

2. 非公式要請書

2-1 Conservation Education Supporting Project

SUPPORT TO CONSERVATION EDUCATION PROGRAMME

1. Name of the Project : Conservation Education Supporting Project
2. Project Area : Nationwide
3. Project Period : Three Years
4. Project Cost : NRs. 12,500,000.00 US \$ 568,181.00
5. Project Objective : To support the departmental extension programmes at the field level by coordinating them and by supporting with the physical facilities and the updating activities as well.
6. Main Programmes:
 - i) Assessment of departmental extension education programmes with respect to physical targets, budget, personnel, technical aspects and problems etc.
 - ii) Analysis of the departmental programmes with respect to the target groups, designing materials, production practices, programme formulation and implementation, and scope etc.
 - iii) Establishment of the physical facilities such as audio-visual library, documentation, clearing house, graphic service, editing and printing, photolab, sound and video studio, and electronics workshop.
 - iv) Updating programmes such as workshops in script writing, editing, handling study tour and demonstration etc., maintenance of equipments, extension policies, study tour on extension, long-term in-country and abroad training etc.
7. Others:

The project will be implemented under the supervision of the Planning Cell of the Ministry of Forests and Soil Conservation. The personnels and the physical infrastructures will be gathered among the departments which are the recipient of the project itself.

-Proposed Conservation Education Program-

Justification :

With the implementation of the programs relevant to soil conservation, community forestry, wildlife management, herbal farming and resettlement, the participation base of the local community has become essential in order to be the programs a success. Along with the other factors that promote people's participation, the conservation education program plays a key role to motivate the people and changing their attitude towards conservation.

At present the extension education efforts are being practiced by the departments under the Ministry of Forests and Soil Conservation. Individually such programs have become successful to attract the local people in various occasions. They have also developed extension methods, materials, and programs suitable to the specific target groups.

A unified extension education program has become necessary in order to involve the local people in conservation activities. Thus a coordinated approach among the departments in the field of conservation education has been felt essential so that the local people can be effectively involved. In order to promote the departmental programs at the field level, a centrally located supporting services will be necessary. The center will focus on two major aspects such as the facilities including audio-visual studios, photo lab, printing press, library, documentation etc. and the programs to update the extension personnels.

Objectives :

To support the departmental extension programs at the field level by coordinating them and by supporting with the physical facilities and the updating programs as well.

Methodology :

First of all the departmental activities are assessed and hence the extension programs are analyzed. The problems with them will be identified and the departments will be supported to establish extension education section if there is none.

Secondly, the programs will be analyzed to find out the target groups, materials design and production practices, program formulation and implementation and the other aspects of extension. Based on the information received on the above aspects, a joint action plan will be designed so that all the departments will have access to the facilities to be established.

Thirdly a central unit at the Ministry level will be established with the equipments and the facilities pertinent to the following aspects :

- Audio visual library : to make the Audio visual materials e.g. films, filmstrips, etc. for the use in the fields,
- Documentation : to safely keep the materials produced by the departments and for the future references,
- Clearing House : to support the newsletters and help release press ,
- Graphic service : to support in designing materials,
- Editing service : to support the departments in editing materials and scripts etc.,
- Off-set press : to provide printing facilities,
- Photo lab : to process and develop photographic materials including color slides,
- Sound studio : to promote audio materials and radio programs,
- Video lab : to produce and edit video films and TV programs,
- Electronics workshop : to provide maintenance services.

Fourthly the centrally located unit will handle various programs in order to enhance the departmental caliber by conducting specific workshops such as :

- script writing for the audio visual and printing materials,
- editing newsletters, reports etc.,
- handling study tour, demonstration etc.,
- maintenance of the equipments,
- policy of extension education, and
- others. (Study tour, Training etc.)

