







# Report on the IUFRO-SPDC Training Workshop

# "Preparing and Writing Research Proposals"



Jointly organised by Institute of Forestry, Tribhuvan University, Nepal ComForM Project, University of Copenhagen IUFRO's Special Programme for Developing Countries (IUFRO-SPDC)

Supported by Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management

Hetauda, Nepal, 20 - 22 February 2009

## 1. Introduction

The Training Workshop on "Preparing and Writing Research Proposals" was jointly organised by the Institute of Forestry of the Tribhuvan University, Nepal, the ComForM Project (Community-based Natural Forest and Tree Management in the Himalaya Project), University of Copenhagen, Denmark and IUFRO's Special Programme for Developing Countries (IUFRO-SPDC). The two-and-a-half day event took place at the Orchid Resort in Hetauda, Nepal. Hetauda is also home to one of the two campuses of the Institute of Forestry of Tribhuvan University.

Held from 20 to 22 February 2009, the training workshop brought together 23 scientists from various organisations in Nepal, namely the Institute of Forestry (both Pokhara Campus and Hetauda Campus), Kathmandu Forestry College, Department of Forest Research and Survey as well as local NGOs such as Himawanti Nepal, FECOFUN, and the Nepal Foresters' Association. For list of participants please refer to Annex 1.

The workshop received both cash and in-kind support from the ComForM Project which covered the local expenditures including local travel of participants, and workshop logistics, while IUFRO-SPDC (through funding by the Austrian Ministry for Agriculture, Forestry, Environment and Water Management) provided the training material as well as covered the costs of the trainer.

Dr. Michael Kleine, IUFRO-SPDC Coordinator, Vienna, Austria conducted and facilitated the training. Organisational and technical support in implementing this workshop was provided by Mr. L. Puri and Mr. K.K. Thapa, both working with the ComForM Project.

## 2. Lecture Content

The workshop content is based on the IUFRO-SPDC Manual for Preparing and Writing Research Proposals. This manual has been published in 2000 and since then it is being used by IUFRO-SPDC to conduct training in proposal writing. Major sections of the manual are also available for presentation on Power Point and were used in the lectures. Both the manual and presentations are available for download on the IUFRO-SPDC website at

http://www.iufro.org/auth/science/special/spdc/training-resource-centre0/.

The workshop sessions were basically organized according to the list of content outlined in the manual. The major topics presented and discussed include:

- The need for scientific research
- Identifying and prioritizing research needs
- Identifying sources of research funding

- Introduction to the research proposal process
- Pre-planning activities
- Writing the proposal
- Tips on writing techniques and appearance of proposal
- Post-proposal writing

The workshop programme is presented in Annex 2 of this report.

## 3. Workshop Sessions

The workshop started with a general introduction about IUFRO and IUFRO-SPDC providing the participants with some background information on the work of IUFRO at the global level and its services to developing countries. In context, the training module on preparing and writing of research proposals is an integral component of IUFRO-SPDC's capacity building programme in developing countries and over the past 10 years many early and mid-career scientists mainly in Africa and Asia have benefited from proposal writing workshops.

In the first lecture on proposal writing the nature of scientific work was described including scientific methods, types of literature to be used, implementing research processes incorporating identification of problems, hypothesis building and constructing, supporting or casting doubt on a scientific theory. This led to the core issue of defining a problem that is relevant to forest stakeholders within a specific context (e.g. ecological region, country, region, network or organization). Because of the importance to identify and formulate relevant problems for decisions on the direction and type of research work to be conducted, a group session was organized as outlined below.

#### 3. 1 Group Work: Problem identification

The participants were asked to discuss problems that are relevant to the forest sector in Nepal, particularly representing current issues and concerns important to advance forestrelated knowledge and technology. Groups of 4-5 participants were formed to deliberate currently important forest issues. Based on these discussions the group selected one topic it considered most important and formulated an appropriate problem statement. In addition, information was collected that assist in the write-up of a justification explaining why this is an important problem.

