11. 林業普及ニーズ調査用紙と結果の例

Draft: 26 Feb. 1992

HMG/JICA Forestry Extension Project

Review of Forestry Extension Activities

1. Objective

The main tasks of the Forestry Extension Project are 1) to assess on-going extension activities, and 2) to survey the extension needs at the following levels of forestry administration, in order to study how the present situation is and what ought to be in the field of forestry extension, and to develop appropriate extension programmes.

HMG Administration

Forestry Projects

Central Level Regional Level District Level

Project Level Programme Level

Field Staff Level Grassroots Level

The review of forestry extension activities aims at 1) the analysis of on-going extension methods, and 2) the extension needs felt by forestry related organizations (or transmitters of information), both at the central and the regional levels.

The in-depth survey of extension needs at the grassroots level (or the recipients of information), which are the most important items to be investigated, will be conducted after this review survey.

Draft: 20 May 1992

HMG/JICA Forestry Extension Project

Review of Forestry Extension Activities

Survey Items:

Format A: Project Sheets

- 1. Project Profile
- 1.1. Project Title & Contact Address
- 1.2. Data Sources
- 1.3. Implementation Periods & Major Inputs
- 1.4. Area of Operation
- 1.5. Project Objective(s)
- 1.6. Organizational Structure
- 2. Extension & Publicity Approaches
- 2.1. Target Group(s) & Participatory Approaches
- 2.2. Extension Component, Personnel & Communication Channels
- 2.3. Institutional Cooperation & Coordination
- 2.4. Extension Facilities
- 2.5. Extension Materials
- 3. Evaluation & Future Plans
- 3.1. Major Achievements
- 3.2. Self-Evaluation on Extension Effects
- 3.3. Problems / Constraints & Future Plans
- 4. Role of Extension and Publicity Division / MFE

Format B: Programme Sheets

- 1. Programme Profile
- 1.1. Programme Title
- 1.2. Data Sources
- 1.3. Implementation Periods
- 1.4. Area of Operation
- 1.5. Objective(s)
- 1.6. Activities / Targets / Inputs
- 2. Extension Approaches
- 2.1. Target Group(s) & Participatory Approaches
- 2.2. Staff Involvement & Communication Channels
- 2.3. Institutional Cooperation & Coordination
- 2.4. Use of Extension Facilities
- 2.5. Use of Extension Materials
- 3. Evaluation & Future Plans
- 3.1. Major Achievements
- 3.2. Self-Evaluation on People's Participation
- 3.3. Problems / Constraints & Future Plans

Format A-B': District Sheets

- 1. DFO Profile
- 1.1. District Name & Contact Address
- 1.2. Data Sources
- 1.3. Duties & Targets
- 1.4. Budgets
- 1.5. Forestry Related Programmes in the District
- 2. Extension Activities
- 2.1. Major Activities & Participatory Programmes
- 2.2. Staff Composition & Communication Channels
- 2.3. Institutional Cooperation & Coordination
- 2.4. Extension Facilities
- 2.5. Use of Extension Materials

- 3. Evaluation & Suggestions for Improvements
- 3.1. Major Achievements
- 3.2. Self-Evaluation on People's Participation
- 3.3. Problems / Constraints & Suggestions for Improvements
- 4. Role of Extension and Publicity Division / MFE

Format C: Field Staff Sheets

- 1. Personal Profile
- 1.1. Position
- 1.2. Educational & Professional Background
- 1.3. Employment Status & Working Conditions
- 1.4. Duties
- 2. Extension Works
- 2.1. State of Information Reception
- 2.2. State of Information Delivery
- 2.3. Involvement in Participatory Programmes
- 2.4. Use of Extension Facilities
- 2.5. Use of Extension Materials
- 3. Evaluation & Suggestions for Improvements
- 3.1. Major Achievements
- 3.2. Self-Evaluation on People's Participation
- 3.3. Problems / Constraints & Suggestions for Improvements

3. Questionnaire Formats & Survey Procedure

The following questionnaire formats will be developed for different administration levels.

Format A - Project Sheets

This format is for interviews with the representatives of forestry related projects on their general extension and publicity efforts (covering a - c of the above extension stages).

Format B - Programme Sheets

This is for interviews with the persons in charge of specific programmes within these projects, covering c - e of the above stages.

Format A-B' - District Sheets

For interviews with district forest offices who are carrying out community forestry programmes, another type of format will be designed.

Format C - Field Staff Sheets

This will be designed for interviews with field staff who have direct contact with the recipients of information. The survey will be made on selected field workers of different status, i.e. rangers, asst. rangers, forest guards and extension assistants.

The survey will proceed as follows, according to the schedule as shown in the project work plan;

- (1) First of all, Format A and B will be developed, and used together in the interviews of forestry related projects. The questionnaires will be tested, then improvements would be made according to the result of the interviews.
- (2) From the examination of CFDP programmes, Format A-B' will be developed and used in interviews with district forest offices.
- (3) After analyzing general extension activities of forestry related projects and DFOs, Format C will be developed for the interviews with field staffs who are working under these projects and DFOs.

Draft: 29 July 1992

HMG/JICA Forestry Extension Project

Review Report on
Extension Activities of Forestry Related Projects
in the Western Development Region of Nepal

Integrated Watershed Management Project in Phewa Tal

1. Project Profile

1.1. Data Sources

(1) Bibliography: Project Document of Phase I, 1987

Work Plan for 1990/91 & 91/92, 1990

Mid-term Review Report, 1991 Bridging Phase Draft Report, 1991

Watershed Management Plan, 1992

(2) Interview

Date : 11,16 March 1992 Place : IWMP Office in Pokhara

Interviewer: T. Kadota Interviewee: B.K. Rimal

Y. Nishioka (Position) (Project Incharge)

R. Pyakurel

(Extension Incharge)

1.2. Implementation Periods

Phase	Started	Terminated	Funding Sources
I	1974	1981	HMG/UNDP/FAO
II	1981	1986	do.
Interim	1987	1989	HMG/FINNIDA
1	1989	1992	do.
Bridging	1992	1994	do.

1.3. Area of Operation

Phewa Tal Catchment Area (116 km²), Kaski Dist. Altitude 800 -2600m, 6 VDC, 1 CDC, Population - 30,000

1.4. Project Objective(s)

- (1) To protect the environment of the watershed from erosion and introduce sustainable land use practices in the area.
- (2) To reduce the rate of sedimentation in the lake.

- (3) To improve the quality of life of the rural population through productive land use and improved methods of land utilization.
- (4) To create awareness and motivate people to participate in watershed conservation activities.

1.5. Organizational Structure

The project consists of two separate watersheds (Phewa Tal & Kulekhani) which have their own staff and budgets. The project chief is based in DSCWM. The project in-charges are responsible for day to day activities in respective watersheds. Assistant project coordinators employed by FINNIPA are stationed in the site offices. The project cooperate and coordinate with other line agencies / projects when necessary and sounds appropriate.

(1) Sub-Projects

The following sub-projects are implemented.

- a) Information Promotion Component
- b) Rehabilitative Measures
- c) Preventive Measures
- d) Extension & Education Component
- e) Infrastructure Development

(2) Integrated Approach & Priority Programmes

Instead of introducing a single measure based on the target setting, the project demonstrates various activities in the integrated manner. These activities are based on the selected plots, farms and sub-watersheds/villages according to the specific needs of these areas regarding soil conservation and watershed management.

The efforts of the project have been directed to so-called "priority programmes", in which project activities are integrated. These, together with extension and training will take about 70% of the annual budget. The following priority programmes have been undertaken by the project.

- a) Signare Khola catchment development
- b) Harpan Khola valley development.
- c) Harpan Delta development
- d) Green belt development by the lake

2. Extension & Publicity Approaches

2.1. Target Groups & Participatory Approaches

(1) General Target Group

All the people living in the watershed area create one large target group.

a) Conservation Committees

For participation of local communities, six Panchayat Conservation Committees (P.C.C.s) were formed and soil conservation meetings were held 20 times by the fiscal year 1988/89. These committees were later renamed as Conservation Committees of Village Development Committees (V.D.C.s). The activities include one annual training/seminar for each committee and committee meetings as needed.

b) Forest Users' Groups

Villagers are also motivated and assisted to form forest users' groups to undertake various conservation activities. Working exercises for users' groups to form management plans are being conducted.

c) Special Day Celebrations

Special days such as the World Food Day and the Environment Day are celebrated in order to show the field activities to important persons and make local people aware of environmental degradation.

(2) Special Target Groups

a) Progressive Farmers

The primary target groups will be those who are interested in taking their responsibilities and are willing to participate in project activities. Demonstration Farmers are selected to undertake on-farm conservation activities on their land.