Financial Resources :

In order to implement the program in a full-flage scale, the financial resources required will be as follows :

Equipments	Rs in 000
Sound equipments	2000
Vedeo equipments	2000
Printing equipments	1500
Photo lab equipments	1000
Electronic workshop equipments	1000
Equipments foe graphic design	500
	<hr/> 8000
Facilities	
AV Library	300
Documantation	300
Clearing House	150
	<hr/> 750
Activities :	
Workshop	500
Study tour	750
Training	1000
	<hr/> 1250
Others	
Vehicles	1000
Sundry	500
	<hr/> 1500
	11, 500
	<hr/> <u>16150</u>

2-2 Kavre Water Management Project

WATERSHED MANAGEMENT PLAN

for

KAVRE DISTRICT

PROJECT PROFILE

1. Name of the Project:- Kavre Watershed Management Project
2. Project Area:- Kavre District
3. Project Period:- 5 Years (1st Phase)
(Designed life of Project:-15 Years)
4. Project Cost:- 1st Phase (Years):- Rs. 203,486,000.00
Us \$ 11,561,705.00
5. Project Objectives:- To Improve the economic condition of the people through the Conservation & Management of Soil and Water resources of the Watersheds of Kavre District.
6. Main Programmes:- (i) Gully control, Landslide control, Torrent control, Stream bank protection, Water source protection, Irrigation channel improvement, Road slope stabilization, Trail improvement, Terrace improvement, Grass planting, Fiddler tree planting, Conservation plantation, Primary & Secondary energy technologies.

Others:-

- Head quarter of the kavre district is situated at 30 km. east of Kathmandu
- Kavre district covers 1475 km² area with 68 Panchayats.
- Sunkoshi and Bagmati are the two major rivers in the district,
- Population of the district is 307,150 the population per km² is 208.
- The 1st phase of the project will reduce the sediment by more than 357,000 tons and fulfill the fodder and fuelwood 17 % & 18 % of the total need respectively.
- The project generates employment, fulfills the fodder & fuelwood demand and increases the productivity through the rehabilitation and preventive measures of soil and water conservation programmes.

2 -- 3 Pilot Plantation Project for Tissue Culture
Propagation of Forest Species

PILOT PLANT FOR PLANT BREEDING
(TISSUE CULTURE PROPAGATION)
OF FOREST SPECIES.

MINISTRY OF FOREST & SOIL CONSERVATION
BABAR MAHAL
KATHMANDU
NEPAL
1987.

NAME OF THE PROJECT:

PILOT PLANT FOR PLANT BREEDING (TISSUE CULTURE
PROPAGATION) OF FOREST SPECIES.

LOCATION:

Tissue culture Laboratory, Godawary, Kathmandu, Nepal.

PROJECT DURATION:

Five years.

DEVELOPMENT OBJECTIVES:

To provide clean, improved planting materials for large
scale Forestry plantations through the use of tissue
culture techniques.

Immediate Objectives:

This project will directly contribute

1. to large scale forestry plantations
2. to improvement of Forestry with suitable varieties of
Trees and medicinal herb crops - through the extension
of Tissue culture Techniques.

This project will also facilitate training in
Tissue culture Techniques.

Objectivewise the project will:

1. Produce Tissue culture plants from those species
whose in vitro propagation methods have already been
developed because the trial plantation of
such species in various sites have already been
done. The micropropagation methods of following
Plant species have already been developed:
 - a. Dalbergia sissoo
 - b. Eucalyptus camaldulensis
 - c. Dendrocalamus strictus
 - d. Ficus auriculata

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Of the above species, the trial plantation of Dalbergia sissoo at different sites have shown successful and encouraging results. Dalbergia sissoo has shown the growth of 3 meters/year. Over 800 tissue culture derived Dalbergia sissoo plants have been planted in the year 1985/86 period.

2. Support the Existing Tissue Culture Laboratory, Godawari, under Ministry of Forest and Soil Conservation, which is attempting to develop micropropagation methods for forest trees.
3. Develop strategy of Extension of Tissue Culture Plants in Forestry.

OUTPUTS:

1. The main aim of this project would be the mass supply of the clean & improved Sapling of Trees and planting materials to overcome the problem of deforestation of the country. In other words, method development will be done by our existing Research laboratory and the large scale breeding via tissue culture will be done under this pilot plant.
2. The project will collaborate with personnels from Forestry sector to devise procedure to gradually cover the field and forest with Tissue culture planting stock.
3. Besides the supply of Tissue culture plants to prevent worsening deforestation problem, the project will contribute in popularization of micropropagation methods for priority species of plants for the commercialization of Tissue culture materials.

