project was launched in 2006-07 and implementation was over by March 2015. The project had coverage in 14 divisions including 3 wild life divisions, out of 51 divisions in the state. The financial outlay was 802 crores. With a target of developing 210000 ha of degraded forest land, it also aimed at generation of additional income for the forest fringe dwellers. The Society was constituted as an autonomous organisation under Forests and Environment Department, Govt. of Odisha with registration no.022321/49/2006-07 for implementing forestry projects through the field establishment of Forest Department in the state.

In the project strategies and priorities, emphasis was given on supporting the livelihoods through alternative income generation activities in SHG mode, which was actually implemented during 2nd half of the project.

In IGA approach, main thrust was given on generating revolving fund with creation of SHGs.

Though the project was started in the year 2006, product study on about 20 non-timber forest produce (NTFP) was undertaken in 2008 by deploying an organisation called MART. The study which was actually designed to investigate the prospects of IGA in identified the divisions.

The work was started with small IGAs in the SHGs with existing partner NGOs at field level, after identifying and shortlisting the SHGs on an average 2-3 SHGs per each VSS (Vana Samrakshan Samity). There were some 22400 odd VS samities. Then revolving fund was released at the level of VSS as they can use it as seed money for taking up small IGAs through SHGs. The effort was all demand driven with available resources, available technologies, as per study by MART on product specialisation. It was decided at the appropriate level that all works which are to be undertaken for generating additional income, will be assigned to VSS and the departmental officials will monitor and keep vigil over the performance of the VSS.

Capacity Building, value chain approach was initially going on through PMGOs but subsequently replaced by IGA supporting agencies at the level of each FMU from 2011 onwards. SHGs formed for the purpose were mostly comprised of women member only.



Resource base was also linked with other forest based activities which also includes components like farm forestry outside the recorded forest areas and under planting in ANR areas. This practice was also continued in the extended period of the project.

Another agency was deployed to undertake study on progress of incomer generation activities in all the implementing divisions. As per their suggestion and as per decisions evolved at the field level PRODUCT BASED CLUSTER APPROACH was evolved. It comprised two main factors, viz.

- Value chain development: After collecting, sorting, grading, drying, storing, packaging and branding the products, aggregation of products is done. Bulk quantities of the product are stored to achieve economy of scale so that volume of business is optimised and institutionalised structure could be utilised for market linkages. SHGs which were working on the same commodities/ products form a CLUSTER in order to bring SHGs together.
- Establishment of Cluster based Micro Enterprise: Commodities were selected and SHGs advised to form cluster by hand holding and BDS support. Clusters were registered and assigned PAN/TAN

No. etc. and carry out their business through institutionalised convergence and finance.

All these have a positive advantages of Phase-I implementation and had a good coverage of area.

7358 SHGs were supported in 2424 VSS/EDCs with Revolving fund @ Rs. 2-2.5 lakhs per VSS.

No. of loans disbursed is 24042 totaling amount of Rs. 7056.93 lakhs, out of which recovery up to March 2015 was Rs. 3885.97 lakhs.

Total Revolving fund of Rs. 47.69 crores was released from the project.

Seventy clusters with at least one business cycle were formed with participation of 11733 members from 1080 SHGs in 468 VSS, which handled 16 types of commodities, out of which 75 % of clusters are based on NTFP. Total amount invested was Rs. 40.58 million out of which profit was reported Rs.10.18 million (25 % return over investment). This ensured good return for each member, cluster viability and expansion, institutionalised market linkage and reduction of pressure on the adjacent forest. NABARD and POPI are facilitating the organisation at present.

DABUR- BAITARANI has been collecting medicinal plants from the project area and the adjacent forest fringes and extending necessary cooperation to the SHGs in VSS for trading and regeneration.

Under OFSDP II, Livelihood Resource Centre has been established as a dedicated unit for the promotion of cluster level business activity and for managing different types of fund earmarked for clusters and development of business plant and to take up the responsibility of financial linkages product development and designed capacity development and marketing. It is expected that in due course of time, Livelihood Resource Centre will emerge as a self-sustaining unit.

[Presentation in Annexure 6]

2nd Presentation

Tripura Forest Environmental Improvement and Poverty Alleviation Society (Tripura JICA Project and Overview)

Presenter: Mr. G.S. Raju, IFS, PCCF, Chief Executive Officer and Project Director, TFEIPA Project.

Tripura Forest Environmental Improvement and Poverty Alleviation Project was started in 2007-08 and is being continued up to July 2017 by a society formed under the Registration of Societies Act, 1860. The society, aims at promoting sustainable forest management in the state of Tripura with a larger goal of supporting rural livelihoods. Recognising the crucial linkage between rural livelihood in forest fringe villages and the forest resources in the context of the state, the project specifically focused on conservation and development of Forests on one hand and their optimal and sustainable use on the other by creating alternative livelihood opportunities based on local skills and other resources. The project is implemented throughout the state in selected project villages through active participation of the village community organised as Joint Forest Management Committee.

Out of eight districts of the state, the project is being implemented in seven districts and forty blocks of Tripura state through 463 Joint Forest Management Committees. Most of the target villages are autonomous district council villages. The project cost is 367 crores, out of which major expenditure goes towards employment generation of poorest of the poor in the most interior pockets of the state.

Objective:

- 1. To improve forest density.
- 2. To improve livelihood of target households.
- 3. To conserve soil and improve water regime.

4. To conserve biodiversity.

Achievement of initiative

Agro Forestry Implementation Strategy:

In the realm of livelihood, agro forestry activities were undertaken with nine agro-forestry models. In fact, there are 120000 patta holders in the state. Forest lands were allotted to them under The Schedule Tribes and Other Traditional Forests Dwellers (Recognition of Forest Rights) Act. The project has targeted about 8500 odd families Rs. 52000/- to 56000/- per hector has been the unit cost. A total of 8753ha. of land have been brought under agro forestry. Through implementation of nine agro forestry models, for the first time in the state of Tripura, shifting cultivators have been rehabilitated.



Decentralised people's nursery:

In order to cater the demand for huge quantity of planting materials, seedlings have been raised involving SHG members through decentralised people's nursery programme. Rs. 6/- is given as input for raising its seedlings, which are bought back on payment of Rs. 10/-. So there is a clear profit margin of Rs. 4/- per seedling for the SHG. This has endowed the economic benefit to the SHGs members and generated enthusiasm among the SHG members to go for DPN nurseries.

Soil and Moisture Conservation:

Against a target of construction of 2523 check dams during the project period, 2419 dams are constructed

under three different models for the purpose of

- 1. Soil and Water Conservation
- 2. Ground Water Retention
- 3. Development of Fishery nursery.

Under this scheme water bodies with a total of 14052 ha. of surface area has been established having annual fishery potential of about 2800 MT. Initially Tripura had to import a lot of fish from Andhra, but now self-sufficiency has been generated in fish production because of the activity under the project. In order to encourage fishery in JFMC check dams, scientific fish farming has been introduced under the aegis of Fishery Department, Govt. of Tripura. About 600 ha. of water area has been identified in various JFMCs and fingerlings and basic



fish feed were supplied to SHG members from the project. From the sale proceeds, SHG members are to deposit a prescribed amount to JFMC which will be considered at a source of revenue to JFMC. This idea has been liked by the State Government who wants to replicate this idea in other parts of district.

Rearing of Pigs:

Since there is a steady demand of pig meat in north eastern states, piggery is also high in demand like fishery. Out of all income generation activities, fishery and piggery has taken their larger part of all the activities.

Bamboo Grass Initiatives:

Bamboo grass is available in plenty in tea forest areas

in the state. Initially, collection of grass was done inefficiently and involvement of forest depending committee was also negligible. After introduction TFIPAP, a pilot scheme on harvesting and marketing of broom grass involving private entrepreneurs was taken up. The present level of collection is about 771 MT. fetching more than Rs. 4.2 crores. About 4500 families are directly benefited from harvesting of grass. Approximately Rs.12 lakh has been collected as forest revenue and Rs. 20 lakhs has been collected as revolving fund in various JFMCs.

For storing broom grass and for organised marketing of the same, 22 mini CCFC have been constructed for making eight lakhs of brooms. The value addition of the grass will generate employment for six months for nearly 1000 families.

Skill development and artisan in the project:

The project contributed to the skill development of 800 artisans in bamboo furniture, bamboo basket making, bamboo made products, bamboo root carving etc. Seven outlets have been opened for sale of these products. Resource to Marketing, the complete cycle can be seen under the JICA Project in Tripura. For marketing, Tripura JICA Project has developed a separate wing called, "Crafts and More", which has been appreciated by all concerned including the Chief Secretary. Branding and labelling is being done under this wing also.

Since 2010-11, 85 trainings were conducted for 3278 persons for manufacture of Agarbatti (incense sticks).

SHGs are taking up second, third and subsequent cycles of activities for IGA. SHGs are getting loans from other sources. Women SHGs are linked with NERLP and NRLM.

Under the project exclusive software for managing the supply side and marketing crops and other activities has been developed. This is expected to be very useful in managing product manufacturing and inventory management. Supply side and marketing side manage-

ment has given boost to the confidence of people. The project organised residential training for children of JFMCs members. The project has also set up a bamboo treatment plant at Subal Singh Cluster Complex

Convergence:

- 58 centres were constructed in convergence with Anganwari and project funds called Multi utility Centres.
- 2. Raising 7304 ha. of agro forestry in convergence with Rs. 1700 lakh from MGNREGA. (60% from MGNREGA and 40% from the Project).
- 3. Rs. 275 lakhs came from MGNREGA for construction of check dams.
- 4. For SHG this state government has released Rs. 231 lakhs as additional revolving fund.
- Other banks realeased 209 loans involving Rs. 141 lakhs.
- 6. Baramura Ecotourism Complex right on NH 44 has been constructed.
- 7. Project is also constructing toilet blocks, animal sheds, overhead water tank etc. under Kathalia and Mohanbhog block.
- 8. Skill development training is being conducted in collaboration with various lying departments viz. fishery, ARDD, TBM, ICAR etc.

The project has got approval of sustainability plan of Rs. 1.30 crores per year which will be allotted to State Forest Department. For training, funds will be coming from the Skill Development Dept. The sustainability even after the project closes in July 2016, is ensured.

[Presentation in Annexure 7]

Himachal Pradesh

Dr. Suresh Kumar shared the experience of Swan River Integrated Watershed Management Project funded

by JICA in Una district of Himachal Pradesh between 2006 and 2016, and highlighted the impact of water storage structures on the livelihood of the surrounding villages. He shared representatives of various line departments in the Project Management Unit also facilitated convergence. Giving examples of various types of producer and user institutions, he shared experience of Turmeric processing centre developed with support from the Project which is managed by a federation of SHGs, and developing of a brand for marketing of produce.

[Presentation in Annexure 8]

Sikkim |

Mr Udai Gurung, in his presentation, shared that the main strategy of the Project for livelihood development is through developing and promoting eco-tourism. He shared details of various eco-tourism products being tried out under the Project and informed that four out of 11 ecotourism zones proposed in Sikkim have already been notified by the State Government. He highlighted



the soft and technical skills development required for the SHGs, focusing on their institutional development through regular monitoring of their performance.

[Presentation in Annexure 9]

Discussion

1. Mr. Vineet Sarin sought clarification from Tripura,

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whether the products that were selected for enterprise building were selected in the basis of any market study. Mr. Raju, CPD Tripura project replied that market study was done only for handloom and handicraft products. Mr. Bansal added that in Odisha, market study was done only for the forest based products, with a focus on how value can be added to them. The studies led to identification of 15 products, for which an action plan was prepared.

- 2. Mr. Srivastava of Tamil Nadu Project wanted to know from Odisha project authorities as to how the corpus of Rs. two lakh revolving fund was utilized. He felt that given need for funds, the amount seems small. He also wanted to know the maximum amount given to an SHG. Mr. Karat from Odisha clarified, that, initially the amount of only Rs. 1 lakh was provided as revolving fund, and subsequent amount was released based on performance and requirement. Initially each Project SHG got about Rs. 15 to 20000, which subsequently increased to Rs. 50-60,000. Mr. Bansal further clarified that the need for funds varied, and the requirement was observed to be lower in interior areas.
- Recovery of revolving fund was identified as a major issue. It was observed that though the recoveries tend to improve with continuous facilitation by support NGOs over time, there is a need to continuously monitor the performance of SHGs in this regard.
- 4. Co-chair, Mr. Anuraag Sinha, thanked the presenters for their insightful presentations, and pointed out that all the major elements for the developing sustainable livelihood could be found in one or the other presentation, citing the following points:

Need for sustainable IGAs with conservation focus was highlighted in all the four presentations, through efforts to promote NTFP based enterprises.

Cluster approach to livelihood development and its significance can be seen in the presentations made by Himachal Pradesh and Tripura. They also highlight the value chain approach to development of enterprises and role of product development and branding.

Odisha presentation highlighted the importance of better management of revolving fund and role of convergence in livelihood development.

- 5. The Chair of the session, Dr. Thomas Chandy, made the concluding remarks pointing that the sustainability of the enterprises in the post project period is an issue, and it needs to be ensured that the enterprises continue getting the required support in the post-project period, highlighting the need for engagement of local NGOs or a support institution in the form of Livelihood Support Centre as is being proposed in the new phase of Odisha Project.
- 6. Mr. Karat and Mr. Sarin clarified that under the Project the support agencies are engaged for a limited period of time, and sometimes the concerned agencies are interested in continued dependence of these groups on them for support.
- 7. Mr. Srivastava appreciated the role of local NGOs in facilitating the processes required for livelihood development and informed that in many cases, the JFMCs continue paying them out of their own resources in order to continue their support.
- 8. The initiative by State Government in Tripura to provide funds for continued support to enterprises in the post project period was appreciated. This could also help to continue engagement of local support agencies and to meet some operational expenses.

TECHNICAL SESSION -4 INSTITUTIONAL DEVELOPMENT THROUGH CAPACITY BUILDING

Chair: Mr. G.H. Raju, PCCF, CEO & PD/ TFEIPAP Co-Chair: Ms. Ai Tachikawa, JICA, India

Sl.	Topic	Presenter
1st Presentation	Institutional capacity development in WBFBC Project	Mr. S.Chaudhuri, CCF & PD(Fin), WBFBCP
2nd Presentation	Use of GPS & GIS for demarcation of FPC forest boundaries	Mr. A Guha, Head Kgp DMU, WBFBCP
3rd Presentation	Selection of intervention areas under JICA assisted UFRMP	S. Mohan Joshi, PD, Uttarakhand Project

West Bengal

Mr S. Chaudhuri presented the target and achievement under various sub-components of the Institutional Strengthening through Capacity Building component of the WBFBC Project. He highlighted the progress made by the project in creating the physical infrastructure as well as training of project staff and villagers using internal resources as well as various training institutions.

Mr. Anjan Guha presented his experience from Kharagpur on how the GPS and GIS technology is being used by the Project to demarcate FPC and forest boundaries, thereby helping to resolve conflicts.

[Two Presentations in Annexure 10 & 11]



Uttarakhand

Mr Joshi presented the process of selection of intervention areas and project villages in Uttarakhand. The project has recently started and would be implemented in 705 Van Panchayats spread across seven Forest Divisions. Highlighting phase-wise selection of Van Panchayats, he informed that the selection is a two stage process with minimum and priority criteria respectively applied in each stage.

Discussion

- Mr. Bansal wanted clarification from Uttarakhand on 'minimum criteria' and 'priority criteria' used by Uttarakhand for identification of Van Panchayats, suggesting that there is some confusion in the manner in which the criteria have been distributed under two categories. He suggested that the approval of Gram Panchayat should be the minimum criteria and not the priority criteria.
- 2. Mr. Srivastava wanted the clarification from West Bengal on the agency which authenticated the revision in the area that emerges due to GPS mapping and its legal ramifications. He suggested that as Revenue Department is the only agency authorised for the purpose, how they are involved in the process.



 Mr. Bansal, reiterated the view that the differences between the recorded survey area based on cadastal survey and new survey area based on GPS survey need to be reconciled, because of its serious ramifications with respect to Forest Conservation Act.



- 4. It was clarified by Mr. S.Chaudhuri or West Bengal that the map being prepared is not a legal boundary of the forests, instead it is a management map indicating the area of forest allocated to each JFMC.
- 5. The Co-Chair, Ms. Tachikawa, requested Uttarakhand and other Projects to share any publicity material, including videos that they develop for publicising JICA funded projects with JICA office so that the same can be put up on their website. She also informed about the country focused short duration training programmes targeting different levels of officers being offered through MoEF & CC and DEA by Japan for State Forest Departments and MoEF & CC under three year technical cooperation project.



6. Mr. G.S.Raju, the Chair, made the concluding remarks pointing out that over last four-five years he has observed significant improvement in the way the JICA funded projects are being implemented through use of technology. Citing example of use of technology in management of central nursery, online accounting and digitization of plantation journal in West Bengal, he complimented the young officers for being at the forefront in adoption of such technologies.

TECHNICAL SESSION - 5

Technology Based Forest Management

Chair: S. Barari, APCCF, CPD, WBFBCP Co-Chair: Mr. S. Talukdar, JICA India

Sl.	Topic	Presenter
1st Presentation	Use of MIS and GIS in West Bengal	Mr. S.Chaudhuri, CCF & PD(Fin), WBFBCP and Mr. Palmoni Das, CEO, INNOVA
2nd Presentation	Remote Sensing & GIS application for Sustainable Forest Management-Tamil Nadu Perspective	Mr. Sanjay Srivastava, APCCF & PD, TNGP
3rd Presentation	Technology Based Forest MgmtUse of GIS in UPPFMPAP	Dr. V. M. Arora, PD, UPFMPAP
4th Presentation	Special lecture — Sustainability issues in forest sector assistance to India	A. K. Bansal, Ex-ADG Forest, MoEF, Govt of India

West Bengal

Mr. S. Chaudhuri, with support from Mr. Das made a power point presentation on the Use of MIS and GIS in West Bengal. The details of four online modules developed under Forest MIS for WBFBC for efficient and effective Project management were presented and discussed. These are

- (i) Online Plantation Journal,
- (ii) Online Plantation Monitoring,
- (iii) Online Tally Based Accounting,
- (iv) Online Budget Control System.

He highlighted that creation as well as adoption of these in field takes time from six to nine months. He clarified that at present the time lag between actual expenditure and actual recording is about 40 days, which is aimed to reduce to seven days shortly.

[Presentation in Annexure 12]

Discussion:

 Mr. Sarin wanted to know about how the system operates in areas with poor network, such as Cooch Behar and Darjeeling, and the likelihood of system getting overloaded. Mr. Joshi raised similar concerns for Project area, especially at the FMU level, in Uttarakhand.

It was clarified that at present the system does not get loaded as the updation is only once a week. Also, in some places, arrangements have been made with service providers to install towers or for dedicated network lines. Mr. Chandy suggested that the entries can be made offline, and once the network is available, it can be uploaded. This could be a better and cheaper option than getting a dedicated server, which could be quite expensive.



2. Mr. Srivastava wanted to know whether the JFMCs have savings or current accounts and if it is savings accounts how the issue of 'interest' generated in savings account is being addressed. It was clarified that being a non-profit Society, application for required IT exemptions have been issued and it is gathered that the same is likely to be granted shortly. The interest generated can be ploughed back for project purpose in future with the concurrence of the Governing Body.



3. Mr. Srivastava also wondered whether it would be more beneficial to have a voucher based system,

and whether the system should provide more flexibility to DFOs to allocate funds for different uses. He also wanted a clarification on why does the PMU need approval of Governing Body for online accounting system, if the same is already specified in the Project Operational Manual.

It was clarified that though the accounting system is given in the Operation Manual, online budgeting and accounting is not mentioned. To that extent the PMU would require a nod from the Governing Body for installing and running the system.

Mr. Chandy, wanted clarification on the level at which the systems are maintained.

It was clarified that they are established at the DMU (Division) level.



- 4. Details of an Incident Tracking System which is under development and currently being tried on pilot scale, was also shared by Mr. Chaudhury. He mentioned that the system is used at the field level to report incidents, using a simple GPS tracker with long battery life.
- 5. Regarding online monitoring Mr. Sarin was interested to know how many pictures are taken for online monitoring and reporting.

He was informed that four pictures per activity are currently uploaded. Mr. Srivastava wanted to know if the maps and pictures being uploaded are static, to which it was clarified that at the moment they are static only.



It was suggested by Mr. Srivastava, that for the SFD to effectively use these in future, it would be better if the information that is uploaded could be categorised according to Reserve Forest.

He was apprised that the system provides for such categorization.

7. On Online Budget Control System, Mr. Barari further clarified that the Project has codified all items, in total 212, to facilitate the system operation. The positive thing is that the WBFD is also switching over to the same system. The system is yet to be fully functional. Once fully operational, it can also be used to generate reimbursement claims.