The results of the group work are presented in the Table below:

Group	Problem Statement	Justification
1	Difficulty in on-time mapping of forest boundaries in community forest management	<ul> <li>More than 15000 CF groups exist and need to demarcate their boundaries on the ground (Government rule);</li> </ul>
		<ul> <li>Conventional techniques of forest survey (Compass/tape) are time consuming and costly;</li> </ul>
		Differential GPS techniques are becoming available in Nepal.
2	Social and cultural issues are the barriers in enhancing women leadership in CF management	<ul> <li>Statistics show low level of leadership of women at present;</li> </ul>
		<ul> <li>&gt;50% of national population are women and they are the primary users of CFT;</li> </ul>
		<ul> <li>There are 15000 CFs whose management will be improved by women leadership.</li> </ul>
3	Loss of quality and quantity of timber due to sal heart wood damage	<ul> <li>Sal is one of the most valuable timber yielding species in Nepal;</li> </ul>
		<ul> <li>It is one of the major sources of income from the forest sector for the community and the nation as a whole;</li> </ul>
		If borer is not controlled the nation will incur a huge economic loss.
	Inhibition factors to promote medicinal and Aromatic plants in CF	<ul> <li>MAP has commercial and cultural value</li> </ul>
4		Potentiality for cultivation
		Over exploitation of marketed species
		<ul> <li>Lack of market access to the rural people</li> </ul>
5	Uncontrolled forest fire is one of the major land-use problems in Nepal. People burn large forest areas deliberately in the summer season in order to increase grass production.	<ul> <li>To check excessive surface run off (soil erosion)</li> </ul>
		To reduce crop damage
		To conserve biodiversity
		Promote eco-tourism

Results of Group Work on Problem Identification

The results elaborated by the participants during the group work were presented and discussed in a plenary session.

### 3. 2 Defining Research Objectives

The next step in the workshop programme was to define specific research objectives, an important element in preparing a research proposal. Specific research objectives can be formulated as behavioral, performance, process or product objectives, depending on the type of intended research and expected results. A number of well formulated objectives including specific objectives and hypothesis formulations were presented. Based on the discussions on objective formulation and hypothesis development a second round of group work was implemented. In this group session participants were asked to further work on their projects and formulate research objectives that contribute to address the issues addressed in the problem statement.

Group	Problem Statement	Research Objectives
1	Difficulty in on-time mapping of forest boundaries in community forest management	<ul> <li>To introduce GPS mapping technique in CF boundary survey;</li> <li>To compare the results of GPS mapping with conventional techniques (i. e. theodolite, compass/chain);</li> <li>To assess the most effective and efficient method of boundary survey.</li> </ul>
2	Social and cultural issues are the barriers in enhancing women leadership in CF management	<ul> <li>To assess the social, cultural norms and values preventing women to take leadership in CF;</li> <li>To assess kinds of dependency of women on men to access sources;</li> <li>To assess the social beliefs on women and men.</li> </ul>
3	Loss of quality and quantity of timber due to Sal heart wood damage	<ul> <li>To estimate the gross financial loss from Sal heart wood borer;</li> <li>To compare the damage in different localites in Makawanpur District (damage mapping).</li> </ul>
4	Inhibition factors to promote medicinal and Aromatic plants in CF	<ul> <li>To explore sustainable MAP markets to foster sustainable livelihoods of CFUGs;</li> <li>To identify the gap to secure MAP markets;</li> <li>To suggest to stakeholders measures to enhance MAP markets.</li> </ul>
5	Uncontrolled forest fire is one of the major land-use problems in Nepal. People burn large forest areas deliberately in the summer season in order to increase grass production.	<ul> <li>To assess the adverse effects (social, economical and climatic) of uncontrolled forest fire;</li> <li>To develop appropriate strategies to mitigate uncontrolled fire.</li> </ul>

Results of Group Work on Formulating Research Objectives

## 3. 3 Pre-Planning

At the stage of formulating research objectives it is essential to tailor the research project to the specific requirements of a funding organization, so as to increase the chances of the submission to be accepted. This topic was intensively discussed with the participants in order to make them aware of the importance of matching the research project to the objectives of a donor agency. Towards this end, the proposal developer needs to collect sufficient information about the thematic priorities, budgetary limitations, and administrative requirements of a funding organization. This information is used for the decision to which organization to submit the proposal. A list of organizations that provide funding for research was presented along with a link to the CPF Source Book of Funding, a useful website when search for potential research donors.

