

INDIA-CANADA ENVIRONMENT FACILITY

STATUS REPORT AS ON SEPTEMBER 30, 2002

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INTRODUCTION

This report provides an overview of the activities, status and trends of the India Canada Environment Facility (ICEF) project over the period April-Sept, 2002. The document presents a corporate work plan of the ICEF Project Office for the next six months. Detailed progress report, both in physical and financial terms in respect of each of the sub-projects, has also been provided in the report.

2.0 JOINT PROJECT STEERING COMMITTEE (JPSC) AND MANAGING BODY MEETINGS

During the period, Mr. Bill Gunn, Head of Aid, DEVCOS, Canadian High Commission, was replaced by Mr. Bob Woodhouse. The rest of the membership remained unaltered.

The JPSC had its 32nd meeting on April 30, '02. The Managing Body of the ICEF Society also had its 18th meeting on the date, which was the Society's Annual General Body meeting. Further meetings of the two bodies could not take place during the period following the dislocation of the officials of the Canadian High Commission on account of the travel advisory.

During this meeting of the Managing Body of the Society, in-depth discussion took place on the nature of ICEF's accountability to CIDA. It was agreed that as a registered society under the Registration of Societies Act of India, 1860, the Co-Directors were accountable to its Managing Body, which has representation of both the governments of India and Canada. From CIDA's perspective, ICEF operates as a locally managed counterpart fund.

3.0 ICEF PROJECT OFFICE

Mr. Bernard Boudreau, the Canadian Co-Director, successfully completed his tenure of three years in August, '02. The Indian Co-Director, in position since October, 01, has since been operating as the Director of ICEF. The Managing Body of the ICEF had decided during its 18th meeting that the organization could be managed with the one Director alone after the conclusion of the tenure of the Canadian cooperant in July, '02. Representatives of the Canadian High Commission also indicated that while the option to fill up the position through another Canadian cooperant remained open, Canada did not intend to do so for the present.

The Indian Co-Director undertook a visit to the CIDA headquarters in June-July, '02 to familiarize himself with the reporting, management, financial and policy framework of CIDA funded counterpart funds.

4.0 DRAFT OPERATING RULES OF ICEF

The draft Project Management Plan of ICEF, prepared in 1996, was never formally approved. It was decided that a set of Operating Rules needed to be in place for smooth functioning of the organization. The draft Rules have been prepared during the period

under review and would be placed before the Managing Body in its next meeting, scheduled for Oct.8, '02, for consideration and approval.

5.0 PROJECT IMPLEMENTATION

As of September, 2002, ICEF has a portfolio of five completed and twenty ongoing sub-projects; besides four proposals are awaiting consideration by the Joint Project Steering Committee (JPSC) for final approval. One proposal is in the process of final review while two more are at the stage of concept review in the ICEF Project Office.

Project implementation activities have progressed evenly during the period. Regular meetings of the Technical / Advisory Committees and the Steering Committees have taken place in as many as 11 sub-projects during the period. Close monitoring and follow up of the decisions taken in these meetings is being ensured.

Eight sub-projects in all are scheduled to come to an end during the current financial year. Of these, two sub-projects concluded during the reporting period, while the other six would conclude during the next six months period. Against this backdrop, ICEF intends to put strong focus on dissemination activities, including sharing of ideas, encouraging debates and discussions, and to follow up on lessons for wider replication through networking.

5.1 REVIEW OF THE CONSTITUTION OF SUB-PROJECT STEERING AND TECHNICAL COMMITTEES

In order to facilitate better ownership of the sub-project activities by the state and central government agencies by way of enhanced communication and feedback, constitution of Steering and Technical Committees of all the sub-projects has been reviewed and modified during the reporting period. Care has been taken to ensure participation of the representatives of the concerned central and state levels ministries and departments in the project in the Steering Committees. Eminent technical experts have been inducted in to the Technical Committees.

5.2 EXTENSION OF SUB-PROJECT PERIOD

Two instances where the partner agencies are seeking extension of the project period are the Loktak Lake and TIDE sub-projects.

In the Loktak sub-project, the scientific data collected hitherto has helped to clearly understand the lake system as an organic entity, with a definite strategy for improvement. The strategy now needs to be put in to operation with the help of the local people whose livelihood depends on the health of the lake system. The Project Steering Committee of the sub-project has also recommended extension for a period of two more years to complete these activities. No additional budgetary support would be required during the extension period. ICEFPO is presently considering the request and would take the matter for consideration of the Managing Body of ICEF along with its recommendation.

The TIDE sub-project, aimed at diffusion of efficient biomass utilization technologies, on the other hand, has shown exceptional results so far with all the targets having been achieved well within the project period. The successful experiences, however, need to be taken beyond the immediate project boundaries and disseminated widely for replication. With about 10% of the committed funds remaining unutilized, ICEFPO is considering a one-year extension to the sub-project to carry on the good work.

Status of progress in respect of each of the sub-project is placed at Annexure A of this document.

5.3 MID-TERM EVALUATION

The mid-term evaluation of the Loktak Lake sub-project was carried out in March, '02 through external specialist consultants. The report was circulated to all concerned subsequently and was tabled before the Steering and Technical Committees of the sub-project. Copy of the executive summary of the report is placed at Annexure B of the document.

5.4 FINAL EVALUATION

Of the eight sub-projects heading for conclusion during the financial year, two sub-projects namely the IIT Kharagpur-Flyash and WWF concluded during the six months under review. Final evaluation exercise with specialist consultants has been gone through in both the projects. Executive summaries of these reports are placed at Annexure C1 and C2 of the document.

6.0 FINANCIAL STATUS

An amount of Rs. 56.4 crore was disbursed towards the five completed sub-projects while the outlay for the twenty ongoing sub-projects has been planned at Rs.51.3 crore. The seven proposals, at various stages of the pipeline, if approved, would be worth Rs.46.2 crore. ICEF Project Office budget is projected at Rs.8.5 crore. With overall fund availability, including interest on deposits and the last installment of the monetised funds, estimated at Rs.295 crore, the approved and completed projects along with administrative expenses of the ICEFPO, account for 76.8% of total funds. If the sub-projects in the pipeline worth Rs.46.2 crore were also to be taken in to account, the level of overall commitment would go up to Rs.272 crore approximately, leaving Rs.22 crore as uncommitted funds. New concepts to this end are under examination in ICEFPO.

Disbursement of Rs.11.00 crore was made to various sub-projects during the six-monthly period. Total disbursement during the financial year is expected to reach Rs.20 crore approximately.

The last tranche of the monetised counterpart fund of approximately C\$ 10 million out of the C\$ 72.00 million committed by the Govt. of Canada under the MoU with the Govt. of India, remains to be received by ICEF. Considering the current availability of funds and the projected cash flow, the tranche of C\$ 10 million would only be needed around Oct.-Nov. 2004. The stage at which the monetisation process may be initiated, however, would have to be carefully timed as the current cash flow and the pace of utilization of the available funds would depend on several factors including approval of new projects. The objective would be to ensure that balance funds when received, did not remain idle with ICEF. Anticipating a time lag of one and a half years in the process, the request for funds could be made around June'03.

Statements indicating the status of funds, disbursements and investments are placed at Annexure D.

7.0 MANUAL OF FINANCIAL MANAGEMENT SYSTEM

The Manual prepared by ICEF in February 02, lays down the Financial Management System to be followed by Implementing Organisations. The Manual lays down formats for reporting on financial progress in terms of physical achievements as well. The document has been shared with the partner organizations.

The Finance Officer in the ICEFPO has been asked to interact closely with the partner agencies in an effort to ensure that the issues were clarified, and that the system was followed uniformly. The officer has undertaken short monitoring visits to Chennai for the Coastal Mangrove sub-project being implemented by the Swaminathan Foundation, and to Kolkata in connection with the Sagar Wind Turbine and the Arsenic sub-projects. The practice has yielded encouraging results by way of helping the partners agencies understand the reporting and book keeping practices better, and would be continued in future as well.

8.0 PIPELINE OF NEW PROPOSALS

For ICEF, more or less midway in its project span, it would be important to look for proposals that go beyond activities merely at the local level. The successful solutions and strategies, based on hands-on experience gained from implementing such a large number of projects in the past years, ought to be internalized into the policy and practices adopted and promoted by the government ministries and departments at all levels, including the central, state, district, block and village levels. This would be an effective way to replicate the approaches and models adopted by ICEF's partners in other parts of the country. Policy advocacy, therefore, would become an important corner stone of future intervention by ICEF. The current pipeline of sub-projects is being developed with an eye to this important issue.

The current pipeline of sub-projects could be categorized in to the "hard" and "soft" pipelines. Four proposals namely, the Ladakh Renewable Energy, M.P. Irrigation, Ranchi Solid Waste Management and the Networking Project, awaiting final consideration by the JPSC, could be put in the hard pipeline category. Three more proposals namely, the Mizoram Forest Conservation, Chhattisgarh Environment

Management and the Uttaranchal Biodiversity Conservation are at the review stage in the ICEFPO, and could be categorized as the soft pipeline.

In addition, a large number of proposals have also been received in the past six months and are being subjected to the screening process in the ICEFPO.

9.0 CAPACITY BUILDING WITHIN ICEFPO

With a view to disseminate the ICEF experience, Project Officers in ICEFPO have been encouraged to share their insights, gained from hands-on implementation of sub-projects, with wider audience at the national level. Such interactions, approved carefully and selectively, at important workshops and seminars organized by other NGOs as well as government organizations, would help in raising the level of ICEF's own perception of the environmental challenges being encountered in specific projects, as also provide a feedback on the quality of ICEF achievements.

A list of such seminars and workshops attended by ICEF Project Managers in the last six months, is placed at Annexure E.

10.0 REPORT ON MICRO-CREDIT AND REVOLVING FUNDS

A large number of sub-projects and NGO partners, funded by ICEF, have taken recourse to setting up revolving funds for village level Self Help Groups. These SHGs, mostly formed and operated by women, have proved to be an effective and financially viable alternative to the existing methods of addressing rural poverty through the provision of micro-credit. Looking to the relevance of the subject across the board for ICEF, a short term consultancy was offered to study the viability of a particular proposal under an on-going sub-project.

An executive summary of the findings is placed at Annexure F of this report.

11.0 CORPORATE WORK PLAN FOR OCT.'02-MAR.'03

Salient features of the corporate work plan of ICEF/ activities for the period Oct.'02-March,'03 are as below:

- i) Mid-term evaluation of five sub-projects, namely, Sustainable drinking water supply in Kerala, Sagar wind energy, Renewable energy technologies in rural India, Rehabilitation of tank irrigation system and Mitigating Arsenic pollution.
- ii) Final evaluation of three sub-projects, namely, Environmental improvement in rainfed areas, Sustainable management of resources (BAIF) and Management of environmental resources by communities (AKF)
- iii) Final approval of the current pipeline/ approval of new concepts
- iv) Further development and implementation of the NETPRO concept towards policy advocacy, following a specific annual work plan. In particular, support to MoEF for developing the framework for Sustainable Development Indicators, and strengthening the capacities of village level institutions.
- v) Closer attention to the reporting system in ICEF.
- vi) Commissioning of special financial audit in certain cases.

B 1 INDIAN FARM FORESTRY DEVELOPMENT COOPERATIVE (IFFDC): INDIAN FARM FORESTRY DEVELOPMENT COOPERATIVE

Start and End Date: April 1995 – March 2002

- The project was completed in March 2002 after seven years of support. The target of 20,00 hectare of developing wastelands has been exceeded by 1215 hectares and of 90 PFFCs to be set up by 23.
- ICEF had given a grant of Rs. 2 Crores to the PFFC, which averaged about Rs. 2 lakhs per PFFC - covering 2 to 4 villages. These were to be loaned by the PFFCs to the SHGs to undertake micro-enterprises. Over two years about Rs. 80 lakhs have been utilized by the members.
- IFFDC continues to hold the Annual General Meetings every year, attended by the Chairpersons of the PFFCs. IFFDC continues to monitor the performance of the PFFCs set up with ICEF assistance.