Tamil Nadu

Mr. Srivastava made a presentation on use of remote sensing and GIS for Sustainable Forest Management. Explaining the basics of the system, he outlined various ways in which it is being used for the purpose of planning, management, monitoring of forest and biodiversity resources. He highlighted the need for developing inhouse resources, using appropriate data, depending upon the type of use / analysis required. It was informed that four MIS and four GIS Project specific modules have been created. He emphasised that for adoption, the software should be easy to operate and intensive and

continuous training is required. He also shared details of an android application developed by a young IFS officer of Tamil Nadu cadre, called 'Plantation Made Easy', that could be used by farmers.

[Presentation in Annexure 13]



Discussion:

 Mr. Bansal wanted to know how much of the data that is uploaded in these systems is in the public domain.

It was informed that at present none of these data is in the public domain. However, some metadata can be put in public domain, which could then be used by other agencies for their purpose as well.



Mr. Chandy shared that biodiversity is a complicated issue, and tracking or monitoring changes only using satellite imageries may not work and intensive ground-truthing needs to be undertaken. Mr. Srivastava shared that for monitoring of critically endangered species in Tamilnadu, 17 resource agencies have been employed, which also do ground truthing, using geo-coordinated photographs.



3. Mr. Sarin emphasised that new projects need to understand that it takes time to build in-house capacity. Therefore there should be strong focus on building in-house capacity not only for creating the system, but also running it. He requested Tamilnadu to explain for the benefit of others, as to how it has been able to sustain it.



Mr Srivastava shared that the technology and system has been absorbed by the SFD, as Working Plan Maps are now generated using the system and there is minimal dependence on outsiders for maintaining or running the system. There has been effort to develop interest for working in the GIS lab through various ways – promotion, foreign training etc.

- Mr. Prakash opined that there should be provision for special allowance on the lines of those that work for preparation of Working Plan.
- Mr. Sinha wanted to know if and how Tamilnadu has contributed to developing the capacity of other states for use of RS and GIS.
 - He was informed that field staffs of many states have been trained on the topic by Tamilnadu SFD.
- 5. Mr. Sarin highlighted that for the sake of facilitating integration use of departmental GIS lab is encouraged and no project specific GIS infrastructure is created. He also emphasised that for more effective use of the technology, the metadata should be shared with other agencies.



- 6. Mr. Talukdar suggested that other states could have similar systems. He also emphasised focusing on in-house capacity building and incentivising the staff working on GIS. He opined that awarding the states with best practices could be thought of by JICA.
- Mr. Barari thanked the presenter and the participants for lively participation and suggested that the next Project Directors meeting should focus on MIS and GIS integration.

Uttar Pradesh

Dr. Arora shared the use of Remote sensing and GIS for forest classification, indicating that they are using ten



density classes for the purpose against seven used by FSI. Presenting how the technology was used to analyse the Project impact in terms of change in forest cover, he shared that low interest of the field staff is a major issue. He informed that UP has the highest number (10 nos.) of AR-CDM afforestation projects. He also informed that the MIS developed under the project is completely in the public domain, and is credited with more than 3.8 lakh hits till date. He explained the use of live MIS to monitor the repayment of loan by SHGs. The same technology was used to monitor the ambitious 50 million sapling planting programme in a single day by UP Forest Department, considered as a record in itself.

[Presentation in Annexure 14]

Special Presentation by Mr. A. K. Bansal, Ex-ADG

Mr. Bansal made a presentation on sustainability issues in forest sector assistance to India. Suggesting that there should be more focus now on monitoring of eco-system

services in new projects, he highlighted the need for strengthening JFM and livelihoods through intersectoral convergence. Sustainability of the IGAs initiated through project support hold the key to post-project sustainability. He emphasised that instead of a blue print approach, support to SHGs should be based on their specific support needs, and the

approach to support should be incremental, spread over a period of five to eight years. Citing lack of expertise with SFD staff for Community Development activities, he argued for addressing these through linkage and convergence. He pointed out that there is need for strategic convergence with four specific areas – drinking water, health, education and alternative energy. He suggested that in the consolidation phase, there should be an assessment of the support needs of community based

institutions such as FPCs and SHGs, and their enterprises, to address these issues in a targeted manner and that instead of sudden closure of support, there should be a tapering off of the same.

[Presentation in Annexure 15]

Discussion:

1. Mr. Prakash wanted to know whether the PMU can take funds from Public Sector Units under CSR.

He was apprised by Mr. Bansal that if there is such a provision in the MoA of the Society, there should not be any problem.

There was also a view that as the PMU is likely to become defunct after the project is over, it is better to directly link the CSR with FPCs.

Mr. Srivastava doubted if the source of funding would impact the sustainability.

Mr. Sarin suggested that the CSR business plans

could be posted on the Project websites.

2. Mr. Joshi suggested that the work on livelihood and micro-enterprise should be started within first two years of the start of the project, otherwise there may not be enough time to address the issues effectively.

3. Dr. Arora suggested institutional linkages with SRLM and credit linkages with

banks for sustainability.

4. Mr. Sarin opined that in their experience there is still not much clarity on REDD+ at the national level, as there is no framework due to absence of any international agreement on REDD+. Thus the JICA projects are only creating REDD+ readiness, and thus there is no harm in modifying the documentation and reporting system as per REDD+ principles.

Sundarban trip and Banabibi



















TECHNICAL SESSION - 6 GROUP DISCUSSION & RECOMMENDATIONS

Layout of Group Discussion of the 9th Annual Workshop:

JICA reckoned that thrust areas discussed in the previous workshops should be discussed and the recommendations finalized in the next workshop, as a matter of principle. With this the continuity of the recommendations could be maintained and the Annual Workshops would attain a meaningful conclusion. Having this principle laid out, the suggestions received and incorporated from the participants of the 8th Annual National Workshop of JICA in Gangtok, Sikkim on each thrust area were further discussed and finalized.

Themes placed for Group Discussion in 9th Workshop

The first four themes emerging out of 8th Annual Workshop in Sikkim were taken up for discussion and suggesting actionable points, in the Technical Session 6—Group Discussion in the 9th Annual Workshop.

The four Groups formed on the themes are given below.

Sl.	Topic	Group Member
Group 1	Sustainable Forest and Biodiversity Management	Dr. A.K. Pattanayak, Dr. P. Raj Karat, Mr. V. Sarin
Group 2	Livelihood Security	Mr. S.Barari, Mr. G.Samuel Raju, Dr. T.Chandy, Mr. V.M.Arora, Mr. S.Kumar, Mr.D.Kumar, Mr. S.M. Joshi, Mr. R.K.Dogra
Group 3	Institutional Strengthening and Capacity Building	Mr. S.K.Srivastava, Dr.P.K.Verma, Mr. Aiban Swer,
Group 4	Technology Based Monitoring	Mr. S. Chaudhuri, Mr. Anurag Sinha, Mr. SubrotoTalukdar & Ms. Ai Tachikawa

The groups deliberated for an hour and presented their actionable suggestions, which are recorded below.

DISCUSSIONS AND RECOMMENDATIONS OF TECHNICAL SESSION 6

Group-I: Sustainable Forest and Biodiversity Management

MEMBERS: Dr. A.K. Pattanayak, Dr. P. Raj Karat, Mr. V. Sarin,

Recommendation 1 of 8th Workshop:

Policy Synergization of Natural Resource

Management (NRM) Practices is essential

Review of recommendations of 8^{th} Workshop & Actionable points suggested by the Members

SLAC (State Level Advisory Committee) under the chairmanship of the Chief Secretary should be formed in each Project for reviewing the progress of convergence, which should meet every six months.

Clear instructions are needed from Government to District Collectors to prioritize the project villages for implementation of ongoing schemes. (Actionable point: Provision for regular reviewing with the concerned DCs would be needed).

District Level Advisory Committees (DLACs) should be formed under the chairmanship of District Collector to review the proposals for convergence based on micro plans on a quarterly basis. (Actionable point: Decisions taken in the DLAC meeting should be reviewed at quarterly interval for its implementation at block / panchayat / village level).

Either the BDOs should be made the member of DLAC, or a Block Level Implementation Committee should be formed where Presidents of the FPCs would be the invited members along with the Gram Panchayat Presidents.

Consultation of all proposals should be done with line departments at Block level before finalization of Micro plans. (Actionable points: The concerned Range Officer could make a presentation of the microplans and share copies of the summary of microplans with related line departments).

Ward members of the particular village should be made a member of FPC/VSS.

System to be established for recognition of FPC/VSS and Forest Department staff for best performance in ensuring convergence.

Local educated youth should be employed as Animators, who can continue giving assistance in post-project period and thereby ensure sustainability. System for their payment in post-project period by FPC needs to be established.

One officer should be designated in the PMU exclusively for monitoring the convergence related issues at FPC/VSS level. He should evolve focus areas for convergence and develop monitoring strategy.

Recommendation 2 of 8th Workshop:

Social Audit and Monitoring should be done.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

Social audit and financial audit should be taken up at village level.

Four members (2 Ladies + 2 Gents) should be selected by GB from outside the Executive Committee to conduct social (performance) audit within the FPC / VSS at regular interval, at least once a year.

Recommendation 3 of 8th Workshop:

Sense of belongingness of the community

Review of recommendations of 8th Workshop

& Actionable points suggested by the Members

Community should be sensitized about their entitlements and responsibilities with regard to various proposals before finalizing the micro plan.

Develop and provide protocols for monitoring of the eco-system services to the community specially stream flow and water quality.

Recommendation 4 of 8th Workshop:

Incentivisation of the Community and recognizing the Marginalized is essential.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

Women working group should be formed and involved in micro plan preparation to ensure that their priorities are reflected in the microplan.

SHGs selection should be more focused towards marginalized people specially women and forest dependent groups within the village.

Challenge Fund to be formed at PMU level for recognizing the best performing FPC / VSS / SHGs and rewarding for their best performance through additional funding to further their objectives.

Grading of FPC/VSS/SHG should be done on objective parameters to be evolved by each project.

Recommendation 5 of 8th Workshop:

There is a need to develop indicators of Sustainable Forest Management (SFM)

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

Ecosystem based management should be taken into account to ensure sustainable use of traditional services/practices in the overall forest resource management.

Objectively verifiable indictors to be developed at the start of the project and also the methodology to assess the same at mid-term and end term.

Group II: Livelihood Security

Members: Mr. S.Barari, Mr. G.Samuel Raju, Dr. T.Chandy, Mr. V.M.Arora, Mr.S.Kumar, Mr.D.Kumar, Mr.S.M.Joshi, Mr.R.K.Dogra

Recommendation 1 of 8th Workshop:

The Livelihood initiatives should have a direct connect with the conservation objectives.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

The groups view was that there is no disconnect between Conservation and Livelihood development, as Socioeconomic development in forest fringe villages, indirectly supports Conservation.

Willing SHGs could be motivated to contribute funds directly for conservation

and rules can be framed for that, particularly if they are directly and exclusively obtaining financial benefits from the forest. This contribution could be in the form of fees paid to FPC / VSS.

Recommendation 2 of 8th Workshop:

JFMC to be linked to Panchayat to attract funding from other sources to sustain various livelihood initiatives and establish convergence

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

UP JFM Rules, 2002 provide for receipt of such funds. This may be explored.

Effort should be made for issuing government notification that some percentage of budget outlay meant for Rural Development and other line departments to be routed through Forest Department to JFMCs for implementing the projects as per the micro-plans.

Recommendation 3 & 5 of 8th Workshop:

Institutionalization of livelihood activities and Marketing, Branding and Quality Control should be aimed, for sustainability of Income Generation Activities (IGAs)

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

NABARD, KVIC, Skill India Mission etc. should be used as platform for the purpose.

Study may be undertaken by JICA documenting the strategies, process, and outcomes related to Branding of SHG produce in JICA forestry projects. This will benefit other States.

USP of the product should be identified, recognized, created and promoted, for easier marketing.

Standardization of marketable forest products, in terms of quality, could be taken with JICA support.

Help from marketing professionals should be taken for developing marketing strategies and facilitating marketing processes, including branding

Recommendation 4 of 8th Workshop:

Promotion of Ecotourism as a non-consumptive and sustainable livelihood opportunity in biodiversity rich areas should be taken up.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

No comments made by the Group.

Recommendation 6 of 8th Workshop:

Financial inclusion through CSR and other initiatives

 For sustainability of SHGs and SHG level enterprises, linkages of these with Rural Livelihoods Mission, NABARD, Lead banks etc. should be attempted, wherever possible.

Additional Recommendation suggested by the Members:

Monitoring of livelihood security need to be instituted—

Forest Department should monitor the activities of SHGs supported under the project and the micro-enterprises initiated with project support for ten years after the closure of project.

Not all SHGs may require further support. Clear criteria and indicators should be developed to identify which SHGs and enterprises are still in need to support at the time of project closure.

Group-III: Institutional Strengthening & Capacity Building

Members: Mr. S.K.Srivastava, Dr.P.K.Verma, Mr. Aiban Swer, Ms. Yukari Inagaki, Programme specialist, JICA

Recommendation 1 of 8th Workshop:

Amendment in Forest Act for legalizing the JFMC/EDC and making them permanent bodies may be mooted.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

The Group was of the view that there is no need for amendment to forest act, as most of the States have established JFM either through an administrative order of the Government or by making rules under the relevant Act.

JFMCs are already permanent institutions under Societies Registration Act, 1860.

Recommendation 2 of 8th Workshop:

Involvement of local NGOs / Facilitators to work with JFMCs/EDCs during and after the Project

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

The Group felt that the recommendation requires further institutionalization of training of such Facilitators in order to improve their understanding and capabilities.

Need specific training and training of trainers (ToT) should be organized for them by employing reputed training centres / institutions like IRMA, Anand; IIPA, Delhi; FTI, Kanpur; TNFA, Coimbatore; TISS, Mumbai; Gandhigram Institute, Dindigul etc.

Literature in local language should be used to train local youth as trainers.

Collaboration with the local universities and institutions could also be explored.

Programmes should be organized to orient and sensitize the NGO's towards the project approach and objectives.

Recommendation 3 of 8th Workshop:

Notification specifying clear guidelines on usufructs sharing may be issued by Government

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

Group felt that the notification is already there in most of the states but the same has not been implemented in letter and spirit. The reason could also be that the forests / plantations allocated to JFMCs are still not ready for harvesting. In some places, lack of awareness also adds to the non-implementation.

The situation can be improved by proper monitoring and review of the issue at the appropriate level.

Recommendation 4 of 8th Workshop:

Regular Training based on Training Need Analysis (TNA)should be organized.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

The Group felt that Annual Training Calendar needs to be developed as per TNA.

All stakeholders should be identified for requisite training needs and action taken.

The identified persons should compulsorily attend such trainings and the replacements / substitutes should not be accepted and no exemption should be given without genuine reasons.

Recommendation 5 of 8th Workshop:

A mechanism need to be developed for Village

Development Fund Management.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

The Group felt that the recommendation needs to be strengthened by instituting a short-term consultancy study by JICA in this regard specifying the mechanism.

Additional Recommendation suggested by the Members:

More focus and priority should be on 'Inhouse' capacity development rather than depending upon outsourcing the activity, which would also ensure imbibing of the technology within the Forest Department.

All State Forest Training Institutes should be upgraded as 'Centre of Excellence' with full autonomy on the lines of TNFA, Coimbatore.

Group-IV: Technology Based Monitoring

Members: Mr. S. Chaudhuri, Mr. Anurag Sinha, Mr. SubrotoTalukdar & Ms. Ai Tachikawa

Recommendation 1 of 8th Workshop:

State forest departments should use GIS technologies for identification and digitalization of forest boundaries for planning, assessment of forest coverage change, and identification of encroachment areas.

Review of recommendations of 8th Workshop

& Actionable points suggested by the Members

To ensure this, GIS-MIS must be in place during preparatory stage of the Project.

Recommendation 2 of 8th Workshop:

JFMC/EDC/Van Panchayat boundaries under the project should be identified, geo-coded with boundary pillars and GIS enabled maps generated; lowest unit of management being JFMC / Beat / Block / Community Forest for analysing project intervention performance and carbon benefit sharing mechanism.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

This should also be completed during the Project preparatory stage

Recommendation 3 of 8th Workshop:

Remote sensing & GIS technology should be used for preparing detailed Resource map viz., Forest Type, Density, Soil, Biodiversity, NTFP, Groundwater, Wood stock, Biomass and Carbon at the highest possible scale for management purpose of the field units.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

· No comments made by the group.

Recommendation 4 of 8th Workshop:

State Forest Departments should associate with other Central/State level bodies for sharing

Spatial Database between various agencies.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

To ensure this, JICA aided Projects should transfer GIS MIS knowledge / exchange resource with each other through common platform, exchanges and exposure visits.

Recommendation 5 of 8th Workshop:

Resource maps should be developed to study the "before" and "after" effects of the project / management interventions. Periodical forest coverage change assessment using high resolution images and satellite based estimation is important for MRV and identification of pressure points to enable forest officers for better management practices.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

No comment made by the Group.

Recommendation 6 of 8th Workshop:

Wherever possible, monitoring should be done on real time basis using advanced GIS applications and mobile Apps by the State Monitoring Units involving the community.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

This should be done at all levels to the extent possible.

Recommendation 7 of 8th Workshop:

GPS survey of all plantation sites (perimeter and area) across all schemes should be made mandatory. Data needs to be compiled at State level for complete database of all afforestation sites.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

No comments made by the Group.

Recommendation 8 of 8th Workshop:

Capacity Building within State Forest Departments in using satellite images for processing and interpretation should be built through national and international trainings.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

Resource Institutions and individuals should be identified and staff working on GIS and MIS should be incentivized.

Recommendation 9 of 8th Workshop:

The Projects should strengthen the existing GIS capabilities and transfer the same to State Forest Departments after the completion of project to ensure post project sustainability. It should integrate the plan within other budget head to derive best benefits and application in other divisions too.

Review of recommendations of 8th Workshop & Actionable points suggested by the Members

This should be done during the on-going Project tenure with focus on in-house capacities.

Additional Recommendation suggested by the Members:

Special focus should be provided to data security.