Twelve demonstration farms will be established during the present phase. Leader farmer trainings (total 61 times) and conservation study tours (54 times) were organized in the previous phases up to 1988/89. Two technical trainings (30 participants each) and study tours will be provided to those farmers during the present phase.

b) Marginal Farmers & Low Income Groups

Poor farmers who often belong to hill tribes and vocational castes are causing environmental degradation because of their basic income shortage. These people constitute the specific target group for income generation programmes.

The programmes include i) fruit plant production, ii) bee keeping, iii) mushroom cultivation, iv) pigeon/duck farming and v) bamboo crafting. The seedlings and materials needed for these programmes are distributed by the project.

c) Women

Women play an important role in utilization of natural resources like fodder and fuelwood. They have been neglected on conservation activities. The project lays more emphasis on women by introducing regular programmes.

98 selected women (2 per ward) have been targeted to participate trainings (including improved stove training), meetings and other conservation activities and to receive home visits. The project recommends to select these women as many as possible from lower castes or from low income groups.

Study tours are organized annually for all the target women. They are also provided with necessary materials and budget to conduct the programmes, although no cash incentives are being given. A conservation song's competition, targeted at women groups, is organized at the occasion of Teej festival.

d) Schools

Teachers and students are considered by the project the potential manpower of today and in the future to build up awareness and forward conservation messages in communities.

School conservation education programme has been developed and implemented since the previous phases of the project. Seven lower secondary and high schools so far have been involved in the programme. In the previous phases up to 1988/89, school programmes were organized 19 times. Two school nurseries have been established. The present programme includes the activities as follows;

- i) Teachers' training on conservation education.
- ii) Conservation education programme and preparation of teaching materials for lower secondary and high schools as needed.
- iii) Conservation education lessons undertaken at schools by the trained teachers.

iv) Conservation competitions organized for students.
 Essay/poem writing competitions (350 students annually)
 Drawing competitions (70 students annually)
 Quiz competitions (for all students participated in conservation lessons)

The winners of these competitions are rewarded with books, dictionaries and stationery.

e) Field Staff

Institutional strengthening programme of DSCWM has been implemented since the beginning of FINNIDA phases. On-job trainings have been conducted. The project staff participate incountry and overseas trainings according to the IWMP training programme.

2.2. Extension and Education Section

(1) Major Tasks

The objectives of the extension and education component are to generate awareness on sustainable use of environment among people and communities, as well as to motivate, organize, and train them on practical measures which improve soil conservation and watershed management. The component has the following major tasks. By improving people's participation, the component has a supporting role to other activities.

- a) Demonstrations
- b) School Programmes
- c) Extension & Training
- d) Development & Distribution of Extension Materials

The component also deals with the e) promotion of energy saving cooking systems, and the f) income generation programmes. The former has close relation with the women and the demonstration farmer programmes, while the latter has to do with the extension to marginal farmers and low income groups.

The improved stoves has showed its capability to save fire-wood in cooking. To achieve wider acceptance, the component has been conducting i) design modification of improved stove for large rural families, ii) motivation and training of the families for the installment, and iii) purchase and distribution of the stoves. The annual target of distribution is 60 for 1990-92 period (total 120).

(2) Budget

The total amount of budget for Phewa Tal Watershed in the fiscal year 1991/92 is NRs. 880,000, of which FINNIDA contribution is NRs. 555,000 and HMG's NRs. 325,000. Most of the FINNIDA input is to be spent for organizing participatory programmes, such as of women, while nearly a half of the HMG input is for the establishment and maintenance of demonstration plots.

The sharing of budget reflects the reluctance of HMG to allocate its budget to participatory programmes. FINNIDA demands the HMG contribution be increased.

(3) Staff Composition and Communication Channels

In Kathmandu, there are two female extension officers of FINNIDA (one for extension & training, the other for women development) who plan and conduct extension Programmes both of Kulekhani and Phewa Tal.

In Phewa Tal office, one extension incharge is assigned for the supervision of activities in the area. One female ranger is involved in the women development programme, in addition to forestry activities such as nursery establishment.

In the field of Phewa Tal area, six site incharges (one for each VDC, one post presently vacant), who are mid-level technicians of forestry or agronomy, are assigned for general project activities including the extension. All of these are HMG staff.

In addition to these permanent staff, Six local female motivators are employed at the FINNIDA expense. They were selected from the respective VDCs and assist the extension works in their own places. They receive salaries, as well as the allowances to attend meetings.

(4) Feedback System of Extension Effects

All of the female motivators are obliged to submit monthly reports to the women development officer. The site incharges were also instructed to submit their monthly reports to the deputy project incharge. The formats for these reports have been developed.

2.3. Institutional Cooperation

DSCWM supports the project to develop, produce and distribute extension and education materials. The project utilizes existing materials suitable for its use, as well as produces and makes them available for others as needed. In return it supports DSCWM in developing, producing and distributing these materials. The project conducts the income generation programme in cooperation with the Dept. of Agriculture.

2.4. Extension Facilities

(1) Head Office

There is a meeting hall of recent completion which accommodates 50-60 persons. The hall is equipped with the following items;

slide projector - 1, overhead projector - 1,
film projector -1, audio cassette recorder - 1,
generator - 1, loud speaker - 1, TV set -1, video deck -1

One video projector will be available soon. The equipment is also taken to the field. Other than the above equipment the head office has a photo-copy machine, a mimeograph printing machine and cameras which are used both for extension and other purposes. There are some posters, maps and pictures displayed in the office showing the project activities to visitors.

(2) Field Centres

Although six field centres have been established to cover all the VDCs in the project area, two have no buildings and the building of another is out of use. Of the three centres with buildings, one is just for lodging of project staff while two have meeting rooms which accommodate about 30 persons. None of these centres are equipped with radio communication devices, nor are there any displays for extension.

(3) Demonstration Plots

In the previous phases of the project, one herbal farm and a stall feeding demonstration plot were established. Targets in the present phase are a) one agro-forestry demonstration plot, b) twelve demonstration farms with on-farm conservation activities such as fruit and fodder tree plantation, and c) one demonstration village/sub-watershed with soil conservation activities.

The agro-forestry demonstration plot which was established on public land in Bhumdi has an area of 4-5 ha. Cash crops such as coffee, pineapple and cardamom are planted in the plot. Sign-boards are put on most of the plantation sites.

2.5. Extension Materials

(1) Project Logo

The project uses the logos developed by IWMP in Kathmandu. They are used on the printed materials, stationary, badges, T-shirts and signboards, but not for office buildings or in other places.

(2) Printed Matters

Printed matters such as posters, pamphlets, calenders and booklets are all supplied from Kathmandu. The budget will be soon available for the Phewa Tal office to publicize its own newsletters.

(3) Audio-Visual Materials

Although the project uses the educational films produced in Kathmandu, they are becoming out of date. In addition, there is a need felt by the extension in-charge to produce more attractive materials for the people, instead of just delivering direct messages. The project produced a video film to introduce its Teej festival programme.

(4) Other Materials

Stickers and T-shirts are supplied from Kathmandu and distributed by the project. The female motivators are provided with blue saris as a uniform on their duty. Working uniforms were supplied to all the forest watchmen.

Certificates are issued to the participants of training courses. The extension incharge plans to produce badges of their own. No exhibition articles have been displayed.

The project provide food and accommodation to the participants of meetings, seminars/workshops, trainings and study tours. However, no cash incentives nor allowances are being offered to the participants.

3. Evaluation and Future Plans

3.1. Major Achievements

The project activities since 1974 have improved the physical conditions in the watershed remarkably. At the same time, the awareness of soil conservation needs among local people has increased. In addition to the establishment of Conservation Committees in six VDCs, 34 Forest Users' Groups have been formed.

3.2. Evaluation on Extension Effects

After 17 years of the project operation, the existence of the project has been recognized by most of the residents in the area. The project activities and their benefits seem to have been understood by the majority of people, though in the lesser degree by the illiterates which constitute about 30% of all residents.

Likewise, motivation towards participating in the project activities is strongly felt among the educated and the well-to-do, but not among the majority of people who are small-scale farmers.

There is also a tendency that people are keen on the programmes which produce immediate and individual benefits like study tours, but not so much on the programmes which produce only long-term and indirect benefits such as of civil engineering and forestry.

3.3. Problems / Constraints & Future Plans

The key questions or most difficult problems still to be solved in extension are;

- a) Control of free cattle grazing;
- b) New income sources to reduce the people's dependence on land and cattle;
- c) Promotion of private planting for non-progressive land owners; and
- d) Data based evaluation of naturally caused soil erosion

(1) Problems in Community Approach

The project believes that the above remaining problems can only be solved by participatory approaches on community basis and with full commitment of villagers.