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4. The target of the project, in the beginning will be to produce Four Million Plants, mainly of those plant species such as Dalbergia sissoo, Eucalyptus camaldulensis, Dendrocalamus strictus and Ficus auriculata whose micro-propagation methods have already been developed and have undergone trial performances.
5. Development of micropropagation method for the following species is now being carried on at present in our Tissue culture laboratory, and once the successful methods are established, the tissue culture plants of these species will be started under this project:
 1. *Acacia catechu* (Catechu gum tree)
 2. *Bassia butyracea* (Chyuri)
 3. *Brassiopsis hainla* (Fodder tree)
 4. *Bombax malabaricum* (Simal)
 5. *Dalbergia latifolia* (Rose wood tree)
 6. *Dendrocalamus hamiltonii* (Bamboo)
 7. *Eucalyptus citriodora* (essential oil bearing tree)
 8. *Grewia oppositifolia* (fodder tree)
 9. *Osmanthus odoratus* (essential oil bearing tree)
 10. *Sugandh Kokila* (essential oil bearing tree)
 11. *Rhododendrons*

ACTIVITIES OF THE PROJECT:

1. Seeds or shoot buds or meristems or floral parts of priority species of plants will be collected and put to tissue culture Treatment for shoot proliferation.
2. Suitability of planting stock obtained from tissue culture Techniques will be assessed through field performance.

3. Tissue culture scientists will clone the plant and produce well-rooted plants. These plants will be taken care of by Foresters for nursery care and growth before use in large scale plantation.
4. Forest sectors will be approached to send their scientific personnels for Transfer of basic know how of tissue culture technique.
5. Germplasms of plants whose micropropagation methods have already been developed will be preserved using both cool and chemical treatment.

THE EXISTING TISSUE CULTURE LABORATORY WILL:

1. Share its experience in tissue culture with Scientific personnels from Forestry sectors.
2. Work out the procedure that can be adopted for large scale production of Tissue culture plants through the joint efforts of Tissue culture scientists and Foresters.
3. Assist in germ plasm preservation of forestry species using in vitro techniques.
4. Assist in developing methods for rapid propogation of plants introduced as in vitro materials.

PROJECT DESCRIPTION:-

Those plant species whose in vitro propagation methods have already been established will be selected for large scale production. The number of tissue culture plants to be produced of a particular species will be according to the need for trial plantation. Usually

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such a number will be between 500,000 and 10,00,000. The number of plant species or varieties to be included for large scale production will be between 4 and 8. Plant species or cultivars whose tissue culture propagation methods have been developed include two species of medicinal plants (Atropa belladonna, and Solanum laciniatum), one species of insecticidal plant, one timber tree (Dalbergia sissoo), 9 cultivars of potatoes and 30 kinds of orchids. Other species which are under field establishment observation include Eucalyptus camaldulensis (a fast growing tree), one species of bamboo, (Dendrocalamus strictus), and one fodder species (Ficus auriculata).

In vitro produced plants will be distributed to the different user agencies for performance trials at sites where they will be finally used in industrial scales. Since the project envisages production of tissue culture plants for commercial uses it is implied that the whole procedure from production to distribution of tissue culture material has to be carried out efficiently or economically. Therefore a separate tissue culture unit with a set up of flow chart system has to be established. Such a unit requires an office, a laboratory, glass houses, plastic houses, shipping areas, refrigerators, field, scientific and semi-skilled personnels.

Project target and schedule of implementation:

A pilot plant unit with a capacity to produce 3-4 million test tube plants, 1988.

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PROJECT BENEFIT:

By the use of clean planting materials derived from tissue culture, the yield and quality of forestry crops will enhance significantly. Once the benefit of test tube plants has been obvious to farmers and others, the demand for such planting materials is expected to rise sharply. As a consequence there will be a need for the establishment of a series of tissue culture factories in order to cater such needs. Under such circumstances the experiences gained by the proposed unit will be drawn for the establishment of new tissue culture factories. Besides the advantages of rapid multiplication, ie. theoretically over 10^6 plants from one plant in a year, the tissue culture method also ensures the production of planting materials free from fungi, bacteria, nematodes, and possibly viruses.

It is generally presumed that a significant increase is expected from plantation of selected clonal propagules rather than selected seedlots. A several fold yield increase from large scale plantation of selected Eucalypts cuttings in Brazil would indicate an obvious advantage of such an approach. Since tissue culture methods particularly meristem, shoot tip or bud cultures ensure the genetic stability of the regenerants, multiplication of selected individuals with true-to-type characters by this means is apparently possible. Hence this would result into a rapid genetic improvement of planting stock. To date in a laboratory in France, AFOCEL, tissue culture methods are regularly applied to produce thousands of clonal plants from hundreds of selected trees.