B 2. NAGALAND ENVIRONMENTAL PROTECTION AND ECONOMIC DEVELOPMENT, IMPLEMENTING ORGANIZATIONS: GOVERNMENT OF NAGALAND AND INTERNATIONAL DEVELOPMENT RESEARCH CENTRE (IDRC)

Start and End Date: December 1994 - March 2001

In the north-eastern hilly region of the country, agriculture follows a typical slash and burn practice known locally as Jhoom cultivation. It is well known that this practice of shifting cultivation causes not only a reduction in forest cover but also rapid loss of top-soil. The project, therefore began by undertaking promotion of improved jhoom cultivation practices through trials in about 1800 identified "Test Plots" in 900 villages distributed over all the 7 hill districts of Nagaland. The project was implemented by a Project Operations Unit (POU) raised by deputing about 16 officers from various line departments under a team leader. The POU received funds directly and operated independently.

The efforts were focused on low cost land treatment measures and promotion of mixed crops including trees. As the farmer would revisit the abandoned jhoom plot for cultivation after a few years, these trees are expected to give some additional benefit. However, in this project, at the end of five years, the farmers did not want to harvest these trees but wanted to let these grow for future use. In order to derive some immediate benefit, the farmers wanted to plant shade loving cash crops in between these trees which they call "fallow management". This led to the need for considering a second phase of the project. An unutilized amount of about Rs. 80 lakh was available from this project which gave an opportunity to extend the project period for nine months during which time fallow management was taken up to a pilot scale. During this extra period referred as the "bridging period", identification and sensitization of the Village Development Boards were included to enable them to undertake future development projects on a more sustainable manner.

Current Status

Although the project has been closed on March, 2001, there has been a second phase of the project which will continue for another five years. The second phase has been built upon the first phase and the project management structure remained more or less the same. The progress of the second phase of the project has been discussed separately in this report.

Lessons learnt

Earlier efforts to dissuade people from the harmful practice of shifting cultivation (Jhoom) did not generate the desired results. The present NEPED approach began by proposing not to replace but to improve and stabilize the existing Jhoom practices, which was instrumental in bringing about many positive changes in the traditional practices.

This community based project approach was acceptable to both the GoN and the communities which in turn enhanced the effectiveness of project implementation. This highlights the crucial role, the community plays in making a project success and its replication (farmers planted trees of their own in areas six times more than the project area).

The improvised structure for project management i.e. the POU put in place by the State Government and making use of the existing village level institutions had been highly effective and beneficial in project implementation.

Improved environment friendly agro-forestry models that emerged are beneficial to environment and also give additional income. The experience can be fine-tuned and expanded profitably in

other NE states (also SE Asia) where shifting cultivation is the main-stay and causing environmental degradation.

The success of the project in terms of soundness of its concept and potential to generate additional income has generated so much enthusiasm that other states in the region are aspiring to undertake similar projects. The successful conclusion of this project also led to the supporting of another project in the state by ICEF.

Financial Management

The project including the bridging period has utilized 100% of approved fund. IDRC provided additional support for financial management and reporting .

Note: The Project is closed as of March 31, 2001.

B 3. ENVIRONMENTAL IMPROVEMENT IN RAINFED AREAS: INDIAN POTASH LIMITED (IPL)

Start and End Date: April 1996 - March 2003 (Extended by 2 years)

Demonstration for improved crop production through on farm soil and water conservation measures and management of waste lands through tree plantation in collaboration with the local village committees, are the main highlights of the project. The project is operational in 60 villages in the area bordering Madhya Pradesh and Maharashtra. The area represents typical semi-arid region of central India where agriculture depends primarily on rainfall. Uncertain rainfall and steady degradation of the land and water resources has been a major cause for accentuating poverty in the region.

The physical activities of the project were implemented to a large extent through the Village Environment Committees (VECs) formed in each village for this purpose. Now that the project is about to close, the aspects of strengthening these VECs has been undertaken with renewed vigour. The period April-September 2002 witnessed the progress in the area of consolidating the functioning and organizational aspects of the VECs. Rules and regulations for operating a revolving fund after the closure of the project have been discussed and the basic ground rules have been worked out. About 60 % VECs have already been registered under the Societies Registration Act. The remaining VECs will follow suit. 40 Environment Resource Centres (ERCs) which will primarily function as the village community centre have also been constructed.

In addition, physical works like field bunding and construction of water harvesting structures continued in full swing. 542 ha of Farm bunds, 9 check dams, 23 tanks and reservoirs and 5.2 km of nalla dressing were completed during this period (Apr - sept, 02) of reporting. In the renewable energy front, emphasis has been laid in construction of bio gas plants. 74 Bio gas plants have been constructed in collaboration with district Urja Nigam which provides a small subsidy and trained mason for construction. The remaining cost is shared equally between the project and the beneficiary farmer. The project has also introduced vermi-composting in a large way.

As a part of the withdrawal strategy EIRA submitted a proposal to ICEF requesting transfer of an amount of about Rs.2.7 crores which was expected to remain unspent at the end of the project to EIRA to be used as a revolving fund to meet the micro credit needs of the communities in the project area. The matter was discussed in detail in the 6th Project Management Committee (PMC) meeting held in April 25, 2002. ICEF expressed its reservations to support the concept which was proposed apparently as an after-thought by the project implementing agency keeping specifically in tune that some money would remain un-utilized at the end of the project.

In its attempt to ascertain the desirability of this revolving fund proposal, ICEF appointed a consultant from NABARD for 10 days in September to go through the proposal and visit the project area to make an assessment of the proposal. While the consultant more or less supported the need for developing a mechanism to meet the micro-credit needs of the community but cautioned that the VECs are not yet strong enough to handle large amount of money to meet local developmental needs. Moreover, the proposal submitted by EIRA has no element for establishing any future linkages with local banks. EIRA would like to adopt a cooperative model in which credit would circulate within a closed group. A final decision on this proposal would be taken in the forthcoming PMC meeting scheduled to held on October 25, 2002.

Physical achievement during April - September, 2002

Project Activity	Target Apr- Sept, 02	Achieved Apr- Sept, 02	Cumulative till date
<i>Land Development, Management and Conservation</i>			
a. Farm bunding, ha	400	542	7175
b. Bund outlets, no	400	243	1216
c. Stone bunding, ha	31	29	1253
d. Gully plugs (loose boulder), no.	89	115	1012
<i>Afforestation/ Plantation</i>			
a. Plantation in community land, no of plants	12400	19778	1,563,832
b. Plantation in private land, no of plants	4000	12207	829,703
c. Nursery raising, no of plants	30000	19,731	2,173,744
<i>Agriculture</i>			
a. Crop demonstration, ha	16	35	775
b. Permanent compost pits (nadib), no	100	198	1000
c. Soil testing, no of samples	nil	nil	
d. Vermi-compost	15	17	108
<i>Water Harvesting and conservation</i>			
a. Check dams / overflow weirs, no	22	9	47
b. Ponds and tanks, no	37	23	117
c. Nalla dressing, km	7	5.2	13.7
d. Repair of old structures, no	11	9	13
<i>Energy Conservation and development</i>			
a. Improved (iron) chullhas, no	52	0	1157
b. Smokeless chullhas, no	58	0	2002
c. Pressure cooker, no	118	57	690
d. Bio gas plants, no	78	74	929
<i>Community Development</i>			
a. ERC (community centres), no	27	31	40
b. Strengthening of SHGs/UGs, no	58	4	225
c. Training of village groups, no	19	20	73
d. Training of VECs, no	32	9	71
e. Exposure visits	6	2	25
e. Workshops	5	1	6

Financial Management

The project submits audited financial report on half yearly basis. The financial management practices in the project is rigorous and effective keeping very much in tune with ICEF's FMS. In the initial years, the project had been slow in fund utilization. The project has got a two years extension and is now in its sixth year of implementation.

B 4. WATER RESOURCES DEVELOPMENT AND ENERGY CONSERVATION FOR SUSTAINABLE MANAGEMENT OF THE ENVIRONMENT: *BAIF DEVELOPMENT RESEARCH FOUNDATION*

Start and End Date: September 1996 – March 2003

The focus of work was on gradual withdrawal from the project. To this end, development of local resource teams, strengthening of community organizations, handing over of assets to the community organizations, documentation and dissemination were the main activities of the reporting period. Apart from residual physical work relating to horticulture, bunding and gully plugging, 400 new families joined the project under energy conservation and womens activities, 24 drinking water sources developed for easy access to safe drinking water was effectively managed by the people(sharing & maintenance). 24 training / workshops took place against 22 planned. 3 district level workshops were organized for experience sharing of project and dissemination. A Project Steering Committee meeting was held in September to inform members about the progress and seek their guidance on taking the project forward.

Three key areas identified included (a) need for upscaling innovation and approaches evolved in the project, (b) strengthening mechanisms for equitable water sharing, and (c) looking beyond March 2003. In documentation and dissemination, a booklet on the Bundi (Rajasthan) site has been prepared on the project experiences and approaches evolved. The draft is under finalization. A presentation was also given to the Chief Minister of Rajasthan who evinced keen interest in visiting the project early. This is likely to boost replication efforts. Despite widespread drought all around it, the Bundi site has been declared non drought hit for the third successive year. A documentary film covering all three sites has been prepared and will be finalized in the next two months. A paper on “Rejuvenation of Rivulet : A case from Karnataka” was presented in the 12th International Soil Conservation Organization Conference held in Beijing, China. International Journal of Natural Resource Management has accepted the paper for publication in its forthcoming issue. The Farm pond model of Karnataka site was presented to the Planning Commission in Delhi. Separate State wise information is also provided below.

KARNATAKA

Six trainings were given to members of Resource Team (a group of local beneficiaries trained on different topics relating to the project activities and who then give training or handle exposure visit of farmers from outside project area and explain things at their level). Six district level workshops were conducted involving local PRI members, farmers, NGOs and officials from the government departments. A green festival (Hasiru Habbu) was celebrated with involvement of local community. Exposure visits were also organized to the project site for government officials, NGOs and others. World Environment Day was celebrated in association with Department of Forests and Education. A community hall has been renovated for conducting training programs.

RAJASTHAN

Five trainings took place for the Watershed Committee, Charagah Samiti, Water user Groups and SHGs. Trainings were on rules and regulations of CPR management & maintenance, benefit sharing, dispute resolution, development of linkages etc. An exposure visit to the Indian Institute of Science, Bhopal was organized primarily to know of new developments which could help improve land productivity in their area. Seven demonstrations were conducted on wheat cultivation with the use of organic manure and inorganic fertilizer. Students as members of 11 environment clubs (193 members) continued nature club activities including cleanliness programs in the village. Independence and Environment day were celebrated with them and used as occasions for informing them about the benefits of various project activities, hazards of deforestation, pollution, overuse of inorganic fertilizers, health & hygiene. Some physical activities like bund strengthening, grass seed broadcasting were done without assistance from the project. Certified maize seeds were grown on experimental basis by 37 families under guidance

about use of inputs & irrigation. Basmati rice cultivation - a project success - continued. Both Charagahs (silvipasture developed on community wasteland) were handed over to the community.

UTTAR PRADESH

Trainings were organized, one each for women & mens groups on aspects like inter loaning, recovery and income generating activities, apart from training to field staff and field guides. Irrigation groups have now started to follow the rules and mechanisms developed by them for water sharing and maintenance. There is voluntary participation for plantations now around the irrigation groups. Due to improved water availability improved variety of bajra seeds have been planted by 31 farmers on an experimental basis and yields will be monitored to assess the most suitable variety. More farmers are now cultivating oilseeds and pulses to take advantage of better soil moisture. Kitchen gardens have become a good source of seasonal vegetables. Water User Groups have begun to follow rules and regulations developed jointly by farmers and Baif.