However, Conservation Committees are not functioning at the moment. Two panchayat development plans worked out in the previous phases do not seem to have been implemented. This reflects a political vacuum after the abolishment of Panchayat system. In order to solve the situation, the project would take the following measures;

- a) Building up the local people's awareness that responsibilities for environmental care shall lay on themselves instead of the HMG and the project, through appropriate extension methods.
- b) Handing over the management responsibilities of conservation plantations to the users' groups according to the national policy on community forestry. Establishing forest management method by communities.
- c) Motivation and encouragement of local people to use their available resources and to extend their contribution. In small activities, priority will be given to those villages and users' groups which are active in soil conservation.
- d) Channelizing and utilization of project resources through local voluntary organizations, by strengthening local manpower and leadership, in order to build up a more sustainable local resources management structure.

It is recognized that the school programmes are an effective method of extension, therefore should be strengthened. The programmes should be held more frequently and more initiative should be taken by the schools.

(2) Motivation of Field Staff

It is felt that motivation towards field work is generally lacking among the project staff. This is mainly due to insufficient allowances and facilities. There is a need to provide remedies for their working conditions.

Re-orientation and encouragement of the field workers are necessary in drawing people's participation and in coordination of field works. Emphasis must be placed on good quality and impacts of their work, instead of a routine accomplishment of the physical targets. The methodology should be developed for them how to reach the people.

The extension incharge express the need to make the extension component better equipped for its field activities. There should be, for instance, more film projectors for field use.

(3) Problems in Target Setting

It is observed that the project implementation is often constrained by its rigid target setting. Proper target setting is necessary to solve the problems of respective groups of people.

During the Bridging Phase, working approach will be changed from implementation-oriented to objective-oriented. Self-evaluation of the previous year's activities and modification of the planning/implementation procedures will be made to improve the technology packages.

(4) Data-based Monitoring

It is observed that handing over of information obtained in previous phases has not been done sufficiently. For instance, the herbal farm demonstration plot which was established in the past phase seem to have been left forgotten. Problem analysis of geological erosion also has not yet been done properly.

It is required to operationalize data-based monitoring systems for natural conditions and project activities before the measures are adopted, and to modify them as necessary.

4. Role of Extension and Publicity Division / MFE

The project incharge requests the division to develop a strategic extension policy which is operational at field level, as well as supportive measures to reinforce field extension activities. It is also recommended to work out extension methods targeted at respective groups of people, such as age groups, which are simple enough for the field workers to carry out.

Draft: 26 July 1992

Phewa Tal IWMP - Preventive Measures

1. Profile

1.1. Data Sources

(1) Bibliography: Project Document of Phase I, 1987 Work Plan for 1990/91 & 91/92, 1990 Mid-Term Review Report, 1991

Bridging Phase Draft Report, 1991 Watershed Management Plan, 1992

(2) Interview

Date: 21 July 1992 Place: IWMP office in Pokhara Interviewer: T.Kadota Interviewee: S.S.Shrestha (Position) (Deputy PIC)

- 1.2. Implementation Periods Same as the project
- 1.3. Area of Operation Same as the project

1.4. Objectives

The immediate objectives of the component are to reduce erosion and peak run-off. The development objectives have been to sustain long-term on-site soil productivity and to reduce down stream damages by:

- (1) Evaluating and developing preventive measures required for adoption by small farmers;
- (2) Advocating better and sustained utilization of resources within the watersheds;
- (3) Involving and motivating community participation in these activities; and
- (4) Focusing on activities in the erosion/hazard areas and their catchment areas through an integrated approach.

1.5. Activities / Targets / Financial & Physical Inputs

(1) Nursery Management

The activity includes maintenance and operation of project nurseries. Some project nurseries will be converted to private nurseries.

(2) Seedling Production & Distribution

The annual production capacity in 1991/92 is about 200,000 seedlings. About a half of seedlings produced is used on conservation plantations in large areas and the other half distributed for private plantations. For budgetary purposes, an average price (including the transportation costs) per seedling is set to 1.75 rupees. Fruit tree seedlings are mainly purchased from nurseries outside.

(3) Conservation Plantations

Total area needing conservation plantation is not exactly known at present. There is an urgent need to cover badly eroding barren plots of at least 200 -250 ha. The annual target of 50-60 ha, is selected purely based on the project implementation capacity. The target could be increased by raising the seedling production capacity and involving local people according to community forestry approach. 40% of the conservation plantation is estimated to be fodder trees and grasses (Nigalo, Napier, etc.) and 60% mixed species.

(4) Plantation Management & Improvement

The target of the activity is only 60 ha for the two-year period from 1990 to 1992. Due to the degraded site conditions, mortality rate of seedlings is often 30 to 50% or more. This means that some 50% of plantations need further improvement.

Management of the plantations will be handed over to the local users' groups. Technical & financial assistance to the users' groups will be provided by the project.

(5) Construction of Conservation Pond

Existing ponds will be investigated and improvement works recommended to users groups. Only three ponds are scheduled to be constructed annually by the project.

Final selection of the locations will be based on other conservation activities among users groups. Individual pond improvement, not connected to other conservation activities, will be supported only by providing survey, planning and advise to the villagers, who must take the responsibility of implementation by themselves.

(6) Water Source Conservation & Supply

Water regime and quality is one of the key questions in community development. Five water source protection or small scale water supply systems are built up annually.

(8) Terrace Improvement

The annual target is 20 ha. Terrace improvement consists of the riser stabilization works (by planting) of the existing horizontal terraces and leveling of sloping terraces on agricultural land by contour line planting.

(9) Green Belt Development

Green belts are needed along the Phewa lake shorelines and Harpan Khola riverbanks. Total target is about 30 ha (lakeside 20 ha, riverbanks 10 ha).

2. Extension Approaches

2.1. Target Group(s) & Participatory Approaches

(1) Community Forestry Users' Groups

The project intends to hand over the management responsibilities of the conservation plantations to the users' groups according to the national policy on Community Forestry.

Activities:

- a) Assistance to the existing users' groups
- b) Identification and formation of users' groups on the remaining plantations under project management
- c) Preparation of operational plans
- d) Workshops/trainings for new users' group committees (four times in two sites in 1991/92)

(2) Progressive (Demonstration) Farmers

Forestry activities are included in the demonstration farmer programme.

(3) Low Income Group

The project is distributing seedlings of fruit trees to the selected people with low income, through its women motivators and target women.

(4) Project Staff

Activities:

- a) Officer's workshop/training (one or two times annually)
- b) Site incharge's workshop/training (do.)
- c) Trainings and study tours for forest watchmen (None in 1991/92)
- d) Follow-up field trainings

2.2. Staff Involvement & Communication Channels

In the Phewa Tal office there is one conservation officer (deputy project incharge / DSCWM) with forestry background. He supervises forestry activities of the site incharges who are assigned to every VDC. Six forest guards (one for each VDC) temporary employed by HMG assist the site incharges in the field.

Local nursery naikes (eight persons, one for each project nursery) and forest watchmen (27 persons) are also temporary employed, paid from the HMG budget. The number of forest watchmen has been reduced as management of the plantations were handed over to the users' groups. The site incharges inform the progress of their forestry activities to the conservation officer in their monthly reports.

2.3. <u>Institutional Cooperation & Coordination</u>

The project cooperate with Kaski DFO in exchanging tree seedlings in demand, with Dept. of Horticulture in purchasing of fruit trees, with BTRT in joint participatory programmes, and with Institute of Forest in the involvement of forestry students to the participatory programmes.

2.4. Use of Extension Facilities

Audio-visual equipment is often used as a part of the extension effort of preventive measures.

2.5. Use of Extension Materials

The section developed the guidelines for establishing forest management work plans by the users' groups, which are basically in line with those of the community forestry programme. Other printed matters in use are all supplied from the head office of IWMP or from Dept. of Soil Conservation.

Most of the audio-visual materials in use are also supplied from the head office or the department. FINNIDA recently produced a 45-minute video film which shows the effect of preventive measures in the Phewa Tal area.

In addition to the above instructive and educational materials, the section supplied T-shirts to all the field staff and it used to provide uniforms to the forest guards and watchmen.

