IUFRO-SPDC

Report on the
IUFRO-SPDC Training Workshop

“Working effectively at the Interface of Forest Science and Forest Policy”

Thimphu, Bhutan

22 to 24 October 2013

Organised by:
RNR Research and Development Center Yusipang and IUFRO -SPDC

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1. Introduction

IUFRO-SPDC in collaboration with the Renewable Natural Resources Research and Development Center Yusipang, Department of Forest and Park Services, Ministry of Agriculture and Forests, Royal Government of Bhutan, organised a three-day training workshop on “Working Effectively at the Interface of Forest Science and Forest Policy”. The workshop took place at the Natural Resources Development Cooperation Ltd. Headquarters in Thimphu, Bhutan from 22 to 24 October 2013.

This workshop activity has been implemented as part of the Bhutan-Austria Project on “Climate change adaptation potentials of forests in Bhutan – Building human capacities and knowledge base (BC-CAP)”, representing a follow-up initiative of a long-term collaboration on forest research between Bhutan and Austria. IUFRO contributes to Work Package 6 on “Training of Bhutanese forest scientists, Government officials and other relevant stakeholders in effective dissemination and uptake of scientific knowledge in the field of climate sensitive forestry and – land use”.

The training provided concepts and methods to researchers on how to plan, conduct, and organize research activities so that research results can more quickly and easily be transformed into usable information for problem-solving and policy-making. The workshop content is based on the Guidance for Scientists and Research Organizations published by IUFRO’s Task Force on the Science-Policy Interface as IUFRO Occasional Paper 17.

The aim of the workshop was to enable the participants to learn about the best practices of science-policy interactions as evidenced in the global negotiations on climate change based on collaborative scientific analysis under the umbrella of the Intergovernmental Panel on Climate Change (IPCC). A range of case studies from the global policy arena as well as national level such as India, Nepal and Costa Rica were presented addressing forest-related science-policy issues including field projects for reducing deforestation and forest degradation (REDD+).

1.1 Objectives

The primary objective of the workshop was to increase the impact of science on forest policy and improve the practice of forestry, thereby creating more value for society from forest and tree-related research. Towards this end, the training workshop specifically aimed at

a) Improving the understanding of policy- and decision making and the roles scientists can play in informing such processes;

b) Training researchers and other concerned officials on planning, conducting, and organizing research activities so that research results can be effectively transformed into usable information for problem-solving and policy-making;
c) Explaining key aspects of science-policy interaction and best practices for work at the science-policy interface with special emphasis on the incorporation of relevant traditional knowledge;

d) Presenting a wide range of case studies related to REDD+ from India, Nepal and Costa Rica;

e) Conducting hands-on exercises in working groups on issues of immediate concern for Bhutan with focus on the transformation of scientific information for use in policy and on-the-ground forest management, and

f) Practically design a plan of action for effectively communicating research results obtained through the BC-CAP project.

1. 2 Participants

The workshop brought together a total of 32 participants from various organisations in Bhutan including:

- Renewable Natural Resources Research and Development Center Yusipang, Department of Forest and Park Services, Ministry of Agriculture and Forests (main organiser of the workshop);
- Renewable Natural Resources Research and Development Center Jakar, Department of Livestock, Ministry of Agriculture and Forests;
- Renewable Natural Resources Research and Development Centers Bhur, Bajo and Wengkhar, Department of Agriculture, Ministry of Agriculture and Forests;
- Nature Recreation and Ecotourism Division, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- Ugyen Wangchuk Institute of Conservation and Environment, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- College of Natural Resources, Royal University of Bhutan;
- Social Forestry and Extension Division, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- Policy and Planning Division, Ministry of Agriculture and Forests;
- Forest Resources Management Division, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- Renewable Natural Resources Research and Development Sub-Center Darla, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- Watershed Management Division, Department of Forest and Park Services, Ministry of Agriculture and Forests;
- Natural Resources Development Cooperation Ltd., Druk Holding and Investment;
- Department of Hydromet Services, Ministry of Economic Affairs; and
- Council for RNR Research of Bhutan, Ministry of Agriculture and Forests.
2. First Day: Tuesday, 22 October

2.1 Inaugural Session

The inaugural session began at 0900 Hrs with an address by Dr Tshewang Dorji of the Renewable Natural Resources Research and Development Center Yusipang, who welcomed the participants and the resource persons and gave a brief introduction of the project on "Climate change adaptation potentials of forests in Bhutan – building human capacities and knowledge base" under the Fast-start Climate Initiative of the Austrian Ministry of Agriculture, Forestry, Environment, and Water Management. He said the project will assess stress tolerances and climate change adaptation and mitigation potentials of main forest types in Bhutan, develop susceptibility models for climate change relevant biotic disturbance agents, conceptualise restoration strategies for increasing carbon stocks and combating species losses on degraded lands, educate Bhutanese experts in climate change adaptation measures in forestry and REDD+ opportunities through in-country courses and workshops as well as through formal academic education through the mountain forestry master course and doctoral studies at BOKU University, Vienna, Austria and establish and train a national expert group on adaptation measures to climate change; as well as train Bhutanese forest scientists, Government officials and other relevant stakeholders in effective dissemination and uptake of scientific knowledge in the field of climate sensitive forestry and land use.