Overall for the 3 sites from inception, the savings for the self- help groups was 4.75 lakhs, 1394 loans were given amounting to Rs 16 lakhs, out of which Rs 12 lakhs have been recovered. The Village Watershed Committees have provided 1071 loans, mainly for agricultural purposes, amounting to Rs 12.6 lakhs, out of which 8.67 lakhs have been recovered.

Output Results till Date

- 3679 ha under various forms of area treatment measures (soil & water conservation, horticulture, afforestation, silvipasture, improved agriculture; community institutions are managing 100% of common property resources.
- 3566 gully plugs & check bunds, 49 checkdams and 815 farm ponds constructed.
- Total of 6746 ha of watershed area treated that resulted in over 50% of the project area to double crop per year. 75% of participants have increased crop yields over 50 %. People's contributions have helped in extending activities to peripheral areas.
- Small stream in Tiptur site has become perennial ; previously it was dried up.
- 24 drinking water sources developed that resulted in being easily accessible to safe drinking water in all project sites.
- Over 50 % community institutions have women members as office bearers.

Outcome Results till Date

- Utilization of common property resources benefits by 90% of target families.
- Increased average income of 50% of target group by 50% over baseline.

Time required for women for collection of drinking water, fuel and fodder is reduced by 70 % as compared to baseline.

Project Activity	Unit	Planned Activities April-September, 2002	Achievements April- September 2002	Cumulative achievements till date
I Survey & Analysis				
1. Topographic /Micro planning	ha			2647
2. Socio- economic survey & analysis	families			1839
II Area Treatment				
1. Hortiforestry	ha	56	51	535
2. Afforestation	ha			131
3 Silvipasture (Raj & Kar)	ha			119
4. Bunding with vegetative protection	ha	195	187	2595
III Drainage Line treatment				
1 Gully Plugging	nos	22	41	2843
2 Temp. Check bunds	nos	5	-	723
3. Permanent checkdams	nos	3	-	49
4. Repairing / desilting old checkbunds	nos			69
5. Gabions	nos			13
6 Farm Ponds	nos			815
7. Underground Bandhara	nos			6
IV Energy conservation & Women`s activities				
1. Energy Saving Devices	nos			2905
2. Kitchen Garden	nos	263	255	1361
3. Vermi Composting & Nadep	nos	110	151	1369
4.Womens SHG activities				
- groups	nos	-	1(new fedn)	40
- members	nos	-	-	820
V Training & Workshop				
1 Beneficiaries Training & Exposures	nos	13	12	279
2 Officers	nos	5	3	71
3.Shramdan Camps	nos	1	6	61
4. District level meets	nos	3	3	3
5. Experience Sharing workshop	nos	-	-	5

B 5 MANAGEMENT OF ENVIRONMENTAL RESOURCES BY COMMUNITIES: AGA KHAN FOUNDATION

Start and End Date: August 1996 – December 2002

MERC programme continues to progress well in completing project activities and outputs. In the last six months about 90% of the planned budget has been spent and cumulatively till September 2002, 98% of the total programme budget has been spent. The project is well on its way to scheduled closure in December 2002.

Focus on preparing for partners' future (post-MERC) continued. Field partners are going through reviews, strategy development, and documentation of past work and proposal development for raising funds for future programmes. Generally the process followed has been that partner does internal review and documentation first and then calls for an external consultant. This approach helps in partners doing their own thinking first and in being cost effective also.

MERC partners' meeting was organised in July to assimilate partners learning and draw general lessons. The proceedings of the workshop have been documented and the report is being shared with all the partners. This would be a useful document for the MERC end term review team also. Project Advisory Committee meeting was also held in June that discussed key issues and identified sustainability of MERC investments and future of MERC NGO partners as key issues. Some of the issues raised during PAC were discussed in the MERC partners meeting. Further detailed financial planning was done with partners to close the programme on time.

Gender book titled "Understanding women's experiences in natural resources management" and JFM case studies were published. Four enriching experiences documenting partners' work were also published. Research on PRI involvement in NRM in Rajasthan was initiated under which two workshops have already been held. The draft report is ready and final report would be available by end of October. Workshop on sharing the experiences of JFM cell's three years experiences was held in July in Gandhi Nagar. The workshop raised critical issues on past performance of JFM cell and on possible future options.

Field base support to partners

Some of the key issues on which support was provided to field partners was as follows:

- For SMM review, documentation, future planning and proposal development was supported and facilitated.
- Same exercise was also done with SSD, MMVS, RBKS
- AKRSP(I) is providing support to all field partners in implementing institutional maturity index in MERC partners' villages.

In addition, Aravali organised an external review of their last five years operations, DSC documented summary of their support provided to 10 field organisations and also conducted an external review of their training programmes. Contacts already established between ETC, Netherlands and Aravali have resulted in a joint proposal on sustainable agriculture. The proposal has been submitted to SDC. Aravali also met up with Traidcraft UK to explore future possibilities of collaboration on livelihood promotion and micro-enterprise development. SRTT (Sir Ratan Tata Trust), SDTT (Sir Dorabji Tata Trust) and UNDP were contacted to explore future funding specially for MERC field partners.

Cumulative achievements by MERC field partners

Till September 2002, MERC programme through its nine field partners has reached 147 villages covering 35,611 hectares and 12758 families. Details of specific activities undertaken are as follows:

- Soil and water conservation works undertaken in 14,501 hectares.
- 140-village development committee and 588 User groups formed.
- 355 Self Help Groups formed covering 4938 families and saving reaching Rs 31.39 lakh 287 small water harvesting structure costing less than Rs. one lakh, 355 wells (new and repaired) and 62 big water harvesting structure constructed.

In total MERC partners have been able to leverage three times the MERC funds from other sources including Government sources.

Financial capacity building

Support in the last six months was provided by AKF account staff mainly for smooth closure of MERC. In Rajasthan independent auditors appointed by ARAVALI on behest of AKF followed up on the audit visits done last year. Partners have implemented most of the suggestions made by the auditing team and both AKF and ARAVALI are following up on the actions taken by the partners.

Organic farming with SAVA

Organic certificate from IMO, Switzerland was issued to 10 farmers and in conversion certificate was issued to 11 farmers last year. However last year SAVA could not export Groundnuts because of higher levels of aflatoxin levels. This year SAVA was hoping to do better but plans did not materialise due to drought like conditions initially and late rains late, both effecting production.

RNPA Achievements: RESEARCH

Documentation and Dissemination of Best Practices

Gender study was published and launched in a workshop in Ahmedabad. The publication has been widely circulated. There has been big demand for this publication and feed back has been positive. The conflict report is with SAGE publications for their response on whether they would like to publish it. But they have taken time and AKF is looking at alternative ways of publishing the study. 23 issues of 'Enriching Experiences' have been published so far. As mentioned in the last report *Jalchitra*, a software package to assist rural communities to store information about different water sources, water demand, hydro-geological data and meteorological records is now available on a compact disc with a user manual.

Capacity Building and Support Initiatives linked to research

Impact assessment methodology has been finalised. AKF is planning to use this methodology in future in new programme initiatives. The experience and lessons learnt from ANANDI's support being provided to five MERC NGOs for mainstreaming gender in field initiatives were discussed in a workshop in August 2002. This workshop was attended by NGOs and subject experts and they found the approach adopted both innovative and useful.

Action Research Studies by Partners

All seven studies conducted by field NGOs, two each on issues related to joint forest management and on common land development, one each on issues of agriculture development, sustainability

and village institutions have been already completed. The learnings from these studies are being integrated with future organisation strategies.

Research Capacity building of Partners

Joint Forest Management (JFM) case studies were published and disseminated widely during the period. A lot of positive feedback on the publication has been received. Further as these case studies document field NGOs experiences, NGOs are further using them to spread their work and dialoging with government on crucial policy issues.

Networking and Policy Advocacy

Watershed programme and policy

Aravali in Rajasthan further followed up on the watershed study done last year in collaboration with AKF. The Rajasthan Govt. has moved on some of the recommendations by issuing relevant officials orders and notifications. DSC based in Gujarat made progress with the national study on PIM and regional study on watershed management. Apart that DSC completed four studies on various issues. The completed studies are; Advantage Watershed (Eloquent Part II), A comparative study of canal and ground water on wheat yield, Assessment of Training programmes and Inclusion of Forest Land in Watershed Programme. Findings of these studies having policy implications are being discussed at various levels

JFM cell experience workshop

Workshop on sharing the experiences of JFM cell's three years experiences was held in July in Gandhi Nagar. The workshop attended by senior officials from Government of Gujarat and large number of local NGOs, ICEF and AKF shared concern about the effectiveness of JFM cell and what steps need to be taken in future to address the issues. However there was general consensus that despite concerns JFM cell is a significant step forward and can play a significant role in increasing the effectiveness of JFM programmes in Gujarat. AKF might consider supporting such initiatives in future.

Panchayat Raj Institutions study in Rajasthan

Panchayats are becoming a major vehicle for implementation of developmental activity both by constitutional amendments and state act. However there are many ground level issues that need to be investigated e.g. capacity of the panchayats to handle complex organisational, technical and financial issues on the ground, fund flow to Panchayats, functional autonomy of the panchayats, relationship with other CBOs and NGOs and issues of accountability and transparency. AKF in collaboration with ARAVALI commissioned TARU for this study. The study is near completion and the findings have been discussed in two state level workshops and the final report would ready by October 02. The study, while investigating some of these issues has also raised some more critical issues. This is a long-term agenda and both AKF and ARAVALI (and possibly ICEF) would do further work on this important and complex issue.

Groundwater

DSC workshop on Ground water could not be held due to disturbances in Gujarat. The findings from the Groundwater study are significant would be followed up by AKF in future.

Outcome Results till Date

- Two implementing organisations - ASA and SAVA have been able to leverage four times the MERC funding, from government resources. They have also scaled up significantly in terms

of area coverage, no of staff, no of funding sources indicating wider acceptability, no of issues engaged with. Significant improvements on qualitative indicators have also been observed.

- ASA, SAVA, DSC and ARAVALI are playing major roles in influencing policy at the district, state and Government of India levels.
 - New mechanism like support networks have been tried and the idea of creation and support of capacity building institutions have got further boost because of MERC initiatives. Further, capacity building approaches are being made more effective and efficient by introducing innovative and tight monitoring systems.
 - MERC Support organisations are active in improving quality of government field programs by both training govt. staff and providing handholding support to various Government departments.
 - Research initiatives on gender, impact assessment and conflict and documentation of forest case studies and publication of partners field experiences and disseminating this have contributed to knowledge creation and dissemination. Some of these are contributing to improvement in field implementation.
 - Field and support organizations have developed linkages with Government and research institutions, both to improve practice and to influence policy. Innovative institutional structures like JFM cell in the area of Joint Forest Management (JFM), set up as a collaborative venture between Gujarat Forest Dept., AKF(I) and Geer Foundation is addressing operational bottlenecks in application of JFM at the field level. This is a new initiative and creates a future possible option to create interface between civil society institutions and Government and improve implementation of local participation focussed government programmes. However success of this mechanism would be tested in next few years.
-
- NGOs have a role to play in the development sector to demonstrate innovative solutions and to identify gaps and weaknesses in Government policies and in the implementation of the policies. NGOs also have a role to play as partners in implementing development projects and programmes. Given these roles, it is essential to build the capacities of small NGOs to enable them to play these roles more effectively.
 - An effective capacity building strategy has been demonstrated in the project. This consists of hand holding and in providing assistance for changing needs of the NGO. MERC has demonstrated that it is important to address the organization development of the NGO and not just restrict capacity building to addressing NRM issues on the ground. OD involves financial systems, planning and monitoring processes, staff policy, governance issues relating to the governing body, strategic and long term planning. This contributes to the sustainability of the NGO and the work it is supporting.
 - If the project objectives have not been met due to short comings within the donor agencies involved, they are morally bound to make up the short comings.
 - Modifying procedures, policies and interpretation of policies is a slow process that must be addressed on a continuous process, through demonstration and dialogue. This is an important role for the NGO sector to play.