3. Evaluation & Future Plans

- 3.1. Major Achievements (1974-91)
- (1) Nursery Establishment & Management
 Project Nurseries 8, School Nursery 1
- (2) Seedling Production & Distribution Total 250,000 seedlings produced by 1989. 70,000 tree seedlings / 13,000 fruit trees distributed to the farmers during 1987-89.
- (3) Conservation Plantations Tree Plantation - 543 ha, Grass Plantation - 94 ha (by 1989) The standard of planting as well as tree survival rate are generally good.
- (4) Plantation Management & Improvement
 Forest Users' Groups formed;
 on plantation 28, on natural forests 10, total 38
- (5) Conservation Pond Construction & Improvement 57

- (6) Water Source Conservation & Development 19 (6 ha)
- (7) Terrace Improvement 179 ha

3.2. Self-Evaluation on People's Participation

The deputy project incharge (conservation officer) estimates that the motivation towards participating in the preventive measures has been reached about half of the residents in the watershed area. The motivation among women, children and aged people has not yet been fully achieved.

It is felt that most of the motivated people are also willing to participate in the activities. The problems are; that the low income group tend to avoid the activities with long-term, indirect benefits, that political rivalry sometimes hampers people's participation, and that the remoteness of some areas are hindering the attendance of the people.

In spite of these difficulties, participatory programmes of the preventive measures are drawing the maximum attendance of people. The project gives only suggestions and tries to obtain consensus in decision making.

However, the people's contribution is limited to some labour works such as pitting, clearing, planting and transportation of local materials at the time of community plantation. The project is considering to charge the tree seedlings it distributes to the people, though, except for fruit trees, it foresees difficulty.

Plantation techniques are being gradually adopted by the residents. Some people have voluntarily started planting fruit, coffee and fodder trees on their own lands.

3.3. Problems / Constraints & Future Plans

(1) People's Self-Reliance and Sustainability

There is considerable evidence that the project is creating dependency on external resources rather than promoting capacity for self-reliance. Community involvement in planning and management of plantations is low. This will not help promoting sustainability.

(2) Nursery Establishment & Management

The number of nurseries is low considering the size of the catchment area, so that farmers are discouraged from collecting seedlings. The spread of innovations and technical knowledge is very uneven between nurseries.

Private nurseries have often been managed by richer members of the communities and seldom by the poor. To increase sustainability, and spread the benefits, it is recommended that a large number of small home nurseries be promoted.

(3) Seedling Production & Distribution

The local population has the capacity at present to propagate at least some of the tree species produced in the nurseries. For other tree/grass species, farmer training would enable them to propagate these using new techniques which are known to the project.

(4) Conservation Plantations

The project has not so far identified appropriate grass species for plantation. Some of the grass plantations had received applications of fertilizer, and their success is therefore not replicable on the large scale. The project should look for and test species which will establish and produce fodder or other required products without the addition of fertilizer.

(5) Plantation Management & Improvement

Management plans have not yet been approved in many of the places, although user groups are being formed for older plantations. it is necessary to identify users of the areas to be planted, and to form user groups with officially approved operational plans prior to plantation activities being initiated.

Priority should be given to broad leaved species which can coppice easily and are preferred by the majority of users. Promotion of an under-storey of grass and shrubs in the plantations is recommended to protect soil and reduce run-off.

- a) Many fences of old plantations are damaged, and as a result grazing prevents the natural regeneration of broad-leaves. Until pine plantations are converted to mixed forest with a healthy broad-leaved component, grazing should be prohibited.
- b) Plantations should be appropriately thinned to provide fodder to communities.
- c) Demonstrations of various options for plantations and natural regeneration, and for their subsequent management, should be set up so that communities can learn about the range of options available to them for developing degraded lands to forest.

(6) Conservation Pond Construction & Improvement

Many of the existing ponds dry out in 1-3 months after the monsoon. In order to control "free grazing" and to establish stall feeding practices, locations of ponds and trails should be reconsidered. Collection of water by drainage systems or using the overflow of drinking/washing water should be taken into consideration.

(7) Terrace Improvement

The IWMP recommendations to farmers appear too standardized for different situations in the area. A more flexible approach is needed. In many areas, the potential for increased productivity and soil protection through planting grasses and trees on terrace banks is enormous. However, it has not been possible so far because of grazing during the fallow period. Only if all the members of a community agree to stall-feeding, could such crucial developments take place.

(8) Green Belt Development

The value of stabilizing shoreline slopes of the lake is questionable, given that streams and rivers are the primary source of silt, and in addition, it is difficult to find areas for this activities, for large land holders along the shoreline are unwilling to offer their lands for tree plantation.

Draft: 20 Jan. 1993

HMG/JICA Forestry Extension Project

Household Survey of Forestry Extension Needs

1. Sample Households

About 300 households will be selected out of 50 wards for in-depth study (average six households/ward). These sample households should consist of 60 % or 180 households hill Hindu castes, 25% or 75 households hill tribes, and 15% or 45 households professional castes and others, roughly reflecting the demographic composition of the middle hill area in WDR.

2. Interviewees for Individual Needs

All family members of the sample households (17 yrs. and above in age) will be interviewed, except for those who usually live outside of the village.

3. Survey Items

3-1. Household Data & Physical Needs

(for one interviewee / household)

household members, source of cash income, agriculture livestock, fuelwood, lumber, privately owned trees interviewer's findings & comments

- 3-2. Individual Needs (for all the interviewees)
 - (1) General Needs
 - (2) Forestry Related Needs major concerns, actions taken, assitance received improvements made, plans for improvement
 - (3) Interviewer's Findings & Comments

	·	•		:
		•		
·				
Questionnair	ce Format I - Hou	usehold Data	& Physica	1 Needs No.
	for one interview			
		:	• . •	
	Interviewer:		Date:	Time:
	Interviewee:		_	
Distric	ct Name:	Name or V	DC:	Ward No.:
1. Household	l Members			
			•	
17 yrs.	and above	Mal	e/Female:_	_/persons
•			Total:	persons
	and below:	0		persons
Absente	e Members:			persons
2 Marion Con	race of Cook to-		<i>c</i>	
z. Major sou	rces of Cash Inc	come (cneck	& describe)
a) sala	ary - from where	? :		
b) wage	s - of what kind	of work ?	:	
c) pens	ion - from where	e ? :	<u> </u>	
d) remi	ttance - from wh	nom/where ?	:	
e) priv	ate business - o	of what kind	?:	· · · · · · · · · · · · · · · · · · ·
I) sale	of goods - of w	that kind?	•	
3. Agricultu	ire			
_				
(1) Area of	Cultivated Land	l:r	opani	
	ency of Manure (gh, b) short, c)		· .	
4. Livestock				
(1) Number	of Domestic Anim	nals & Feed	Sources	
· .	Matured	Infant	Major Fee (Select f	d Sources rom below.)
Cows/Ox	en:	· i	; 	<u> </u>
Buffs:			<u> </u>	
Sheep/G Swine:	ouats:		· · · · · · · · · · · · · · · · · · ·	
	(specify):	 		
Others	· · · · · · · · · · · · · · · · · · ·			·····
Others				
	Sources)			•
(Feed S	Gources) zing, b) fodder f	from forest,	c) fodder	from privately
(Feed S a) graz				
(Feed S a) graz	sing, b) fodder f			
(Feed S a) graz	sing, b) fodder f			
(Feed S a) graz	sing, b) fodder f	ltural by-pr		
(Feed S a) graz	sing, b) fodder f			
(Feed S a) graz	sing, b) fodder f	ltural by-pr		
(Feed S a) graz	sing, b) fodder f	itural by-pr 1		
(Feed S a) graz	sing, b) fodder f	ltural by-pr		
(Feed S a) graz	sing, b) fodder f	itural by-pr 1		
(Feed S a) graz	sing, b) fodder f	itural by-pr 1		
(Feed S a) graz	sing, b) fodder f	itural by-pr 1		

(2)	a) enough, b) short, c) very short	•
5. F	uelwood	
(1)	Availability of Fuelwood (check) a) easily available, b) difficult	, c) very difficult
(2)	Purchase of Fuelwood (check): If yes,bhari/yr. 1 b	
(3)	Type(s) of Cooking Stove(s) Used a) traditional agenu, b) traditional c) improved chulo (specify), d) o	nal mud chulo,
6. L	umber	
(1)	Availability of Lumber (check) a) easily available, b) difficult	, c) very difficult
(2)	Tree Species Preferred:	
	Purchase of Lumber (check): a) ye	es, b) no
7. P	rivately Owned Trees	
	Number	Major Species (Fill in one.)
(1)	fruit/edible trees	·
(2)	fodder trees	
(3)	fuelwood trees	
(4)	timber trees	
(5)	bamboos	
(6)	other kinds (specify)	
8, 1	nterviewer's Findings & Comments	

Questionnaire Format II - Individual Needs (for all the interviewees)

No.	1.