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In our context also such a genetic gain can be expected from plantation of clonal plants produced by tissue culture means. For example, in a trial plantation with Eucalyptus camaldunensis seedlings grown from seeds collected from a single tree, a great variation was observed. An one year old tree showed a over 100% height increase and over 300% volume increase compared with its average. In such case the tissue culture method if applied to multiply rapidly such elite individuals followed by plantation would obviously result into height and volume gains in the order of over 100%. A similar yield increase can be projected for other tree species which display variation in their seed progeny by cloning elite candidates using tissue culture methods.

In tree breeding hybrid seed production is a laborious and costly process. Since tissue culture techniques offer possibility to produce over a million plants from a single seed in a year, obviously only a few controlled crosses would be needed to produce hybrid seeds required for large scale plantations.

In view of the above advantages, the establishment of a demonstration pilot unit for propagating the tissue culture plants would lead to a significant improvement in Forestry crops both in quality and quantity. Moreover, such a unit would be an example for other sectors that need healthy, improved planting stocks for their development programmes.

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EXECUTING AGENCY:

Tissue Culture Laboratory, Godawary, Ministry of
Forest & Soil Conservation.

a. Technical Assistance:-

- i. A Co-ordinator with an experience in handling of tissue culture plants will be needed.
- ii. In order to have an overview of the project, visits for two senior persons at least at four tissue culture factories will be appropriate. The duration for such visits will be 2 -3 weeks.
- iii. Training for a period from 6 - 12 months for each of four scientific personnels to improve upon already existing facility and know-how.
- iv. Long term training for a few persons on genetic improvement of trees will be a valuable supplement to the project because of its on-going nature and future implications.

PROJECT STATUS:

Micropropagation methods for 30 kinds of orchids, two medicinal plants (Atropa belladonna, Solanum laciniatum), one insecticidal plant (Chrysanthemum cinerariaefolium), one tree species (Dalbergia sissoo) and 9 cultivars of potato have been developed at the plant tissue culture laboratory, Godawari. All of these plants have been established in the field. For culture initiation, explants were used from in vitro grown seedlings as well as from plants in the field.

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Commercialization of micropropagation techniques are often considered to be impossible or problematic or uneconomical. This view seems to have originated out of the difficulties an experimenter faces when he tries to regenerate plants via micropropagation. Firstly, for the establishment of culture for a given species he has to select appropriate materials, which could be seed, leaf, stem, root, shoot bud, shoot tip, meristem. Except when seeds are used, other parts of plants are likely to turn brown because of phenolic compounds released by the explant.

Secondly, an unorganized growth, callus, could result which when perpetuated by regular transfer are prone to produce cells with different chromosome number from that of original tissue explant.

Thirdly, there are no known method that allows multiplication of shoots with developed roots. Only shoots multiply.

The first two difficulties could be overcome by meticulous manipulation in the selection of explant material and cytokinin concentration in basic medium.

For root development conventional practice in tissue culture is by transfer of these multiplied shoots into root inducing medium. This step perhaps limits the possibility to large scale propagation since each individual shoot had to be operated upon for transfer under aseptic condition. However in our laboratory as a result of an R & D effort a new technique has been

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developed in which the sterile operation for rooting has been bypassed by transferring the multiplied shoots directly to nonsterile sandbeds. Chrysanthemum cinerari-
aefolium, 9 cultivars of potato, Dalbergia sissoo,
and Atropa belladonna have been established in the field following the direct transfer procedure.

Fourthly, the field establishment of in vitro produced plants need extra care compared to seedlings because the former lack cuticle during the transfer. However, as indicated above the multiplied shoots could be directly planted into sand beds for root development, thus unwarranting the extracare during transfer. Our experiences are that the rooting period of such microcuttings vary with species. And once the optimum period for rooting is assessed, production of clonal plants in millions becomes a regular practice.

Development of methods for rooting of proliferated shoots in non-sterile sandbed has reduced the production cost of tissue culture plants several times less compared to production cost of tissue culture plants produced conventionally. In the conventional method the in vitro proliferated shoots are rooted in sterile media. This practice besides increasing the cost of tissue culture plants limits the possibility of producing millions of plants because the required number of skilled personnels will not be easily available. Possibly 400 to 600 plants per day can be produced by conventional methods by a skilled person whereas by the method developed at the Godawari tissue culture lab the number of plants that can be produced is upto 10,000 per person per day. By the adoption of this method the price of tissue culture plant can possibly compete with the price of seedlings.