**ANNEXURE B 6 – INTEGRATED WATERSHED MANAGEMENT AND WATER STORAGE IN PUSHKAR LAKE
AREA: DIRECTORATE OF WATERSHED DEVELOPMENT & SOIL**

Start and End Date: April 1997 – March 2001 (Project Closed)

**B 7 COASTAL WETLANDS: MANGROVE CONSERVATION AND MANAGEMENT : MS SWAMINATHAN
RESEARCH FOUNDATION**

Start and End Date: May 1996 – May 2004

In Tamil Nadu, the Forest Department has adopted the approach of community based management system demonstrated by the project. This is supported by the Forest Department channelising funds through the village level institutions. In Andhra Pradesh, MSSRF is being consulted on conservation of 2000 ha. of as yet pristine mangrove forests falling outside the Reserve Forests. In Orissa the Forest Department is willing to adopt the technical aspects of the demonstration more willingly than the social aspects.

Much depends on the attitude and understanding at the senior most levels of the Forest Department. Of the three States MSSRF is working in, Orissa is least ready to accept community management of the forest areas. However, the one Divisional Forest Officer who has been exposed to MSSRF work under the project, in Pichawaram, is open to suggestions from, and uses MSSRF as a resource institution. This should be broad based.

In Tamil Nadu and Andhra Pradesh, the community has developed the capacity to prepare micro-plans by themselves.

The restoration of mangrove areas is progressing on schedule and 1500 hectares of mangrove areas will be restored in 3 States by April 2003.

The project has been hampered by a number of changes in the personnel at the decision-making levels in the States and in Chennai. Part of the slow progress in Orissa could also be due to this reason.

The issues that require further effort are:

The Forest Department officials of Orissa, as well as of Andhra Pradesh and Tamil Nadu should have further inputs of training on mangrove management. The emphasis has to be on the social mobilization aspects of it.

Efforts have to be made to sensitize the GoI and the concerned State Governments to have a specific policy on mangrove management or specify mangroves as a special case, within the existing Government Orders

In the interest of sustainability, efforts have to be made for the State Governments to use MSSRF as a resource institution for mangrove management. This will ensure that the capacities created with considerable cost by ICEF is available to the State Governments on an on-going process.

Achievements April-September 2002

Project results and activities	Achievement till Sept. 2002
1. Community using more alternatives sources of fuel, timber, fodder and income generation to reduce pressure on mangroves and improve livelihoods	
Community using more alternatives sources of fuel, timber, fodder and income generation to reduce pressure on mangroves and improve livelihoods	Distributed saplings for private lands and common lands planted
Reduce the Mangrove dependency by using fuel efficient portable chullah	Portable chullahs, kerosene stoves, gas connections and pressure cookers distributed
2. Improved livestock management and fodder production	
Reduce the dry cattle population in the village and encourage stall-feeding.	Reduced scrub cattle in all the project villages and promoted use of fodder from the common lands
3. More income generated from non-mangrove resources	
Alternate income generated	Training imparted and income generated through coir rope making, making door mats, fish vending, tailoring, crab fattening, rearing chicken, chalk making, improvement in farm practices, supply of agricultural inputs
4. More commitment for joint management with community for continued protection and more resources from mangroves	
Improved technical knowledge and awareness about mangroves being used by forestry personnel to jointly manage, conserve and restore mangroves with community.	Conducted awareness raising workshops and folk theatre. Ensured that the Executive Committee of the CBO managing the mangroves met regularly and prepared micro-plans jointly with the communities and the Forest Department.
5. Restore 1500 ha. of degraded mangrove forests – 600 ha. in AP	A total of 1025 ha. undertaken: 315 ha. in AP; 190 ha. in Orissa and 520 ha in Tamil Nadu.

**B 8. LAND RESTORATION THROUGH WASTE MANAGEMENT, IMPLEMENTING ORGANIZATIONS:
INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR AND UNIVERSITY OF WESTERN ONTARIO,
CANADA**

**Start and End Date: April 1997 - April 2002
Project extended till July 2002. Project now closed.**

This project was being jointly implemented by IIT, Kharagpur and UWO, Canada. While IIT was funded by ICEF, UWO received funds through the Canadian International Development Agency (CIDA), directly. The MOU for the project was signed jointly between ICEF, IIT, and UWO.

With a view to demonstrating the technology for use of waste material (flyash and sludge), plantations totaling 396 ha have been established in five states in consultation with local NGOs, private sectors and Government institutions. Crop trials (1 ha each) were carried out at three locations in three different states.

Partner Organisations

1. BAIF, Pune
2. Univ. of Agricultural Sc., Raichur
3. Centre for Env. Concerns, Hyderabad
4. CART, Bhubaneswar
5. Cuttack Municipal Corporation
6. Kitply Limited, Raipur
7. DWDS, Jaipur

The project ended in April 2002. Since there was some delay in carrying out the end of project evaluation, the project was given a three month extension, till July 2002. The end of project evaluation was carried out in June-July 2002 and the draft report received in August 2002. The end of project report that was to be received from the project partners, by July 2002, has been delayed.

Two national level workshops were held in April 2002, at Delhi and Bhubaneswar.

Output results till date (90% Achieved)

- Initial results in the plantations at Raipur and Medak, have shown definite increase in the growth of the plantations as compared to the normal methods of plantations.
- Increased access of fuel and fodder through lopping by the local communities in the plantation areas.
- IIT facilities operational and dissemination of facilities in progress.
- 8 IIT staff trained for carrying out full range of analysis.

Outcome results till date (50% Achieved)

- Preliminary data indicate positive benefits of the technology.
- Facilities at IIT upgraded for advanced analytical capabilities.

Recommendations of the end of project evaluation

The recommendations identified areas in project planning that could have made a difference in project implementation. The evaluation did point out that the project has proven that the technology not only restores wasteland and improves the chemical and physical structure of soils it also increases yields in biomass and edible agricultural crop production. Results achieved using the soil amendment were significantly better than those achieved using traditional applications of NPK inorganic fertilizers. There was no compelling evidence to show that there was any build-up

of heavy metals in soils and plants receiving the soil amendment in the dosages prescribed by the project. The evaluation pointed out that the social components of the project could have been strengthened for better results on the field.

The project has not been able to carry out dissemination of the results as planned due to delays in project implementation. Also, the results of the project are to be submitted to ICAR and followed up for issuance of certificates for large scale use of flyash. ICEF proposes to take these up as special activities, under the policy advocacy project, which is under consideration.

B 9. EDUCATION AND CAPACITY BUILDING FOR PROMOTING NATURE CONSERVATION AND ENVIRONMENT: *WORLD WIDE FUND FOR NATURE-INDIA*

Start and End Date: February 1998 – June 2002 (Project ended)

The project came to a close on 30th June 2002. Participatory final performance assessment was carried out in June 2002 by two external consultants Prof. Vinod Kumar from IGIDR Mumbai and Dr. Yashpal Singh from UPPCB Lucknow. These consultants traveled to three states each (except Arunachal) and met with the state education officers, NGOs, school children, nature club advisors, school administration and also community members. No team member visited Arunachal since no work was done there in the last one year due to project personnel leaving the project. A final wrap-up meeting was held in Pune towards the end of June 2002 in which the results of the evaluation were discussed with all the state education officers. Few major lessons learnt are given below:

- The project design is in line with the policies of MoEF relating to formation of nature clubs (eco-clubs) in schools. Teachers were a good medium of spreading awareness about various local environmental issues to students.
- This ICEF sub-project, in comparison to the rest of the portfolio, has been the most effective in terms of time, cost and coverage.
- Resource material produced as part of the project proved effective in dissemination of knowledge in regional languages on various locale-specific issues.
- This project was able to build the capacity of young education officers in 7 regional WWF offices and also across 19 NGOs. More than 2,000 teachers in 600 schools were trained through the teachers' workshops.
- The concept of nature clubs has gained momentum in many state education boards and municipal corporations. The model is being emulated in the neighboring schools and districts that were not part of the ICEF projects initially.
- A large number of municipal corporations including Mumbai, Pune and Mysore have replicated the ICEF-WWF model in schools run by them. States like Goa, Himachal Pradesh and West Bengal have shown interest in resource material published under the sub-project. A few private sector companies like Infosys have also funded similar activities through NGOs.
- Inspired with the student's nature clubs in Himachal Pradesh, four mahila (women) mandals have formed their own nature clubs with the help of members of gram panchayats.

Financial Management:

Final project audit report is awaited. Over Rs 23 lakhs were left un-disbursed by ICEF and ~ Rs 30 lakhs were left unspent by WWF. Once the final audit report is received, the amount left unspent by WWF would be recovered.

B 10. SUSTAINABLE DEVELOPMENT AND WATER RESOURCES MANAGEMENT OF LOKTAK LAKE, IMPLEMENTING ORGANIZATIONS: LOKTAK DEVELOPMENT AUTHORITY (LDA) AND WETLANDS INTERNATIONAL-SOUTH ASIA (WISA)

Start and End Project: February 1998 – January 2003

The project area comprises of the entire water body of Loktak Lake and the people living in and around the lake. Reduction in storage capacity due to siltation and proliferation of weeds has not only aggravated the problems of flood but has also depleted the fish stock. The project envisages bringing back the lake to its normal health through catchment area treatment and establishing optimum water management regimes. The catchment area treatment programme is funded separately by GoI but implemented jointly by LDA.

The project being a lake conservation project, substantial resources has been ear-marked for carrying out scientific studies and data collection so as to understand the complex eco-system like Loktak lake and to make sustainable management of its resources possible. Data collection and their analysis continued in the area of stream gauging, silt load analysis, phumdi proliferation, fishery development, water quality and limnological studies etc. Plantation and other income generating activities in the catchment area continued as planned. The period was utilized primarily to consolidate the gains made so far in these areas of scientific investigations and also to identify appropriate physical interventions to provide the communities with more direct and tangible benefits.

As the project would be coming to an end in January, 2003, this reporting period was also used to prepare a proposal for extension for a period of two more years.

The community participated phumdi workshop conducted in the month of February provided a number of options for management of the phumdis. While the local fishermen wanted phumdis to be removed through the barrage gate, the lake shore dwellers suggested use of phumdis as composting and bio gas material. Experimental composting of phumdi has been attempted during this period with reasonable success. The project is now gearing up to propagate large scale phumdi composting and its trial in the farmers fields. Based on a laboratory study conducted on phumdi samples of *Salvinia* sp., the scientists from ASTRA, Bangalore confirmed the potential of use of *Salvinia* as a bio gas feed material. The project is also following up with the plans to undertake construction of demonstration plants for bio gas using phumdi as the feed material.

Activities carried under community participation continued from the previous years. Three new villages were brought under income generation programs. A complete census survey of the phum dwellers was also completed in the reporting period. Five training workshops were held on the role of women in conservation and management of Loktak lake and its catchments, and management of SHGs. The joint community based demonstration projects are: sanitation project in Island villages, irrigation program in Tinghai Khunou, strengthening of existing fish farms, integrated farming at Sadar Joute, strengthening of women's group in Bungte Chiru Khunka, and training and capacity building. A census survey was also conducted within the phum dwellers of Loktak lake.

The STAG and the PSC meetings held during the month of September recommended very emphatically the need for extension for at least by two more years. The meetings appreciated the elements of good performance of the project and also identified slack areas. Concerns were expressed as the ownership of the project by the state government was considered wanting in some areas. Another suggestion was that the PSC meetings should be conducted more frequently. It was suggested that the next meeting should be held at Delhi so that higher level representative from NHPC could also attend the meeting for their active and direct participation in the project. The proposal for extension of the project by two more years would be taken up amongst others in the next JPSC meeting scheduled to be held on October 8, 2002.

