

PDCBK936

PROJECT ASSISTANCE COMPLETION REPORT

MAHARASHTRA SOCIAL FORESTRY PROJECT

(No. 386-0478)

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MAHARASHTRA SOCIAL FORESTRY PROJECT

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I. INTRODUCTION

About 80% of the forest area in Maharashtra, that covers about 21% of the total geographical area of the state, is classified as Tropical Dry Deciduous and Tropical Thorn forests. Increased population and a rising economy accelerated the consumption of forest products at a rate which outstripped the capacity of the state forests to replenish supplies. Per findings of the 1980 study by the National Council of Applied Economic Research (NCAER), the projected annual demand for firewood in Maharashtra was 17 million M3 while the state forests were able to produce only 1.5 million M3 and the huge gap of 15.5 million M3 between the demand and supply was presumably made up by agricultural residues, dung, shrubs etc. The National Commission on Agriculture recommended that India's strategy on forestry development should focus on developing large scale social forestry programs outside the legal forest reserves to meet the growing rural population needs of fuelwood, fodder, small timber and other forest products. Pursuant to this, GOI took a policy decision to promote social forestry program primarily on private and communal lands in the resource deficient states of India. Within this overall context USAID assisted GOI in designing and developing a social forestry project in Maharashtra.

II. PROJECTS GOALS AND PURPOSE

Initiated in October 1982, this eight year Maharashtra Social Forestry Project (MSFP), with a total funding of about \$40 million (AID & GOI's cumulative funding against \$60 million estimated in the PP), was USAID's second major project in the Forestry sector in India. The overall goals of the project were:

- (i) increased supply of firewood, fodder, fruit and small timber;
- (ii) increased rural employment;
- (iii) reduced rate of deforestation.

The project purpose was to develop the institutional capability of the new state Social Forestry Department (SFD) to assist villagers to manage their communal and private lands for increased and sustained production of forest products.

The mid term evaluation of 1985 observed that although the physical targets were largely being met, there was need for more emphasis on activities which enhance and have the greatest impact on project sustainability. Considering that some of the key indicators of sustainability could be more appropriately dealt with by the project end, the final evaluation of September 1990 specifically focused on this issue. The end of the project status discusses the extent to which different project activities are sustainable.

A project audit was also carried out by RIG in 1988 that raised questions regarding Government of Maharashtra (GOM) fully completing the outputs envisioned under the Fixed Amount Reimbursement (FAR) system of payment. A sample survey by an independent agency was, therefore, undertaken in 1989 to verify achievements that provided the basis for USAID reimbursement. The survey concluded that the FAR benchmarks have generally been achieved within acceptable limits.

A final evaluation of the project was conducted by a two member team in September 1990. The evaluation observed that the primary project purpose of developing SFD capacity to help farmers and communities manage their private & communal land for increased production was largely achieved (Attachment V-H lists accomplishments by the end of the project). This suggests the project goals can be met in a sustainable way. Generally, the trend of increased seedling production & plantation establishment even after the termination of USAID assistance - (see Attachment V-E) in the private & public forestry sectors indicate good progress towards project goals viz., increased production/supply of forest products, significant direct employment benefits and reduced pressure on the existing forests by generating additional woodlot resources outside the forest reserves. The research studies undertaken under this project are expected to lead to technical improvements and better market link and thus ensure sustainability.

III. END OF PROJECT STATUS AND LESSONS LEARNT

The project envisioned social forestry field program implementation over the first five years in all the 27 districts of Maharashtra with support for training, research, studies and technical assistance for the complete 8 years of the project.

A. Field Activity:

- (i) Nursery Development: Against the annual production target of 23 million nursery seedlings by the end of field program support, the departmental and private nurseries collectively produced 45.8 million seedlings in 86-87 which were used to raise the 87-88 project plantations. During the next three years, the GOM, using their own funds under its state social forestry and related wasteland development programs, generated on an average 160 million seedlings per year from the government and private nurseries. Therefore, the seedling production was not only much more than the envisioned target by the project end, but also sustained thereafter by GOM at a much higher level. Furthermore, the trend of production also generally suggests progressively increased private sector involvement. (Attachment V-C and V-E)

Until 1986-87, all seedlings were provided free of cost. However, in keeping with the project review recommendation a seedling policy was introduced by GOM in 1987-88 reducing the level of subsidy. This policy was modified in 1990 to establish subsidized pricing structure by species group to widen species base in response to emerging demands. The final evaluation of September 1990 emphasizes the need for introducing a rational pricing structure to reflect production cost plus a margin of profit to make the program of private seedling production a self sustaining process.