There should be emphasis on continuous updating of technology and integration of GIS-MIS



West Bengal Forest and **Biodiversity Conservation Project**

Project Attributes and Status

Components (Reimbursable)	Financial (Rs. In lakh)	ALC: NO	
Afforestation	13620	39.5%	
Biodiversity Conservation	1580	4.5%	
Community Mobilisation/Development	3120	9.1%	
Institutional Capacity Development	4170	12.1%	
Consulting Services	1850	5.4%	
Price Escalation	7138	20.8%	
Physical Contingencies	2960	8.6%	
	34438		

Milestones

- 1. MoD signed between Gol, GoWB & JICA -18.10.11
- 2. Signing L/A between JICA & Gol -29.03.12 3. GoWB Resolution to form Society 28.06.12

- 4. Date of Effectuation of Loan 24.08.12 5. Registration of Society 19.7.12 6. First grant received from GoWB -28.03.13

- First grant received from GoWB -28.03.13
 Commencement of Consultancy (PMC) 01.08.13
 Project formally launched by Hon'ble CM -16.12.13
 G.O for establishment of exclusive PMU 13.06.14
 Mid-Term Review of The Project was approved by JICA on 24.02.2016

Duration, Phases & Extent

1.Total 8 years - 2012-13 to 2019-20 (now extended to 2021):Preparatory phase - 2012-13 to 2013-14 Implementation phase - 2014-15 to 2017-18 Closing Phase - 2018-19 to 2019-20 2. Extends to whole of West Bengal

Breakdown of Cost (By Year)

Re.	1.00 = JPY 1.85	F	ts. Lakhs		
SI. No.	Targer January Cale	inancial Year Non-Reimbursable Portion		Total	
1	2012-2013	70.3	264.9	335.2	
2	2013-2014	740.5	4767.6	5508.1	
3	2014-2015	1016.2	6400.0	7416.2	
4	2015-2016	1275.7	7864.9	9140.6	
5	2016-2017	1221.6	7167.6	8389.2	
6	2017-2018	745.9	3697.3	4443.2	
7	2018-2019	632.4	2751.4	3383.8	
8	2019-2020	459.5	1524.3	1983.8	
	TOTAL	6162.1	34438.0	40600.1	

JICA Loans - Basic Terms & Conditions

- Total Project Cost: Rs 406 Crores (=7511m ¥)
- Interest Rate for works: 0.65%
- Interest Rate for Consulting Services: 0.01%
- Commitment Charge on unused balance: 0.1% p.a
- JICA loan coverage over project cost: 85% (344 Cr)
- Non-reimbursable cost (borne by GoWB): 15% (62 Cr)
- Repayment period: 40 yrs. Including grace 10yrs

Breakdown of Cost -by currency

	Reimbursable Portion	Non Reimbursable Portion	Total	
Foreign Currency (m ¥)	6371.00	1140.00	7511.00	
Local Currency (m Rs.)	3444,00	616.00	4060.00	

- Exchange Rate: Rs.1 = JPY 1.85
- Price Escalation
 - Foreign Currency Portion: 1.6% p.a.
- Local Currency Portion: 6.6% p.a.
- Physical Contingency: 10%
- Base Year for Cost Estimation: May 2011

Items	Original	Actual		
Selection of Consultants	April 2012-December 2012	July 2013		
Establishment of PMU	March 2012	June 2014		
Afforestation	October 2012- March 2020	July 2013- ongoing		
Biodiversity Conservation	October 2012- March 2020	December 2013- ongoing		
Community Development	April 2012- March 2020	pre-implementation stage		
Institutional Capacity Development	April 2012- March 2020	August 2013-ongoing		
Consulting Services	January 2013 - March 2020	August 2013 -ongoing		
Project Completion Date	March 2020	2021		

Afforestation

- . In Recorded Forest (Total: 18,970 ha)-6 models
 - A1- Clone-450 ha
 - A2- Sal in S.Bengal-2500 ha
 - A3- Quick Growing small timber 7300ha
 - A4- Enrichment of degraded Sal by coppicing -8430ha
 - A5- Economic Pltn. in N.Bengal -1190 ha
 - A6- Sal & associates in N. Bengal 400 ha
- . Tree Plantation Outside Forest (Total: 1500 ha) Inic [Only on available Govt. land]
 - B1- Strip Pltn. on roadside/canalside -1400 ha
 - B2- Block Pitn. On non-forest land-100ha
- Soil & Moisture Conservation in forestry treatment areas
- Production of 1 yr old QPM -Establishment / Expansion of Root Trainer based Central nurseries - 40 units producing @2lac QPM per yr

Organizational Setup

- W.B Forest and Biodiversity Conservation Society
- · Society comprise of Governing Body (GB)-13members, Chairman is Forest Secy., CPD is Member Secy.
- · PMU under Society in overall management
- · 36 DMUs, within the office of DFO
- . 178 FMUs, within the office of Range Officer
- 100 contractual staff for assisting the PMU/DMUs
- 576 FPCs & 24 EDCs under the DMUs
- · High Powered Committee (not within Society) -Headed by Chief Secy and comprising Secretaries of Depts, -Advisory in nature

Biodiversity Conservation

- W.L Habitat Mgmt in 7 PAs—
 -Grass & fodder tree pltn -280ha-Gorumara/Jaldapara/BTR
 -Fodder tree pltn in hills -75ha-Singalila/Senchal/Neora
- Mitigation of Man-Animal Conflict
 -Erection (40 km) and replacement (30 km) of electric fencing for elephant and gaur in North Bengal.
 -Creation of mobile squad- vehicle with transport cage,
- patrol vehicle, field equipment

 Labour & vehicle for driving elephant,
 capture, treatment & release of smaller animals
- Research on W.L & Biodiversity
 6 topics Ecology of Elephant in South-West Bengal; Ecology of Elephant in North Bengal; Ecology of Gaur in North Bengal; The impact of habitat management practices, especially canopy, manipulation and grassland restoration; Leopard ecology in North Bengal; Population dynamics, distribution, breeding behaviour, and predator-gray relationship of Tiper in North Bengal. predator-grey relationship of Tiger in North Bengal.



Community Mobilization

Selection of 576 FPCs and 24 EDCs

- · Micro Planning (600 numbers)-
- · Community Dev. Infrastr. for 600 FPC/EDCs -Infrastr. For whole community to be maintained by themselves
- Categorization of FPC/EDCs into classes for allocation of Community Dev. Fund 7.67 lac / 5.76 lac / 2.56 lac

- •Formation and Selection of SHGs (2-5 SHG per FPC/EDC)
- Training of SHG by NGOs on matters like micro-financing
- Development of Business plan
- •Seed fund to be provided as Rs. 1.25 lakh for each FPC/

Institutional Capacity Development

- Base line Survey of the State's Forest Resource -Work in Progress (FSI) is
- Socio-economic conditions at the Start of the Project (NABCONS)
- ► Infrastructure Development Training, Research, GIS, Forest Protection etc including Building, Equipment &Vehicle
- Research Activities in Forestry
- ▶ Mid-term Monitoring & Evaluation including periodic Biodiversity & Community Development Studies
- ► End-term Monitoring and Evaluation

Establishment of PMU & Institutionalisation of Society

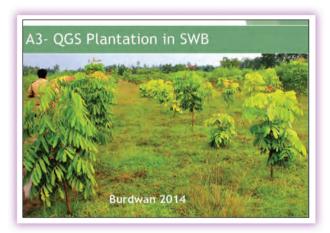


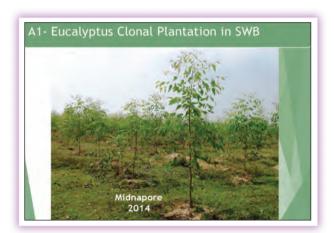
Activities	Particulars	Unit	Achieveme nts 2013-14	Achieveme nts 2014-15	Achieveme nts 2015-16	Achievements 2016-17 (upto 31.12.2016)	Total achievement (upto 28.12.2016)
			Physical	Physical	Physical	Physical	Physical
Establishment of PMU	1 1	no.	4	1	40	-	1
Establishment of DMUs	(1)	no.	32		-	-	36
Establishment of FMUs	1	na.	67	79	27	5	178
Posting of Officers on Deputation to the Societyof-PMU		no.	8	5	1.50	1 .	5.
Deployment of "Support Staff"	At PMU	no.	1	10	1,2,1	1	12
to PMU and DMU	Circle Office		4	-	s	5	10
	At DMUs	no.	3	50	10	5	68
Preparation of Manuals	Manuals/ Guidelines.	na.	6	10	3	8	27

Progressive Statement of Achievements

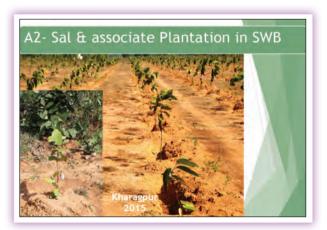


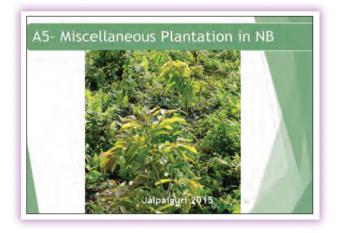
Activities	Particulars	Unit	Achievement 5 2014-15	Achievement s 2015-16	Achievements 2016-17 (upto 31.12.2016)	Total achievement
	-	-	Physical	Physical	Physical	Physical
Afforestation Target 21,770	A1 Target 450 ha	ha.	141.50	166.00	143.00	450.50
ha	A2 Target 2500 ha	ha.	176.00	406.00	365.00	947.00
1 3	A3 Target 7300	ha.	257.00	1,643.00	1,891.00	3,791.00
	A4 Target 8430 ha	ha.	1,129.00	2,923.00	2,425.00	6,477.00
	A5 Target 1190 ha	ha.	30,00	160,00	362.00	552.00
1	A6 Target 400 ha	ha.	20.00	110.00	135.00	265.00
	B1 Target 1400 ha	ha.	119.15	310.50	412.00	841.65
	B2 Target 100 ha	ha.	45.28	19.00	31,00	95.28
	Total 21770	ha.	1,917.93	5,737.50	5,764.00	13,419,43



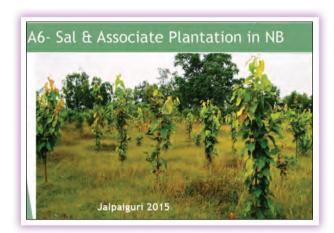






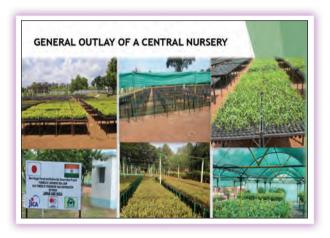








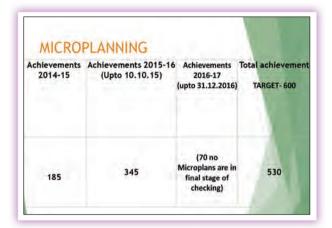


















Particulars	Targ	Achieveme nts 2013-14	Achieveme nts 2014-15	Achieveme nts 2015-16	Achievements 2016-17 (upto 31.12.2016)	Total achievement (upto 28.12.2016)
		Physical	Physical	Physical	Physical	Physica
Construction of Building at AE-391	1	4 2	0.00	1	>•	1
Group D quarters	15	1	6	8	100	15
Group C quarters	10	.,	8	2	+	10
ROs quarters/ Range office	5	- 20	1	2	2	5
Expansion of existing Administrativ e Building	2 flrs	9	13	3	2 firs (part)	2 firs (part

- The Project provides the scope for extending Income Generation Activities (IGA) through microfinancing among the Self Help Group (SHG) under the active co-operation of the JFMCs.
- As the Project covers 600 JFMCs, these will be at least 1200 SHGs acting as beneficiaries. Being a new-comer in the venture of microfinancing and IGA, the Society sought co-operation from the pioneer Govt. Training Institute in the sphere viz. B.R.Ambedkar Institute for Panchayet and Rural Development (BRAIPRD) at Kalyani, Dist-Nadia, WB for capacity Development and training to the front line forest personnel and primary stoke holders i.e., JFMC and SHG members.
- In the first phase, there is target to conduct one-week course involving about 300 stoke holders in 9-10 slots having 30-40 participants in each slot 6 nos. of such courses have already been completed so far.
- West Bengal State Rural Livelihoods Mission (WBSRLM) or "Anandadhara", a Society under the Panchayets & Rural Development Department, Govt. of West Bengal expressed their interest and willingness to develop a long term partnership with the Society for capacity building as well as exploring the areas of co-operation regarding livelihoods enhancement particularly of the SHG women.

Particulars	Target	Achievement	s Achievement	Total
		2015-16	2016-17 (upto 31.12.2016)	Achievemen (upto 31.12.2016)
	4.5	Physical	Physical	Physical
Package 2 for Middle and Junior officers in Indian Institutes Short term training (10-15 days)	40 participants	80	1	81
Package 3 for Jr. officers, FR and Front Line Staff (inhouse or Indian Institutes)	15 Participants	45	23	68
Frontline Staff and FPC/EDC/SHG Microfinance & Accounting	30,000 no. of Participants		190	190



Particulars	Unit	Achievement	Achieveme	Achieveme	Achievement	Total
		2013-14	nts 2014-15	nts 2015-16	2016-17 (upto 31.12.2016)	achievement (upto 31.12.2016)
		Physical	Physical	Physical	Physical	Physica
Study Tours	nos.	2	-2	2	3	7
	no. of Participants	30	:30	35	32	97
MIS	nos.	1	- 2	7		7
	no. of Participants	14	-2-	128	-4-	128
Community Development	nos.			2	2	4
	no. of Participants	1-1		80	52	132

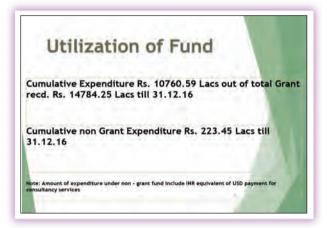
Particulars	Unit	Achievement	Achievement	Achievement	Achievements	Total
		2013-14	2014-15	2015-16	2016-17 (upto 31.12.2016)	achievement (upto 31.12.2016)
		Physical	Physical	Physical	Physical	Physical
Micro-plan Preparation	no	23	33	1	4	57
Target 30,000 Participants	no. of Participants	419	854	24	The latest	1,297
	no. of Participants	10,000	14,300	6,000	7	30,300
Usage of GPS Target 25 Training	no.	4	27	9	9	49
& 500 participants	no. of Participants	100	582	54	95	831
Accounting Procedure	nos.	- 2	31	11	24	66
	no. of Participants	Loll	247	51	286	584
Tree Plantation Outside	nos-	-0-	14	60		74
Forest Area (TPOFA)	no, of Participants		443	230		673
Nursery Techniques	nos.		4	4	- 3	11
	no. of Participants		113	104	134	351

Particulars	Unit	Achieveme nts 2013-14 Physical	Achieveme nts 2014-15 Physical	Achieveme nts 2015-16 Physical	Achievements 2016-17 (upto 31.12.2016) Physical	Total achievement (upto 31.12.2016) Physical
Vehicles-Mahindra Scorpio (Target 24)	nos.		10	Priysical	Physical 14	24
Vehicles-Maruti Suzuki Ertiga (Target 2)	nos.	1.0	2	0		2
Hero Super Splendor mobike (Target 155)	nos.		100	- 6	55	155
Equipment-GPS	nos.	90	90	87	120	267
Equipment-Camera	nos.		90	54		144
Equipment-Computers	nos.	13	43	2	5	63
Equipment-Printers	nos.	7	43	1		51
Tally Software	nos.	25	12	120		37









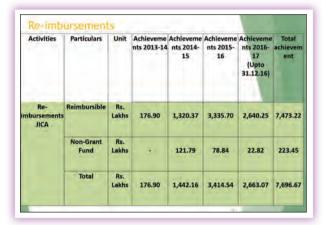
Activities	Particulars	Unit	Achieveme nts 2014-15	Achieveme nts 2015-16	Achievement s 2016-17 (upto 31.12.2016)	Total achievement (upto 31.12.2016)
			Physical	Physical	Physical	Physica
Improvement of Wildlife	Grass land Plantation in Plains (Target 280 ha)	ha.	0.00	100.00	100.00	200.00
Wildlife Habitat in Protected Areas (Target 335 ha Grassland +fodder)	Fodder tree plantation after bamboo removal in the hills (Target 75ha)	ha.	0,00	5,00	25,00	30,00
Studies	Studies (Target 6)	nos.	2	2	4	6

Yene	Grant Received		Balance from	Total fund	Expenditure	Balance carried over	
12-13	Component	Amount (in Rs. Lacs)	previous year	TO-CO-CO		carried over	
	NT	105.25	0.00	105.25	0,00	105.25	
	SCP	20.00	0.00	20.00	0.00	20.00	
	TSP	10,00	0.00	10.00	0.00	10.00	
	Total Grant recd.	135.25	0.00	135.25	0.00	135.25	
	Non-Grant Fund	0.00	0,00	0.00	0.00	0.00	
	Total	135.25	0,00	135.25	0.00	135.25	
13-14	NT	2754.00	105.25	2859.25	165.37	2693.88	
	SCP	1927.80	20.00	1947.80	62,08	1885.72	
	TSP	626.20	10.00	836.20	28.04	808.16	
	Total Grant recd.	5508.00	135.25	5643.25	255.49	5387.76	
	Non-Grant Fund	0,00	0,00	0.00	0.00	0.00	
	Total	5508.00	135.25	5643.25	255.49	5387.76	
14-15	NT	0.00	2693.88	2693.88	999.23	1694.65	
	SCP	0.00	1885.72	1885.72	699,46	1186.26	
	TSP	0.00	808.16	808,16	299,77	508.39	
	Total Grant recd.	0.00	5387.76	5387.76	1998.46	3389.30	
	Non-Grant Fund	121.79	0.00	121.79	121.79	0.00	
	Total	121.79	5387.76	5509.55	2120.25	3389.30	
15-16	NT	4500.00	1694.65	6194.65	2166.92	4027.73	
7-70	SCP	3200.00	1186.26	4386.26	1523.59	2862.67	
M 1	TSP	1441.00	508.39	1949.39	662.61	1286.78	
K 1	Total Grant recd.	9141.00	3389.30	12530.30	4353.12	8177.18	
	Non-Grant Fund	78.84	0.00	78.84	78.84	0.00	
	Total	9219.84	3389.30	12609.14	4431.96	8177.18	
16-17	NT	0.00	4027.73	4027,73	2035,23	1992.50	
	SCP	0.00	2862.67	2862.67	1453.73	1408.94	
	TSP	0.00	1286.78	1286.78	664.56	622.22	
	Total Grant recd.	0.00	8177.18	8177.18	4153,52	4023.66	
	Non-Grant Fund	22.82	0.00	22.82	22.82	0.00	
	Total	22.82	8177.18	\$200.00	4176,34	4023.66	



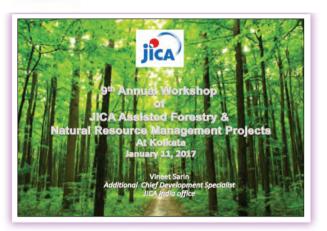
Particulars	Unit	Second Second	2.1011111111111111111111111111111111111	A september of section of	Contract of the Contract of th	
Reimbursible	Rs. Lakhs	198.87	1,702.96	3,889.31	3,646.29	9,437.43
Non- reimbursible	Rs. Lakhs	56.63	295.50	463.80	507.23	1,323.16
Total Utilisation Grants	Rs. Lakhs	255,50	1,998.46	4,353,11	4,153.52	10,760.59
Non-Grant Fund	Rs. Lakhs	-	121.79	78.84	22.82	223,45
Grand Total	Rs. Lakhs	255.50	2,120.25	4,431.95	4,176.34	10,984.04
	Reimbursible Non- reimbursible Total Utilisation Grants Non-Grant Fund	Reimbursible Rs. Lakhs Non- reimbursible Lakhs Total Utilisation Grants Lakhs Non-Grant Fund Lakhs Grand Total Rs.	Reimbursible Rs. Lakhs 198.87 Non- reimbursible Lakhs 56.63 Total Utilisation Grants Lakhs 255.50 Non-Grant Fund Lakhs - Grand Total Rs.	Reimbursible	Relimbursible	Non-reimbursible Rs. Lakhs 198.87 1,702.96 3,889.31 3,646.29







ANNEXURE





JICA's Forestry Sector Activities in India Silver Jubilee Year (1991 ~ 2016)

- Two Technical Cooperation projects
 - 1) Capacity Building for SFTIs, CASFOS (completed)
 - Training Curriculum Improvement at CASFOS
 Training of Master Trainers at CASFOS
 - · Training of Trainers at SFTIs
 - Natural Disaster Management in Forest Areas of Uttarakhand (signed in FY 2016) covering the following:
 - Development of model sites for sediment disaster mitigation in collaboration with the ongoing ODA Loan project
 - Capacity Development of Forest Dept. personnel
 Knowledge dissemination at national level



Financial Assistance Spanning Across More than Two Decades

- Starting in 1991, 'Afforestation & Pasture Development along Indira Gandhi Canal Area', in Rajasthan, was first project
- In a span of 26 years, financial assistance has been extended to 25 projects
- 23 ODA Loans and 2 Technical Cooperation
- 22 ODA loan projects are state specific, cover 13 states, namely Rajasthan (5), Tamil Nadu (3), Gujarat (2), Karnataka (2), Punjab (2), Haryana, Orissa, Himachal Pradesh, Tripura, Uttar Pradesh, Sikkim, West Bengal and Uttarakhand



JICA's Forestry Sector Activities in India Silver Jubilee Year (1991 ~ 2016)

- Two new ODA Loan projects for Nagaland and Odisha (Phase 2) are in fact finding/appraisal stage and expected to be signed by March 2017 subject to approval from Government of Japan
- Cumulative commitment stands at JPY 225.8 billion (Rs. 12,000 crores approx. or US\$. 1.86 billion at current exchange rates)
- JICA continues to be the largest donor to the forestry sector in India with footprints in 23 states (13 ODA &TC) + (10 HRD)



JICA's Forestry Sector Activities in India Silver Jubilee Year (1991 ~ 2016)

- Capacity Development project for frontline staff at national level is under implementation covering 13 states (10 new + 3 old) -Arunachal Pradesh, Assam, Mizoram, Nagaland, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Maharashtra, Kerala, Himachal Pradesh, Uttarakhand and West Bengal
- The project focuses on:
 - Infrastructure development of State Forest Training Institutes (SFTIs) and CASFOS Burnihat, Colmbatore,
 - Training of Trainers and Faculty Training
 - Development of training material for frontline staff



JICA's Forestry Sector Activities in India Silver Jubilee Year (1991 ~ 2016)

- Additionally, the 'Rolling Plan' submitted by DEA, Gol to GoJ for projects to be considered in future, includes projects from following states:
 - Himachal Pradesh
 - Tripura
 - Meghalaya
 - Karnataka (Phase 3 project)
 - Punjab



Broad Milestones Achieved

- Plantation and regeneration activities have covered over 2 million hectares
- Another 0.5 million expected in next 5 to 7 years
- 16,000 plus JFMC committees have been formed/ functioning, another 1,500 expected in next 5 years
- 24,000 SHGs are operating, 7000 more SHGs to be formed.



Thrust Areas of 3rd Generation

- IGAs are selected and promoted only after identifying feasible and sustainable marketing networks based on value chain assessment
- 'Society mode' organizational set up is mandatory
- Strong and appropriate institutions at the local level are adopted
- Biodiversity conservation, Agro-farm forestry receive greater focus
- Technology based management is
 made a prerequisite.