Achievements April -September 2002

Project Activity	Planned Activities April-September, 2002	Achievements April-September 2002	Cumulative achievements till date
<i>Project Planning and Awareness</i>			
a. consultation meetings with line departments / universities/NGOs, no	-	14	33
b. planning, and awareness workshops, no	nil	nil	5
c. tech. studies by external consultants, no	nil	nil	13
<i>Water Management</i>			
a. data collection from stations			
- meteorological data from no. of stations	on going	5	5
- rain gauge data from no. of stations	on going	8	8
- stream gauging data from no of stations	on going	12	12
- lake level data from no. of stations	on going	4	4
b. water quality measurement in lab			
- physicochemical parameters, no of stations	on going	15	15
- microbiological parameters, no of stations	on going	15	15
<i>Catchment area Plantation</i>			
a. aided regeneration, ha	-	-	680
b. maintenance 1 year plantation, ha	-	-	100
c. afforestation, ha	-	500	3200
d. horticulture plantation, ha	-	75	385
e. treatment of active Jhum area, ha	-	-	130
f. smokeless chullhas in hills, no	-	-	2000
<i>Studies for mgt. of fish/aquatic vegetation</i>			
a. assessment of floral diversity	on going	on going	145 sp.
b. genesis of phumdi	on going	on going	-
c. fish diversity	on going	on going	55 sp.
d. fish food and feeding habits	on going	on going	8 sp.
e. fish landing study	on going	on going	11 markets
<i>Sustainable Fishery Management</i>			
a. fishery ext. training, no (participants)		1 (32)	7 (454)
c. demonstration projects, no		150	372
		4	5
<i>Community Participation and Development</i>			
a. socio-economic survey, no. of villages		14	58
b. PRA for comm.structures, no. of villages		nil	44
c. assessment of cooperatives, no		-	138
<i>Capacity Building/Training of Project staff</i>			
a. Training meetings, no	-	7	20
b. fishermen groups formed, no.	-	4	19
c. watershed committee formed, no.	-	3	23
d. self help groups formed, no	-	-	36
e. phum clearing committee, no.	-	12	12
<i>Demonstration projects</i>			
a. low cost sanitation, units (villages)	-	58 (1)	54 (2)
b. smokeless chullhas in lake shore	-	200	3173
c. production of fish spawns, no	-	-	500000
d. clearing of channel, km	-	3.5	3.5

Lessons Learnt till Date

Lake conservation and management projects are data and scientific investigations intensive projects. Loktak lake project demanded serious attention in terms of data collection and a number

of scientific studies. It has not been possible as yet to introduce changes in resource utilization pattern without understanding the dynamics of the eco-systems. Community based approach in the management of a multi-user based common property resource (e.g lake, forest) is a relatively slow and complex affair loaded with conflict of interests and uncertainties, and at times difficult to sustain, especially in the absence of policy guidelines. But LDA is moving in the right direction.

Financial Management

The financial audit that covers the period from April 1, 2001 to March 31, 2002 of this project was conducted by George Read & co., Kolkata. The report mentions that the financial statements are prepared in accordance with the prescribed accounting policies and principles, and these are applied on consistent basis. LDA has already taken action and complied with the recommendations made in the previous year's audit report.

B 11. DIFFUSION OF EFFICIENT BIO-MASS UTILIZATION TECHNOLOGIES IN NON-FORMAL INDUSTRIES IN KARNATAKA AND KERALA: TECHNOLOGY INFORMATICS DESIGN ENDEAVOR

Start and End Date: March 1998 - February 2003

TIDE staff working on the project have started working in the entrepreneur mode for Karnataka from April 1, 2001 and that no more systems would be installed in the name of TIDE. In Kerala, the entrepreneur mode has started from July 1, 2001. The entrepreneurs have completed one year of operations on their own, with advertising support from TIDE, linked to the sale of devices.

Achievements April -September 2002

Project activity	Planned activities April-September2002	Achievements April-September 2002	Cumulative achievements till date
Devices installed- Karnataka Kerala	462 80	637 83	2048 554
Entrepreneurs established	8	8	8
Undertake indoor air quality monitoring	ongoing	ongoing	ongoing
Fuel accounting to be carried out	ongoing	ongoing	ongoing
Promotion plans	to start up activities in Tamil Nadu and AP	set up systems in AP and TN	beginning made in TN and AP

Output results till date: (100% Achieved)

- Information on the improved devices were disseminated & marketed to non-formal industries.
- Independent evaluation of these devices confirmed their savings potential.
- Fuel efficient energy conversion devices in selected categories of non-formal industries have been demonstrated.
- Fuel efficient energy conversion devices have been sold through entrepreneurs in the two states; technical and marketing skills for these devices were provided and diffusion infrastructure in place.
- Collaboration with selected manufacturers taken up in the two states.

Outcome results till date: (100% Achieved)

- Sufficient enhanced awareness leading to increased demand for efficient biomass burning devices.
- Infrastructure for assembly and manufacture of efficient devices in place.
- Increased availability of biofuel burning devices due to collaboration with selected manufacturers.
- entrepreneurs set up and in place taking up manufacturing and marketing of devices
- New sites being explored.

B 12 PROJECT FOR ENVIRONMENT REGENERATION: MYRADA

Start and End Date: August 1998 – December 2002

As the project is drawing to a close, the network NGOs mainly worked on documentation, trainings to community organizations, promoting external linkages, mobilizing government programs in the project areas, carrying out residual physical activity to catch the late monsoon and formation of Watershed Management Committees to maintain watershed structures.

Overall, the project carried out several innovations like natural forest regeneration in wastelands through stone wall protection, deep trenching in upper reaches, low cost sunken ponds to enhance infiltration, participatory technology development in dryland agriculture, with focus on intercropping and border cropping, and introduction of red gram and sunflower in some areas to take advantage of better soil moisture, introduction of village seed bank concept, community contribution for watershed programs, group insurance of women SHG members, promotion of alternate energy sources like bio- gas with subsidy from government and community sharing of water from water harvesting structures.

The CBOs capacities for better management and sustainability has improved with linkages to banks (50% SHGs have mobilized matching grants from banks), government and technical support institutions, trainings in book keeping, adoption of rules and regulations and respect for them, self assessment and increased self confidence leading to some CBO members being elected to the local Panchayat. The Watershed Associations have improved technical capability and experience in matters such as site selection, measurements, preparations of action plans and budgets.

Gender mainstreaming has benefitted women by active involvement in CBOs (with 60 % membership) and in project work, recognition of womens credit worthiness by local banks, increase in self esteem and leadership (of some CBOs), increase in joint decisions in the family, promotion of LPG connections and selection of forest species to meet firewood requirement. This, alongwith reduction in drudgery due to better availability of water, fuelwood and fodder has allowed them more time with the family leading to increased enrolment of children in schools and better family health.

The policy / procedural issues the project has participated in addressing include influencing change in local government guidelines for CPR management, influenced government departments to incorporate activities like NFR, deep trenching and investing in capacity building of CBOs.

As a result of this project, the network partners follow ICEF FMS Manual and reporting system evolved by MYRADA in their other projects also. Their abilities have improved in planning, budgeting, accounting, respect for audit observations and follow up action, developing linkages with other institutions, and working in coordination (for lobbying with forest department for controlled grazing and access to better services and infrastructure like transport, crop insurance, school buildings). They have also been able to attract more government schemes to their areas.

The physical activities have led to increased water availability, green cover, agricultural production, fodder and milk production and household income. Open grazing has been largely controlled and cut and carry method of fodder is being adopted. This will lead to better quality of stall fed animals and bio -gas.. The SHGs had a total common fund of Rs 83.86 lakhs . The number of loans given was 24180 amounting to Rs 251 lakhs. These were mainly for income generating activities.

Experience sharing and external linkages development workshops were held by MYRADA and individual partners. Participants included officers of local bank, agriculture research station, officers of line departments, Panchayat Chairman and other local NGOs.

Documentation has been done by partner NGOs and Myrada. This needs to be coordinated and quality improved.

Achievements April -September 2002

Project Activity	Unit	Planned Activities Apr-Sept, 2002	Achievements Apr-Sept 2002	Cumulative achievements till date
Surveys				
- surveys	nos			150
- preparation of watershed maps	nos			114
Soil & Water Conservation				
- earthen bunding	ha	2	2	2,748
- boulder bunding	ha			1,546
- diversion channel	meters			10,562
- waste weirs / spill ways	nos	17	13	2,201
- gully plugs / checks	nos			753
- water harvesting tanks	nos	26	28	142
- small check dams	nos			12
- land reclamation	ha			61
- tank rehabilitation	nos	1	3	12
- silt application	ha			162
Afforestation, Horticulture, Fodder Development				
- nursery raising	nos			5,20,216
- fodder grass	ha	-	80	665
- bund plantation	ha			135
- natural forest regeneration	ha			462
- horticulture	ha	-	5	160
- block plantation	ha	64	21	251
- dryland agriculture	ha			86
- bio gas plants	nos	-	1	29
Gender Development & CBOs				
- women SHG				
- seed capital support to SHG for IGP	nos		3	67
- WDA / WIC / WMC	nos			47
	nos			25
Training / Exposure				
- staff	nos	20	8	106
- WDA / WIC/ WMC members	nos	133	52	164
- Women SHG members	nos	90	35	171

Output Results till Date

- Increase in crop area under dryland and irrigated farming by over 50%.
- Natural Forest Regeneration in 462 ha
- Over 4000 ha under land treatment (soil & water conservation, block plantations, land reclamation, silt application , horticulture)
- Seed capital support to 47 SHGs for income generation programs.
- Web of community organizations formed and made functional for watershed management.
- Network NGOs share project experiences biannually.

Outcome Results till Date

- Increase in crop production by over 25%.
- Green cover in project area more than doubled.
- Increased availability of water from surface and underground sources for domestic & non domestic uses.
- More participatory and systematic approach of community in managing their natural resources.
- Improved ability of network partners to tailor project interventions to needs and replicate successful practices.

B 13. SUSTAINABLE DRINKING WATER SUPPLY IN THE HUMID TROPICS OF KERALA, IMPLEMENTING ORGANIZATION: MALANADU DEVELOPMENT SOCIETY.PARTNER ORGANISATION - KUTTANADU VIKASANA SAMITHY, ALAPPUZHA

Start and End Date: February 1999 – January 2004

The physical activities at all 3 sites continued with accent on rain water harvesting drinking water structures. Soil & Water conservation works were greatly hampered by inadequate and irregular rainfall at Karunapuram site due to which soil bunding, which is an important activity, could not take place. Significant progress was made in actively involving the local panchayats in collaborating with the project and in providing part financing for the water harvesting structures. Negotiations with the panchayats are in an advanced stage of finalization and fund flow from them is expected to commence in the next half year. An experience sharing visit to ICEF BAIF Tiptur site in Karnataka was made. A Swasraya Sangamam (one day gathering of all SHG members) was held in Karunapuram site for awareness and experience sharing. Village volunteers were trained in accounting and auditing of SHG books, and based on project interventions, a training has been scheduled (for early October) for the implementing staff of the World Bank aided Kerala Rural Water Supply and Sanitation Agency (KRWSA).

There was increased availability of safe drinking water for more than 300 families. Surveys in 19 households showed total elimination of water borne diseases such as cholera, dysentery and jaundice, as compared to baseline, when using water from rain water harvesting structures of the project. In times of acute water scarcity, beneficiaries (with project rain water harvesting tanks) have started sharing with non beneficiaries, for the first time, thus widening pool of beneficiaries and helping in awareness generation and replication efforts. A project tank built as a demonstration unit in a Primary School led to replication efforts by the teachers in their homes. Improved availability of water (quantity & quality) has led to improvement in quality of food and a feeling of water security, thus improving the quality of life. Previously rice cooked in the morning from open water sources used to get fermented and became inedible, thus necessitating evening cooking again.