- (ii) **Plantation Establishment:** As against the target of 81,000 Ha of plantations to be raised on private and public lands covering 4,300 villages, an area of 75,428 Ha has been covered by the end of the project. The primary reason for this short fall was farmer's reluctance to enter the tree production system following the introduction of seedling pricing in 87-88. Thus, against an achievement of 12,278 Ha in 86-87, an area of only 5,948 Ha was established in 87-88 under the private forestry sector. During the subsequent years, however, (i.e. after the termination of USAID assistance to field activities) the private forestry program expanded significantly (72,609 Ha in 88-89 and 63,279 Ha in 89-90) once the tree growers became aware of the net economic benefit from the Agroforestry program. (Attachment V-D and V-E)

Recently, GOM has liberalized the existing transportation restriction in respect of 4 commonly grown social forestry species (viz, Babul, Prosopis, Subabul and Eucalyptus). These species have also been exempted from the Maharashtra Tree Felling Act. Such liberalization in felling and transportation regulations coupled with a recently undertaken marketing study, that analyses existing marketing channels and evaluates marketing options, are expected to provide further support to this expanding private forestry sector.

The project envisioned development of village management plans for all the 4,300 community plantation programs and transfer of woodlot (WL) management responsibilities to the Gram Panchayats after three years of plantation establishment. By the project end, all the 4,300 management plans, conceived as institutional tools for village/department interaction, were developed in keeping with the approved guidelines and WL management responsibilities were assumed by the village panchayats. Despite such achievements, the sustainability of community woodlot remains somewhat problematic. Some of the factors responsible for the limited success in decentralized management relate to:

- (a) Less than effective community participation in the planning and design of village management plans.
- (b) Inadequate financial resources with the panchayats to sustain the process of existing WL maintenance through rotation and creating new ones following harvesting.
- (c) Absence of suitably trained village level Development Committees as management adjuncts to panchayats for the purpose of decentralized WL management;
- (d) Lack of appropriate technical models and management systems capable of providing immediate and continuing flow of product benefits from the WLs to the community.

The recommendations of the study on "Panchayat Management of Block Plantations" and the project final evaluation will constitute the basis for GOM actions to address these constraints

B. Support Activities

(i) Organization and Staffing

The social forestry program covered all the 27 districts of Maharashtra by creating separate Social Forestry Divisions in each district and provided staff required at all levels for effective project implementation. By the project end, a well established state Social Forestry Dept. (SFD) with trained and experienced staff capable of building upon the program further was in place. The state government initiative to significantly increase social forestry afforestation following termination of USAID assistance to the field activities in 1987 clearly demonstrates SFD intention to expand and sustain the program over time.

To help AID manage and administer the project, an Information and Technology Unit (ITU) was planned through direct AID contract with a suitable U.S. educational institution or consortium. Since the establishment of ITU was delayed due to a variety of reasons and implementation of the project was found to proceed satisfactorily, GOI and AID subsequently agreed to drop the ITU concept from the project. In lieu, provision for project technical support through U.S. and Indian consultants was made to provide some of the critical advisory technical services envisioned under the ITU. Although SFD initially decided to directly provide the TA in identified areas, continued GOM budgetary constraint did not allow procurement of needed technical services. It is only in the project's last phase that USAID was able to convince GOM about the critical need for such TA, even if limited, and provided assistance in forestry research and computer programming (discussed later under 'Research and Monitoring/Evaluation').

(ii) Training and Extension

A large number of incountry training programs for the SFD staff and villagers including social workers, governing council members (panchayat), students and teachers were organized at the village, district, regional and state levels as part of the institutional capacity building program. While the villagers training programs focused primarily on the art and science of seedling growing and tree establishment, the staff training programs dealt with issues like rural sociology, extension, communication and the like to help develop needed extension skills within the technical and professional forestry community at different levels. Assistance for training was obtained from the state based institutes like the Administrative Training Institute, Forestry Training Institute, Tata Institute of Social Science and Jamnalal Bajaj Institute of Management. The project final evaluation observed that more

training is needed before technically competent groups can be expected at the Panchayat level. In recognition of this deficiency, SFD has been developing capsules course, focussed towards this target group (village level decentralized management unit) to help attain sustainability of community woodlots in the state.