## 3. 4 Writing the Research Proposal

Once clear objectives of the intended research have been defined, the scientists may start with the actual proposal writing process including compilation of information on the background, previous research and available literature. During the training session, the whole range of steps involved in drafting the research proposal has been presented and discussed. The major components of a good research proposal include (a) Summary/Abstracts; (b) Introduction; (c) Statement of Problem or Need; (d) Project Description; (e) Budget including Budget Explanation/Justification, (f) Special Considerations, (g) Curriculum Vitae, and (h) Appendices. The Project Description is further sub-divided into sections such as Objectives; Experimental plan; Facilities and Equipment; Dissemination and Literature cited.

Writing the proposal text should be guided by the requirements related to structure and format defined by the donor agency. This is most important as many funding organisations right away reject submissions in case some of the formal requirements are not met. In addition, the evaluation of project submissions is frequently carried out in stages, starting with the abstract of a proposal. Only if the abstract has received a minimum number of scores, the proposal will enter the second stage of evaluation. Composing a clear, concise, and attractive abstract is, therefore, an important element on the road to a successful submission. Towards this end, the participants were asked to prepare within their groups an outline of an abstract for presentation in the plenary. Two examples elaborated in the groups are presented in the Table below.

More discussions were also held on the content of the Project Description which represents the core chapter of any proposal. The project description begins with the objectives of the research and if needed a hypothesis. The actual activities undertaken in the research project are described in the experimental plan including methods and procedures used during project implementation. Important for subsequently drafting a realistic budget, all the facilities, equipment and personnel needed for the research activities are also outlined.

#### Examples of Developing a Summary/Abstracts for the Research Proposal

#### Project: Social Inclusion

Problem Statement: Social and cultural issues are the barriers in enhancing women leadership in CF management

Content of Abstracts:

- Diversity in social and cultural values;
- Different societal and ethnic groups;
- National data about CF shows more than 15000 CF groups but few CF have female leaders;
- Study conducted in two different ethnic communities (say A and B ) and two different geographic regions for comparison;
- Assess social and cultural norms and values preventing women to take leadership in CF management;
- A semi structured questionnaire will be prepared to collect the information /data;
- Focus group discussion will be conducted separately;
- Data will be analyzed by using simple descriptive statistical tools;
- Research work is supposed to finish within one year time period;
- Proposed budget is approximately 1,500,00/-

#### Project: Sal Hart Wood Borer

Problem Statement: Loss of quality and quantity of timber due to sal heart wood damage

#### Abstract

Introduction and problem statement

- Sal (*Shorea robusta*) is a dominant species in the tropical and sub-tropical regions of Nepal. It is one of the most valuable timber yielding species contributing to the national as well as community economies (contribution will be quantified).
- Sal forest is reported to have been infested by Sal heartwood borer (*Hoplocerambics spinicornis*) that deteriorates the quality and quantity of the timber, and results into the loss of timber price.
- The incidence of its infestation has been observed in the Sal forests in the Makawanpur district as well. Nevertheless, it is yet to determine the extent of its infestation and the damage caused by it. It has limited application of control measures.

Objectives

- To map Sal heartwood borer infestation area and compare damage in different locality in the Makawanpur district, and
- To estimate gross financial loss from the Sal heart wood borer in the district. Materials and methods
- · Random sampling of the Sal forests in the district
- Felling of randomly selected trees and observation in each selected forest
- Market survey

(Alternative: Survey of timber stocks eg. Saw mills, range posts, CFUGs...)

#### Expected outcome

- A map showing Sal heartwood borer in Makawanpur district will be prepared,
- DFO and CFUGs will get information on whether it is cost effective to introduce control measures.

### 3. 5 Finalising the Proposal

In the final session of the training workshop various measures were discussed that are essential to finalise the proposal document. Such measures include developing a realistic budget for the project using the information on research activities, personnel, equipment, tools and other facilities needed for the implementation of the project. Budget positions for publishing and dissemination of the results, travel, communication and auditing need also be considered. Examples of budget calculations were presented and discussed with the participants.

The list of references used in the proposal as well as the Curriculum Vitae of the scientists involved in the project are additional components that need to be prepared following the formal requirements as provided by the funding agency. Examples of properly designed lists of references were presented in the workshop.