Recharged wells have cut down women`s drudgery in water collection considerably. Some women had to negotiate slopes of 500 -800 meters to walk down the valley to fetch water and others had to queue up all night for fetching water from distant sources. Well monitoring in Panikachira site has shown increase in ground water table by 45cms even though rainfall is less this year by 47%. This is the result of considerable headway being made in soil & water conservation works. Apart from training to beneficiaries and staff in various aspects of the project, a large number of masons have also been trained and made available for local replication initiatives, by contact through KVS, which is also started helping smaller NGOs with the know--how. This will help in replication.

The project has not been successful in its endeavor to form a Vana Suraksha Samithy for the forest area in the midlands site despite three public meetings conducted by the forest department. Efforts are on to pursue the same.

Achievements April -September 2002

Project Activity	Unit	Planned Activities April-September, 2002	Achievements April- September 2002	Cumulative achievements till date
Drinking Water Technologies				
- Development & Rejuvenation of Wells	nos	15	25	88
- FCT	nos	73	82	175
Soil & Water Conservation				
- Bunding & Terracing	ha	1533	43	3194
- Trenching	nos	2000	2963	6945
- Gabions	nos	-	-	2
- Gully Plugging	nos	50	19	54
- Water Collection Pits	nos	15000	-	33483
- Drainage Line Treatment	meters	-	-	665
- Sanitary Latrines	nos	37	2	65
- Ponds	nos	2	2	4
- Tree Nursery	nos	3	3	6
- Kitchen Garden	nos	20	16	28
Training & Capacity Development	no of trngs	33	36	92
- to beneficiaries	-do-	2	2	19
- to project staff				
SHG Formation X	nos	35	38	359

Output Results till Date

- 263 water storage and supply structures in place and functioning for more reliable water supply.
- 65 sanitation structures constructed to reduce contamination of water sources.
- 359 SHGs formed and made functional.
- 3194 ha of area bunded and vegetative cover provided.
- Several training programs on diversified subjects relating to the project were conducted for beneficiaries and staff.

Outcome Results till Date

- Increased availability of safe drinking water for over 500 families in the project area.
- Surveys in 19 households shows total elimination of water borne diseases, as compared to baseline, when using water from rain water harvesting structures of the project.
- In times of acute water scarcity, beneficiaries (with project rain water harvesting tanks) have started sharing with non beneficiaries, for the first time, thus widening pool of beneficiaries and helping in awareness generation and replication efforts.
- Improved availability of water (quantity & quality) has led to improvement in quality of food and a feeling of water security, thus improving the quality of life.
- Demonstration of benefits as a result of structures already installed has led to replication in other areas.
- Improved capacity of MDS and KVS in sustainable natural resource development and management

B 14. SAGAR ISLAND WIND-DIESEL ELECTRICITY: WEST BENGAL RENEWABLE ENERGY DEVELOPMENT AGENCY

Start and End Date: January 2000 - December 2003

The first phase of commissioning two wind turbines and the wind diesel controller has been commissioned in April 2002. The formal inauguration was done by the High Commissioner of Canada to India, and the Hon'ble Chief Minister of West Bengal. Around 200 consumers have taken supply from the hybrid system and electricity is being supplied for 4-5 hours as a start up initiative.

The second Project Management Committee meeting was held. One of the key issues identified was the non-functioning of the local cooperative, which would take up the supply of electricity to the local population. It was decided that if efforts to make the cooperative active, did not show results, then efforts to form a new cooperative with members from the consumers should be taken up. It was also decided to carry out an evaluation of phase I, before proceeding to phase II for installation of eight machines, and integration of the controller in the system.

Output Results till Date (20% achieved)

- WDHS installation and commissioning is in progress.

B 15. IMPLEMENTATION OF RENEWABLE ENERGY TECHNOLOGY IN RURAL INDIA THROUGH NGOS: TATA ENERGY RESEARCH INSTITUTE, NEW DELHI

Start and End Date: June 1999 - May 2003

This project targets the local communities to take up increased use of renewable energy systems and energy conserving technologies for meeting their requirements of electricity. The project will establish two energy support units (ESUs) in two project areas near Dehradun, Uttar Pradesh and Bikaner, Rajasthan for taking up total marketing, servicing, and financing activities for disseminating renewable energy systems.

Partner Organisations

1. Urmul Seemant, Bikaner
2. Manav Seva Sansthan, Bikaner
3. Sri Jagdamda Samiti, Rishikesh

The assembly activities in Bikaner have stabilized and the focus here was on sale of systems and training of various stakeholders. In Rishikesh region the assembly process has been recently completed and local vendors have been identified and trained for supplying small components, while the major components like panels and charge controllers are still being sourced from outside. The Bikaner project office launched three new products with panels of 3 w, 5 w, and 8 w, targeted at the low-income group of households. Systems worth Rs. 11.9 lakhs have been sold in Bikaner and Rs. 4.44 lakhs in Rishikesh regions. Training activities have been ongoing, with programmes for bank officials, consumers, dealers, and to SHGs. A consultant was appointed to review the institutional options for the ESU, and to prepare the financial plans for the institutional setup recommended. The consultant has submitted the report and the same is being examined for followup.

UREDA (Uttaranchal Renewable Energy Development Agency), Dehradun is planning to electrify 125 non-electrified villages of Uttaranchal with solar photovoltaics in the year 2002-03. Under the scheme DLS will be disseminated in the respective villages at subsidized cost (the total amount of subsidy is yet to be decided). TERI and SMTA, Vikasnagar have approached jointly to the agency to undertake this work of electrification in few of the blocks where Uttam Urja has a good presence. UREDA has been requested by the project to assign 5 (five) blocks to the project to undertake this venture. UREDA is yet to finalize the approved strategy as per MNES guidelines. Once it is approved the blocks will be allocated to the project.

Achievements April -September 2002

Project activity	Planned activities April-September, 2002	Achievements April-September 2002
Market build up activities	Building up a brand image	project build up under the name "Uttam Urja"
Dissemination meetings	ongoing	ongoing
Technical training	ongoing	ongoing
After sales services to be taken up	dealer and NGO training on after sale services to be done	training imparted and after sales services taken up
Sale of systems		Rs. 16 lakhs
Local assembly to be set up	Planned for Rishikesh	Local assembly facilities set up

Output Results till Date (20% Achieved)

- Awareness meetings on renewable energy technologies held.
- Workshops for operation and maintenance and technical training of RETs organised.
- First batch of 100 solar P- home lighting systems delivered and disseminated to consumers in Rishikesh and Bikaner

The second Project Steering Committee meeting was held in this period. Since the project comes to a close in June 2003, discussions were initiated to determine the structure of the ESU and also the role of TERI and other institutions on the revolving fund that would be set up. The nature of support to the ESU (grant, equity, loan) with a view to making the same sustaining, was also discussed. The issue of ICEF in monitoring the fund is also being discussed within ICEF.

B 16 REHABILITATION OF INTEGRATED TANK MANAGEMENT SYSTEMS IN THE KALIVELLI WATERSHED: PALMYRA

Start and End Date: July 1999 – June 2004

A Mid-term Performance Assessment of the project is scheduled to be undertaken in the middle of October 2002.

The project is working on 31 tanks against 23 that was the target in the proposal. However, the 23 tanks were to have all the components dealt with - although this was implied and not explicitly stated. These components include feeder channels, bund repair - desilting tank bed; distribution channels in the command area. Palmyra has undertaken different combinations of these components in different tanks. Hence the larger number of tanks covered.

Another reason for the larger number of tanks covered is the stipulation that the farmers will contribute 30% of the cost of the repairs and do so in cash in a bank account before the project contributes its share of 70%. The farmers are willing to contribute this - about Rs. 200 -300 per acre - to ensure that they can use the impounded rain water. However, they are able to do so better when there has been a good harvest which is dependant on rainfall. Half - way through the project, one-third of the funds earmarked for restoration works, has been utilized.

This project is one of the very few ones which is trying to integrate gender issues in irrigation management. It is proceeding on a trial and error basis. A strategy lately being tried out - of women landholders [women headed households] and spouses of men farmers being brought into SHGs for capacity building and induction into the Executive Committee of the WUA - seems to be making some headway.

Achievements April-September 2002

Sl. No.	Project Activities	Planned activities [Jan – Dec '02]	Achievements [Jan 02 – Aug. 02]	Cumulative achievements till Aug. 2002
Tank rehabilitation				
1.	Field survey and basic estimates	22	34	46
2.	Restoration activities	9	15	30
3.	PRA exercises	13	0	21
4.	Formation of Water Users' Association [WUA]	3	1	31`
5.	Registration of WUAs	9	2	21
6.	Formation of SHGs	6	5	78
7.	Formation of Women Pattedar SHG	4	3	3
8.	Accounts training for WUA	27	19	25
9.	Accounts training for SHGs	-	3	3
10.	Income Generation training for SHGs	17	6	28
11.	Tank management and leadership training to EC members of WUA	25	19	36
12.	Exposure visits	-	13	43

B 17. COMMUNITY-BASED PROJECT TO MITIGATE ARSENIC POLLUTION IN WEST BENGAL: ALL INDIA INSTITUTE OF HYGIENE & PUBLIC HEALTH (AIHH&PH), CALCUTTA

Start and End Date: September 2001 – September 2006

Installations of community treatment plants is in progress by various NGOs. Community institutions are being trained for action in arsenic affected areas. Success of the technology park has started to influence the state policy relating to arsenic mitigation. Results of the technology park are being used by the Public Health Engineering Department (PHED) in future planning of Arsenic treatment measures.

Third PMC meeting was held in early September 2002. Major decisions taken in the PMC are indicated below:

- It was suggested that focus of the project should now be on low-cost treatment and rain water harvesting. NGOs should be given the responsibility to market these low-cost options in Arsenic affected areas.
- The idea of having regular Arsenic medical clinic in Kolkata was debated at great lengths and eventually decided not to pursue this further. It was agreed that mobile clinics cum awareness vehicles will be preferred.
- It was also decided to drop two non-performing NGOs - Sahay and VHA. New NGOs should also be included.
- It has to be decided by AIHH&PH if they need a separate Project Secretariat. A decision on this needs to be made by 30th sep and conveyed to ICEF.
- Community contribution should be the focus where community treatment units are being installed. This will ensure proper maintenance and sustainability of these plants.
- Audit for partner NGOs to be carried out before fresh MOU is signed.
- Leading advertising agencies like Lintas are to be roped in for awareness generation on the Arsenic issue.
- A complete film on social and technical issues should be made for the project.
- AIHH&PH would revise and send the request for advance. Meanwhile interim payment of ~Rs 20 lakhs needs to be done.
- Substantial changes to be done in the annual work plan as per these discussions.

Achievements April -September 2002

Project Activity	Planned Activities April-September, 2002	Achievements April-September 2002	Cumulative achievements till date
PRA's Conducted	100	42	127
Village Meetings Held	150	67	235
SHGs Formed	60	30	122
Awareness Programs Conducted	500	371	538
Medical Clinics Organized	5	0	2
Training: - Water Quality	10	7	25
Training - Medical Trainings	5	2	18
No of People Trained in Medical Trainings	100	44	982
Water Quality Analysis			

- Field Kit Testing	10,000	7941	11968
- Laboratory Testing	500	268	1457
Physical Interventions			
- Treatment Plants Installed	100	59	76
- Dug wells commissioned	11	11	13
Workshops			
- PMP Workshop	1	1	2
- Technology Park Workshop	1	1	2
Project Meetings			
- PMC Advisory Committee	1	1	3
- Technical Committee	2	1	3
- NGO Review Meetings	2	1	4
- Meeting with ARP manufacturers	1	2	2
IEC Material			
- Posters	0	0	12
- Pamphlets	2	0	1
- Audio Cassettes	2	2	2
Publications			
- Technology Park Manual	0	0	1
- Technology Brochures	1	1	1
Reports			
Annual Progress Reports	1	1	1

B 18. MANAGEMENT OF FRESH WATER RESOURCES IN THE LAKSHADWEEP ISLANDS, IMPLEMENTING ORGANIZATIONS: ADMINISTRATION OF UNION TERRITORY OF LAKSHADWEEP AND CENTRE FOR WATER RESOURCES DEVELOPMENT & MANAGEMENT, KERALA

Start and End Date: December 2000 – December 2005

The Union Territory of Lakshadweep is an archipelago comprising of 36 small islands located in the Arabian sea. Out of these 36 islands, only 10 are inhabited at present. The project will cover all the 10 islands which put together have a geographical area of 32 sq. km and a population of about 60,000. Groundwater is the only naturally available fresh water source in these islands. Owing to the increasing utilization of groundwater to meet the domestic needs, the only available source is depleting fast due to saline water intrusion. Signs of saline water intrusion within the fresh groundwater zone along the periphery is apparent in most of the islands. If this trend is not controlled, the entire fresh groundwater may turn saline in the near future.