Journey Two and Half Decades

- Sectoral assistance has traversed two and half decades journey
- Covered 3 generations of projects
- 1st: 1990-91 ~ 1997-98
- 2nd: 2002-03 ~ 2012-13
- 3rd: 2013 onwards



Thrust Areas of 3rd Generation

- Efforts are made to make projects REDD+ ready for providing larger benefits to communities, as and when international protocols are in place
- Disaster Mitigation measures for specially in hilly/ coastal states are considered
- Emphasis is given on institutionalization of inter-sectoral convergence by dovetailing of local resources and development schemes for promoting sustainability and replicability



Thrust Areas of 3rd Generation

- An all-inclusive and holistic approach is adopted
- Large scale afforestation/ regeneration continues through active JFM approach
- Greater emphasis on providing sustainable livelihoods opportunities through JFM Consolidation Activities is ensured, which includes eco-tourism
- Need-based and strategic funding is provided for Livelihood development on certain objective parameters



Thrust Areas of 3rd Generation

 Efforts are made to have an In-built 'Sustainability Plan' as an integral component at project formulation stage



Key Issues Flagged at Sikkim

- The two key issues that were flagged by JICA at the Sikkim workshop were:
 - 'Sustainability' of project effects and Impacts
 - 'Replicability' of projects/ programs/ schemes for moving towards sustainability
- 'Sustainability' and 'Replicability' are the cornerstones for the way forward and concerted efforts of all stakeholders are an imperative requirement for achieving the same



Revisiting Key Recommendations of Sikkim

- Livelihood Security
 - Livelihood initiatives to have direct connect with conservation objectives
 - Synergy with Gram Panchayat initiatives and activities for sustenance, effectiveness and convergence
 - Adoption of cluster based and federation based institutionalization of livelihood activities
 - Devising product development, branding and quality control strategies
 - Exploring financial inclusion by integrating CSR initiatives, linking up with financial institutions and government schemes



Key Issues Flagged at Sikkim

- Needless to state, the future of forestry projects largely hinge on the progress we make on these two issues.
- Therefore, we must utilize this opportunity to allot adequate time for discussion on the same and making further headway



Revisiting Key Recommendations of Sikkim

- Institutional Strengthening and Capacity Building
 - Government notification on usufruct sharing to be clear
 - Role of NGOs/ facilitators is critical for interfacing between Community and FD. Local literate youth to be trained to work on a long time basis
 - 'Training Need Analysis' to be a prerequisite for taking up trainings at commencement and regular intervals
 - Village Development Fund and mechanism for collecting and utilization of funds needs to be established for community benefits



Revisiting Key Recommendations of Sikkim

- Sustainable Forest Management
 - Policy synergization of NRM practices is required through inter-departmental coordination/ inter-sectoral linkages/ convergence mechanism
 - Sense of belongingness and involvement of community along with marginalized groups is very critical for SFM
 - Providing social and economic benefits to communities is an imperative requirement
 - Developing indicators of SFM and proactively assessing progress is necessary



Revisiting Key Recommendations of Sikkim

- · Technology based Management
 - GIS technology to be used for identification and digitization of forest boundaries for planning, assessment of forest cover changes and identification of encroachments.
 - Remote Sensing and GIS technology to be used for preparing detailed resource maps for better management of field units
 - Resource maps to be prepared for 'before' and 'after' scenario of project/ management interventions

50



Revisiting Key Recommendations of Sikkim

- · Technology based Monitoring
 - Monitoring to be done on real time basis using advanced GIS applications and mobile Apps in collaboration with communities
 - FD to associate with Central/ State bodies for sharing of Spatial database between various agencies



Recommendations of Impact Assessment Study

- 1. JFM Consolidation
 - Strengthen the role of VFCs through capacity building and vesting of more responsibilities
 - Gradation of existing VFCs to incentivize the good performers
 - Routing funds for works through VFC/EDCs
 - Promoting Transparency and Social Accountability – ensuring all payments to and by VFCs are made through direct bank transfers only



Impact Assessment Study

- Impact Assessment (IA) Study carried out for Odisha, Rajasthan and Gujarat forestry projects from December 2015 to September 2016 by JICA appointed consulting team
- 4 projects were covered in 3 states (1 in Odisha, 2 in Rajasthan and 1 in Gujarat)
- Covered 90 villages (30 in each state), which were selected based on Stratified Random (probability sampling) sampling method



Recommendations of Impact Assessment Study

- 2. JFM Consolidation
 - Strengthening Current Revolving Fund mechanism by ensuring better management by communities
 - Diversifying Scope of Existing revolving Fund mechanism by also considering Vulnerability Reduction Finance, General Purpose finance, Livelihood Finance etc.



Recommendations of Impact Assessment Study

- 1. Afforestation
 - Landscape Approach for Afforestation and Conservation to be adopted
 - Emphasis on raising of Quality Planting Material needs to be given
 - Rationalization of Models for Intervention is required
 - Provision for protection of plantations beyond Maintenance period through social fencing, restricting grazing and managing forest fires
 - Obtaining Baseline data and Change Management through utilization of Remote sensing and GIS applications



Recommendations of Impact Assessment Study

- 3. Training & Extension
 - Focused and regular Training on TNA basis across various levels. IT can be the key for effective, efficient training & capacity building.
 - Smart Classes could be introduced through interactive modules for making training visually attractive, recorded versions of which could be repeatedly viewed thus saving time and costs



Recommendations of Impact Assessment Study

- 3. Training & Extension
 - User friendly Mobile Apps could be introduced to VFCs and SHGs for record keeping, revolving fund, repayments, interest etc. and also for transmission of information to communities
 - Focused Classes for Financial Literacy should be provided to communities through tie ups with NABARD, Banks and MFIs with regard to various schemes available relating to savings/ deposits, loans insurance, pension etc.



Recommendations of Impact Assessment Study

- 4. Convergence
 - Establishing dedicated Convergence Cell as a part of the PMU to ensure focused convergence at PMU as well as VFC/EDC and SHG level.



Recommendations of Impact Assessment Study

- 3. Training & Extension
 - Post Project and Sustainability: Trainings need to be given along with written guidelines to VFCs/ EDCs on post project management and sustainable use of assets.



Recommendations of Impact Assessment Study

- 4. Monitoring & Evaluation
 - Logical Framework Analysis –
 Monitoring framework need to be
 created at the start of the project.
 Scientific methods for making
 periodic assessments Key
 Objectively Verifiable Indicators
 (OVIs)needs to be ascertained
 - MIS and GIS need to be operationalized at the start of the project.



Recommendations of Impact Assessment Study

- 4. Convergence
 - Holistic approach to be adopted by factoring in all departments and schemes that the project would like to converge with
 - Strong Institutional Arrangement with Robust M&E with clear cut roles and responsibilities for each stakeholder and time bound plan to implement. State Level and District Level Advisory Committees to be more proactive



Recommendations of Impact Assessment Study

- 4. Monitoring & Evaluation
 - Pooling & Optimization of Resources should be considered rather than all states engaging in the same activity to save time and costs.



Recommendations of Impact Assessment Study

- 4. Corporate Social Responsibility
 - Most VFCs qualify to avail CSR funds with proper handholding
 - Identify and create concrete business plans as per CSR guidelines including fund requirement
 - Detailed CSR project documents need to be prepared and shared on CSR webpage of the project website inviting Corporates and PSUs



Utility of Annual Workshops & Project Directors Meeting

- A famous European statesman once said, "Only a fool learns from his own mistakes. The wise man learns from mistakes of others"
- If I were that statesman I would rather say ... "Only a fool learns from his own mistakes. The wise man learns not only from mistakes of others but also from their knowledge and experience"



Recommendations of Impact Assessment Study

- 4. Financial Inclusion in JICA projects
 - JICA is keen to explore ways and means to promote financial inclusion
 - Second part of the study was dedicated to Financial Inclusion
 - JICA is still in the process of considering various suggestions/ recommendations that the study has provided



Utility of Annual Workshops & Project Directors Meeting

- All states implementing JICA assisted projects have much in common in terms of organization structure, scope of works, broad implementation strategies etc. but often success varies from state to state
- ➤ Variance in achievement of success could be attributable to various factors ranging from administrative, technical or even political — which may be common with common solutions



Recommendations of Impact Assessment Study

- 4. Financial Inclusion in JICA projects
 - In the current scenario in India with demonitization happening and Government of India's push towards digital and cashless economy, financial inclusion assumes greater significance
 - JICA would soon be coming up with its draft strategy on the same for discussions with you for ongoing and future projects.
 - We do look forward to your invaluable suggestions on the same.



Utility of Annual Workshops & Project Directors Meeting

- However, due to lack of opportunities for inter-state interactions all projects may be working on similar issues to which some may have found solutions already.
- In such scenario, there is no prudence in engaging in a futile exercise of 'reinventing the wheel', which leads to not only wastage of time but precious resources as well.



Utility of Annual Workshops & Project Directors Meeting

Therefore, National Workshops and Project Directors meeting, on an annual basis, provide the ideal forum to all JICA assisted project authorities to meet atleast twice in a year for cross learning and experience sharing



Faster Progression is the Need

- Submit the 'Action Plan' to JICA within 2 months after conclusion of workshop
- Progress on 'Action Plan' to be updated at the next PD meeting and Annual Workshop by each state
- Success and failure including issues, challenges and best solutions to be further discussed for onward progression along with new emerging issues and challenges



Faster Progression is the Need

- ➤ JICA has promoted 9 Annual Workshops and 8 PD Meetings since 2009
- At the conclusion of each workshop, a set of recommendations have been generated for all stakeholders
- However, compliance is not as fast and progressive as ideally it should have been
- Hence, the benefits of such deliberations are not being realized fully



Key Message

With 26 years of fantastic symbiotic collaboration between JICA and the Indian forestry sector – there is tremendous potential for growth in future as well



Faster Progression is the Need

- This workshop onwards, JICA would like to introduce the following system:
 - Recommendations to be circulated within 15 days to all participants
 - Recommendations to be finalized and shared within a month after the conclusion of the workshop
 - Each state would be requested to prepare an 'Action Plan' on the recommendations with specific reference to their JICA assisted projects



Key Message

The key is to keep jointly evolving and improving the content and quality of our projects to make them more impact creating, replicable and sustainable -leading to healthier forests and wealthier forest village communities.



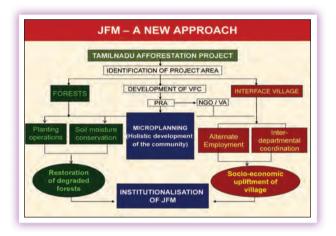
Thank you very much for your attention!

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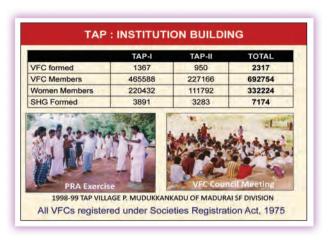






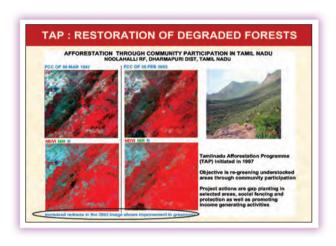
JICA ASSISTED FORESTRY PROJECTS IN TAMILNADU							
Project	Duration	Signing date	Closing	Outlay (Rsin cr)			
Tamil Nadu Afforestation Project Phase-I (TAP Phase I)	1997-98 to 2004-05 (8 yrs)	19.7.1996	31.3.2004	Rs 688 cr			
Tamil Nadu Afforestation Project Phase-II (TAP Phase II)	2005-06 to 2012-13 (8 yrs)	5.10.2004	31.3.2013	Rs 570 cr			
Tamil Nadu Biodiversity Conservation & Greening Project (TBGP)	2011-12 to 2018-19 (8 years)	1.10.2010	31,3.2019	Rs 686 cr			

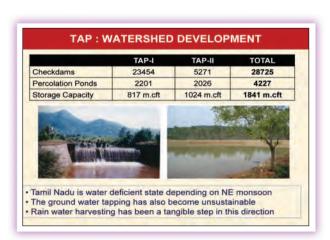
TAMILNADU A	FFORESTATION F	PROJECT (TAP)
OBJECTIVES		
To launch a massive	tree plantation in the S	tate of Tamilnadu,
To bring about balance	ed ecological improve	ment
Meet to the extent pos	ssible requirements of I	ocal people
Improve productivity	of forests	and a second
Provide employment	opportunities in rural a	reas
Enhance the capabili	ties of Forest Departme	nt
		1 10 2
Ecological restoration of forests	Livelihood improvement by JFM	Poverty reduction in villages



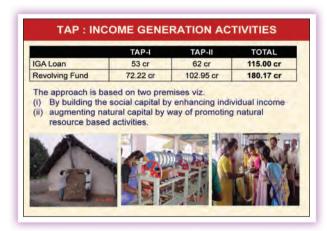


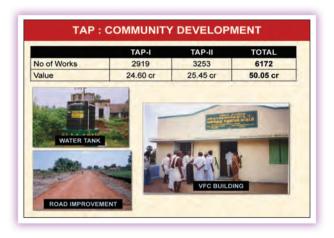


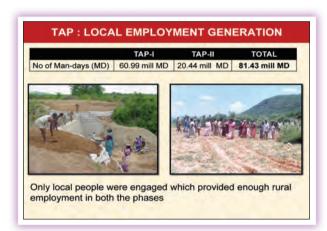


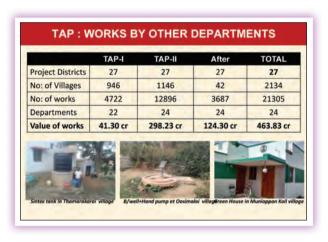


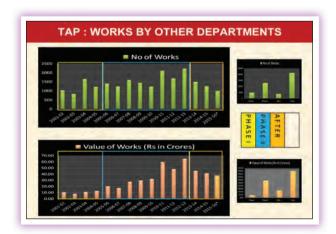












Review by the Chief Secretary (Chairperson, SLIFMC) of convergence mechanism on 19-7-2016 "Gave instructions to get an order from the Government for utilizing the resources by coordinating with the other related 5-6 Line Departments"

TAP: WORKS BY OTHER DEPARTMENTS

Year	Rural Development		Horticulture	Tribal Welfare	Social Welfare	Education
2010	5491.93	22.00	1.56	0	32.36	69.51
2011	4403.42	28.10	1.61	0	18.53	19.26
2012	6191.90	11.50	0.81	5.00	27.50	64.51
2013	4324.31	28.10	0.81	0	23.50	0
2014	4058.35	20.44	0.48	0	18.88	3.00
2015	3671.37	38.50	1,20	14.50	44.50	26.50
Total	28141.28	148.64	6.47	19.50	165.27	182.78

Proposal discussed (as per various Schemes under implementation):

- Considering the spread and number of TAP villages in Tamil Nadu, a minimum of 15% of the BE allocation for works in the rural areas could be spent by each Department for the TAP villages.
- It is also suggested that priority may be given to the villages and districts that are vet to be covered.
- Further recurring inputs would be required for maintenance of the community assets created by various Departments.

TAP: SOCIO-ECONOMIC DEVELOPMENT

- · Beneficiaries have taken to revenue generating activities
- · SHGs have emerged as able tool for women empowerment
- · Improved infrastructures in the villages uplifted life quality
- · Other department activities have led integrated development
- 100% Non timber Forest Produce (NTFP) & 90% Timber, Bamboo & poles goes to Village Forest Committees (VFC)





NATIONAL RECOGNITION

INDIRA PRIYADARSHINI VRIKSH MITRA AWARD 2001



Vellore Division

Ungatty VFC

Thiru Velu Mudaliyar



This is the highest National Award in the Environment & Forestry Sector

EX POST EVALUATION OF TAP

Ex post evaluation of TAP-I was conducted by a third party in Jan 2008 and after a thorough evaluation, JICA awarded a rating of 'A' for the project which is the highest rate awarded by them

TBGP - PROJECT CONTEXT





(2011-12 to 2018-2019)

> Though TAP achieved success in restoration of degraded forests, anthropogenic pressures still existed posing imminent threat to biodiversity Problem complexity needed special emphasis and long term strategy

TAMILNADU BIODIVERSITY CONSERVATION & GREENING PROJECT (TBGP) தமிழ்நாடு உயிர்பன்மை பாதுகாப்பு மற்றும் பசுமையாக்குதல் திட்டம்

TBGP - PROJECT OBJECTIVE

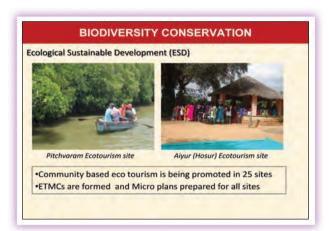
To strengthen biodiversity conservation by improving ecosystem and management capacity as well as undertake tree planting outside recorded forest areas, thereby contributing to the environmental conservation and harmonized socio-economic development

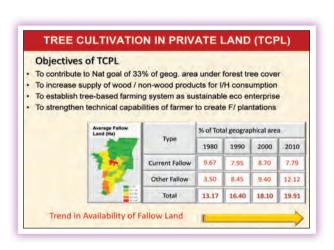
TBGP - PROJECT DESIGN

- 1. Biodiversity conservation is first priority
- 2. Every component needs to be linked with Biodiversity conservation
- 3. Consistency with international standards











Year	No. of villages	Seedlings planted (in Lakhs)		
icui	No. of villages	Target	Achievement	
2012-13	1000	100	100	
2013-14	1018	181	181	
2014-15	967	102	102	
2015-16	1021	102	102	
Total	4006	485	485	





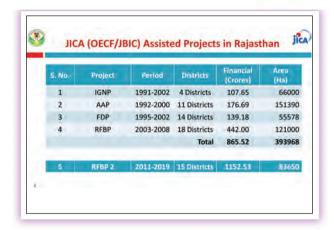


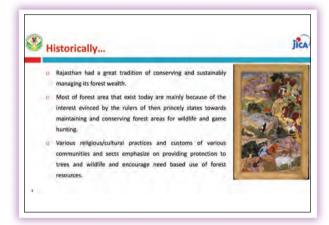


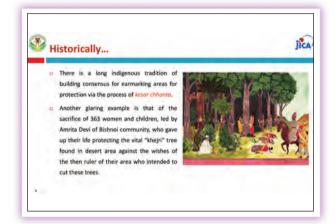




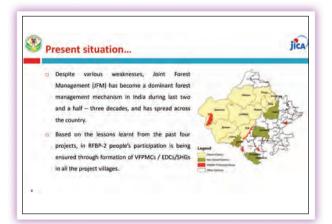




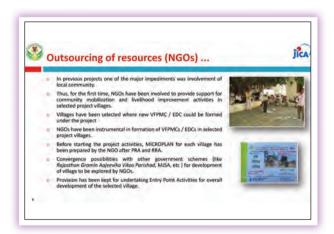


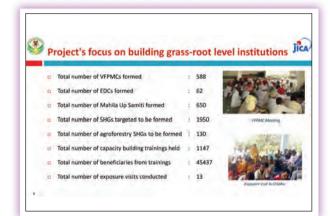






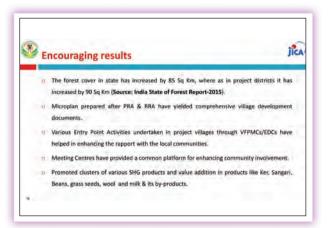






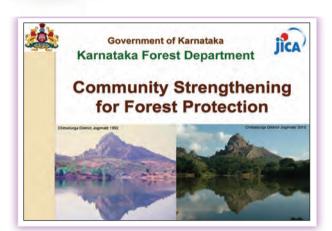












Traditional forest management	With Community Participation
Management of forest resources by the State by policing of forests The community needs are not fully understood and met Lack of understanding about ecological security among the communities Often contributed negative mindset among the communities Unregulated exploitation of forest resources leading to degradation and deforestation.	protecting forest resources by creating required awareness Joint management of fores resources by the communities Community needs are recognized Sensitize the Communities towards a need for ecologica security Builds credibility and transparency

Background to the Community Participation in Karnataka

- 1988 National Forest Policy envisages community participation for sustainable forest management
- 1990 Govt, of India guidelines to involve community and NGOs in forest management and protection
- 1993 Government of Karnataka (GoK) orders on JFPM for the development of degraded forest lands (density below 0.25) by constituting Village Forest Committees (VFCs) and sharing of forest
- 4. Produce on JFPM orders envisage the formation of VFCs;
 - Around forests predominantly inhabited by tribal people
 - People in the vicinity of forest areas where traditionally their livelihood depended on forest resources
- 5. 1998 GoK ordered participatory management in protected areas by constituting Eco-Development Committees (EDCs) in place of VFCs
- 1998 GoK gave a legal status to VFCs by an amending Section 31 of Karnataka Forest Act 1963

Background to the Community Participation in Karnataka Contd..