The next session was chaired by Dr Michael Kleine, Coordinator of IUFRO' Special Programme for Development of Capacities, who spoke of the historical evolution of IUFRO, its goals, the wide functional and geographical reach of the organization, some of its more recent achievements and, in particular, of the activities of the IUFRO-SPDC program. He said that this workshop was the first of many components of the Work Package 6 of the Bhutan- Austria project under the Fast-start Climate Initiative of the Government of Austria. The dissemination of forest-related information on climate change is an essential component of building human capacity within the Bhutanese society for adaptation and mitigation of climate change effects and the Work Package 6 seeks to introduce a wide range of methods and tools for effective communication between the science community and forest stakeholders including policy makers, community leaders, NGOs, private sector and society at large.

Dr Kleine highlighted the objectives of the workshop and spoke of the necessity of increased participation of stakeholders in policy framing. He said there was a large amount of information available with the science community but it does not reach stakeholders in a manner in which it could be reflected in policy formulation and on-the-ground implementation.

This was followed by self-introduction by all participants in which they highlighted their fields of activity and level of specialization, and their expectations from the workshop in the context of this project. Overall the expectations from the workshop can be summarized as below.
a) Developing dissemination guidelines on the publication of research work
b) Active encouragement to communication of research results must be promoted in the interest of forestry;
c) Research must be genuine and not used to justify existing policies;
d) Increased communication among researchers is needed through networking among the scientists working in related areas;
e) Narrowing the gap between scientific information and its conversion to policies by pursuing best practices for this purpose from across the world; and
f) Increased knowledge about research tools.

The next session, chaired by Dr Michael Kleine, began with a detailed presentation on the subject of science policy interfacing by outlining aspects of interactions between the science community and policy-makers. Important issues included links between substantive knowledge and political decision-making and the barriers that could weaken the links, policy relevance of research, the duration of the public attention (cycle) on specific issues, and the importance of establishing long-term processes of science-policy interactions. Dr Kleine also introduced the participants to the many activities of IUFRO’s Task Force on the Science Policy Interface since it was established in 2000. Over a period of 5 years the Task force evaluated over 60 case studies on science-policy interfacing from around the world. Based on these analyses best practices guidelines were developed and have been used in designing this training.

An interactive session followed this presentation in which the participants shared their experiences of science policy interaction in Bhutan and the factors which limit these interactions. Subsequently, Dr Kleine continued with his presentation explaining the contribution of science in national and international policy processes with examples from the evolving international forestry regime and the national forestry programs across the world.

The afternoon session titled “translating policy into practice: managing renewable natural resources in the mountains under the changing climate” was chaired by Dr Promode Kant. His presentation had three distinct parts the first of which covered the relevant decisions of the UNFCCC on climate change mitigation and adaptation relevant to the forestry sector. The second part was aimed at informing the participants about the various possibilities and procedures in which these global decisions and linked financial resources could be used for local climate positive development. A long discussion followed in which the participants expressed serious difficulties faced in accessing international funds for adaptation to climate change and the need for linking financial flows to the scientific assessment of needs rather than the negotiating capabilities of the countries seeking financial support.

The third part of Dr Kant’s presentation covered integration of mitigation of climate change within the adaptation practices in forestry, agriculture and pastures in a mountain landscape. He presented case studies from Nepal, India and Costa Rica all of which were relevant to Bhutan. Each case study was again followed by detailed discussions during which the participants drew parallels, as well as sharp differences, with the situation obtaining in Bhutan.
3. Second Day: Wednesday, 23 October

The day began with a summary of talks, presentations and discussions held on the previous day by Dr Michael Kleine who then laid out the tasks before the workshop participants for the second day of the event.

3.1 Best Practices Guide

Dr Kleine introduced the Best Practices Guidelines developed by IUFRO on “Working Effectively at the Interface of Forest Science and Forest Policy” and published as IUFRO Occasional Paper No. 17 in 2005. He said that the basic objective of IUFRO is that policy makers, and through them the society at large, should be the ultimate beneficiary of forest research and therefore it is essential that the research undertaken by scientists should be relevant to societal needs. Often research is conducted without giving due thought to how it is relevant to the needs of the society and even if it is relevant how its results can be transformed into usable information. Policy makers should be able to use the insights from research work for the formulation of concrete policies that can then be implemented by decision makers and implementers. The purpose of this guidance is to help researchers plan, conduct, and organize research activities so that results can be more quickly and easily transformed into problem solving and policy making information packages.