The project objective is to conserve the limited available groundwater by collecting additional rain water through roof water harvesting. The project will be implemented by the Administration of the Union Territory of Lakshadweep through the Department of Science, Technology and supported by Lakshadweep Public Works Department, in collaboration with local community institutions.

The project launching has been completed as planned. The project management mechanisms and the community institutions to execute the project are in place. For the sake of logistics, it has been decided to concentrate the project initially at four islands. CWRDM has conducted initial hydrogeological studies in four islands. This was followed by training the local mesons in the construction of ferro-cement tanks to be used for roof water harvesting structures. Also eight roof water harvesting structures have been constructed, two in each island to demonstrate the use of such structures.

The Project Management Committee meeting was held in the month of May, 2002. As the previous administrator of Lakshadweep got transferred, the project concept and the intents were shared once again with the new administrator. The annual work plan was reviewed. It was decided that while the administration of Lakshadweep through the PWD department would transport the raw material from the main land, the lead agency namely the department of Science and Technology would implement the project in collaboration with the PWD and the local communities.

There were serious discussions on implementation strategy as well. It was reiterated that the beneficiaries for the roof water harvesting structures should not only be fully involved in the construction of the structures but also make a suitable contribution as deemed fit in this circumstances.

Physical achievement during this reporting period is not very encouraging. One reason being that the raw materials for construction were to be brought from the main land first by the PWD at their own cost which the project implementing agency would procure from time to time as per the need. Another factor was the commencement of Panchayet election in the islands during the month of September. The project team hopes to compensate for the short fall in annual target during the second half of the year.

Achievements April -September 2002

Project Activity	Planned Activities Apr-Sept. 02	Achievements Apr-Sept'02	Cumulative achievements
<i>Community Mobilization:</i>			
a. Community awareness meetings, no	7	5	12
b. PRA training for LPWD/DST staff, no	2	1	7
c. Technical training for CWRDM, no	1	1	1
<i>Survey and Investigations :</i>			
a. Social Base line data, no.of islands	3	3	9
b. Hydrological survey, trips	2	1	9
- Observation wells, no.of islands	1	1	1
- VES	nil	nil	nil
- Water sample analysis, no	n.a	n.a	72
<i>Construction of structures :</i>			
a. Training of masons, no. of training	-	-	7
a) Construction of RWH structures, no	-	3	9

Although the logistical constraints in implementation of the project in the islands were known, its extent had not been clear at the beginning. The islands remain almost inaccessible during the monsoon season.

Local communities as part of the Union territories, are used to subsidies, particularly in social sectors. The concept of communities partly paying for the cost of the RWH structures, is taking time to get internalized.

The project approach of harvesting roof top rain-water would offer only a temporary solution, if the demand for fresh water by the communities keep increasing due to increasing standard of living.

Financial Management

The organization (CWRDM) has its own well established finance department. For uniformity's sake, the financial controlling practices of the organization is also applicable to this project. Besides, this department also conducts internal auditing of the project fund. Initial difficulties in accounting arose from the advance released by CWRDM to the implementing agency in the island who as per norm wanted to submit only the utilization certificate. It was however, agreed in the second PSC meeting that detailed expenditure statement will also be submitted by the implementing agency to CWRDM.

The financial audit that covers the period from April 1, 2000 to March 31, 2001 of this project was conducted by Kumar & Biju Associates, Chartered Accountants. They have only certified the Receipts & Payments Account for the year ended 2000-2001.

B 19. COMMUNITY-BASED WATER RESOURCE MANAGEMENT WITH EMPHASIS ON NATURAL WATER QUALITY IMPROVEMENT AND RESOURCE RECOVERY: XAVIER INSTITUTE OF MANAGEMENT (XIM) & CENTRAL INSTITUTE OF FRESH WATER AQUACULTURE (CIFA), BHUBANESWAR, ORISSA

Start and End Date: November 2000 – November 2005

Construction work at the three sites is progressing well and would be completed by the end of 2002.

Vanivihar - Excavation has been completed for the 3 duckweed ponds. Stone pitching is under progress. Work of 2nd weir is under completion. 70% work is complete.

Nicco Park - Excavation of all 4 duckweed ponds, 2 fish ponds and 1 marketing pond is complete. Stone pitching and Earthen embankment work under progress. 60% work completed.

Laxmi Sagar - De-weeding and cutting of hard strata is complete. The work will resume after rains. 50% work is complete. Social mobilization is underway at all the project sites.

Community Mobilization, Training and Awareness was the main focus over last six months. Following events were organised:

- Two day trainers training on 'Role of women in water conservation and management through community participation' was organized.
- Street theater in Oriya was conducted at the 3 project sites and also at village Kesura. It got a very good response at all the sites.
- Polythene eradication campaign was organized for 4 local schools in which more than 100 children participated. The program was very well covered by the media. One project site BDA Nicco park was declared polythene free from 9th July 2002.
- Health survey was conducted for 282 households. Four health check-up camps were organized with the help of Rotary club in which over 800 slum people were checked for common diseases.

Co-funding

Rs 4.32 lakhs were mobilized from BASAID (a Swiss NGO) for the SHG work at the 3 project sites. A community hall will also be constructed in village Kesura.

Women Self Help Groups (SHGs):

- The project is working with 4 existing women SHGs and 1 SHG federation (which has network with 16 SHGs). Only 1 new SHG has been formed at Laxmi Sagar.
- All the SHGs have been strengthened and micro-enterprise activities have been initiated. Training programs on paper bag making and mushroom cultivation have been conducted for 40 women members of Kesura SHG. Rs 20,00 has been given to SHG federation for initiating micro-enterprises.
- Two day training on 'trade identification' was imparted to all women members and exposure visit to a successful women's SHG at Balakati was also organized.
- Contacts have also been developed with NABARD for SHG linkages.

Project Management Committee (PMC): The 2nd PMC meeting was held in September. Mr. Kaul from MOEF also attended the meeting. Annual workplans and the budget were approved by the committee. The committee expressed satisfaction over the progress of the project. It was generally agreed that all the 3 sites should be ready by the end of this year and should start fishery activity in early 2003.

Achievements April -September 2002

Project Activity	Planned Activities April-September, 2002	Achievements April-September 2002	Cumulative achievements till date (30 th Sep 2002)
PRA Conducted	-	-	6
Village Meetings	14	7	31
SHGs Formed/Existing Strengthened	2	2	21
SHG Meetings	15	10	15
Tree Plantations	50	-	150
Water Sample Analysed	72	48	160
Reports			
- DPR (Social, Engineering, Fisheries)	-	-	-3
- EIA	-	-	-1
- Biodiversity	-	-	-1
Project Meetings:			
- PMC/Advisory Committee	1	1	2
- Technical Committee	1	1	5
- Coordination Committee	2	2	3
- Tender Evaluation Committee	-	-	3
- Physical Verification Committee	2	1	3
- Progress Review Meetings	8	4	22
- Search Committee	-	-	7
PMP Workshop	-	-	1
Training			
- Gender Tr for Project Staff	1	-	1
- SHG Training	6	6	9
Exposure Visits			
- Mumbai, Kolkata, Delhi, Bangalore, Puri, Cuttack	-	-	6
- Khajuraho & Gopalpur Workshop	-	-	2
Publications			
- Brochure	1	1	2

- Newsletter	2	2	5
Physical Construction			
- Sulabh Sauchalaya	-	-	1
- Vanivihar site	-1	-under progress	70%
- BDA-Nicco Park site	-1	-under progress	60%
- Laxmi sagar site	-1	-under progress	50%

B 20. BIOENERGY FOR SUSTAINABLE RURAL DEVELOPMENT IN TUMKUR DISTRICT, KANARTAKA, KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY: KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY (KSCST), BANGALORE

Start and End Date: April 2001 - March 2006

The project coordinator and project officers joined the Project Management Unit in May/June 2002.

The second Project Steering Committee was held in September 2002 and approved the work plan for the year 2002-03. While some action has been taken on preparation of TORs for some activities, there is no significant progress to report. A consultant was appointed to prepare a procedures manual for operational matters, and also for capital equipment purchases. The PSC, while approving in principle, suggested that the Project Executive Committee should go into the details and give their approval, after which the matters will be heard in the PSC.

Initial project start up activities have been take up in a cluster of five villages. PRA meetings have been held. Discussions with ASTRA (Application of Science and Technologies in Rural Areas) and CGPL (Central Gas Propulsion Lab), under the I.I.Sc have started on MOUs for technical assistance for the various components of the project. There have been some issues raised regarding the role of KSCST and the Project Management Unit. The PMU is processing the various proposals received relating to setting up of community organizations, identification of sites for gasifiers, and related activities.

Initial estimates indicate that the demand for electricity is significantly higher than what has been projected in the project document. Issues now being discussed relate to the mode of operation of gasifiers (local supply versus feeding into the grid), supply to incremental and new loads, as against the total village loads, and drawing up separate distribution lines for the supply of electricity from the gasifier systems.

Fund utilization is low at 1% only so far. With the PMU in place and Steering Committee meetings taking place regularly, higher disbursement in the coming month is expected.

**B 21. NAGALAND EMPOWERMENT OF PEOPLE THROUGH ECONOMIC DEVELOPMENT (PHASE II):
GOVERNMENT OF NAGALAND (GON)**

Start and End Date: April 2001 - March 2006

Promotion of alternative farming practices to replace the environment degrading, age old practice of shifting cultivation and generation of additional income for the Naga farmers are the two main objectives of the project. The Naga farmers are being encouraged through Village Development Boards (VDBs) to plant shade loving cash crops e.g. ginger, turmeric cardamom, pepper etc. as mixed crops in both primary and secondary forest lands as an alternative to existing Jhum practice. To begin with, the project will form revolving fund to provide credit to finance these planting activities in 100 villages. The project will work simultaneously to provide support for collection, storage, value addition and marketing of the agro-forestry produce of the farmers. In addition a few test plots will be undertaken to demonstrate Jhum crop intensification and agro-forestry models.