	•	•		
Name of	Interviewer:	Date:		Time
Name of	Interviewer: Interviewee:		Sex:	_ Age:
	upation Other than I			
	ool Education: up to			
District	Name: Name	ne of VDC:		Ward N
		•		
1. General Ne	eds	egic and a second	4.54	
			and a second	1.0
(Q.) What are	your major concerns	s in day-to-da	ay life '	3 -
Check fi	ve items.			
(1) food suff	iciency & quality		-	
(2) earning m	ore cash			
(3) livestock	care			
(4) availabil	ity of drinking wate	er		
(5) motorable	roads		ŧ	
(6) availabil	ity of forest produc	cts		
(7) security		•	•	
(8) health &	sanity.			
(9) more ente	rtainment			
(10)landslide	s & soil erosion	*		
(11) religious	activities			
(12)upbringin	g & education of chi	ildren		
(13)friendshi	p with others	•	•	-
(14)more free	time			

(15)power supply
(16)others (specify)

2. Forestry-Related Needs
(Q.1) What are major forestry-related concerns to you? Check up to three from below (or if there are none just answer 'nil').
(1) fuelwood availability
(2) availability of good quality lumber
(3) fodder availability
(4) manure availability
(5) loss of farm soil fertility
(6) availability of other forest products (specify:)
(7) uncontrolled grazing
(8) forest fire
(9) forest encroachment by others
(10)conflicts of forest ownership (11)landslides & soil erosion
(12)people's lack of consciousness on forest conservation
(13) lack of knowledge on forestry techniques
(kind of techniques needed:)
(14)availability of tree seedlings
(15)other problems (specify:)
(Q.2) For each of the selected concerns;
 (1) What actions did you take ? (2) Any help ever received ? What kind of help ? Who gave the help ? (3) Any improvement ever made ? How was it improved ? (4) Do you have any idea what to do ? Give your plan. What kind of help do you need for the plan ? Whom would you consult ?
Inmo of Care
Name of Concern:
*6
If yes, what kind(s) ? :
(2) Help Received (check): Yes No
If yes, what kind(s) ? :
Who helped ?:
(3) Improvement Made (check): Yes No If yes, how was it improved ?:
4) Idea(s) for Improvement (check): Yes No If yes, give your plan:
Assistance Needed:
Person(s) or Office(s) to consult:

Name	of Concern:		
(1)	Actions Taken (check): Yes If yes, what kind(s)?:		
			:
(2)	<pre>Help Received (check): Yes If yes, what kind(s) ?:</pre>		
(3)	Who helped ? :	Yes	No
	If yes, how was it improved ?		·
(4)	Idea(s) for Improvement (check If yes, give your plan:	-	
	Assistance Needed:		
	Person(s) or Office(s) to cons	sult:	
	101201(0) 01 012100(1) 10 0011		
		1	
Name	e of Concern:		
	Actions Taken (check): Yes	No	$(x_1, x_2, \dots, x_n) = (x_1, \dots, x_n)$
(-)	If yes, what kind(s) ? :		
(2)	Help Received (check): Yes	No	
, ,	If yes, what kind(s) ? :		
	:		
	Who helped ? :		
(3)	Improvement Made (check):	Yes	No
	If yes, how was it improved ?		
(4)	Idea(s) for Improvement (check If yes, give your plan:): 	Yes No
	<u>.</u>		
	Assistance Needed:		
	Person(s) or Office(s) to con	sult:	

3. Interviewer's Findings & Comments

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Number of	-10t	se- hold			ω	ے		~ h						. 10	9	·	ω			5						 Q	۵	ω					-						:		
DATE	Remarks		two user groups within the ward				Only private forest		Ward is called Shidane				HFP operated	INFC Tree Planting Site	JOCY. PADP Operation area	Ģ	op	Other to No Of Tono Stronging Book on	Close to No. 20, do, Joint management & use with ward No. 3 & 5			MAN-made lorest only				Marg Was called bloadpur Derore mersed into Armos		Villagers prefer private planting to C/F													
Survey Spot	Others	Major Ethnic Groups	Brahmon, Chetri, Sarki, Danzi	Brahman, Chetri, Kami, Gurung Chetri, Brahman	Brahman, Chetri, Magar	Brahman, Chetri	Brahman, Gurung, Chetri	Brahman, Magar	Gurung, Kami	Gurung	brahman, Muslim	Gurung	Chetri, Brahman	Curung Brahman (Poster: Magh:	Brahman, Chetri	Brahman, Chetri	Brahman	ourund Tourund	Gurung, Brahman, Kami, Danai	Brahman, Gharti, Chetri, Kami		sarki, braman, chetri, magar Brahman, Chetri	Gurung, Newal, Magar, Chetri	Darai, Brahman, Chetri, Gurun	Magar, Gurung, Newal, Brahman	Gurung, Sarki, Aani Gurung, Brahman, Kami	Gurung, Kami, Magar	Chetri, Brahman													
Surve	S	Access (h)	<u> </u>	 o 10	0	:	0. ئ	· ·	0 0		1			-) in	ns,)))	4.0		n 10				, v.		4.0													
ics of	ı	Altitude A		•••	800-1200	800-1200	800-1200	750-1200	1300-2500	300-3000	800-1350	600-1300	750-1100	900-	700		800-1000	1950	1250-1300			800-1060	: –		200	1500-1800	1400-1700	1650-1800												· _ · •	
	Matters	Project Act.	CFDP/DFO	CFDP/0F0	CFIDP/DFID		1	CFDP/DFD	1350	ACAP RTRT	BTRT	BTRT	FAUDP/JPFO	NOAF TRAD/Dhous	Tour / Hour	1	CFDP/DFG	ACA!	-	I W.P	COW OFFI	CEDP-055	REED BARNA	CFDP/DF0	CFDP/DFO	LARC, LINE	LARC, CFDP	LARC	•		-										
	Forest Related	Condi-	-	Normal Normal			ठू	Normal	Normal	Normal S	Normal	Normai		Lood	Normal		Normal	YOTHAL	Sood	Normal		Normal						Norma!													
	Forest	For.	-	X 09					2. 2.	Z Z			50×				XOI		75%				_	_	× ×		45X							:							
	Ward		∞ .	····	• ↔	7#8	r~	o (∞:	12.7	-	ന	us t	~ u r	2 6-3	o,	e :	28.0	3, 541	တ္ခု			7	;	Ξ,	- 10	-	···													
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Survey	District	Name	Lanjung	Lanjung	Syangia			Syangja	Kaski	Kaski Kaski	Kaski	Kaski	Kaski	Mask I	Kaskı	Kaski	Kaski	Naskii Vace	Kaski	Kaski	Parbat	Baglure	Tanahun	Tamahun	Fanahun	Kaski	Parbat	Parbat													
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General Condition of the Survey Ward

Date: 17 Sep. 1992

District:Kaski Name of VDC: Arubabijaya(Village; A) Ward No. (Name): 3 (XXXXX 1.Location & Land Use 800 m to 1.000 m Range of Altitude : Apporx.from Nearest Commercial Centre(Distance from the Ward): Pokhara 2 hrs.) Land Use: Forest & Shurub Lands 10 % Grass & Denuded Lands Cultivated Land 90 % Others -----2.Social Conditions Total Population: 300 Total No. of Households: 48 Outflows of Population: 30 Eyhnic Composition: Brahman (40) Gharti (8) 3. Agriculture Average Area of Agricultural Land / Household: 0.75-1.00ha Large Landholdings & their Area: 5.0ha the Landless / Tenant Farmers: 4 / 5-7 Major Agriculture Products: Wheat. Rice. Maise. Millet. Mustard. Potato Self-Sufficiency of Agriculture Products: 75% Household Sufficient Type of Fertilizer: Compost (Chemical-little) Major livestock Species: Oxen/Cows(20-25/10-15).Buffs(100).Goat(100) 4. Day to Day Life Major Source of Fuel for Cooking: Fuelwood Type of Cooking Stove: Traditional Stove (Mud) Major Cash Income for Residents: Rice. Potato, Vegetable. Orange Major Products Sold by the Villagers: Rice. Potato, Vegetable. Orange Approx. Average Monthly Income / Household: Rs.1,000-1,500/Month Public Facilities within the ward: Primary School, Water Supply 5. Forest (ry) Related Matters Project Activities: Planted/Preserved Trees on Private Land : Many Indigenous Common Ownership of Forest: Common Jointly use with ward No.1 & 5 Forest Conditions: Good, but few Major Tree Spp.: Chilaune, Katus, Sal. Forest Products (Self-Sufficiency): Fodder (100%). Fuelwood, Lumber (Short) Environmental Problems: Landslides Other Problems:

General Condition of the Survey Ward

Date: 14.0ct. 1992

District:Kaski Name of VDC: Sarangkot (Village: B) Ward No. (Name): 5 (Yekgharry) 1.Location & Land Use_ Range of Altitude : Apporx.from 1.600 m 900 m to Nearest Commercial Centre (Distance from the Ward): Pokhara (2 hrs.) Land Use: Forest & Shurub Lands ----- 60 % Grass & Denuded Lands Cultivated Land 25 % Others -----10 % 2. Social Conditions Total Population: 700 Total No. of Households: 200 Outflows of Population: 20-25 Eyhnic Composition: Brahman (xx) Chhetri (xx) Majhi (15) 3. Agriculture Average Area of Agricultural Land / Household: 0.50ha Large Landholdings & their Area: 1.25ha the Landless / Tenant Farmers: 10 / 180(?) Major Agriculture Products: Wheat, Rice, Maise, Millet Self-Sufficiency of Agriculture Products: 50% (6 months) Type of Fertilizer: Compost (Chemical-little) Major livestock Species: Oxen/Cows (400), Buffs (400), Goat (600) 4. Day to Day Life Major Source of Fuel for Cooking: Fuelwood Type of Cooking Stove: Traditional Stove (Mud) 95% Improved Stove (Mud) 5% Major Cash Income for Residents: wages, Bamboo crafts Major Products Sold by the Villagers: -Approx. Average Monthly Income / Household: Rs.500-600/Month Public Facilities within the ward: Primary School. Water Supply 5. Forest (ry) Related Matters Project Activities: 1YMP Planted/Preserved Trees on Private Land : Many Indigenous Common Ownership of Forest: Common, Jointly use with ward No. 5 Honga VDC Forest Conditions: Good Major Tree Spp.: Chilaune Katus. Utis. Painyu, Sal. Forest Products (Self-Sufficiency): Fodder (100%). Firewood (100%). Lumber (100%) Environmental Problems: Landslides, Gullies Other Problems:

<u>General Condition of the Survey Ward</u>

Date: 04 March 1993

District:Parbat Name of VDC: Durlung (Village; C) Ward No. (Name): 7 (Chanante) 1.Location & Land Use_ Range of Altitude : Apporx.from 1.300 m to 1.700 m Nearest Commercial Centre(Distance from the Ward): Kushma (4 hrs.) Land Use: Forest & Shurub Lands ----- 33 % Grass & Denuded Lands Cultivated Land 60 % Others -----2. Social Conditions Outflows of Population: 18 Total No. of Households: 51 Total Population: 286 Gurung (32), Kami (14). Magar (4) Sarki (2) Giri (2) Eyhnic Composition: 3.Agriculture Average Area of Agricultural Land / Household: 0.40-0.50ha Large Landholdings & their Area: 1.00-1.25ha the Landless / Tenant Farmers: - / 23 Major Agriculture Products: Wheat. Rice, Maise, Millet. Musterd, Potato Self-Sufficiency of Agriculture Products: 8 months Shortage Type of Fertilizer: Compost (Chemical-little): Major livestock Species: Oxen/Cows(125), Buffs(100), Goat(20-25) 4. Day to Day Life Major Source of Fuel for Cooking: Fuelwood Type of Cooking Stove: Traditional Stove (Stone) Major Cash Income for Residents: Remittance from Britsh / Indian Armies Major Products Sold by the Villagers: -Approx. Average Monthly Income / Household: Rs. 400/Month Public Facilities within the ward: Primary School, Water Supply 5. Forest (ry) Related Matters Project Activities: LRARC, CFDP Planted/Preserved Trees on Private Land : Few Indigenous Common Ownership of Forest: Forest Conditions: Normal Major Tree Spp.:Chilaune, Mallato. Katus. Utis, Angeri, Manwa. Salla. Forest Products (Self-Sufficiency): Fodder (100%), Firewood (100%) Environmental Problems: Landslides, Gullies Other Problems:

General Condition of the Survey Ward

Date: 05 March 1993

District:Parbat Name of VDC: Bajung (Village: D) Ward No. (Name): 8 (Lampata)

1.Location & Land Use

Range of Altitude: Apporx. from 1,000 m to 1,800 m

Nearest Commercial Centre (Distance from the Ward): Kushma (4 hrs.)

Land Use : Forest & Shurub Lands ------ 20 % Grass & Denuded Lands ------ 10

Cultivated Land Others Others

2. Social Conditions

Total Population: 250 Total No. of Households: 65 Outflows of Population: 15-20

Eyhnic Composition: Brahman (30), Chhetri (20), Giri (15)

3.Agriculture

Average Area of Agricultural Land / Household: 1.00 - 1.25ha

Large Landholdings & their Area: 2.50-3.00ha the Landless / Tenant Farmers: 2 - 3 / 5 -6

Major Agriculture Products: Wheat. Rice, Maise. Willet

Self-Sufficiency of Agriculture Products: 80% Type of Fertilizer: Compost (Chemical-little)

Major livestock Species: Oxen/Cows(120), Buffs(100), Goat(150)

4.Day to Day Life

Major Source of Fuel for Cooking: Fuelwood Type of Cooking Stove: Traditional Stove (Mud)

Major Cash Income for Residents: Remittance from Britsh / Indian Armies

Major Products Sold by the Villagers: -

Approx. Average Monthly Income / Household: Rs.1.000 - 3.000/Month

Public Facilities within the ward: Health Post

5. Forest (ry) Related Matters

Project Activities: LRARC

Planted/Preserved Trees on Private Land : Few

Indigenous Common Ownership of Forest: -

Forest Conditions: Normal

Major Tree Spp.:Sallo.Chilaune.Kaus,Utis.Sal

Forest Products (Self-Sufficiency): Fodder (100%), Firewood (100%)

Environmental Problems: Gullies, Forest fire

Other Problems:

Household Data & Physical Needs (1)

No.	ocation			aste	dembers						Income
	Dist.	V.D.C.	Nard No.		Total	Absentee	17-	Male	Female	-16	Sources
1	Kaski	Arba	3	Brahman	5	1	2	1	1	2	af
2	Kaski	Arba	3	Brahman	6	0	3	2	. 1	3	af
3	Kaski	Arba	3	Gharti	6	0	3	1	2	3	b
4	Kaski	Arba	3	Brahman	6	0	4	2	: 2	2	С
5	Kaski	Arba	3	Brahman	2	0	2	1	1.	. 0	f
6	Kaski	Arba	3	Brahman	5	0	4	2	2	1	f
7	Kaski	Sarangkot	5	Brahman	7	0	4	2	2	3	e
8	Kaski	arangkot	5	Chhetri	8	0	5	3	2	3	
9	Kaski	Sarangkot		Sarki	10	1	3	1	2	6	<u>d</u>
10		Sarangkot	5	Chhetri	9	1	5	3	2	3	
11	Kaski	Sarangkot	5	Majhi	9	1	5	3	2	3	f
12	Kaski	Sarangkot	5	Majhi	5	1	3	2	1	1	bf
13	Parbat	Durlung	7	Gurung	12	4	7	4	3	1	С
14	Parbat	Durlung	7	Gurung	6	0	4	2	2	2	f
15	Parbat	Durlung	7	Gurung	8	0	4	2	2	4	b
16	Parbat	Durlung	7	Gurung	14	3	7	3	- 4	4	cd
17	Parbat	Durlung	7	Magar	7	0	4	2	2	3	С
18	Parbat	Durlung	7	Sunwar	5	0	2	1	1	3	b
19	Parbat	Bajung	8	Chhetri	13	0	7	4	3	6	cf
20	Parbat	Bajung	8	Chhetri	6	0	3	1	: 2	3	af
21	Parbat	Bajung	8	Chhetri	14	0	10	6	4	.4	а
22	Parbat	Bajung	8	Chhetri	4	0	3	1	2	1	
23	Parbat	Bajung	- 8	Chhetri	5	0	4	2	2	1	f
24	Parbat	Bajung	8	Chhetri	3	0	3	2	1	.0	
lot.	al				175	12	101	53	48	62	
ve	rage				7.29	0.50	4.21	2.21	2,00	2.58	

Brahman	6
Chhetri	. 8
HC-Total	14
Gurung	4
Magar	1
III-Total	5
LC-Total	5

Total 24 households

Household Data & Physical Needs (2)