2002 GoK brought out a comprehensive JFPM Order enhancing the share of forest resources to VFCs and also provided for increased

Forest Produce	VFC	Goyt
NTFP	90%	10%
Forest produce from plantations created prior to VFC formation (Excluding Teak Plantations)	50%	50%
Forest produce from natural growth prior to VFC formation (Excluding valuable species; Sandal wood, Pterocarpus, Teak, Terminalia and Lagerstroemia)	50%	50%
Forest produce from the assets created after VFC formation	75%	25%

- JBIC assisted KSFMBC project envisages formation of SHGs under VFCs / EDCs aiming at
 - · providing alternate sources of income through IGA.
 - enhancing household economy of forest resource dependent people
 - enhancing participation of women and other weaker sections in decision- making

KSFMBC Project at a Glance 1 Title Karnataka Sustainable Forest Management & Biodiversity Conservation (KSFMBC) Project To bring about ecological restoration and facilitate livelihood improvement through JFPM and to achieve bio-diversity conservation. 2 Project Objective 3 Project Area All 30 districts of Karnataka 4 Project Period 10 years (2005-06 to 2014-15) 5 Project Outlay Rs. 745.000 crore 6 JBIC Component Rs. 613.266 crore (82.317%) (14,718 Million Yens) 7 State Share Rs. 131.734 crore (17.683%) (3,162 Million Yens) 8 Afforestation Target 1,85,000 ha. Ach. 1,87,085 ha. 9 VFCs & EDCs Target 1,200 & 73 Nos. Ach. 1,222 & 73 Nos.

Achievements under the project

- · Implemented in all 30 Districts
- Sharing pattern clearly defined
- Empowerment to VFCs and EDCs
- Enhanced women participation
- Formation of Eco Development Committees (EDCs) for Biodiversity Conservation in protected areas

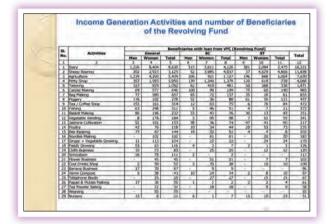
Achievements under the project Contd...

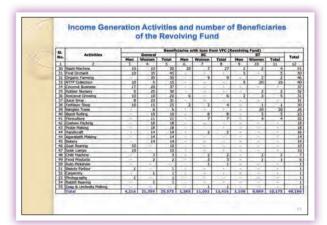
- Integrated Management Plans
- · Bio mass sharing
- · Self Help Groups (SHGs)
- Revolving Fund (micro finance)
- Convergence from Banks/NABARD
- Income Generation Activities
- Capacity building
- Exposure trips
- Skill Up gradation Trainings
- VFDF / VDF

Resource Generation and Benefits

- Creating Revolving Fund
- for Income Generation Activities
- Funds to the VFCs by sharing forest proceeds
- Other Benefits to the communities during project implementation

Revolving Fund (Rs. in lakha)							
SI. No.	Name of the Circle	Total No. of VFC	Total Amount provided to VFCs	Interest accrued so far			
ì	2	3	4	5			
1	Bangalore	82	62.646	28.529			
2	Belgaum	119	136.142	30.905			
3	Bellary	120	166.339	35.959			
-4	Chamarajanagar	36	43.565	11.495			
5	Chikkamagaluru	63	78.200	23.096			
6	Dharwad	94	81.750	21.739			
7	Gulbarga	82	111.754	31.017			
8	Hassan	90	88,000	14,370			
9	Mysore	80	80,256	18.139			
10	Shimoga	102	124,150	48,428			
11	Kodagu	39	16,726	12,483			
12	Kanara	241	184,216	46.322			
13	Mangalore	74	60,811	8,617			
	Total	1,222	1,234.555	331.099			





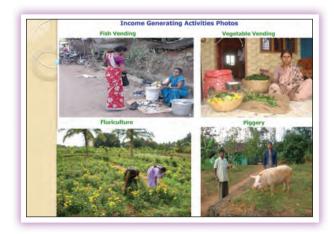










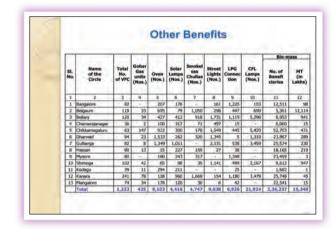






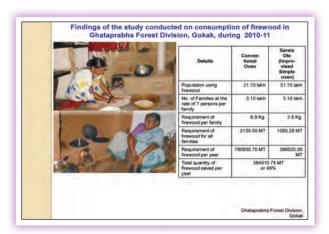


							(Rs. In
		Total Proceeds realized		Govt. Share & Taxes		VFDF Share	VDF Share
SI. No.	Circle	through Auction sale	Amount	Taxes	Govt. Order		
1	Bangalore.	76.348	35.779	9.419	45.822	22,141	21.40
2	Belgaum	101.813	50,609	0.006	130.945	25,794	99.37
3	Bellary		-		14.884	5,118	9.76
4.	Canara	2,876.203	1,445,449	2.043	1,622,614	813,851	821.25
5	Chamarajanagar	3.097	0.310	36.1	2.787	1,394	1.39
5	Chikkmagalur	53.895	32,996		20.899	9,550	9.54
7	Dharwad	14.260	13,075	4.014	7,444	7.787	15.09
В	Guibarga	7,404	0.597	1.433	5.374	2,687	2.68
9	Hassan	129.488	68,186	0,502	50.800	29,916	29.88
10	Kodagu	22,233	6.651	8.931	6.651	3,325	3.32
11	Mangaiore	148,912	98,573	16.851	143.313	70,401	71.78
12	Mysore	150,713	40.087	19.474	37.303	40,497	45,014
13	Shimoga	65,734	147.905	-	39.128	64.334	64.06
1	Total	3,650,100	1,940,217	62.673	2.137.962	1.096.793	1,194.54









			Encroachments				Illicit	Felling
SI. No.	Circle	VFC	evicted area (Ha.)	SI. No.	Circle	VFC	FOC During 05-06 (Nos.)	FOC During 12-13 (Nos.)
1	Bangalore	66	-	1	Bangalore	66	103	-
2	Belgaum	83	12	2	Belgaum	83	3	×
3	Bellary	68	496	3	Bellary	68	93	150
4	Chamarajanagar	18.	1 21	4	Chamarajanagar		6	×.
5	Chikkamagaluru	63	181	5	Chikkamagaluru	63	3	. 5
6	Dharwad	50	83	6	Dharwad	50	54	45
7	Gulbarga	72	1,870	7	Gulbarga	72	29	16
8	Hassan	87	.81	8	Hassan	87	- 5	3
9	Mysore	80	- X	9	Mysore	80	35	38
10	Shimoga	92	200	10	Shimoga	92	337	157
11	Kodagu	1.0		11	Kodagu	-	195	59
12	Kanara-	100	V	12	Kanara	12	100	57
13	Mangalore	- 91		13	Mangalore.	100	114	64
	Total	661	2,842		Total	661	1,077	596

			Fire Inc	idences				Poaching	
SL No.	Circle	VFC	During 05-06 (Nos.)	During 12-13 (Nos.)	SI. No.	Circle	VFC	During 05-06 (Nos.)	During 12-13 (Nos.)
1	Bangalore	66	62	4	1	Bangalore	66	27	
2	Belgaum	83	28		2	Belgaum	83		
3	Bellary	68	45	54	3	Bellary	68	-2	-
4	Chamarajanagar	18	6	18.1	4	Chamarajanagar	100	15	
5	Chikkamagaluru	63	178	22	5	Chikkamagaluru	63	5.	
6	Dharwad	50	28	4	6	Dharwad	50	J-60	100
7	Gulbarga	72	2	~	7	Gulbarga	72	-	-
В	Hassan	87	- 6	- N.	8	Hassan	87	\sim	22
9	Mysore	80	41	8	9	Mysore	80	-13	5
10	Shimoga	92	27	6	10	Shimoga	92	. 6	6
11	Kodagu		150	50	11	Kodagu	\sim	15	6
12	Kanara	18.	16	15	12	Kanara	-	0.00	2
13	Mangalore	×	2	197	13	Mangalore	8	1.2	13
	Total	661	589	163		Total	661	78	41

Challenges

- 1. Sustenance of VFC institutions after project period
- 2. Integration of other line departments
- 3. Linking Financial institutions with VFC/SHGs
- 4. Value addition & Linking market support for IGA products
- 5. Lack of infrastructure and resources for VFC
- 6. Lack of sufficient resources for EDCs
- 7. Forestry activities requires long gestation period
- 8. Inadequate revolving fund

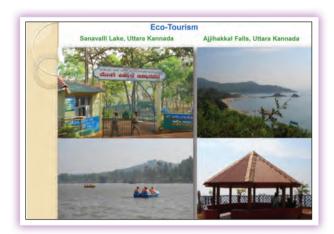
Bottlenecks / Issues

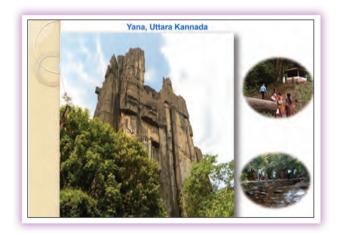
- · Multiple institutions at the village level
- Heterogeneity
- Politicization of the village institutions
- Lack of resources
- Lack of infrastructure
- Multiple programmes
- Lack of awareness due to illiteracy

Innovations tried out

- Eco-tourism in potential areas for income generation
- Introduction of energy saving devices for drying agriculture produce
- Encouraging community owned cottage industry

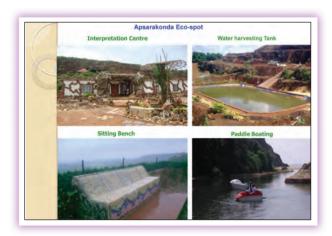


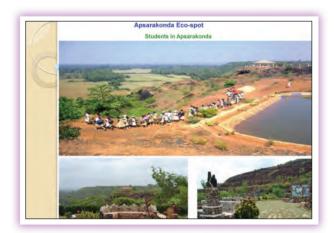


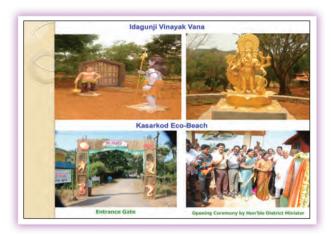


















Lessons learnt

- JFPM approach towards regeneration / restocking of forests is an effective strategy of forest conservation in specific locations and the approach can not be generalized
- Naturals landscapes having potential for generates good income to the VFCs as an IGA
- 3 Substantial funds should be made available to the EDCs in Protected Areas for IGA, as other sources are limited
- 4 In addition to forestry activities, JFPM has to be augmented by promoting IGA / micro credit /other institutional support and convergence
- 5 Energy saving devices needs to be promoted in order to reduce consumption of fire wood
- SMC activity is effective eco-restoration intervention and facilitates better cropping pattern and productivity

Key Suggestions & Way Forward

- 1. Structured sharing of forest resources with the
- community Sufficient corpus fund at the disposal of VFC
- 3. Exposure visit to VFC members for capacity building
- Cross learning workshops
- Providing marketing support to NTFPs
 Federation of VFCs for sharing knowledge and expertise
- Developing infrastructure to support marketing of VFC products

Thank you







Project strategies



- Restoration of degraded forests with active participation of the people following the joint forest management approach.
- · Raising coastal plantations.
- · Biodiversity Management.
- Community/ tribal development through own initiative and convergence of development schemes.
- Enhancing capacity of participating communities and the members of the Project Management Unit (PMU) and other staff engaged in the project.
- Achieving larger goal of supporting the livelihoods through alternative Income Generation Activities in SHG mode.

IGA Approach	Focus
Revolving Funds at Village level	Community managed microfinance
Augmenting income of forest-dependent marginalized communities	Economic Inclusion/Empowerment
Handholding, Capacity Building , Value Chain Approach & Market Support	Integration/Skill improvement/sustainability
Focus on Forest dependent, Poor & Women SHG	Social Inclusion/gender mainstreaming
Linked to EPA & ANR; & Convergence	Internalization
Enabling demand-driven & informed choices	Market & Information
Cluster/ Producer Company, Formalization (PAN, TIN etc.) Institutionalized Linkage	Institutionalization /Sustainability



	Supply Side	Demand Side	
Value Chain Development	Economy of scale, value addition (sorting, grading, drying, storing, form-change, packaging, branding) quality control, legal compliance	Institutionalized and higher long-term Market Linkage,	
Establishment of Cluster based microenterprise	Selection of Commodity, SHG and area, formation of cluster, Handholding & BDS support; Cluster infrastructure Development	Registration of cluster and legal compliances (PAN, TIN etc.) Institutionalized convergence & finance	

Evolving and Flexible Approachica

- · Higher Coverage (7358 SHG in comparison to plan of 4500; also cluster) in response to situation and demand
- Market Research- 20 commodities
- IGASA support for > 3 years
- · Additional Revolving Fund and Village Forest Development Fund
- Cluster Infrastructure
- · Linkage/Convergence with Govt/Corporate
- · IGA Innovation and Institution Fund
- · Higher level Institutionalization: FPOs

-01600	IGA S	Support ur	nder OFSL	DP jica
		pported in 2424 I @ ₹ 2 -2.5 La	4 VSS's/ EDC's khs per VSS.	, with
			69 Crore was le contribution o	
₹70	.56 Crore re	covery of loan is evolved by SH0 ated is ₹1.41 Cr		ut of total of
No. c SHG linke	loans	Amount of Loan disbursed	Loan recovery towards principal	Amount of interest generated
7358	24042	7056.93	3885.97	141.23

ilca)



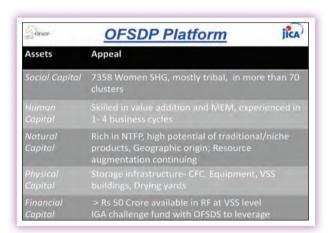
Cluster IGA Snapshot • 70 Clusters (with at least one business cycle) with 11,733 members from 1080 SHGs (468 VSS) 16 types of commodities • 75% of the clusters are around NTFP; Tamarind -20 clusters, siali leaf - 14 and Mahua - 9, Sal leaf - 8 and hill broom - 6 *Total amount invested Rs 40.58 million (RF support RS 28.31 million) • Profit reported Rs 10.18 million (25% return over investment)

13	Honey	1	3	4	40	25,200	25,200
12	Cashew	2	- 11	21	228	18,51,150	13,95,000
n	Groundnut seed	1	4	7	80	2,35,000	2,35,000
10	Ginger seed	11	5	13	133	4,80,500	3,50,000
9	Onion	3	15	39	275	11,50,750	10,75,000
8	Maize	4	27	53	619	92,22,000	45,60,000
7	Agarbati	4	23	51	611	5,75,775	5,44,000
6	Turmeric	5	36	103	1149	22,17,200	17,59,450
5	Hillbroom	5	33	61	703	11,62,000	10,26,000
4	Sal leaf	7	44	139	1515	9,75,760	9,04,300
3	Mahua	8	67	168	1758	89,95,800	78,18,000
2	Siali	12	103	223	2356	80,16,819	68,26,385
1	Tamarind	17	97	198	2266	53,78,500	54,90,000
SI. No.	Product Name	Clusters	VSS involved	SHCs involved	Members involved	Total investment (In Rs)	RF support (Rs)

Product	No of Business Cycles	Total Investment (Rs in lakhs)	RF support (Rs in lakhs)	Profit reported in (Rs in lakhs)	ROI (%)
Tamazinii	32	77.29	75.03	24.49	31.7
But	22	35.82	33.11	6.92	19.3
Matou	18	47.01	28.40	6.22	13.2
Sal leaf	13	40.69	24.73	8.42	20.7
100 kewany	11	20.64	17.66	3.64	17.6
Turmeric	10	68.39	28.23	4.14	6
Agarbati		10.08	19.66	2.31	22.9
Maize	5	67.84	24.65	28.59	42.1
Cashew	3	11.03	7.55	1.15	10,4
Onion	3	11.62	10.30	3.12	26.8
Ginger	1	8.41	7.00	5.20	61.8



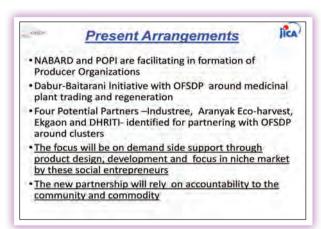












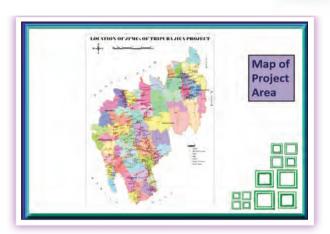
DABUR- BAIT	ARANI Initiatives
Snaps	hot: Trend
Year 15-16	Year16-17
6 Divisions; 20 Forest Ranges	8 Divisions; 22 Forest Ranges
26 Nodal Village: 170 Product collection village	31 Nodal Village: 300 Product collection village
15 Aggregators (12 SHG + 3 Clusters); 690 members (521 ST& SC)	19 Aggregators (15 SHG + 4 Clusters); 815 members (624 ST & SC)
Processed Product: 45 MT Raw material handled: 160MT (About 2 Million INR)	Processed Product : 80 MT Raw material handled: 250MT (About 3 Million INR)

Livelihood resource centre in OFSDP-I

- Under OFSDP II, LRC is proposed to be established as a dedicated unit for the promotion of cluster level business activity
- Will be responsible for managing different types of fund earmarked for clusters and development of Business plan
- LRC to take up the responsibility of Financial linkage, R&D, product development, capacity development and most importantly Marketing
- Is proposed to be a self sustaining unit in due course







Project Overview - General

- Project is called' Tripura Forest Environment Improvement and Poverty Alleviation Project'.
- It is a Society under the Registration of Societies Act 1860
- Project Period: 2007-08 to 2016-17 (10 years)
- Project Area: 7 Districts: West, Khowal, Sepahijala, Gumti, South, Unokoti and North (Partially)
- Target villages/hamlets=456 (400 JFMCs + 40 EDCs + 16 Re-grouped villages). Formed 463 JFMCs/EDCs
- Most of the target villages are ADC villages (about 90%)
- Total budget: JPY 9.2 billion (Rs. 360 crores a (Exchange rate is 1 INR=2.52 JPY)

Objectives of the Project



- To improve forest density,
- To improve income and livelihood options of target households,
- To conserve soil and improve water regime,
- To conserve biodiversity.

Agro-forestry-Implementation Strategy

- . The Project has a target of 8297 Ha
- The Plantations are taken up in clusters in RoFR lands by making them into Joint Liability Groups (JLG)
- · 9 (Nine) agro-forestry models were made.
- Unit Cost: Rs 52,000 to 56,000/-per Ha. Of this Rs 22,000/-is met from JICA and the rest comes from MGNREGA through fund convergence.
- Workshops organized involving Panchayat, TTAADC, Blocks, Agriculture and Horticulture Departments.
- Till 2016-17 Project achieved 8753.64 ha



Model	MAIN CROP	INTER CROS	COST PER MA (IN NA.)
Model-1	Jackfruit, Bamboo	Maize, Pineapple	49,000
Model-2	Lemon, Gamar	Pigeon pea, Ginger	52,000
Model-3	Areca nut, Bamboo	Sesame, Maize, Black pepper	50,000
Model-4	Litchi, Lemon, Acacia	Maize, Turmeric	49,000
Model-5	Jackfruit, Teak	Maize, Ginger	51,000
Model-6	Mango, Bamboo	Maize, Pineapple	51,000
Model-7	Areca nut, Agar	Turmeric, Black pepper	53,000
Model-8	Banana, Acacia	Turmeric	52,000
Model-9	Orange, Acacia	Papaya, Turmeric	52,000







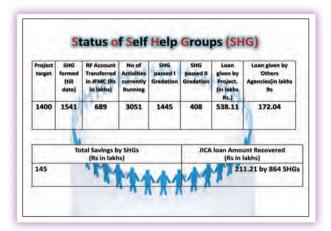




Fingerlings distribution in Collaboration with Fisheries Department

*In order to encourage fishery in the JFMC check-dam and to inculcate scientific fish farming the Project in coordination with Fishery Dept. has conducted joint survey of the check dam for their suitability for fish farming. Total 626.14 Ha of water area have been identified in various JFMCs and the Project is giving fingerlings and basic feed. This initiative has evoked tremendous respect among the JFMCs/SHGs

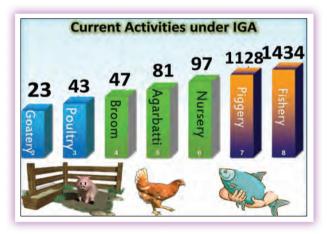


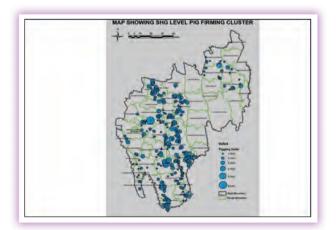


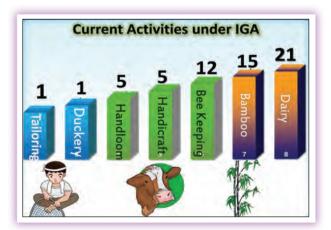
Sustainability of SHGs



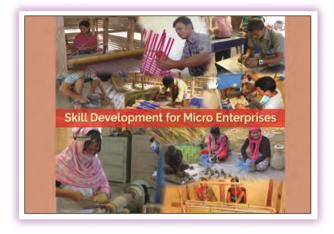
- SHGs are taking up second, third and subsequent cycles of activities for IGA- a sign of sustainability.
- SHGs are getting loans from other sources such as commercial banks- another sign for sustainability
- Linking up of women SHGs with NERLP and NRLM











Skill Development and Artisans in the Project •Project developed 800 artisans bamboo furniture, bamboo basketry, bamboo jewelry, bamboo-turning, bamboo mat products, broom, making, bamboo root carving, Handloom Embroidery. •Opened seven outlets- at Heritage Park, PMU Building, Baramura Eco-Park, Nehru Park, Tepania Eco-park, City Centre & Matabari for sale products.





