Achievements April -September 2002

Major Activities	Target April - Sept., 02	Achievements April - Sept, 01	Cumulative as on date
<i>Jhum crop intensification model</i>			
a) Selection of farmers, no	105	92	92
b) Selection of villages, no	8	8	8
c) Area under trial in Year 1, ha	46	46	46
<i>Demonstration at Merama site</i>			
a) Demonstration in land treatment, ha	1.5	1.5	1.5
b) Demonstration of crop, ha	1.0	1.0	1.0
c) Nursery raising , no of plants (no of species)	500 (1)	500 (1)	500 (1)
d) Visit by farmers, no	200	100	100
e) Training of farmers, no of trng (persons)	15 (200)	5 (75)	5 (75)
<i>Agro-forestry model</i>			
a) Selection of farmers, no	33	33	33
b) Selection of villages, no	8	8	8
c) Area under trial in Year 1, ha	28.5	28.5	28.5
<i>Operationalization of revolving fund by VDBs</i>			
a) Total fund disbursed to VDBs, Rs. Lakh	305.67	190.75	496.42
b) Total beneficiaries (loanees), no	2545	2076	4621
c) Total loan disbursed by VDBs, Rs. Lakh	305.67	190.75	496.42
d) Total amount of recovery, Rs. Lakh	2.91	-	20.05
e) Women SHGs accorded loan, no	n.a	-	-
Production of agro-forestry cash crops			
A Ginger :			
a) Total farmers, no	893	695	695
b) Total production, Metric tonnes	-	360	360
c) Total value worth, Rs. Lakhs	-	18.0	18.0
B. Cardamom:			
a) Total farmers, no	640	613	613
b) Total production, Metric tonnes		n.a	n.a
c) Total value worth, Rs. Lakhs		n.a	n.a
C. Beetle leaves			
a) Total farmers, no	78		
b) Total production, Metric tonnes	729	n.a	n.a
c) Total value worth, Rs. Lakhs	145.8	n.a	n.a

D. Araca nut			
a) Total farmers, no	33	13	13
b) Total production, Metric tonnes	Production	-	-
c) Total value worth, Rs. Lakhs	awaited	-	-
E. Passion fruit			
a) Total farmers, no	270	142	142
b) Total production, Metric tonnes	-	80	80
c) Total value worth, Rs. Lakhs			
F. Turmeric			
a) Total farmers, no	32	30	30
b) Total production, Metric tonnes		55	55
c) Total value worth, Rs. Lakhs		1.65	1.65
G. Other crops			
a) Total farmers, no	-	421	421
b) Total production, Metric tonnes	-	500	500
c) Total value worth, Rs. Lakhs	750.0	n.a	n.a

Lessons Learnt till Date

The project has involved the selected Village Development Boards (VDBs) successfully to receive, disburse and managing of the loans through a revolving fund mechanism. Now that the farmers are producing different types of cash crops e.g. ginger, turmeric cardamom and, pepper as mixed crops in both primary and secondary forest lands, they expect the State Government to make arrangement for marketing. The state Government is gearing up to meet this challenge and is planning to form a marketing federation.

As the farmers have already started refunding loan money particularly against a short duration crop like ginger, the funds at VDB have started to grow. The VDBs will not only have to strengthen their record keeping procedure that has already been put in place to monitor old loans. In order to extend the benefit of the scheme to other farmers the project has to extend new loans based on the recovery of loans. Such loan, however, are to be executed exclusively as per the direction of the POU.

Financial Management

The POU has strengthened its financial management capability by establishing a full time financial management and reporting cell comprising of three staff members was put in place.

ICEFPO and Finance officer made several visits to assist the project cell in closing their earlier accounts, opening new accounts, establishing procedures for transfer of funds and equipments and similar other related matters.

Basic guidelines on accounting practices and formats for reporting etc. was discussed in conjunction with the visiting chartered accounting firm M/S George Read & Co from Kolkata.

The first half yearly (April - Sept, 2002) accounts were audited by M/s George Read & Co. and the observations made by them were taken up with POU for compliance.

Since, the project involves application of revolving funds through out the state, attempts would be made to develop gradually a more broad based, preferably computer based financial management system.

The financial audit that covers the period from April 1, 2001 to September 30, 2001 of this project was conducted by George Read & Co., Chartered Accountants. The report mentions that the financial statements are prepared in accordance with the prescribed accounting policies and principles, and these are applied on consistent basis. It further mentions that proper books of

accounts are maintained and internal control procedures are adequate and commensurate with the size and nature of the project. It also states that the project disbursement report gives a true and fair view of the expenditure and disbursements made by the project-implementing agency for the half year ended on that date. The auditor has recommended that proper vouchers should be prepared and must be authorized by the team leader and they must have proper supporting attached to them, TDS must be deducted wherever applicable and banking reconciliation statement must be prepared on monthly basis. They further recommend that physical verification of assets must be done at the end of accounting year.

B 22. POLLUTION PREVENTION AND WASTE MINIMIZATION OF SMALL SCALE INDUSTRIAL UNITS IN KOLKATA METROPOLIS AREA: WEST BENGAL POLLUTION CONTROL BOARD, KOLKATA

Start and End Date: September 2001 – September 2006

- Rapport established with the industries of Kolkata metropolis area. Working linkages have been established with the government and other concerned authorities.
- Baseline data has been collected and regular monitoring is underway.
- Awareness about project activities is being done through newspaper advertisements, project brochure and a web page.
- PMP workshop has been organized with all the stakeholders. PMP document is ready.
- Chief Minister of West Bengal formally launched the project on 5th June 2002.
- Detailed Environment Assessment Screening report has been completed.
- Training manuals are being prepared for training industrial workers. Jadavpur University, Kolkata, has been engaged to undertake this activity.
- Installations of pollution control/change of fuel also underway
- 1st PMC meeting was organized in September 2002.

Achievements April - September 2002

Project Activity	Planned Activity	Achievements	Cumulative Achievements
1. Activity Set 1100 (Adoption of Pollution Prevention and control options)	Conversion of coal fired boilers	Conversion Complete in 17 units	21
	Conversion of ceramic kilns	Conversion Complete in 5 units	5
	Financial Disbursement	Nil	Nil
	Supervision and installation	150	250
	Feedback, discussions amongst stakeholders, trouble shooting by experts	- Newspaper notification and Advertisements through media - Launching of ICEF website - Written Communication and Interaction - Publishing ICEF brochure	-do-
2. Activity Set 1300 (Adoption of Pollution Prevention and control options)	Identification, scheduling of training needs	Completed	Completed
	Preparation of Training Manuals by experts	Completed	Completed
	Class room training	Training for 1 st batch of	Training for 1 st batch workers completed

		industrial workers completed	
3. Activity Set 1200 (Adoption of Pollution Prevention and control options)	Baseline TOR preparation and expert group formation	Completed	Completed
	Designing of demonstration plant	Completed	Completed
	Installation and construction of plants	Completed	Completed

B 23 CAPACITY BUILDING OF STAKEHOLDERS FOR REGENERATION AND CONSERVATION OF MANGROVE FOREST IN GUJARAT: GUJARAT ECOLOGY COMMISSION

Start and End Date: September 2001 – August 2006

The baseline data base of socio-economic, resource use and technical matters has been collected. This will help to take informed decisions by GEC and the partners. There are four NGOs involved in implementing the project at four sites along the Gulfs of Khambatt and of Kutchch. The baseline data gives a detailed data base of conditions at the start of the project. This information is to be used both for planning and for monitoring. Sites for physical intervention has been selected and the species identified. Nurseries have been started. Alternatives to fodder and fuelwood are being planted.

This is the point of time at which the institutional arrangement has to be looked at closely. The four partners will have different *types* of institutions - cooperative, women based and registered under the Societies Act. The issue to determine is the relationship of the User Groups with the village and stakeholders outside the village, such as those undertaking non-farm activities that impact mangrove health.

Achievements during April-Sept,'02

Project Activity	Planned activities April-September 2002	Achievements April-September 2002
Conduct scientific studies for basic characterisation of the area and develop technological packages with species diversity	Base Line Survey (BLS) for all the Project sites by technical consultants with respect to the mangrove area and the associated drylands	Base Line Survey was conducted by Mangrove Experts at all the sites and Site-wise plantation recommendations based on the feasibility were given by the consultants, including the species to be planted with respect to mangroves and other fodder and fuel species
Activity 112 Awareness building and training of user groups on ecological and economical values of mangroves and technical and other aspects of mangrove regeneration	Awareness programmes for the Mangrove environment to be conducted	Training programmes (5) were conducted at all the Project sites/ villages to create awareness about the ecological and economical importance of mangroves
Develop mangrove plantation	Nursery of mangroves to be prepared in all the sites	Nurseries have been initiated in all the Project sites for <i>Avicennia marina</i>
Develop plantation on common lands for fodder and firewood	Fodder grasses and fodder & firewood trees to be developed in common lands	Saplings of some fodder and firewood and fruit bearing species have been obtained in Kachchh. And nurseries started in Khambat
Studies on use and type of fodder requirements of Maldharis, pattern of migration	Study to be initiated on Maldharis	Study has been scoped out, Terms of Reference have been developed and VIKSAT will shortly initiate the study
Form or expand CBOs for mangrove	CBOs to be formed in all the Project villages	New CBOs formed , existing CBOs expanded to include project activities and all the CBOs have

and CPR management in Project villages with social and gender equity		women as a large part of members, and one CBO is exclusively of women
Training on organizational, management aspects including sensitization for gender equity and technical matters	Gender sensitization training programmes to be carried out	One gender sensitization programme for one of the villagers, one training on PRA of Tada Talao was carried out in the village by trainers from Development Support Centre
Exposure visits to MSSRF field sites and Sunderbans, Bangladesh and documentation of lessons that may be applied to the project	Exposure visit to MSSRF Restoration Programme sites in Orissa for GEC, PIPs and CBOs	The visit, which was planned in July, has been postponed to December or January. The reason was that some agriculture activities needed to be carried out by the villagers because of a good rainfall, and therefore they requested to postpone the visit
Workshops/ meetings with industrial association/ industries to motivate them to take up mangrove regeneration	One workshop to be arranged at GEC for the industrial houses to motivate them to take up mangrove regeneration programmes	A major workshop could not be held at GEC. However, meetings were held with members of Ankleshwar Industrial Association by VIKAS and GEC. GEC had meetings with Gujarat State Electricity Corporation Limited (GSECL). Discussions are on with Gujarat Mineral Development Corporation (GMDC)

Output Results till date:

- The communities have become more aware about the mangroves and their importance and are developing the skills through training programmes to carry out regeneration of mangroves.
- Community Based Organizations (CBOs) in place in 6 Project sites, initiating the process of mangrove development
- The partner NGOs have an enhanced ability to interact with the communities
- Corporate groups willing to interact for initiating mangrove programme
- District level highest authorities interested in the Project and willing to extend cooperation

Outcome Results till Date:

- Village communities in the project sites better equipped technically to carry out regeneration of mangroves
- Corporate sector has initiated programmes for mangrove regeneration

B 24. WATER RESOURCES CONSERVATION & CONJUNCTIVE UTILISATION FOR ENVIRONMENTAL RESTORATION IN TRIBAL AREA OF PATRATU BLOCK, HAZARIBAGH DISTRICT (JHARKHAND STATE): KRISHI GRAM VIKAS KENDRA (KGVK)

Start and End Date: May 2002 – April 2007

The project commenced in May and is in the process of completing the initial start up and mobilization activities. These include recruitments, setting up of office, providing project team with induction and orientation trainings, conducting initial PRAs and formation of community groups, initiating entry point activities and collection of baseline data. A Project Management Planning Workshop is scheduled for November 2002 to finalize the PMP and prepare yearly workplans. The project is expected to gain momentum thereafter. Initial work at the project site showed that entry point activities relating to basic needs helps in generating awareness, interest and active involvement in the project at a very early stage and facilitates project implementation. Women have taken the lead in taking up project activities, where males have hesitated to come forward. This gives an indication that early mainstreaming of gender in core project activities would give a fillip to the project and give an impetus to gender development.

B 25. ENVIRONMENTAL RESTORATION AND WATER CONSERVATION IN HILL VILLAGES OF WESTERN RAMGANGA OF KUMAON HIMALAYAS: *INSTITUTE OF HIMALAYAN ENVIRONMENTAL RESEARCH & EDUCATION (INHERE)*

Start and End Date: May 2002 – April 2007

The project commenced in May and is in the process of completing the initial start up and mobilization activities. These include recruitments, setting up of office, providing project team with induction and orientation trainings, conducting initial PRAs and formation of community groups, initiating entry point activities and collection of baseline data. Questionnaires and formats were developed for household data, present forest situation, village water and irrigation sources, agriculture and related activities. The drafts were discussed with ICEF during the start up meetings in July. Four brochures giving information on the project and on livelihood issues have been prepared. A Project Management Planning Workshop is scheduled for December 2002 to finalize the PMP and prepare yearly workplans. The project is expected to gain momentum thereafter.