Dr Kleine emphasized that science outreach is distinct from activism and advocacy. It only informs and does not persuade the society to accept its findings. It understands that all scientific findings are interim in nature and there is no finality, and the society should be free to use its judgment in utilizing the findings.

The guidelines fall into four categories:

- Focusing research on questions relevant to policy issues
- Conducting research in a collaborative manner combined with frequent communication
- Understanding, serving and engaging in policy processes, and
- Creating organizational capacity and culture that enables the above

3.2 Group Work

Subsequent sessions of the day were then devoted to group work for developing policy briefs based on available research outputs and other scientific information. Dr Kleine presented a brief outline of the group work and its organization. A discussion was held to finalize five subjects of group work as follows:

Group 1: Bamboo as an alternative to wood
Group 2: Enhancing production of commercial timber
Group 3: Human-wild animal conflict
Group 4: REDD+ negotiation strategies
Group 5: Medicinal plants

Participants organized themselves into five groups for preparing short policy briefs on the subject chosen by the Group. After the allotted time, each group was to make a presentation of its results followed by detailed discussion on each of the briefs prepared. As the discussions went on for much longer than anticipated only two groups were able to complete their presentations during the day which has been described briefly as below. The remaining three presentations were rescheduled for the last day of the workshop.

Group 1: Bamboo as an alternative to wood

Ecologically, commercial bamboo can be raised in any available degraded land across the southern foothills of the country. Plantation of bamboos will not only help in reducing pressure in forest utilization but also improve the land use and biomass/vegetation coverage. Bamboo poles can replace trees that are cut in large numbers for use as flag poles and also reduce trade imbalances with India caused by large scale import of bamboo poles by the construction industry. This calls for urgent measures to introduce intensive management of existing natural bamboo stocks and promotion of bamboo plantations on a larger scale.

Group 2: Enhancing production of commercial timber

Timber supply from forests in Bhutan is not able to keep pace with the increasing demand due to the booming construction industry, increased consumption of wood based products, and overall socio-economic development in the country. The commercial timber production in Bhutan is mainly carried out through the establishment of Forest Management Units (FMU) but the number of FMUs could not be increased as the potential accessible areas are diminishing and lot of investment in infrastructure is required to venture into far-flung inaccessible areas. Research has suggested that the present timber shortage could be addressed by carrying out systematic thinning in blue pine forests spread over about 130,000 ha in fourteen Dzongkhags with profuse regeneration in blue pine forests. Lack of thinning in blue pine forests has resulted in deterioration of forests and timber quality. Thinning in blue pine forests will not only help meet the timber demand but also improve the quality of forests. The removal of timber from felling sites should be done through environmental friendly techniques like use of cable yarding systems wherever possible and it should be made available to both the rural and urban consumers.
4. Third day: Thursday, 24 October

4.1 Group work (continued)

Representatives of the remaining three groups also presented their policy briefs followed by detailed discussions.

Group 3: Human-wildlife conflict

Incidences of wildlife related predation on crops and domestic animals are a serious cause for concerns and a recent estimate suggests that in some areas as much as 70% of annual average income for rural households ($194 per year) is lost to depredation by wild animals. Scattered works to mitigate the wildlife conflicts have met with only limited success. Forest management should attempt at enabling coexistence of both human and wildlife in forest areas. The measures to address human wildlife conflicts should include research on population dynamics and ecology of conflict animals to understand their distribution, carrying capacity and response to stress. Also since the traditional ways of warding off wild animals are no longer effective and it is necessary to use modern measures like electric fencing, where feasible, to protect crops from wild animals. The existing scheme of providing compensation may continue because it helps reduce popular anger against wildlife depredation and makes the situation more amenable to management by local government officials.

The Group also felt that even though killing of animals is a taboo in the Bhutanese society it might become necessary to think of culling wild boar which, being a prolific breeder, is increasing at an alarming rate and reported to be the most destructive animal to agricultural crops.

Group 4: REDD+ negotiating strategies

Low deforestation in Bhutan is a conscious choice. The core beliefs have been formalized in a set of principles known as Gross National Happiness (GNH) with all-encompassing commitment to the principles of sustainable economic development, conservation of the environment, cultural preservation and good governance boldly reflected in the country’s constitution, policies, legislation and development plans. Bhutan is permanently protecting over 51% of the country with mandate to conserve 60% forest cover for all times to come. In addition, Bhutan also made a commitment to remain carbon neutral.