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Although there is an increase in application of tissue culture techniques for improvement of growth and quality of vegetable, oil seed, grain and fruit crops, not many forest tree species have been worked out to take advantages of tissue culture techniques. The reason may have been due to the fact that the forest trees are often thought recalcitrant to tissue culture methods. Since now it is clear that any plant or plant part or a single cell can be cultured to regenerate the plant, the question of successful development of propagation method for a particular species, irrespective of which categories it belongs, partly depends upon a number of experiments performed. In view of the experience so far achieved in the Godawari tissue culture laboratory it can be presumed that attempts to develop method for any priority species will be rational to national development goal.

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REQUEST FOR THE GRANT ASSISTANCE TO THE GOVERNMENT OF JAPAN:

As has been mentioned somewhere above, the micropropagation method via tissue culture has already been developed for few species of plants, and few are under process. Now, we have come to realize that once the method is developed, we need to put it into practise for mass production of Plants for the afforestation, as the immediate need of the country.

So, we hereby would like to request the Government of Japan for the Grant Assistance & dispatch of experts to establish the plant breeding of Forest species in Nepal.

2-4 Mid-west and Far-west Terai Community
Forestry Development Project

JICA

(Proposed Project Area)

Project Area : Bardia, Kailali, Kanchanpur, and Banke (Attached)

Development Region : Western and Far Western

Nature of the Project : Community based

Pre Project Situation : non community based

Components : Infrastructure,

Extension and Motivation

Private Planting

Intercropping Approach

Short period Output (return) approach

Local Employment Generation

Importance of yield from natural forests

Utilization of roads, river and canal banks, village
wastelands

Alternate energy approach

School Teaching Program

Trainings

Problems Identified (noted)