No.	Agricultu	re	1	Livestock			Fuelwood			
LJ	Area	Food	Manure	BLU	F. Source	Feed S.	Nvailable	Purchase	Stove	
1	12	b	b	1.80	cd	b	b	b	b	
2	7	b	b	2.55	acde	b	b	b	ab	
3	34	С	b	3.15	ad	b	b	b	a	
4	22	b	b	2.11	acd	a	. b	b	ab	
5	5	b	b	1.61	acd	b	b	b	ab	
6	21	b	b b	3.62	abcd	b	b	b	ab	
7	19	С	b	1.30	cd	a	b	b	<u>b</u>	
8	30	b	ь	6.67	cd	<u>b</u>	C ·	a	ь	
9	2	С	b · · ·	0.93	bcd	С	b	b	b	
10	11	b	b	2.26	abcd	b	d	b	а	
11	0	С	·	0.00			b	a	а	
12	0	c		0.00			С	b	а	
13	20	b	b	3, 36	acd	b ·	С	b	а	
14 15	31	а	b	2.92	abcd	a	b	b	c	
15	4	С	b .	2.97	abc	a	a	b	a	
16	20	b	b	4.98	cd	b	b	a	a	
17	8	С	b	2.23	abcd	С	b	b	а	
18	1	С	b	2.08	abd	b	С	b	a	
19	70	a	b	5.45	cde	<u>b</u>	С	b	а	
20	15	а	b	2.98	d	b	b	b	a	
21	25	b	b	5.86	d	b	b	b	a	
22	20	b	b	2.39	acd	C	c	b	a	
23	20	а	b	2.88	cd	Ъ	b	b	a	
24	25	b	b ·	2.35	acd	b	С .	b	a	
Tot										
Ave	17.58		· · · · · · · · · · · · · · · · · · ·	2.77					·	

(ropani)

1 ha = 20 ropani BLU(Big Livestock Unit):

1 ropani = 5 a

Cattle (Adult) - 0.81 Buffalo - 0.87 Goat, Sheep - 0.06

 $Kid = 1/2 \times Adult$

Household Data & Physical Needs (3)

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1	c	а	Sal	Chilaune	Katus	8	10	0	. 0	3	: 0	21
2	b	a	Katus	Chilaune	Teju	16	5	0	0	11	0	32
3	С	b	Sal	Chilaune		1	2	0	0	0	0	3
4	b	a	Chilaune	Katus		70	15	150	0	0	0	235
5	С	a	Sal	Katus	Chilaune	4	6	1	0	3	0	14
6	b	<u>b</u> .	Chilaune	Sal	Katus	250	55	1000	(1000)	45	0	1350
7	a	a	Champ	Katus		10	10	150	70	15	. 0	255
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9	b	b	Sal	Khamari	Katus	.0	4	0	. 0	ų	0	8
10	b	a	Sal	Chilaune	Katus	2	10	21	0	. 7	0	40
11	b	b	Katus	Chilaune		0	0	0	0	. 0	0	0
12	С	a	Chilaune	Katus		2	0	0	0	0	0	2
13	C.	<u>b</u>		Chilaune	Utis	27	55	4	0	5	30	121
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21	b	<u>b</u>	Salla		Chilaune	0	2	6	0	0	0	88
22	С	<u>a</u>	Chilaune	litis	Katus	- 8	5	0	0	1	0	14
23	b	a	Sal	Salla	Utis	0	6	40	0	2	0	48
24	С.	a ·	Utis	Champ	Dar	5	0	100	0	5	0	110
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Ave						18	12	230	3	- 6	1	270

Chilaune - Schima wallichii Champ - Michelia spp.

Dar - Debregeasia salicifolia

Katus - Castanopsis spp.

Khamari - Gmelina arborea

Sal - Shorea robusta

Salla - Pinus spp. Teju - Picrasma javanica Utis - Alnus nepalensis

ď		Personal Profile Name	Ē.,	Sec.	Ather Occumations	Education	ANDA WAND HOS KUSHI
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Record of the Meeting with Mr. D. P. Dhakal, the Secretary for Forests and Soil Conservation

> JICA Mid-term Review Team for the Forestry Extension Project

- 1. A meeting with Mr. D. P. Dhakal, the Secretary, has been held today at 11.00 hrs. in the Ministry of Forests and Soil Conservation. Also participated in the meeting were; Mr. K. Watanabe, the Project Team Leader, on the Japanese side and Dr. U. R. Sharma, Chief, Planning Division and Mr. I. M. Nakarmi, Chief, Extension and Publicity Division of the Ministry on the Nepalese side.
- 2. The Review Team Leader, Mr.M. Ishijima, thanked Mr. Dhakal for the cooperation extended to the team by the Ministry and also expressed his appreciation for the general support of His Majesty's Government of Nepal (HMG) to the Project. He briefly explained to Mr. Dhakal an outcome of the discussions with the Project staff and observations made during the field trips. He asked for HMG's general assessment of the Project and raised a question regarding HMG's reorganization expected in the near future which might affect the Project.

Prof. Kumazaki mentioned that he was very much impressed with high motivation of the User Group members in managing the forests handed over to the Groups in the Districts he had visited.

- 3. Mr. Dhakal clarified the position of the Ministry as follows:
- (a) He appreciated Prof. Kumazaki's observation on the community forestry programme. He said that there was no denying of some doubts and/or hesitations on the Government side before adopting the new policy to hand over the management responsibility of the forest to the User Groups; however, the policy proved to be right and had reached people's heart; identification of the forest user community would still be the most difficult process, but once correctly identified, the community was most enthusiastic to fulfil its responsibilities.

- (b) Regarding the Project, he indicated that the current scope and size would not match HMG's expectation of the Japanese assistance to the forestry sector of Nepal. It was strongly hoped that the next and a larger-scale assistance would be hammered out during the Project period. Within the Master Plan for the Forestry Sector (MPFS) the Community and Private Forestry Programme had received ample commitments from the various donors, but some other programmes were yet to obtain more support from the donors. Other MPFS programmes suitable for further assistance from the Government of Japan would be the following:
 - (1) National and Leasehold Forestry
 - ② Soil Conservation and Watershed Management
- ③ Medicinal/Aromatic Plants and Minor Forest Products He emphasized that the expected assistance should go beyond "plans" and cover implementation stages linking its activities with environmental conservation and rural development.
- (c) Restructuring of HMG, as questioned by Mr. Ishijima, was still in process and would be finalized by the Cabinet decision before mid-July, the beginning of the new HMG Fiscal Year. Guidelines issued by the Prime Minister were the reduction of redandunt staff and the elimination of duplicated functions in the Government structure. However, due considerations were being given to the essential needs and the Project would not suffer from this reform.
- (d) In reply to the question raised by the Project Team Leader, Mr. Watanabe as to whether the project activities in its third year (July 93/July 94) should be geared towards the formulation of a new project, he stated that it would be a most welcome move from the point of view of the Ministry.
- 4. Mr. Watanabe informed the Secretary of the request being made to obtain additional budget from KR 2 Fund and asked the Ministry to take concerted action for this purpose. Mr. Dhakal agreed and suggested that it would be also useful for the project staff to make contact with the Foreign Aid Division, the Ministry of Finance.

討議議事録(R/D)

THE RECORD OF DISCUSSIONS

BETWEEN THE JAPANESE IMPLEMENTATION SURVEY TEAM

AND THE AUTHORITIES CONCERNED OF

HIS MAJESTY'S GOVERNMENT OF NEPAL

ON THE JAPANESE TECHNICAL COOPERATION

FOR THE FORESTRY EXTENSION PROJECT

The Japanese Implementation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as JICA), and headed by Mr. Katsura Watanabe visited the Kingdom of Nepal from 1 to 8 June 1991 for the purpose of working out the details of the technical cooperation programme concerning the Forestry Extension Project in the Kingdom of Nepal.

During its stay in the Kingdom of Nepal, the Team exchanged views and had a series of discussions with the Nepalese authorities concerned in respect of the desirable measures to be taken by both Governments for the successful implementation of the above mentioned project.

As a result of the discussions, both parties agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

6 June 1991

In Kathmandu

Mr. Katsura Watanabe

Leader

Implementation Survey Team

Japan International

Cooperation Agency

Dr. P. N. Suwal

Acting Secretary

Ministry of Forests and

Soil Conservation

His Majesty's Government

of Nepal

THE ATTACHED DOCUMENT

I COOPERATION BETWEEN BOTH GOVERNMENTS

- The Government of Japan and Ilis Majesty's Government of Mepal will cooperate with each other in implementing the Forestry Extension Project (hereinafter referred to as "the Project").
- 2. The Project will be implemented in accordance with the Master Plan which is given in Section I of the Annex.

H DISPATCH OF JAPANESE EXPERTS

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary neasures through JICA to provide, at its own expense, services of the Japanese experts as listed in Section II of the Annex through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
- 2. The Japanese experts referred to in 1 above and their families will be granted by his Majesty's Government of Nepal the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries or international organizations working in the Kingdom of Nepal under the Colombo Plan Technical Cooperation Scheme.