Furthermore, to equip the staff with new perspectives and additional skills, AID supported participation of key selected SFD officials to specialized overseas short training courses in Agroforestry, Land use Planning, Community Management, Cost/Benefit Analysis, and Environmental Impact Assessment organized by the Oxford Forestry Institute, USDA/OICD, ICRAF and the Los Banos University at Philippines.

While the achievement in the incountry SFD & other department staff training was more than what was envisioned under the project, only 67% of the short term overseas non-degree staff training (& 60% of the total overseas staff training) target could be attained. The primary reason for this shortfall is GOM reluctance to nominate staff for long-term overseas training programs (degree/non-degree) and non-receipt or delay in receipt of nominations by AID in response to course announcements due to elaborate GOI/GOM nomination procedures.

(iii) Research and Studies

To support the developing social forestry program in Maharashtra, Biological research and socio-economic studies were carried out either departmentally or through contractual arrangements with competent institutions and individuals.

While the departmental biological research primarily dealt with the nursery and plantation techniques and economics of common social forestry tree species through the four SFD research centres at Solapur, Nagpur, Ahmednagar and Raigad, collaborative (contractual) biological research with the Rahuri State Agriculture University primarily focussed on adaptive Agroforestry and Silvicultural trials. The preliminary results available have been disseminated through the network of state Training & Visit extension system. Furthermore, USAID provided direct technical assistance to SFDs through a Forestry Research Specialist, to analyze progress made so far in social forestry research and provide specific recommendations for future direction following systems research approach.

Important socio-economic studies include the Market Analysis of Social Forestry Product, Decentralized Management of Community Woodlots, Farmer's Tree Growing, Role of Institutional Financing in Social Forestry etc. Findings and recommendations of these studies will help SFD consider alternative policy options and changes in Acts and Regulations to support any social forestry and related wasteland development program in the state.

(iv) Monitoring and Evaluation

The PP envisioned that the ITU would assume the primary responsibility of project monitoring. However, the ITU concept was dropped subsequently and replaced by a Technical Support Cell in the Directorate of Social Forestry at Pune (PIL 6 & 10). As a result considerable delay was caused in initiating the monitoring activities which were ITU functions.

The SFD finally established a Monitoring and Evaluation (M&E) Cell headed by a Joint Director and the GOI NWDB provided the computer hardware and software to operationalize the M&E system developed by the GOI and donor agencies. However, absence of adequate and trained staff (in the cell and field) stymied the functions of this unit considerably. Considering this deficiency, AID provided limited TA through a computer specialist during the project's last year. Such support helped generally in establishing the M&E procedure relating to data collection, input and analysis so that useful information is available for management decisions in an ongoing basis. In addition, suitable computer programs were also developed specifically for evaluating the Block Plantation and departmental/farmer nurseries.

Furthermore, to keep together the enormous management information generated during the process of project implementation, T.A. was provided through the Systems Research Institute to develop a Desktop Mapping (The Map System) based information system that allows (a) storage of spatial/numerical data; (b) tabulation/display of all/selected data on maps; (c) future catagraphic data addition; and (d) generation of maps for presentation through overhead transparencies.

IV. Mission Follow-up Actions

AID urged the GOM (letter dated April 23, 1991) to consider some of the major recommendations of the project final evaluation that are critical for the sustainability of the ongoing state social forestry program and also relevant in the context of any new forestry/wasteland development program in Maharashtra. The Secretary, Forests informed (letter dated May 9, 1991) GOM intent to initiate actions on the valuable evaluation recommendations in consultation with the Director, Social Forestry. Maximum possible follow-up has already been done, and there is no specific post-project monitoring responsibilities.

V-A. AID FINANCIAL CONTRIBUTIONS (PLANNED V/S ACTUAL INPUTS)

<u>Project Element</u>	<u>Planned Expenditure (\$)</u>	<u>Actual Expenditure (\$)</u>
Management Plans	10,577,000	10,576,952
Plantations	2,826,000	2,822,606
Stocking Reports	5,247,000	5,191,102
Technical Support	23,000	9,618
Overseas Professional Staff Development	354,000	300,898
Local Technical Staff & Field Training	942,000	896,658
Technical Socio-economic Studies/Research	561,000	486,249
Motivators	43,000	42,724
Evaluation	77,000	62,942
Overall Project Funding	Loan: \$ 18.65 M	\$ 18.59 M (99.7%)
	Grant: \$ 2.00 M	\$ 1.79 M (85.0%)
	Total: \$ 20.65 M	\$ 20.38 M (98.7%)
Borrower/Grantee Contribution	Equi. to \$ 20.65 M**	