Broom grass initiative in 2015-16 season

Harvesting of Broom Grass:

- 771 MT of grass worth 4.2 crores was collected.
- 4500 families directly benefited from harvesting of grass
- Approximately Rs 12.00 lakhs has been collected as Forest Revenue.
- Rs 20.00 lakhs has been collected as Revolving fund in various JFMC

Value Addition:

- 200 MT was collected for value addition in 12 Ranges
- Approximately 8 lakhs brooms will be made in 22 mini-CCFC.
- The value addition of grass will generate employment for 6months for nearly 1000 families
- Additional revenue to the Government from value addition.
- Marketing is being done through tender, retail through Crafts & more outlets,. On-line marketing is also being explored.









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Bamboo Treatment Plant

- For manufacturing any bamboo handicrafts, treatment of bamboo is essential.
- The Project has set up a bamboo treatment plant at Subalsing Cluster complex.
- The plant was inaugurated by Hon'ble Minister, Forests on 15th April, 2016.
- The plant will not only supply the treated bamboo to the mini-CCFCs, but also will be able to sell treated bamboo to private entrepreneurs of the state on payment basis



Convergence

- 58 nos. of MUCs were constructed in convergence with the Anganwadi and Project funds
- Raised 7304 Ha. of Agro-forestry in convergence with Rs.1700 lakh from MGNREGA fund
- . Rs. 275 lakhs came from MGNREGA for construction of check dams
- The State Govt. has released additional Revolving Fund (RF) of Rs. 231 lakhs for implementation of micro enterprises of Self-Help Groups (SHGs).
- Other banks extended 209 loans involving 141 lakhs
- In the current year Project is the constructing toilet blocks, animal sheds, over-head water tanks, improvement oaf nurseries etc. with MGNREGA funds under Kathalia & Mohanbhog blocks
- Skill development trainings are being conducted in collaboration with various Line Depts. such as Fishery, ARDD, TBM, KVK, ICAR etc



Introduction of Terracotta

- The Master trainers were brought from Silparamam of Telengana State and the art form is from "Madanapally" Chittoor District, Andhra Pradesh.
- 'terracotta products' manufactured by artisans from Khowai and South districts.































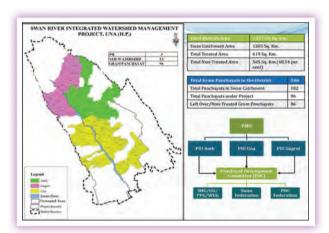








Name of the Project	Swan River (IWM) Project
Donor Agency	Japan International Cooperation Agency.
Nodal Agency	Himachal Pradesh Forest Department
Implementation Period	10 years (w.e.f. 1/4/06 to 31/3/2016) extended up to March, 2017
Date of signing of agreement	31/3/2006
Type of Assistance	Credit
Credit No:	IDP-172
Project Cost	227.20 Crore
JICA Share	Rs. 193.70 Crore (85 %)
Share of HP Government	Rs. 33.50 Crore (15 %)
Project Area	22 out of total 42 SWS in Swan Catchment, Area: 619 Sq. Km out of total 1204 Sq. Km area of Swan Catchment (includes RF, DPF & UPF falling in the Catchment)
Gram Panchayats Covered	96 Out of 246 Panchayats of Una District of H.P.



Project Objectives

- · Afforestation and Regeneration of Forests
- Soil and Water Conservation
- Enhancement of Agricultural and Forestry Production
- Soil Protection and Land Reclamation of Private Land
- To Improve Livelihood and Economic Conditions of the Local People

Project Goal

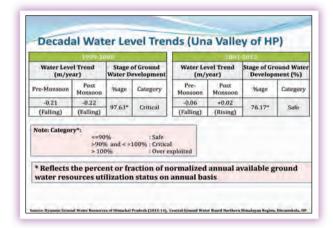
Reduction in poverty of local people in the region through Sustainable Development of Natural Resources (land, water, energy, vegetation and livestock) by the communities in the Project area.

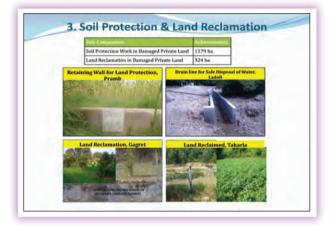






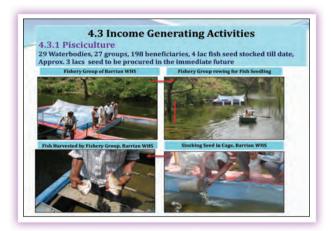






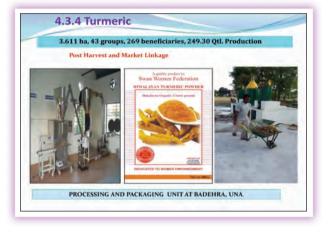






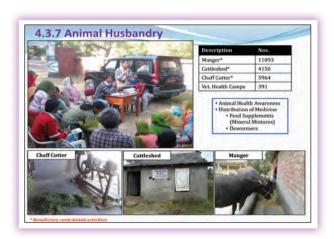














5. Institutional Building MISSION FEDRATING WOMEN SELF HELP GROUPS то ENHANCE THEIR ECONOMIC STATUS

AND

TRANSFORMING THEM TO BUILD

HEALTHY SOCIETY (MANDATE OF PROJECT TO PROMOTE WOMEN PARTICIPATION MOD 23(B)(G)

VISION

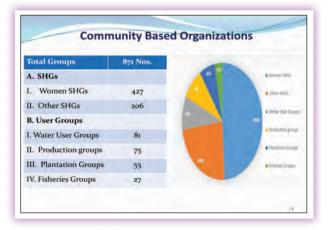
WOMEN EMPOWERMENT

STRATEGY

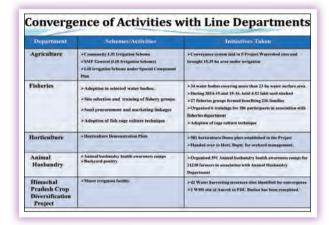
- Formation of Self Help Groups (5 to 7 in each PDCs)
- Formation of Clusters of SHG (5 to 6 PDCs)
- Federating the Clusters (10 Clusters) Registration of Swan Women Federation at District Level
- Identify potential activities

 - Nutritional kitchen garden programmes Homestead Horticulture like Mangos, Guava, Kinow etc. Production of Turmeric, Ginger, Kharief onion, Garlic
- Pisciculture
 And establish market linkages
- Promoting income generation activities through Microfinance and Revolving fund.
- Turmeric and Pisciculture as Flagship Programmes













Institutional Mechanism for Project Sustainability

Objectives

- To put a system in place in such a way that the efforts gone through the project interventions and the benefit of such interventions are sustained, and
- To establish revised institutional arrangement with changed roles and responsibilities at various levels.

This system should be in a position to address the following broad concerns:

Main Concerns - Sustainability of :

- Institutions established and their linkages with departments/organizations.
- Infrastructures created and their use with mechanisms of maintenance/protection etc.
- Processes for continued impacts on the livelihood activities.

Strategies	Processes	Action Taken by Implementing Agency
Handing over Project Created Assets	members by PIU	Prepared PDC-wise inventory of Assets of 96 pp. PDC. PML level workshops / meetings organized with DDS & ADs. Formats/MOUs for hand over have been prepared and finalized PIU level workshop/ meeting organized with PDC Pardhan, members and frontine staff Handing over process already completed
Operation and maintenance of physical structures	Physical Structures constructed with community participation	Prepared Operation and Maintenance Guidelines in Hindi PMU level workshops organized
Sustainable utilization of the Panchayat Development and maintenance fund (PDMF)	Collection of membership fee, beneficiary contribution through project interventions, laterest from bank savings and microrredit 409% of the savings from main bank A/c allocated, for maintenance of forest and community infrastructure	Guidelines for PDMF utilization prepared PMII level workshops / meetings organized {2 No. 45 participants; } PBC: level workshops in progress Totaf PDMF generated in 96 PDCs: Ra 81.91.020

Strategies	Processes	Action Taken by Implementing Agency
Utilization of the revolving fund (RF)	Micro- credit provided to PDCs and utilized by UGs / SHGs for production and IGA activities Maximum allocation of Rs. 30,000/- for each UG/SHG under formal agreement	mechanism of revolving fund PMU level workshops organized PMU level workshop / meeting
Convergence with the line departments	Possible areas of convergence identified in collaboration with line department Site selection in consultation with line department	
Functioning of the institutional setup	PDC, UG and SHGs formed Awareness creation amongst communities for new roles & responsibilities is in progress Process of federating of SHGs started	Total Groups: 871 including 427 SHG of Swan Winnen Federation, 2: Fisheries groups, 81 Water User groups 75 Production groups & 55 Plantation protection groups formed PDC level training programme.

End Term Evaluation

Objectives:

The primary parameters and principles for end-term evaluation impact assessment were-(i) Relevance (ii) Effectiveness (iii) Efficiency (iv) Impact and (v) Sustainability of the Project:

- Economic impact at farm and sampled household level.
- Project level expected present and projected economic impacts.
- Sustainability (how the project will ensure for the continuation of JICA project activities after the Loan Closure)
- Operation and maintenance of the assets created under the project.
- Way Forward (Implementable action plan to be proposed by the expert group for future activities to be undertaken by the communities).

- Review of documents, study approach, study design, extensive field visit including field data collection.
- Economic and Social Impact Evaluation study is based on the analysis and synthesis of primary and secondary data and information collected from various sources.
- HH sample Size 120 Nos.
- Identified 8 PDCs from 3 PIUs in the form of Una: AMB: Gagret in 2:1:1 proportion according to the coverage of PDCS in these PIUs. Interviewed 15 HH in each of the PDC.

Impacts on Rural HHs

Comparison of Household Income between before and after the project

Before	After	% change
Av. Annual income per HH (In Rs.)	Av. Annual Income per HH (In Rs.)	
25151	54850	54.14%

Overall Project Impact Evaluation :- Key Project **Developmental Indicators achieved**

- Vegetative cover provided : 8871 ha (with herbage coverage 70-85 percent)

1.93 mil Min one filling

> Supplemented irrigated area : 227 ha

:0.3 mil M) > Silt arrested

Reduced sediment yield from 44% to 78%.

> Recurrence of inundations and floods decreased

and water development improved from critical (97.63%) to safe zone (76.17%)

- Land protected and reclaimed : 1503 ha

> Developed community based organization and then federated women groups at Project level

Recommendations

1) Afforestation Component

- Further plantation of lemon grass should be under taken as fencing, since it works like protection to community property from wild animals
 Continuity should be maintained for further plantation activities.

(2) Civil Works for Soil and Watershed Management Component

- Left out 20 Sub-watersheds covering an area of 585 sq.km, comprising 86 Gram Panchayats, should be undertaken.
- . O&M aspect should be understood by PDC as their responsibility and commercialization orientation might lead to future sustenance.

(3) Soil Protection and Land Reclamation Component - extending to phase II will help harnessing holistic objectives



(4) Livelihood Improvement Component

- The off late initiative on livelihoods intervention currently a positive move, needs further effort to spread over to give a commercial approach. Also, this might create to review value chain and possible modification to it.
- While raw material processing has been demonstrated in case of turmeric, this has to spread further.
- Initiative needs for collection of milk at community level towards milk federation. Already developed SHG federation may be the platform.
- To make the milk federation commercially viable, animal husbandry activities by the participating families need to enhance quantum of milk production.

(5) Institutional Building: Taking further to the initiative of federation, further expansion in other areas of the district is needed.

Web GIS/MIS System

Delineated and digitized

- Sub-Watersheds
- Drainage Network
- Contour
- Prepared Thematic Maps like Land Use
- Geo-database prepared and attribute data being added.
- WebGIS developed and is operational
- www.agisac.gov.in/swangis

Centre of Learning

Project has proven as learning hub for various aspects of Integrated Watershed Management. Following are the regular academic visitors:-

- > Forest Rangers trainees from Sundernagar College HP.
- > Forest Guard trainees from FTI, Sundernagar & FTI Chail HP.
- > B.Sc Students from University of Horticulture and Forestry, Solan
- > Frontline Staff from Mid-Himalaya, World Bank Project
- > Himachal Pradesh Crop Diversification Project, Hamirpur
- > Farmers from Hoshiarpur and Ferozepur District of Punjab.
- > Ministerial Delegation from Turkey also visited.









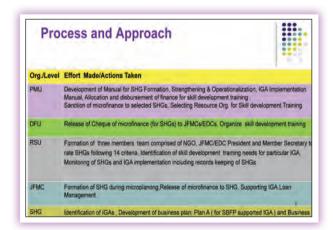
















- Rating of SHGs- A team of two members comprising of Member Secretary and an NGO representative rated the SHGs based on pre fixed criteria. SHGs that scored between 60-100 marks qualified.
- Review of Business Plans and Modification- Suitability and practicality of business plans and skill development reviewed.
- Approval of Business Plans- The final business plans prepared by SHGs were submitted for examination and approval by Member Secretary and President of JFMC/EDC and approval was accorded.

Identification of Skill development Training for IGAs-

Six major types of IGAs traditionally practiced by the SUCe has been selected.

- Nursery Raising and Plantation of Cardamon cardamom)
- Piggery
- Poultry
- Dairy Farming
- Handloom & Handicraft



Planning and Operationalizing Skill Development Training

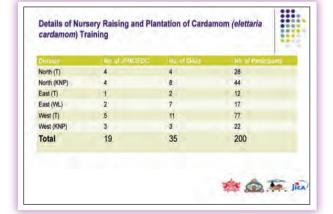
- Internal meeting and discussion held within the PMU and with PMC during first half of May 2016 to strategize skill development training programs and planning for its effectiveness.
- Resource persons from Rural Management and Development Department, Animal Husbandry, Livestock, Fisheries & Veterinary Services Department, Indian Cardamom Research Institute (Spices Board), Government of India selected and deouted
- Skill Development Training were organized by District Facilitation Units with support from Range Support Units, NGOs and Community Organizers in East, West, South and West districts on fixed date, time and venue.



Objectives of Skill Development Training

- Assess existing understanding, knowledge and skills of the participants in for selected IGAs.
- Provide class room orientation on the use of improved technology and tools.
- Impart hands on training through demonstration.
- To develop broader understanding of socio-economic importance of pig farming in the context of participating households.





Details				
Division	No. of JFMC/EDC	No. of SHGs	No. of Participants	
	Goatery			
East (WL)	3	10	31	
East (T)	3	4	25	
West (T)	1	1	4	
South (T)	2	3	12	
South (WL)	9	t	-11	
Total	10	19	83	
	Poultry			
East (WL)	2	9	21	
East (T)	2	3	19	
West (T)	7	9	84	ici
South (T)	5	9	61	DART P. HO

























Sub-Components 1. Training & Capacity Building of Project Implementing Officials, Field & Office Staffs and Other Stakeholders 2. Infrastructure development

Training & Capacity Building of Project Implementing Officials, Field & Office Staffs and Other Stakeholders





Training and Capacity Building

The capacity development programme under WBFBCP is designed to upgrade the knowledge and skills of different target groups in various aspects of forest and wildlife management, keeping the needs of project in mind.

Broadly, different orientation, exposure and training programmes, were planned and are being implemented for four categories of target groups – senior officers (CCF and above); middle and junior officers (DFO, ADFO & R.O); field staff (Foresters, Forest Guards & Contractual Project Staff) and Villagers (JFMC / TPOFA/SHG members).

Different training programmes were envisaged for each of these groups, employing the in-house training resources of the Project, the WBFD, the PMC as well as by employing outside institutions specializing in different subjects. Officers of different levels have received training from training institutes based both within and outside the state.



Type of training	Target Group	Topic / Purpose	Physical Target		Achievement (upro Dec. 2016)	
			No. of training	No. of Participants	No, of training	No. of Participants
Field Training on GPS / GIS	Junior Officers FRs, Dy Frs	Usage of GPS and GIS for boundary demarcation and Mapping	25	500	49	831
Other in- house training	Front Line Staff, Extn Workers, Beneficiary Groups (TPOFA)	Central Nursery Management, Society Accounting, Field Nursery (TPOFA) Bank Account Operation(TPOFA)			160	1868

How the Capacity Building helped in Forest. Management

Development of Central Nursery Management Practices & its subsequent Adaptation by the Forest Directorate

TPOFA (Tree Planting Outside Forest Area) through Beneficiary Groups who were trained in Nursery Techniques & Operation of Bank Accounts Training in GPS usage by Front Line Staff & Digitization of JFMC boundaries & its subsequent Adaptation by the Forest Directorate

Training of Manpower in Society mode Accounting at DMU, FMU & JFMC level & its subsequent Adaptation by the Forest Directorate, WBFDC, CAMPA, SFDA







Training of Manpower in Society mode Accounting

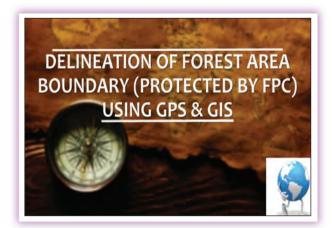
Identification of Trainers & Training of Trainers

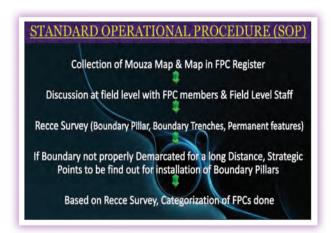
Repeated Hands on session

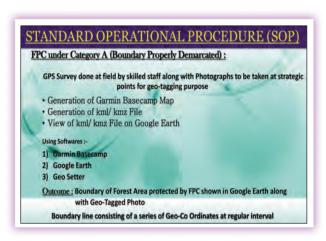
Doubt Clearing Session

Periodic Checking by Team from PMU

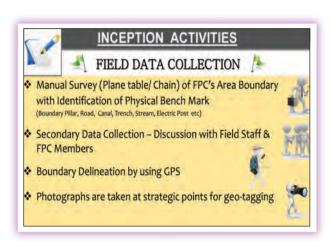
 Subsequent Adaptation by the Forest Directorate for West Bengal Forest Development Corporation Ltd. CAMPA, SFDA Accounting

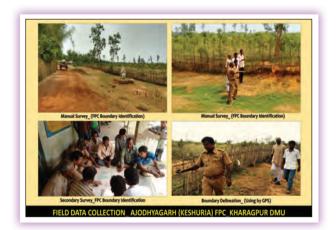














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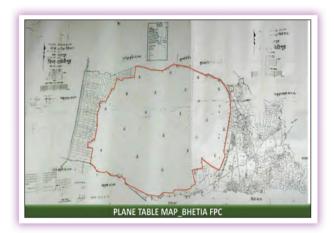
















BENEFITS

- Visualization of change in Forest Cover.
- Encroachment Issues.
- Inter FPC Boundary Demarcation.
- Location Identification for FPC Development Activities.
- Photo Geo-tagging
- Documentation of Forest Fire Prone area

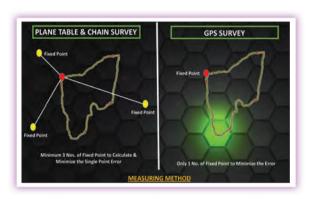


ROAD AHEAD

- GPS Map compared with Non-GPS Ground Map should be taken into consideration for map generation of FPC Protected Forest Area
- Non-GPS Ground Data may be updated with the help of GPS ordinates
- All the FPC Map should be updated by GPS Survey with assistance of the Working Plan
- Physical Survey for ground-truth verification (Usage of Boundary Pillar)
- FPC Registers may be digitized