III PROVISION OF MACHINERY AND EQUIPMENT

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide, at its own expense, such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Section III of the Annex through the normal procedures under the Columbo Plan Technical Cooperation Scheme.
- 2. The Equipment will become the property of His Majesty's flevel theories of Ministry of

of Nepal upon being delivered c.i.f. to the Nepalese authorities concerned at the places of disembarkation, and will be utilized exclusively for the implementation of the project in consultation with the Japanese experts referred to in Section II of the Annex.

IV TRAINING OF NEPALESE PERSONNEL IN JAPAN

- 1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive, at its own expense, the Nepalese personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
- 2. His Majesty's Government of Nepal will take necessary neasures to ensure that the knowledge and experience acquired by the Nepalese personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

SERVICES OF NEPALESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. In accordance with the laws and regulations in force in the Kingdon of Nepal, His Majesty's Government of Nepal will take necessary neasures to secure, at its own expense, the necessary services of Repalese counterpart and administrative personnel as listed in Section IV of the Annex.
- 2. His Majesty's Government of Nepal will allocate the necessary number of suitably qualified personnel to each Japanese expert to be dispatched by the Government of Japan as specified in Section II of the Annex for the effective and successful transfer of technology under the Project.

VI HEASURES TO BE TAKEN BY HIS MAJESTY'S GOVERNMENT OF NEPAL

1. In accordance with the laws and regulations in force in the Kingdon of Nepal, His Majesty's Government of Nepal will takeniecessary Ministry Bake

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neasures to provide at its own expense:

- (1) Land, buildings and facilities as listed in Section V of the Annex;
- (2) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under M-1 above;
- (3) Transportation facilities and travel allowance for the official travel for the Japanese experts within the Kingdom of Nepal;
- (4) Suitably furnished accommodation for the Japanese experts and their families.
- 2. In accordance with the laws and regulations in force in the Kingdon of Nepal. His Majesty's Government of Nepal will take necessary neasures to meet:
- (1) Expenses necessary for the transportation of the Equipment within the Kingdom of Nepal as well as for its installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and any other charges imposed on the Equipment in the Kingdom of Nepal;
- (3) All running expenses necessary for the implementation of the Project.

VE ADMINISTRATION OF THE PROJECT

- The Secretary of the Ministry of Forests and Soil Conservation will bear overall responsibility for the implementation of the Project.
- 2. The Chief of the Extension and Publicity Division, the Ministry of Forests and Soil Conservation, as the Head of the Project, will be responsible for administrative and managerial matters of the Project.
- 3. The Japanese Team Leader will provide necessary recommendations and advice on technical and administrative matters concerning the implementation of the Project to the Head of the Project.
- 4. The Japanese experts will give necessary technical guidance and advice to the Repalese counterpart personnel on matters pertaining to the implementation of the Project.

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5. For the effective and successful implementation of the Project, a Joint Connittee will be established with the function and composition as referred to in Section VI of the Annex.

WE CLAIMS AGAINST JAPANESE EXPERTS

His Majesty's Government of Nepal undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, ocurring in the course of, or otherwise connected with the discharge of their official functions in the Kingdom of Nepal except for those arising from the willful misconduct or gross negligence of the Japanese experts.

IX MUTUAL CONSULTATION

There will be nutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

X JOINT EVALUATION

In order to review and evaluate the Project, both Governments will conduct the Joint Evaluation through JICA and the Nepalese authorities concerned at the end of the cooperation term.

XI TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from 16 July 1991.

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T MASTER PLAN

- 1. Objectives of the Project
 - The objectives of the Project are:
 - (1) to develop and improve techniques for the formulation of model forestry extension programme.
 - (2) to establish an extension network system for the community forestry in the Western Development Region, and thus to contribute to the forestry development and strengthening of organizational ability for the forestry extension in Nepal.
- 2. Activities of the Project
- (1) Surveys of extension needs
- (2) Development of extension materials
- (3) Development of extension methods
- (4) Pre-tests of the materials and methods
- (5) Formulation of model forestry extension programmes
- (6) Necessary activities related to implementation of the activities mentioned above

II JAPANESE EXPERTS

- 1. Long-term experts
- (1) Team Leader
- (2) Forestry Extension expert (extension materials)
- (3) Forestry Extension expert (extension methods)
- 2. Short-term experts
 Short-term experts will be dispatched when necessity arises.

HI LIST OF EQUIPMENT

- 1. Equipment for extension
- 2. Vehicles
- 3. Office equipment and supplies
- 4. Other necessary equipment and materials

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LIST OF NEPALESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. Head of the Project
- 2. Forestry Extension Officer(s)
- 3. Officers and assistants in charge of forestry extension in the forestry line institutions in the hill area of the Western Development Region
- 4. Administrative personnel
- 5. Labour

LIST OF BUILDINGS AND FACILITIES

- 1. Team Leader's office
- 2. Experts' offices
- 3. Other necessary facilities

JOINT COMMITTEE

1. Functions

The Joint Committee will neet at least once a year and whenever necessity arises, and work:

- (1) To formulate an Annual Work Plan of the Project in accordance with the Record of Discussions;
- (2) To review the overall progress of the technical cooperation programme and the activities carried out under the above mentioned Annual Work Plan in particular;
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation programme.

2. Composition

(1) Chairman: Secretary, Ministry of Forests and Soil Conserva

(2) Nepalese Side:

: Additional Secretaries

: Forestry Adviser

: Chief, Planning Division

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- : Chief, Monitoring and Evaluation Division
- : Chief, Forestry Extension and Publicity Division
- : Forestry Extension Officer, Forestry Extension and Publicity Division
- : Director-General, Department of Forests
- : Deputy Director-General, Community Forestry Development
 Division
- : Regional Director of Forests, Western Development Region
- : Director-General, Department of Soil Conservation and Watershed Management
- Representative, Foreign Aid Division, Ministry of Finance
- : Representative, National Planning Commission
- : Other invited representatives

(3) Japanese Side:

- : Team Leader
- : Other Expert(s) nominated by Team Leader
- : Representative, JICA Nepal Office
- N.B.: Officials of the Embassy of Japan may attend the Joint Committee as observers.



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暫定実施計画(TSI)

TENTATIVE SCHEDULE OF IMPLEMENTATION ON THE TECHNICAL COOPERATION FOR THE FORESTRY EXTENSION PROJECT

The Japanese Implementation Survey Team and the Nepalese authorities concerned have jointly formulated the Tentative Schedule of Implementation of the Project as attached hereto.

These have been formulated in connection with the Attached Document of the Record of Discussions signed between the Japanese Implementation Survey Team and the Nepalese authorities concerned for the Project, on the condition that the necessary budget will be allocated for the implementation of the Project and that the schedule is subject to change within the framework of the Record of Discussions when necessity arises in the course of the implementation of the Project.

6 June 1991

In Kathmandu

Mr.Katsura Watanabe

Leader

Implementation Survey Team Japan International

Cooperation Agency

Dr. P. N. Suwal

Acting Secretary Ministry of Forests and

Soil Conservation His Majesty's Government of Nepal

TENTATIVE SCHEDULE OF IMPLEMENTATION

I PROJECT ACTIVITIES

1. TROUGH ROTTYTITES			1000	1001
ITEMS YEAR	1991	1992	1993	1994
I Surveys of extension needs				
1 Community and Private Forestry Programme In particular, needs of the line forestry institutions in the hill area of the Western Development Region			<u> </u>	. i.
2 Selected other Programmes				
N Development of extension materials				<u> : </u>
III Development of extension methods	-			
IV Pre-tests of the materials and methods				
V Formulation of model frestry extension programmes		·		
VI Necessary activities related to implementation of the activities mentioned above				

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H TECHNICAL COPERATION PROGRAMME

YEAR ITEMS	1991	1992	1993	1994
I Japanese side				,
1 Long-term experts		,		
(1) Team Leader				
(2) Forestry Extension				
(extension materials)				
(3) Forestry Extension				
(extension methods)				
2 Short-term experts	(whe	n necess	ity aris	es)
3 Provision of machinery and				 .
equipment				
4 Counterpart training in	(Two t	o three	every ye	ar)
Japan	.			
5 Dispatch of survey missions	I .	ons may		tched
•	when ne	cessity	arises)	
I Nepalesc side				
1 Nepalese personnel				
(1) Head of the Project	/ Nonal	ese side	will ac	cian
(2) Counterpart Personnel	1	ry numbe		
(c) counterpart rersonner	1	ed count		
	1	onding t		
	1 -	ort-term	_)
(3) Administrative personnel		<u> </u>		
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2 Local cost				
3 Buildings and Facilities				
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