Fuelwood

Animal Fodder

Brushwood for irrigation purposes

Timber

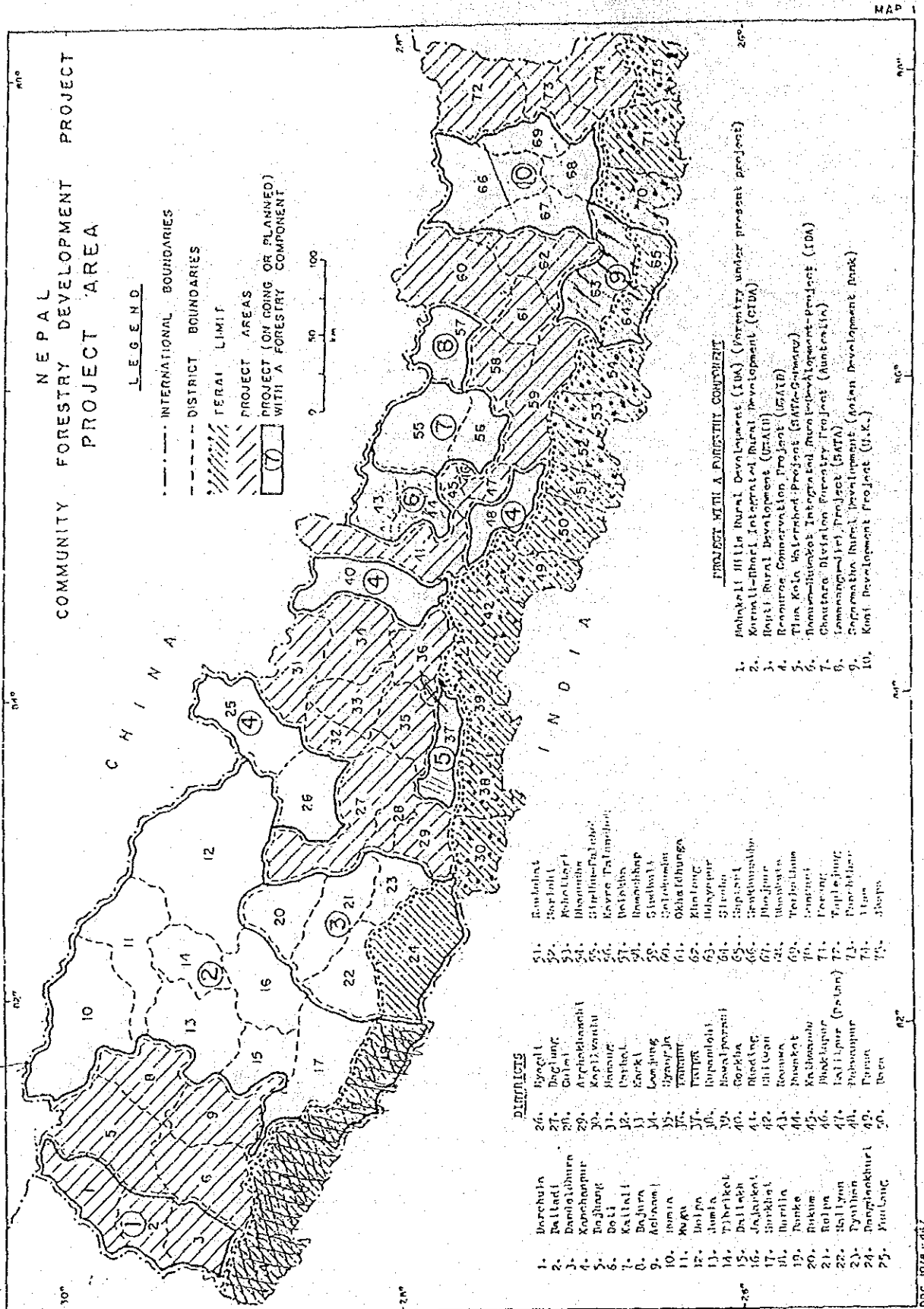
Constraints

Very far from Kathmandu

No bridge over Karnali and Babai

Not any community based forestry protection and
management

Panchayats to be covered : approx. 100



3. 団長レター

Kathmandu, November 13, 1987

Mr. B.N. Khujeli
Secretary,
Ministry of Forest and Soil Conservation
His Majesty's Government of Nepal

Dear Sir,

It is my pleasure to present you herewith the summary of findings and recommendations of our Contact Team.

I hope that the points mentioned in this letter will be considered in due course by your side for the possible technical cooperation project between His Majesty's Government of Nepal and the Government of Japan.

On behalf of the Team, I would like to thank you and other officials for the hearty cooperation and hospitality extended to the Team during our stay in this country.

With kindest regards.

Yours sincerely

Katsuhiro Kotari

Katsuhiro Kotari

Team Leader

JICA Contact Team

cc. Mr. Takao Nishina
Embassy of Japan

cc. Mr. Hideo Ono
Resident Representative of JICA

1. Background and purpose of dispatching contact team

Based upon the Note Verbal dated June 24, 1985 as the official proposal for "Environmental Conservation and Human Welfare" and on the report of the Basic Data Collection Survey Team for Rural Community Development headed by Mr. Katsura Watanabe in February 1986, JICA dispatched the Contact Team (hereinafter referred to as "the Team") in order to confirm the background and contents of the proposal and to discuss and examine the possibility of the commencement of Project-Type Technical Cooperation.

2. Proposal of new intention by the Nepalese side

The Team has received new intention of the Nepalese side, which is still unofficial, on technical cooperation programs as listed below submitted to JICA Nepal Office on October 30, 1987.

The Nepalese side explained the Team the background of new intention that the passage of years since the submission of official proposal of the project above made its priority change, associated with other forestry development projects' progress, and the Team understood this situation.

<List of newly submitted proposals>

- (1) Conservation Education Supporting Project
- (2) Kavre Watershed Management Project
- (3) Pilot Plant Project for Tissue Culture Propagation of Forest Species
- (4) Mid-West and Far-West Terai Community Forestry Development Project

3. New Terms of Reference of the Team

Responding to and respecting the above mentioned new intention of the Nepalese side, the Team, in consultation with the authorities concerned in Japan, decided to conduct its study for the background of the new proposal as much as possible for the further consideration between both governments.

4. Summary of the study for the proposed projects

(1) Conservation and Development in Terai (Chitwan District)

The Team conducted its field survey at Chitwan District as a project site candidate, based on the official proposal.

Chitwan District is rather a field of agricultural farm land and necessary measures to be taken by forestry sectors could be included in the existing program of Terai Community Forestry Development Project. Soil erosion problem at lower Rapti River side should be considered not only by tree plantation but also by other more appropriate measures.