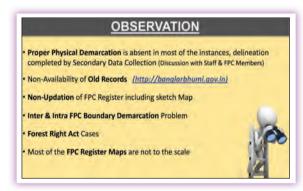


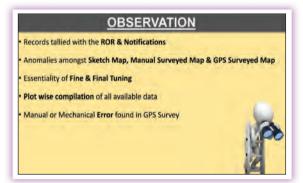






	FMU	FPC	SURVYED MAP (In Ha)	OPS MAP
1	нии	AJODHYAGARH (RANGAMATIA)	163.10	163.69
2		AJODHYAGARH (KESHURIA)	71.83	71.80
3		BRIKABHANUPUR	101.13	101.38
4		PASCHIM PATHRI	156.26	156.44
5		PORAPARA	114.53	114.11
6		BHETIA	238.23	238.77
7		LENGAMARA	173.39	173.21
8		JAMSOLE	218.54	218.00
9		GHRITAGRAM	273.40	274.00
10	BELDA	BINAI (NORTH)	89.05	89.10
11		JAMUNA	207.80	207.00
12		JHATAGERIA	145.69	146.00
13	KESHOREKHA	TELIA	75.60	75.98



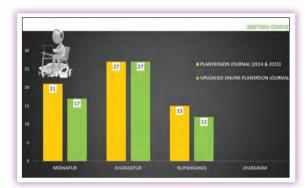






11 ANNEXURE

























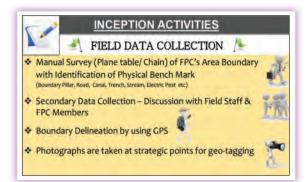


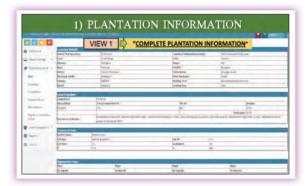








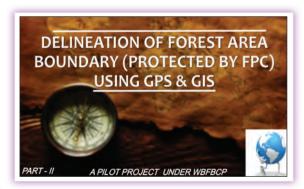






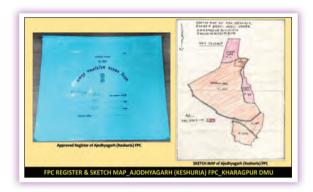






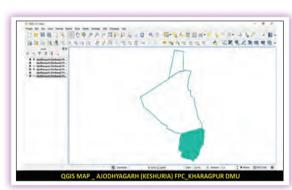


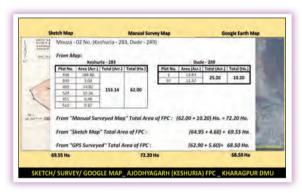




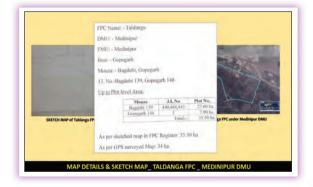










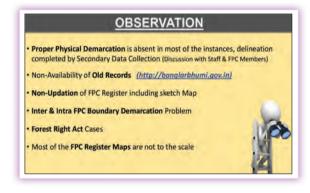




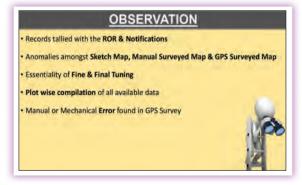














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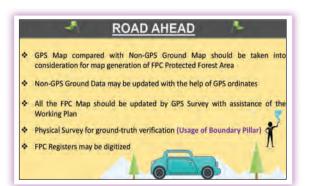






















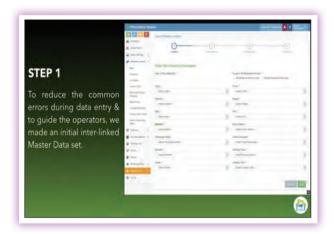






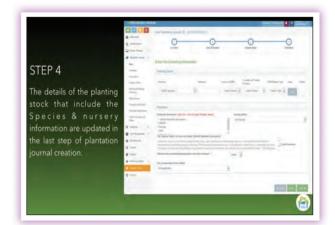








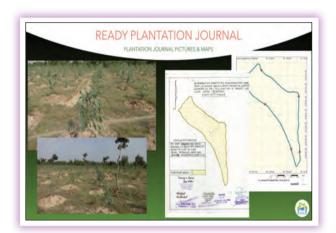












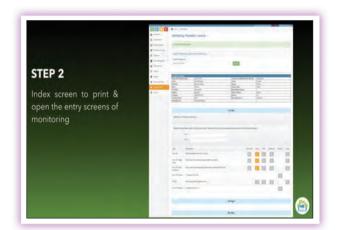


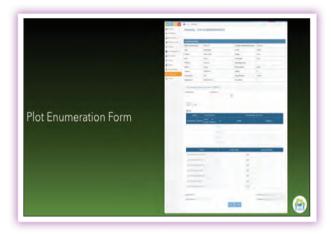


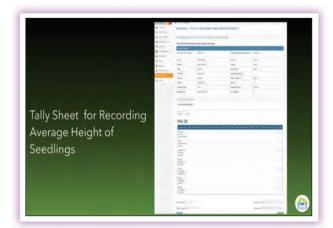








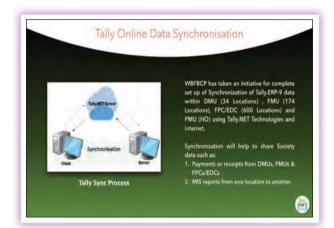




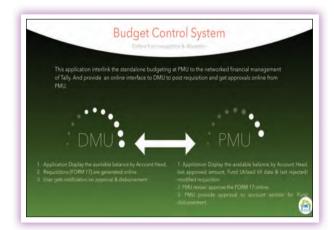


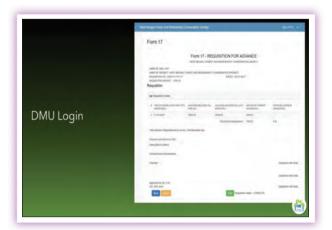


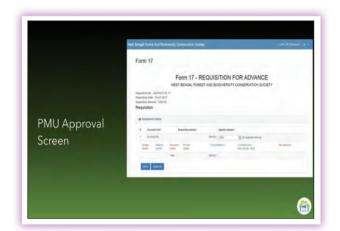
















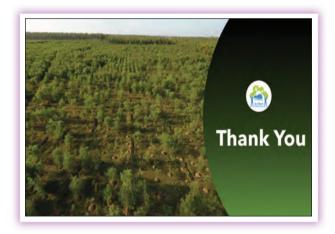






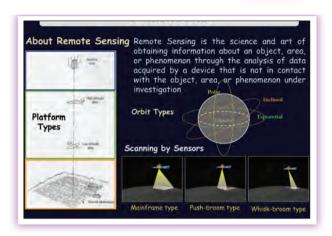


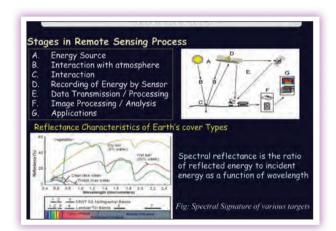




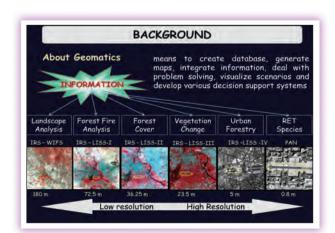


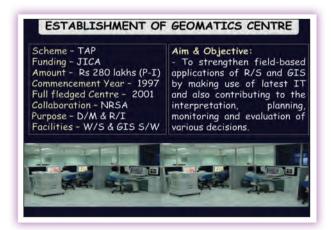








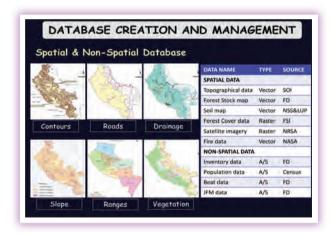


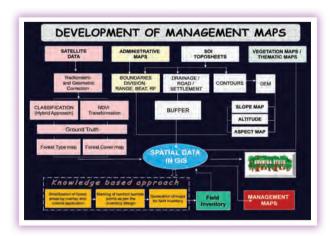


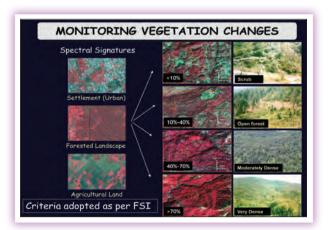


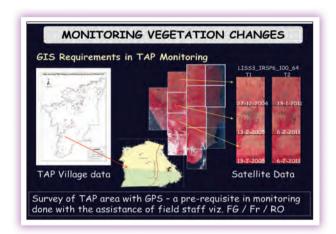


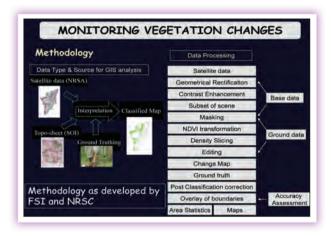


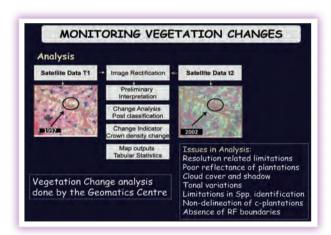


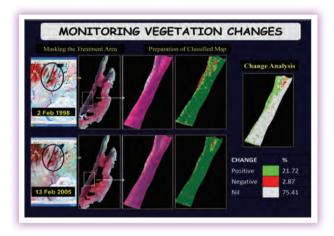


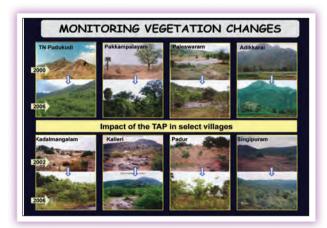




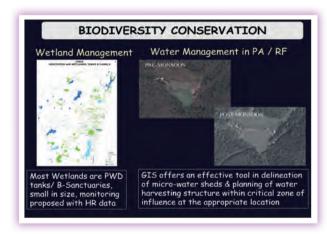


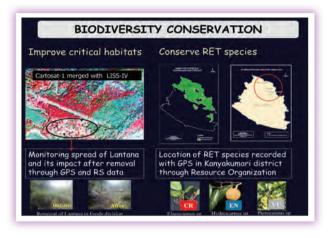


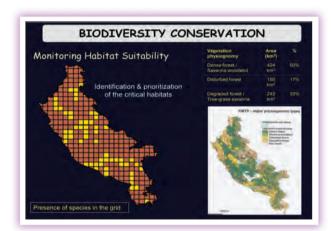


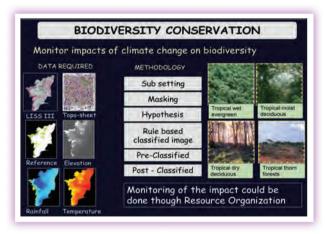


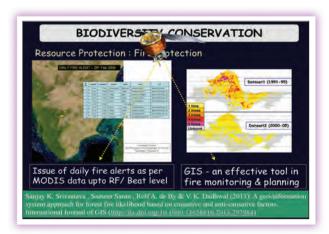


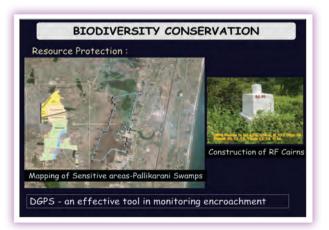


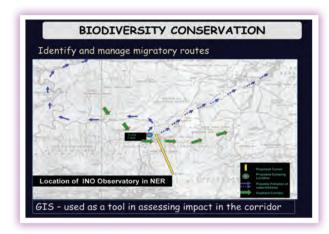


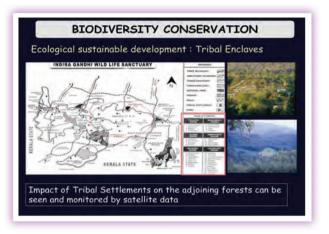


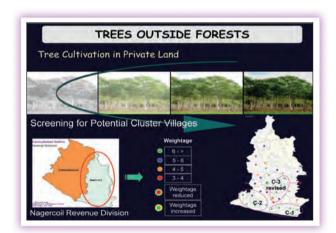




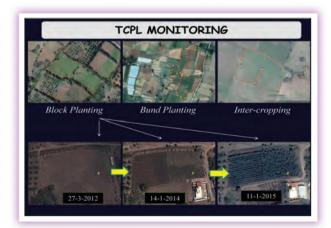


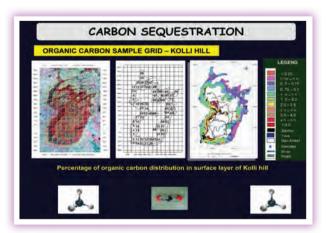


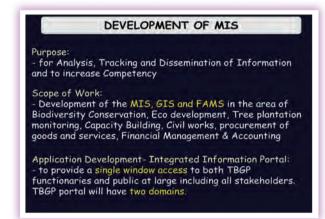


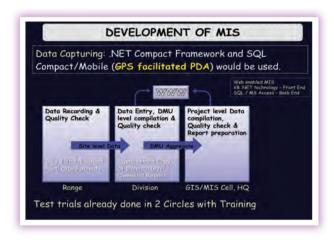




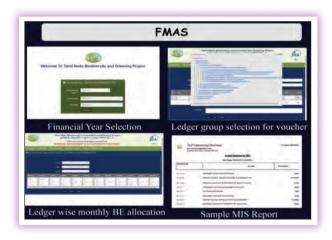


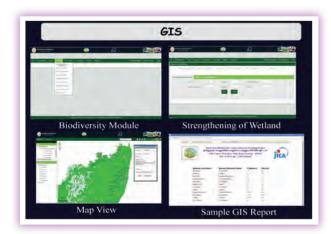


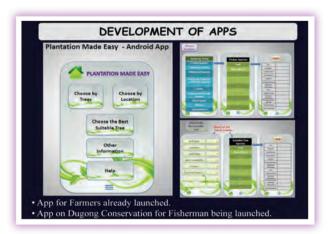


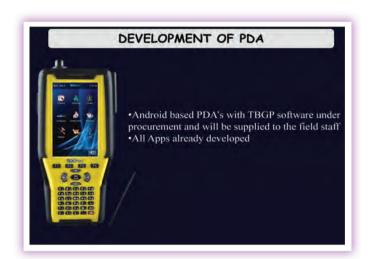


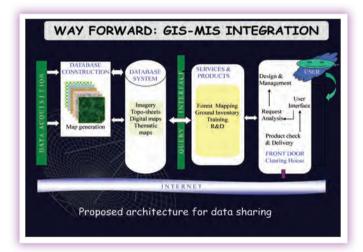


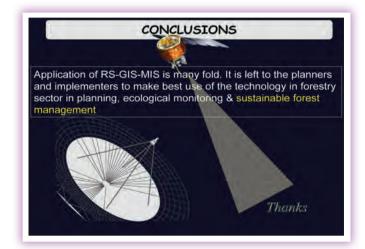








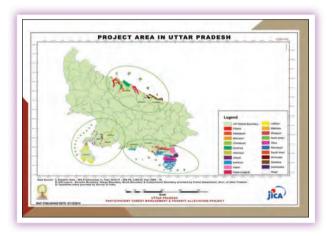






Geographical Area (km²)	Forest Cover (km²)	Increase of Forest Cover over the last report period (km²)	Tree Cover (km²)	Increase of Tree Cover over the last report period (km²)
2,40,928	14,461 (6.00%)	112	7,044 (2,93%)	149





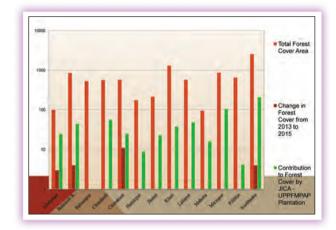
Vital Statistics of L	Ittar Pradesh Forest
Total Geographical Area	240928 km ²
Very Dense	2195 km ²
Mod, Dense	4060 km ²
Open	8206 km ²
Total	14461 km ²
Scrub	803 km ²
Reserve Forest Area	12071 km ²
Protected Forest Area	1157 km ²
Un-classsed Forest	3354 km ²
Total	16582 km ²
Of State Area	6.68%
Of India	2.17%

A 10	
	RS P5 Cartosat -1 image with 2.5 m resolution & IRS P6 esource-sat - 1&2 LISS IV image with 5.8 m resolution
	orest cover density mapping 10%- 80% at 10% density lass interval
♦ F	orest cover vegetation more elaborate than FSI
	oundary demarcation for Forest Division, Range, lock, Compartment and JFMC wise

District	Forest Division	Area of district (ha)	Area under Project (ha)
Pilibhit	Pilibhit	349820.10	73096.91
Lakhimpur	Dudhwa	768397.29	96874,04
	North Kheri		44014.99
	South Kheri		41017.49
Bahraich	Katarniaghat	489005.36	56036.21
	Bahraich		12137.03
Shrawasti	Shrawasti	198146.21	17082,31
Balrampur	Sohelwa	334383.57	68546,98
Hamirpur	Hamirpur	420781.02	24096,18
Jhansi	Jhansi	503014.93	32012.84
Allahabad	Allahabad	548040.63	20893,70
Mahoba	Mahoba	288128.09	14357,74
Chandauli	Kashi	255196.83	102086.85
Chitrakoot	Chitrakoot	308839.51	51521.32
	Kaimsor (Ranipur WL)		23940.74
Mirzapur	Kaimuor	442081.20	96943.25
	Mirzapur		98308.24
Lalitpur	Lalitpur	504681.88	70014.59
Sonthadre	Sonbhadra	691346.81	56950,95
	Renukoot		147817.89
	Obra		143999.75
	Kaimoor (Gurma Range)		25307/27
Grand Total		61,01,863.43	13,17,057.27

		Department ode Plant				IFMC Mod	se Plantati	oin		
	2010-11	2011-12	Sub Total	2011-12	2012-13	2013-14	2014-15	2015-16	Sub Total	Grand Total
1. Allahabad	0	100	100	395	810	755	444	. 99	2503	2603
2 Bahraich	600	600	1200	172	374	454	150	0	1150	2350
3 Katamiyaghat	200	200	400	70	140	128	180	0	498	898
4. Shravasti	650	650	1300	275	550	800	800	376	2801	4101
5. Sohelwa WL	650	650	1300	0	0	8	0	0	-8	1308
6. Kashi	600	550	1150	675	1380	1550	1550	450	5605	6755
7. Chitrakoot	700	700	1400	378	756	854	522	47	2557	3957
8. Hamirpur	700	700	1400	137	274	350	140	ō	901	2301
9. Jhansi	650	650	1300	542	780	400	400	200	2322	3622
10. North Kheri	600	600	1200	288	602	725	200	241	2054	3254
11. South Kheri	600	600	1200	274	578	600	200	100	1752	2952
12. Dudhwa WL	0	0	0	0	0	0	0	0	0	0
13 Lalitpur	700	700	1400	758	1351	1100	1250	350	4809	6209
14. Mahoba	500	500	1000	275	550	550	200	67	1642	2642
15 Kalmoor WL	250	250	500	86	142	295	120	200	843	1343
16 Mirzapur	.0	0	0	2073	2445	3500	1300	400	9719	9719
	800	600	1200	375	0	47	0	0	422	1622
18 Sonbhadra	650	850	1500	814	1662	1110	660	0	4246	5746
19 Obra	600	550	1150	826	1592	1465.22	995	0	4978 22	6128.22
20 Renuket	750	750	1500	1873	4078	3606.1	2100	30	11685.1	13185.1
			20,200			0.000		1	60.495.3	80,695.32

			Division Geog. Very under Area Dense	FSI 2015					% Change	Contributi	15 % Forest Cove	
SI. No.	Districts			Dense	Mod. Dense Forest	Open Forest	Total Forest Cover Area	% Geog. Area	Forest Cover 2013 to 2015	in Forest Cover	on to Forest Cover by UPPFMPAP	Area Covered by Plantation under UPPFMPAP
1	Aflahabad	1. Allahabad	5,137.00	0.00	27.00	72.00	99.00	1.93	3.00	3.03%	25.03	25.28%
2	8	Bahraich Kniaghat Shravasti	6,878.00	290.00	315.00	247.00	852.00	12.39	4.00	0.47%	44,49	5.22%
3	Balrampur	5. Sohelwa	2,981.00	224.00	188.00	118.00	530.00	17.78	1.00	0:19%	0.08	0.02%
4	Chandauli	6 Kashi	2,549.00	6.00	194.00	366,00	566.00	22,20	1.00	0.18%	56,05	9.90%
5	Chitrakoot	7. Chitrakoot	3,092.00	0.00	358.00	116.00	574.00	18.56	11.00	1.92%	25.57	4.45%
		6. Hamirpur	4,282.00	0.00	66.00	108.00	174.00	4.05	0.00	0.00%	9.01	5.18%
7	Uhansi	9. Jhansi	5,024.00	0.00	33.00	181.00	214.00	4.25	0.00	0.00%	23.22	10.85%
8	Kheri	10. N. Khen 11. S. Khen 12. Dudhwa	7,680.00	77.00	165.00	360.00	1,302,00	16.95	-9,00	-0.69%	38,06	2.92%
9	Lalitpur	13. Lalitpur	5,039,00	0.00	128.00	444.00	572.00	11.35	0.00	0.00%	48.09	8.41%
10	Mahoba	14 Mahoba	2,884.00	0.00	22.00	73.00	95.00	3.29	0.00	0.00%	15.42	17.28%
11	Mirzapur	15 Kalmoor 16 Mirzapur	4,521.00	0.00	323.00	544.00	887:00	19.18	0.00	0.00%	185.62	12.18%
		17. Pilibhit	3,499.00	419.00	79.00	155.00	653.00	18.66	-37:00	-5.67%	4.22	0.65%
		18 Sonbhadra 19. Obra 20. Renukol	6,788.00	45.00	870.00	1,629.0	2,544.00	37 48	4.00	0.16%	209.09	8.22%
		Total		1.061.0	2.768.0	4.413.0	9.042.0	188.09	(22.00)		604.95	