The workshop concluded with a session on "Tips on Writing Techniques and Appearance of Proposal" explaining some aspects such as structuring the text (white space, justified/ragged text etc.), headings, fonts, type faces and point sizes. These measures assist in making a proposal look nice and also help the reader to more easily capture the main messages and information of the research project.

# 4. Final Remarks

This training workshop was conducted as part of a support programme provided by Forest and Landscape Denmark (University of Copenhagen) to the Institute of Forestry of the Tribhuvan University, Nepal. The cooperation between Forest and Landscape Denmark (FLD) and IUFRO-SPDC - in support of the forest science community in developing countries – has been agreed in a meeting between the two partners in August 2008. Sharing resources in terms of expertise, personnel and in-kind contributions for travel, logistics and local workshop arrangements have been beneficial to all partners involved.

The workshop on proposal writing was conducted at the right time, as many of the participants were in the process of preparing their own research proposals to be submitted to the ComForM Project. Each participant received an electronic copy of the proposal writing guidelines and presentations made in the workshop. Based on the tools and methods discussed in the workshop the participants will be able to prepare research proposals of higher quality and thus increase the chances to be accepted for funding.

## **ANNEX 1**

# List of Participants

S. No.	Name of Participants	Address	
1	Prof. I. C. Dutta IOF Pokhara		
2	Mr. B. Mahato	IOF Pokhara	
3	Mr. Y. P. Timilsina	IOF Pokhara	
4	4 Mr. B. D. Pokharel IOF Hetauda		
5	5 Mr. S. K. Upadhyaya IOF Hetauda		
6	6 Mr. V. K. Yadav IOF Hetauda		
7	7 Mr. K. P. Dahal IOF Hetauda		
8	8 Mr. V. Thakur IOF Hetauda		
9	Mr. H. L. Shrestha	Kathmandu Forestry College	
10	Mr. K. R. Gautam	Dept. of Forest Research & Survey	
11	Dr. D. R. Upreti	FECOFUN	
12	Ms. A. Mishra	HIMAWANTI Nepal	
13	Ms. J. Rai HIMAWANTI Nepal		
14	Mr. L. Puri ComForM Project		
15	Mr. K. K. Thapa ComForM Project		
16	16 Ms. H. Larsen KU Denmark		
17	Mr. S. Adhikar	IOF Pokhara	
18	Mr. C. P. Upadhyaya	IOF Pokhara	
19	Mr. B. P. Gyawali	Nepal Foresters' Association	
20	Mr. S. K. Manjan	IOF Hetauda	
21	Mr. M. S. Haque	IOF Hetauda	
22	Mr. A. P. Bastola	IOF Pokhara	
23	23 Mr. N. P. Tiwari IOF Hetauda		

# ANNEX 2

# IUFRO-SPDC Training Workshop - Preparing and Writing Research Proposals

# Institute of Forestry, ComForM and IUFRO Special Programme for Developing Countries

# 20-22 February 2009, Hetauda

Friday 20 February		
9.00-10.00	Welcome and introduction of participants	
	About IUFRO	
	Objectives of workshop	
	The need for Scientific research	
10.00-10.30	Coffee break	
10.30-12.00	Identifying and prioritizing research needs	
	Identifying sources of research funding	
12.00-13.30	Lunch	
13.30-16.30	Research proposal process	
	Pre-planning	
	Writing the proposal	
	Group Work "Problem Statement"	
Saturday 21 February		
8.30-10.00	Writing the proposal continues	
	Group Work "Defining Research Objectives"	
10.00-10.30	Coffee break	
10.30-12.00	Writing the proposal	
12.00-13.30	Lunch	
13.30-16.30	Introductory chapter	
	Abstracts/Summary	
	Group Work "Drafting Abstracts"	

Sunday 22 February		
8.30-10.00	Budgetplanning	
	Examples of application formats (ComForM, IFS, ITTO, EC, others)	
10.00-10.30	Coffee break	
10.30-12.00	Tips on writing techniques and appearance of proposal	
	Post-proposal writing	
	Group research	
12.00-13.00	Wrap-up and closing	
13.00	Lunch	
14.00	Departure of Participants	