** The expected HC contribution as per PIL 4 was the rupee equivalent of \$30 Million which was later reduced to the rupee equivalent of \$20.65 (per PIL 23) to match with A.I.D. contribution. The HC contribution was for establishing village plantations @ Rs.117,608 each, (Rs.54,500 being A.I.D. contribution and the GOM share Rs.63,108). The A.I.D. contribution for this activity was to be released in three installments: first installment upon the approval and acceptance of the village management plan by the village panchayat, the second upon completion of the initial planting of the village block plantation, and the last upon submission by GOM of a "survival report" two years after planting indicating that an acceptable stocking level has been achieved within the village block plantation. A.I.D.'s contribution has been released after payment verification procedures and a sample survey by an independent agency which concluded that the FAR benchmarks have generally been achieved within acceptable limits. The completion of benchmarks by GOM and A.I.D. payment releases, by attribution, establishes the fact that the GOM has contributed equally or rather more under the project.

Attachment V-B

V.B PHYSICAL ACHIEVEMENTS (PLANNED V/S ACTUAL OUTPUTS)

	<u>Planned</u>	<u>Actual</u>
1. <u>Training:</u>		
(a) <u>Overseas Training:</u>		
78 forest officers to be trained in social forestry related technical, management & extension courses. (Degree/long-term training - 8 short-term training - 70)		47 forest officials have undergone short-term courses in the U.S., U.K. & Philippines in technical forestry & extension/communication. (Shortfall in target explained under section III B (ii) of this Report).
(b) <u>Incountry Training:</u>		
9,150 SFD staff & local govt. officials to be trained in motivation and extension.		About 11,000 SFD staff & local govt. officials were trained in extension and motivation. In addition about 150,000 panchayat members, farmers, nursery & plantation labourers, social workers, students, school teachers have undergone short courses in subjects dealing with the techniques of nursery and plantation establishment (Attachment V-G).
(c) Research Study	150	94 (Attachment V-F) (The PP target of 150 researches was too ambitious a target given GOM's limited staff capability at the beginning of the project)
(d) No. of rural districts to be covered	27	27
(e) No. of project villages to be covered & village managements plans prepared	4,300	4,300
f) No. of block plantations transferred by SFD to village panchayat for management	4,300	4,300
(g) Nurseries/Seedling (No.) (i) Departmental & Private	4,354/23 Million per year	5,429/45.8 million per year (Attachment V-C)
(h) Plantations (Hectare)	81,000	75,428 (Attachment V-D)

MAHARASHTRA SOCIAL FORESTRY PROJECT
NURSERY DEVELOPMENT & SEEDLING PRODUCTION UNDER THE PROJECT

<u>Period</u> <u>IFY</u>	<u>Private (Kisan Nurseries)</u> <u>No./Seedling</u>	<u>Departmental Nurseries</u> <u>No./Seedling</u>
1983-84	64/(727,000)	446/(22,996,000)
1984-85	399/(3,573,000)	725/(26,673,000)
1985-86	1,104/(12,247,000)	717/(35,065,000)
1986-87	1,197/(8,473,000)	777/(37,341,000)

Note: Seedlings were raised under the project upto 1986-87 only since the plantation program under the project ended in 1987.

Attachment V-D

MAHARASHTRA SOCIAL FORESTRY PROJECT
PLANTATION TARGET ACHIEVEMENTS UNDER THE PROJECT

<u>Period</u>	<u>No. of Project</u>	<u>Block</u>	<u>Private</u>	<u>Watershed</u>	<u>Strip</u>	<u>SC/ST</u>	<u>Total</u>
	<u>Villages</u>	<u>(Ha.)</u>	<u>(Ha.)</u>	<u>(Ha.)</u>	<u>(Ha.)</u>	<u>(Ha.)</u>	
	<u>Covered</u>						
1983-84	540	2,484	2,517	170	461	26	5,658
1984-85	810	5,402	5,918	102	678	329	12,429
1985-86	810	6,628	11,943	64	561	428	19,624
1986-87	1,080	8,629	12,278	37	646	0	21,590
1987-88	1,060	8,695	5,948	37	1,444	3	16,127
Total	4,300	31,838	38,604	410	3,790	786	75,428

Attachment V-E

TREND OF SOCIAL FORESTRY FIELD ACTIVITIES AFTER THE
TERMINATION OF USAID ASSISTANCE

(i) Seedling Production

<u>Period</u> <u>IFY</u>	<u>S.F.D. Nurseries</u> <u>No.</u> <u>Seedling</u>	<u>Private (Kisan Nurseries)</u> <u>No./Seedling</u>
1987-88	3,326/(104,543,000)	4,228/(56,580,000)
1988-89	547/(82,076,000)	4,987/(75,716,000)
1989-90	547/(85,000,000)	5,011/(81,910,000)

(ii) Community Block Plantations

<u>Period</u>	<u>Area of Block Plantation Raised</u>
1988-89	37,317 Ha.
1989-90	25,582 Ha.