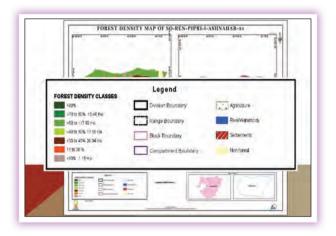
Summary of GIS works completed under the Project

- Division/Range/Compartment Boundaries completed for all 20 project divisions
- JFMC boundary completed for all 800 JFMCs
- Forest cover Density maps / Forest type maps prepared for all 20 divisions
- Forest Land Use maps completed for all 20 divisions for JFMC area
- ❖ JFMC micro plan maps completed for 800 villages
- Standing stock assessment completed for Dudhwa and Renukoot
- Enumeration data collection in progress by the 18 respective forest divisions

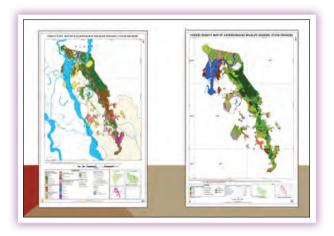
Other works accomplished by GIS lab for UPFD

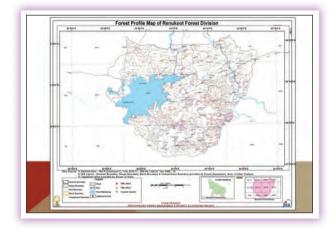
- Prepared Management Plan Map, Water recourse Map, Interpretation Center Map, Ecotourism sites maps of wild life divisions
- Produced Tiger trail Map for Pilibhit, Dudhwa, Kishanpur & Katarniaghat WLD
- Prepared Eco-Sensitive Zone mapping for entire U.P.
- · Produced Wetland Map for various forest divisions.
- Data Sharing Policy for GIS Lab- UPPFMPAP
- · GPS Field Manual
- GIS manual
- · Erdass Manual
- Capacity Building for departmental staff

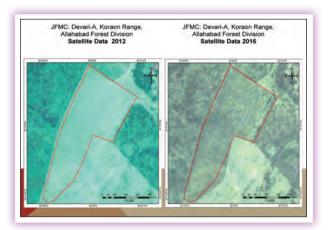
UPPFMPAP	Forest Survey of Indi
2.5m Resolution Multispectral image	23.5m Resolution Multispectral image
<10%	<10%
10-20%	10-40%
20-40%	***
40-50%	40-70%
50-70%	***
70-80%	>70%
>80%	***

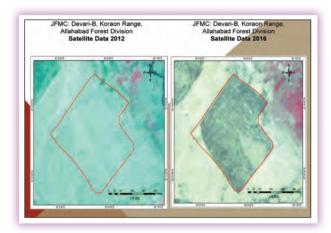




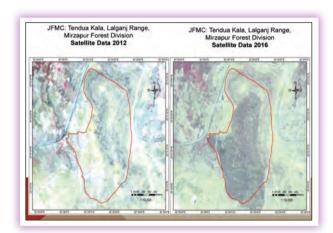


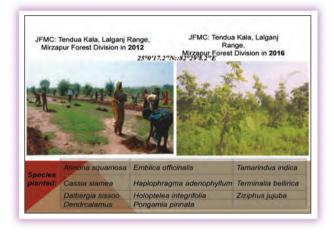


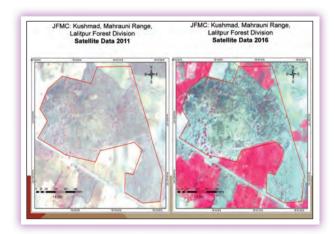




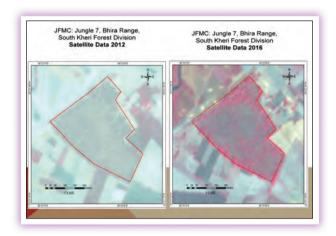




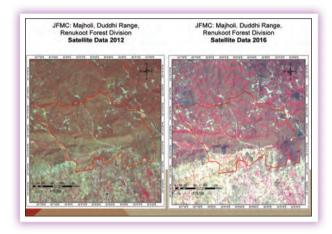


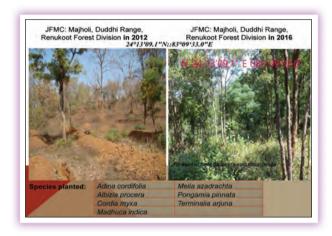


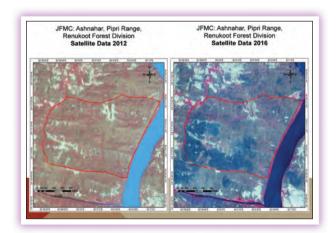


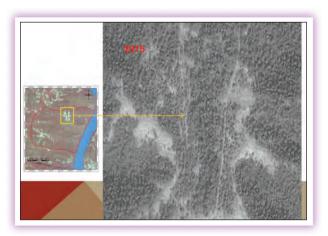












Challenges Faced

- Resetting units and time zone according to Indian system for different brands of GPS to obtain unique data format
- To take circular reading from GPS of proposed area to create JFMC boundary
- To take year wise circular reading of plantation area within JFMC
- To navigate and locate the given latitude and longitude for enumeration
- To define the discrete patch boundary for ARCDM within JFMC on the basis of given GPS locations & maps for installation of pillars

Contd

Contd...

Challenges Faced

- To lay out sample plot (20m / 25m) within discrete patch for ARCDM
- * To convert GPS Lat / Long from one format to others
- To read the GIS maps and identify the required location coordinates
- Preparation of shape files for forest divisions for analogue maps and resolve all the issues related to boundary with adjacent divisions as at times they did not coincide with adjacent boundary creating overshoot & undershoot error
- Lack of interest in field staff towards JICA program

Development of MIS

- In house MIS Development (PMU received no-objection for development of "In-house" MIS facility on 14 Sept, 2010
- * Data entry on real-time basis by field functionaries
- * Android based application
- * Automatic SMS Alert
- Development of Dynamic Website www.uppfmpap.org
- Computerization upto Range level (all 106 Ranges)

MIS Mo	odules
Original Modules	New Modules Developed
1. Financial Management	1. Children Forest Program
2. Forest Area Development & Management	2. MIS Dashboard (Analysis)
3. Community Development & Livelihood Security Enhancement	3. JFMC/EDC Meeting
4. Capacity Building	4. Andriod based Application
5. Institutional Strengthening (PMU/DMU/FMU)	5. Automatic SMS (progress & backlog
6. Project Monitoring Management	6. GIS Map View Capture (Point of Interest) with photograph/ GPS coordinates
7. Supporting Activities	7. SHG Performance
8. Wildlife Management	8 .SHG Consortium, Challenge Fund, Revolving Fund
9. Reports	

MIS Activities

☐ MIS Technical Team

- MIS Officer -1
- ♦ Software Engineer 3
- Service Engineer -1

☐ Support in-house MIS activities

- Design and develop software
- Review Code
- Implementing strategy in data rectification
- *Assistance in timely data update from Divisions

MIS Dashboard

Spreading Information across...

☐ Measure (MIS Dashboard) Usability

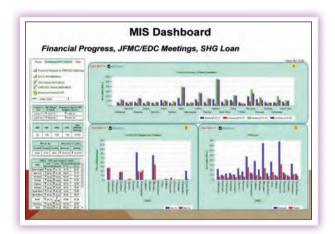
- MIS Dashboard operational from December 2014
- Visits 388337 (recorded as on 9-1-2017)
- No. of Views: 1450 per month

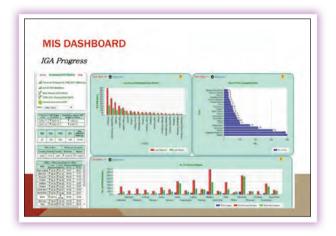
☐ Information break down - two levels (Division and Range)

- Financial Progress (division and component wise)
- *JFMC/EDC meeting (division and range wise)

Loan Management (division and range wise)

IGA progress (division and range wise)





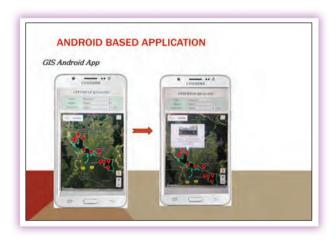








Item	19 July 2016	23 Aug 2016	20 Sept 2016	20 Oct 2016	20Nov 2016	20 Dec 2016	12 Jan 2017
Target of SHG Funding				2680)		
SHGs Funded	2579	2639	2664		26	80	
Seed Fund given to SHGs	22.2865	23.7219	24.5007	25.0302	25.1707	25.1737	25.1890
No, of SHGs Started Repayment	1281	1724	2157	2331	2380	2393	2415
Amt, of Seed Fund Repaid	4.6719 (20.96%)	5.9535 (25.09%)	8.3415 (34.04%)	9.8462 (39.314%)	10.4583 (41.55%)	10.6922 (42.474)	11.3603 (45.10%)
No. of SHGs repaid 100%	135	162	240	296	306	317	335
No. of SHGs repaid 50%-100%	273	335	511	633	698	720	803
No, of SHGs repaid 25%-50%	312	395	496	544	578	578	574
No. of SHGs repaid 1%-25%	561	832	910	865	798	779	703
No. of SHGs repaid 0-1%	1298	915	507	345	300	287	265







MISSION 5 CRORE 2016 Date of Plantation: 11/07/2016 Duration: 24 hrs Number of locations: 6,146 Number of saplings: 5.04 Million Planting done in presence of Independent Witnesses and Auditors Unique distinction achieved: Guinness World Record for the most trees planted in 24 hours by a team at multiple locations







JICA's Forest Sector Assistance to India Sustainability issues

Arun Kumar Bansal

Former Addl. DG Forests India

9th National workshop of JICA assisted Forest Sector projects in India 11-13 January 2017, Kolkata

JICA's forest sector assistance to India

(Official Development Assistance)

- · Environment protection and poverty alleviation
- · JICA major forest sector donor to India
- Twin objectives restoration of degraded forests and enhancing community livelihoods
- · Implemented through VLOs/CBOs
- · Sustainability issues continue

Evolution of Project Approaches

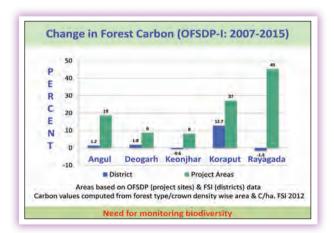
- > Afforestation
 - > Forest Restoration + IGAs
 - > Eco restoration + Inter Sectoral Convergence
- Aiming at SFM with bio-diversity conservation
- Site specific eco-restoration & forest improvement through comprehensive development plans - by VLO/CBOs (with facilitation) - inclusive process, mid-course review/revision - continued enjoyment of community rights
- · Continuous community capacity building
- · Use of RS/GIS-MIS in planning/execution/monitoring
- Process driven & result oriented –innovations/not business as usual
 Increasing focus on enhancing livelihoods of EDCs around forests &
- Increasing focus on enhancing livelihoods of FDCs around forests & other natural resources
- Enhancing outreach or mainstreaming of development initiatives

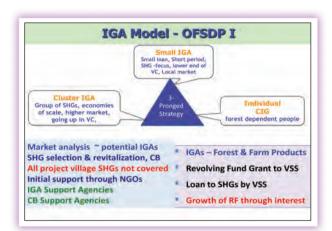
Key learning

- Improved Community Livelihoods reduced sustenance dependence on forests- key to forest restoration – but link to forests has to continue – NTFPs – non-destructive and within sustainable limits / Ecosystem Services –
- Decentralized decision making and timely/adequate fund flow (through empowered society mode PMUs) necessary for successful execution of forestry programs
- SFDs' win-win partnership with NGOs (need be careful about dependency syndrome?)
- · External experts inject out-of-box thinking
- "Transparency and accountability" enhance effectiveness

Current situation

- "Forest & Tree Cover' stabilized but degradation continues
- Sizable forest dependent population inadequate outreach of development initiatives
- JICA funded projects have achieved commendable success in terms of project execution - forestry interventions, institutional capacity development of key stakeholders, enhancing livelihoods etc.
- Evolution of concept of JFM+ (livelihoods) & Inter Sector Convergence (in FFAs)
- Post project sustainability issues continue IGAs seem to hold the key to sustainability in addition to Institutional strengthening at the village level













Achieving Sustainability... (Income Generation Activities - post project ..) Community development skills in FD / Project Personnel Is the support provided during project implementation enough to make all SHGs self reliant - sustainable institutions? Benefiting non-selected SHGs in IGA activities Status assessment/review of village level institutions - VSSs/SHGs in the consolidation phase and categorization Evolve category wise needs for continued support Making arrangement to facilitate required techno-managerial & financial support through state budget or else they are likely to spring back to square one CSR funds and emerging Financial Inclusion initiatives — to be explored through objective feasibility analysis

Achieving Sustainability...

(Strategizing Convergence)

In addition to convergence related to IGAs

Need for strategic convergence on soft components

- Drinking water
- Health and health governance
- -Education
- Alternate Energy Solar, Biomass...

Achieving Sustainability post project... (processes/institutions/assets..)

- Internalization of processes evolved during the project execution within the SFD – need for organic link between the PMU (society) and the SFD
- Taking over of the assets in project areas along with the institutions (VSSs/SHGs) by the SFD – at forest division/range level (just deciding that they will be taken over by the SFD is not enough)
- Need based /tapering support for continuity of institutions
- Monitoring of assets management/maintenance
- · Committed / Adequate funds for post project continuity

Thank you

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9th Annual National Workshop of JICA-2017 (List of Participants)

DISTINGUISHED GUEST

- 1. Sri Basudeb Banerjee, Chief Secretary, Government of West Bengal
- 2. Mr. Masayuki Taga, Console General, Japan.
- 3. Sri Chandan Sinha, Principal Secretary, Forest Department, Government of West Bengal

PARTICIPANTS

JICA TOKYO OFFICE

Sl. No.	Name	Designation	Organisation
1	Mr. Kyosuke Inada	Senior Director	JICA
2	Ms. Chikako Maruyama	Country Officer, SAD-1	JICA
3	Mr. Takaaki Kato	Country Officer, SAD-1	JICA
4	Mr. Seiya Okawara	Country Officer, SAD-1	JICA

JICA INDIA OFFICE

Sl. No.	Name	Designation	Organisation
1	Ms. Sachiko Imoto	Senior Representative	JICA
2	Mr. Vineet Sarin	Additional Chief Development Specialist	JICA
3	Ms. Ai Tachikawa	Representative	JICA
4	Mr. Anurag Sinha	Lead Development Specialist	JICA
5	Mr. Subroto Talukdar	Principal Development Specialist	JICA
6	Ms. Yukari Inagaki	Programme Specialist	JICA
7	Ms. Nikita Sharma	Project Officer	JICA

PARTICIPANTS FROM DIFFERENT STATE

Sl. No.	Name	Designation	Organisation
1	Mr. Arun Kumar Bansal	Former Addl. Director General Forests , India	JICA
2	Dr. Suresh Kumar	Chief Project Director, Swan River Integrated Watershed Management Project, Una, Himachal Pradesh	Himachal Pradesh
3	Mr. Raj Kumar Dogra	Deputy Director, Swan River Integrated Watershed Management Project, PIU Una, Himachal Pradesh	Himachal Pradesh
4	Mr. A. C. Keshavamurthy	Addl. Principal Chief Conservator of Forests	Karnataka
5	Dr. S. Ashutosh	Addl. PCCF & Dy. CEO, MBDA	Meghalaya
6	Mr. Aiban Swer	Director, Meghalaya Basin Development Authority	Meghalaya
7	Mr. Dharmendra Prakash	APCCF	Nagaland
8	Dr. Ajit Kumar Pattnaik	Principal Chief Conservator of Forests (Projects) - cum Project Director, OFSDP	Odisha
9	Dr. Pradeep Raj Karat	CF & Joint Project Director	Odisha
10	Mr. Rajeev Kumar Goyal	Project Director, RFBP-II	Rajasthan
11	Dr. Thomas Chandy	Principal Secretary-cum-PCCF	Sikkim
12	Mr. Udai Gurung	Additional Project Director-II, SBFP. FEWMD	Sikkim
13	Mr. Sanjay Kumar Srivastava	APCCF & Project Director (TBGP)	Tamil nadu
14	Mr. G. S. Raju	PCCF, Chief Executive Officer & Project Director	Tripura
15	Dr. Prashant Kumar Verma	Chief Project Director	Uttar pradesh
16	Mr. V. M. Arora	APCCF/ Project Director	Uttar pradesh
17	Dr. Prabhakar Dubey	APCCF/Project Director	Uttar pradesh
18	Mr. Jayesh Bhatia	TEAM LEADER, PMC	Uttarakhand
19	Mr. Surendra Mohan Joshi	Project Director	Uttarakhand
20	Mr. Kuber Bisht	DFO Soil Conservation Nainital	Uttarakhand

PARTICIPANTS FROM PMC

Sl. No.	Name	Designation	Organisation
1	Mr. S. Arora	Director, Nippon Koei India Pvt. Ltd, WBFBCP (PMC)	NKI
2	Mr. A. Rai	Capacity Building Expert, WBFBCP (PMC)	NKI
3	Mr. D. Adhikari	Administrator Cum Accountant	NKI

PARTICIPANTS FROM WEST BENGAL

Sl. No.	Name	Designation	Organisation
1	Sri Pradeep Shukla	Principal Chief Conservator of Forests & Head of Forest Force	West Bengal
2	Sri Narendra Kumar Pandey	Principal Chief Conservator of Forests, General	West Bengal
3	Sri S. Barari	Chief Project Director, WBFBCP	West Bengal
4	Sri R. K. Mahtolia	Principal Chief Conservator of Forests, RMD	West Bengal
5	Dr. P. Vyas	Principal Chief Conservator of Forests, Wildlife	West Bengal
6	Sri T. V. N. Rao	Addl. Principal Chief Conservator of Forests, Finance	West Bengal
7	Dr. R. P. Saini	Addl. Principal Chief Conservator of Forests, Wildlife	West Bengal
8	Dr. J. T. Mathew	Addl. Principal Chief Conservator of Forests, Research and Monitoring	West Bengal
9	Sri P. T. Bhutia	Addl. Principal Chief Conservator of Forests, North Bengal	West Bengal
10	Sri N. Singhal	Addl. Principal Chief Conservator of Forests & CCF Western Circle	West Bengal
11	Sri S. P. Yadav	Chief Conservator of Forests, Central Circle	West Bengal
12	Sri Debal Ray	Chief Conservator of Forests, South West Circle	West Bengal

PARTICIPANTS FROM WEST BENGAL

Sl. No.	Name	Designation	Organisation
13	Sri S. Chaudhuri	Project Director, Finance, WBFBCP	West Bengal
14	Dr. K. L. Ghosh	Addl. Project Director, Planning & Research	West Bengal
15	Sri P. K. Pandit	Addl. Project Director, Implementation	West Bengal
16	Sri Kalyan Das	Chief Conservator of Forests, South East Circle	West Bengal
17	Sri N. S. Murli	Chief Conservator of Forests, Wildlife North Circle	West Bengal
18	Sri S. Sengupta	Conservator of Forests, Wildlife HQ Circle	West Bengal
19	Sri Tapas Das	Conservator of Forests, Development Circle	West Bengal
20	Sri Anjan Guha	Deputy Conservator of Forests, URF	West Bengal
21	Sri Milan Kanti Mondal	Divisional Forest Officers, Durgapur DMU	West Bengal
22	Sri Satyajit Roy	Assiatant Divisional Forest Officers, Kharagpur DMU	West Bengal
23	Sri Shivanand Ram	Assiatant Divisional Forest Officers, Jhargram DMU	West Bengal
24	Sri Somnath Choudhury	Assiatant Divisional Forest Officers, Bankura South DMU	West Bengal
25	Sri S. Bandyopadhay	Addl. Project Director, (C), WBFBCP	West Bengal
26	Sri G. Chatterjee	Joint Project Director, (C), WBFBCP	West Bengal
27	Sri P. K. Sarkar	Office Superintendent, WBFBCP	West Bengal
28	Sri B. Chakraborty	Authorized Range Officer, WBFBCP	West Bengal
29	Sri K. Mitra	Computor Operator, WBFBCP	West Bengal