(2) Conservation and Development in Midland (Dhading District)

The Team conducted its field survey at Dhading District as a project site candidate, based on the report of Basic Data Collection Survey Team.

As far as its field survey concerned, there is not any suitable site for the Japanese Project-Type Technical Cooperation from the infrastructural points of view. Such a cooperation style as Community Forestry Development Project seems to be more appropriate in this particular area.

(3) Conservation Education Supporting Project

This newly proposed project is placed as the first priority by the Nepalese side.

Main objective of this project is to provide equipments for education and extension. Since such cooperation program does not fit the Japanese Project-Type Technical Cooperation, the Team failed to study it in detail. Another scheme of cooperation would be considered.

(4) Kavre Watershed Management Project

Since the site is near from Kathmandu, the access to the site is good and a fairly large demonstrative effect can be expected. However, as Nepal-Australian Forestry Project is going on in this area, a prudent examination and coordination

is required for further consideration of the project.

(5) Pilot Plant Project for Tissue Culture Propagation of Forest Species

Forest tree seedling production by tissue culture technique has not yet been fully practiced even in Japan. It is quite difficult to dispatch adequate numbers of qualified experts continuously from long term aspects.

(6) Mid-West and Far-West Terai Community Forestry Development Project

During our stay in Nepal, the field survey could not be planned mainly due to time limitation. But interviews from the people concerned indicate many constraints for the implementation of the project.

5. Recommendations to both governments by the Team

To the Nepalese side

The Team is in a good position if the Nepalese side will make an official proposal from among newly presented ones, which should be submitted through the diplomatic channel, in the field of forestry development based upon the results of our survey and comments mentioned in this letter.

To the Japanese side

The Team will convey the unofficial proposal submitted by the Nepalese side and report the results of its survey to the authorities concerned in Japan. The Team will also recommend them to consider the proposal when they are officially submitted through the diplomatic channel.

収集・参考文献 (番号にアンダーラインのあるものは今回の収集資料)

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図面類

地形図

29. ネパール全国 1/1, 000, 000 (英語版)
30. Chitwan District 1/125, 000 (ネパール語版)
31. Dhading District 1/125, 000 (ネパール語版)
32. Mid Western Development Region 1/500, 000 (英語版)

LAND UTILIZATION MAP 1/50,000

- 33. No. 72 A/10, Chitwan, Makawanpur and Dhading Districts
- 34. No. 71 D/12, Gorkha and Lamjung Districts
- 35. No. 71 D/16, Gorkha, Dhading and Nuwakot Districts
- 36. No. 72 A/ 9, Gorkha, Chitwan, Dhading and Tanahun Districts
- 37. No. 72 A/11, Parsa, Chitwan and Makawanpur Districts
- 38. No. 72 A/13, Dhading, Gorkha and Nuwakot Districts
- 39. No. 72 A/ 7, Chitwan and Parsa Districts

LAND CAPABILITY MAP 1/50,000

- 40. No. 71 H/ 4, Dhading, Rasuwa and Nuwakot Districts
- 41. No. 71 D/12, Gorkha and Lamjung Districts
- 42. No. 71 D/16, Gorkha, Dhading and Nuwakot Districts
- 43. No. 72 A/ 6, Chitwan, Nawalparasi and Tanahun Districts
- 44. No. 72 A/13, Dhading, Gorkha and Nuwakot Districts
- 45. No. 72 A/ 7, Chitwan an Parsa Districts
- 46. No. 72 A/11, Parsa, Chitwan and Makawanpur Districts
- 47. No. 72 A/ 9, Gorkha, Chitwan, Dhading and Tanahun Districts
- 48. No. 72 A/10, Chitwan, Makawanpur and Dhading Districts

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- 49. No. 72 A/ 6, Chitwan, Nawalparasi and Tanahun Districts
- 50. No. 72 A/10, Chitwan, Makawanpur and Dhading Districts
- 51. No. 72 A/11, Parsa, Chitwan and Makawanpur Districts
- 52. No. 72 A/ 9, Gorkha, Chitwan, Dhading and Tanhun Districts
- 53. No. 71 H/ 4, Dhading, Rasuwa and Nuwakot Districts
- 54. No. 72 A/13, Dhading, Gorkha and Nuwakot Districts
- 55. No. 71 D/16, Gorkha, Dhading and Nuwakot Districts
- 56. No. 71 D/12, Gorkha and Lamjung Districts