(iii) Private Plantations

<u>Period</u>	<u>Area of Plantation Raised</u>
1988-89	72,609 Ha.
1989-90	63,279 Ha.

Attachment V-F

MAHARASHTRA SOCIAL FORESTRY PROJECT

A. S.F.D. Contractual Socio-economic Studies

1. Planting by Schedule Caste/Schedule Tribe
2. Income generation and upliftment through Kisan Nurseries
3. Tree Planting by voluntary agencies
4. Role of institutional finance in social forestry
5. Role of Cooperatives in social forestry
6. Alternate source of energy and fuel saving device
7. Marketing of social forestry products.
8. Role of women in social forestry.

B. USAID Contractual Socio-economic Studies

9. Role of social forestry in rural development
10. Farmer tree growing
11. Stall feeding and livestock management
12. Panchayat management of block plantations

(C) Biological Research

- (a) Departmental Research: 75 research experiments (See Enclosure-A)
- (b) Contractual Research through the Rahuri State Agriculture University (See Enclosure B).

Enclosure-A

List of in-house biological experiments

<u>Name of Experiments</u>	<u>No. of Experiments</u>
1) Departmental Research under Maharashtra social Forestry Project 6 experiments in 21 localities	21
1) To find out the most economical method of raising Subabul plantation under rain fed conditions - Ia	
2) To find out the best economical method of raising Eucalyptus hybrid plantation under rainfed conditions - Ib	
3) To study different spacements and effect of mulching on the growth of Subabul to arrive at optimum spacing for getting maximum yield under rainfed conditions-IIa	
4) To study different spacements and effect of mulching on the growth of Eucalyptus hybrid to arrive at optimum spacing for getting maximum yield under rainfed conditions-IIb	
5) To study different methods of planting and different spacement for <u>Proposals juliflora</u> for getting maximum fuelwood under rainfed conditions-III	
6) To study different planting techniques and spacement for sesbania grandiflora for getting maximum yield of pulpwood under rainfed conditions.	
ii) Water evaporation retardant Chemicals experiment	12
iii) Jalshakti experiment	10
iv) Introduction trials of exotics species	22
v) Nitrogen fixing tree Association trials	7
vi) Propagation of Mangrove species in Coastal areas	2
vii) Wet planting of seedlings in Dry Zone areas using fungicide/insecticide mixture	$\frac{1}{75}$

Enclosure-B

List of biological experiments through Institutions/Agencies

- 1) Agro Silvipastoral Development and Agro Forestry Research Project by Mahatma Phule Krishi Vidyapeeth, Rahuri.
 - A) Adaptive Silvipastoral and agro-forestry trials on following centres:
 - 1) Rahuri 2) Ashti 3) Sangurde 4) Limb 5) Boradi
 - 6) Solapur 7) Aurangabad

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Attachment V-6

MAHARASHTRA SOCIAL FORESTRY PROJECT
INCOUNTRY TRAINING PROGRAM

Category	Details of the Participants	1983-84		1984-85		1985-86		1986-87		1987-88		1988-89	
		C (No.)	P	C (No.)	P	C (No.)	P	C (No.)	P	C (No.)	P	C (No.)	P
1. Village Level	Labourers, Motivators, Plantation guards, Sarpanch, Teachers, Social Workers	315	12,266	285	11,655	174	10,969	317	14,303	379	17,010	356	24,263
2. District level	Gram Sevak, Members of panchayat, Samiti Sarpanch, Students of primary, high school & colleges	184	11,296	196	12,281	1,020	7,417	206	12,141	197	8,272	138	8,904
3. Regional level	Dist. level Officers of various Dept., Plantation Officers, Asst. Plantation Officers, Asst. Director, Dy. Director,	52	6,729	24	1,254	6	445	-		11	717	20	1,303
4. State level	Asst. Directors, Dy. Directors, Jt. Directors,	7	131	7	131	6	16	6	123	11	300	25	65
TOTAL		558	30,422	512	25,321	1,206	18,847	529	26,567	598	26,299	539	34,540

C - Course
P - Participant

ATTACHMENT V-H

MAHARASHTRA SOCIAL FORESTRY PROJECT (386-0478)
SUMMARY END OF PROJECT STATUS (EOPS)

<u>Particulars</u> (as per PP Log Frame)	<u>EOPS</u>
1. Social Forestry Organization is fully staffed and operational.	Separate Social Forestry Organization (SFD) fully staffed and operationalized in all the 27 districts.
2. Nurseries able to supply 23 million seedlings of satisfactory quality a year.	Private and Public nurseries produced 45.8 million seedlings (Attachment V-C) in 1986-87 (the last year of project assistance for seedling production) and 167 million with GOI/GOM's own funds in 1989-90 (Attachment V-E).
3. Social Forestry Extension staff covers 4,300 villages.	Social Forestry Extension staff covered all the 4,300 project villages.
4. Farmer demand for seedlings for private lands increasing.	Increased farmer demand for seedlings is generally evident from the trend of private sector plantations, (Attachment V-D).
5. Increased amounts of village land available for reforestation.	Progressively increased public block plantation (Attachment V-D).
6. 81,000 Ha tree plantations established yielding average of 10 M3 per Ha per year.	75,428 Ha tree plantations established with the project funds upto IFY 87-88 (Attachment V-D). Thereafter, 198,787 Ha of tree plantations was established in the subsequent two years after project assistance termination for plantations (in 88-89 and 89-90) with GOM funds (Attachment V-E). The plantations are not yet ready for final harvesting to compare planned versus actual yield per unit area.
7. 4,300 management plans accepted by gram panchayats	4,300 village management plans accepted by gram panchayats.

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STATUS OF COVENANTS

Covenant 'a': Documentation provided to AID confirming that staffing and budgets have been established or will be provided for the H&SFD sufficient to carry out the objectives of the project and to build and maintain an institution capable of sustaining the expansion of social forestry throughout Maharashtra: Status of Covenant 'a': Documentation was provided to A.I.D. regarding the specially created Social Forestry Department. The social forestry program covered all the 27 districts of Maharashtra by creating separate Social Forestry Divisions in each district and provided staff required at all levels for effective project implementation. By the project end, a well established state Social Forestry Dept. (SFD) with trained and experienced staff capable of building upon the program further was in place. The state government initiative to significantly increase social forestry afforestation following termination of USAID assistance to the field activities in 1987 clearly demonstrates SFD intention to expand and sustain the program over time.

Covenant (b): Professional forestry and other staff as appropriate assigned to the H&SFD may receive training under the project provided their services are retained for the H&SFD in accordance with applicable Government of India rules governing period of bond following training: Status of Covenant (b): In accordance with the GOM rules, the forest officials (47 for overseas training against the target of 78; and 11,000 for in-country training against the target of 9,150) underwent relevant training. For details on in-country training and the reason for overseas training shortfall refer to Attachment V-G and Attachment V-B of this PACR respectively.

Covenant (c): Documentation provided to AID confirming that a methodology has been established to determine household consumption estimates being prepared for this project: Status of Covenant (c): Scope of Work was developed and a relevant methodology was adopted.

Covenant (d) Documentation provided to A.I.D. confirming that criteria have been established for the distribution of forest produce: Status of Covenant (d): The required documentation was provided to A.I.D.

Covenant (e) Documentation provided to A.I.D. confirming that criteria have been established for the selection of villages to participate in the project. Status of Covenant (e): Village management plans were developed, evaluated and found acceptable.

Covenant (f): Establishment of an evaluation program as an integral part of the Project, which includes the establishment of an adequately staffed monitoring and evaluation unit within the H&SFD by June 1983. the program will include, during the implementation of the Project and at one point thereafter (1) evaluation of progress toward attainment of the objectives of the Project; (2) identification and evaluation of problem areas or constraints which may inhibit such attainment; (3) assessment of how such information may be used to help overcome such problems; and (4) evaluation to the degree feasible, of the overall development impact of the Project. Status of Covenant (f): Mid-term and final evaluations were completed. The SFD established a Monitoring and Evaluation (M&E) Cell headed by a Joint Director and the GOI NWDB provided the computer hardware and software to operationalize the M&E system developed by the GOI and donor agencies. For further details, please refer to B (iv) on page 8 of this PACR.