Though there is localized deforestation, the forest cover is increasing in Bhutan placing it into the category of High Forest cover Low Deforestation (HFLD). However, REDD+ as currently designed is essentially focused on deforestation and forest degradation and countries with greater achievements in conservation of forests and sustainable forest management are unlikely
Group 5: Medicinal plants: Promotion of Manu (Inula racemosa) cultivation

Manu (Inula racemosa) is biennial medicinal plant of the compositae family grown at elevation between 1500 and 3900 m the root of which is used for the production of traditional medicines and incense. Manu cultivation does not require guarding it against grazing and browsing by domestic and wild animals unlike most other agricultural crops. The current market price is Nu. 200 per kilogram and could fetch a gross income of Nu. 300,000 per acre. At the moment it has a ready market within Bhutan and it would greatly benefit the upland farmers if a good sized export market could be established. It would also create significant employment opportunities.

All in all, the workshop exercise of developing policy briefs to promote research results among policy makers in Bhutan achieved its objectives. The five working groups intensively discussed the selected topics and ways and means to present these to policy makers. The participants obtained good insights into this type of communication work that is needed to transform scientific knowledge into information products suitable for policy and management.

4.2 Fast Start Project on climate change adaptation

This final part of the workshop aimed at discussing with the participants some aspects of the new project on “Climate change adaptation potentials of forests in Bhutan – building human capacities and knowledge base” supported by the Government of Austria, particularly on Work
Package 6 related to science-policy and science-society interactions. The results of the discussions are to be used in the main project planning workshop to be held in Vienna, Austria from 7 to 8 November 2013.

Dr Andras Darabant (BOKU University, Vienna, Austria) introduced the project to the participants. He stated that the project seeks to assess the potential for climate adaptation and mitigation measures in Bhutanese forests followed by initiation of specific activities for enhancing the resilience of forests to the anticipated changes caused by the changing climate. Forest restoration strategies and activities for increasing carbon stocks as well as combating species losses, particularly on degraded lands, are also proposed to be developed with community participation and using the best available technologies. The project has a strong focus on capacity building to ensure long term sustainability of the high quality management of forests even as their response to inputs and ownership of knowledge and activities. The project shall be implemented by the Watershed Management Division (the national agency responsible for issues of climate change in forests) of the Ministry of Agriculture and Forests in collaboration with the RNR RDC Yusipang.

The project will be carried out in the Eastern, Central and Western region of the country. The work is divided into 6 work packages as described below.

4.3 Planning session on Work Package 6

Following the presentation about the project, the participants were asked to provide ideas and input to Work Package 6 on dissemination and uptake of scientific knowledge in the field of climate sensitive forestry and land use. The planning session resulted in a wide range of proposals for activities and information products to be developed and communicated by the project. The results of the deliberations are summarised as shown below.
**Work Package 6:** Dissemination of Scientific knowledge ensured through capacity building and active research communication of project results

Activity 1: Detailed Communication plan (Responsibilities, time frame) to be elaborated based on information below.

<table>
<thead>
<tr>
<th>Levels</th>
<th>Target Audience</th>
<th>Project actors</th>
<th>Written Information product</th>
<th>Medium of Dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Minister, MoAF</td>
<td>Project Scientists, CoRRB, specialists, RRCO.</td>
<td>Policy Brief</td>
<td>Seminars and presentations</td>
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<td></td>
<td>PPD, MoAF</td>
<td>Project scientists, CoRRB, specialists, RRCO.</td>
<td>Policy Brief</td>
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<td>Secretary, MoAF</td>
<td>Project scientists, CoRRB, specialists, RRCO.</td>
<td>Policy brief</td>
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<td>Project scientist</td>
<td>Technical summary</td>
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<td></td>
<td>Department of hydromet Services, MoEA</td>
<td>Project scientists</td>
<td>Technical summary</td>
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<td>National Env. Commission</td>
<td>Project scientist</td>
<td>Technical summary</td>
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<tr>
<td></td>
<td>CoRRB</td>
<td>Project scientists</td>
<td>Detailed report, research papers, proposals</td>
<td></td>
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<tr>
<td></td>
<td>UWICE, CNR, Sherubtse</td>
<td>Project Scientists</td>
<td>Technical summary, Educational material</td>
<td></td>
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<td></td>
<td>ICS, MoAF</td>
<td>Project Scientists</td>
<td>Technical summary, News, Updates</td>
<td>Local Media</td>
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<td></td>
<td>NRDCL</td>
<td>Project Scientists</td>
<td>Technical summary</td>
<td>Seminars and presentations</td>
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<td></td>
<td>DGPC</td>
<td>Project Scientists</td>
<td>Technical summary</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>Local communities/Visiting guests</td>
<td>Project scientists/RRCO</td>
<td>Leaflets, Brochures, Posters,</td>
<td>Field visits, presentations</td>
</tr>
</tbody>
</table>

**Channel 1:**
Policy briefs from Project through CoRRB to Ministry

**Channel 2:**
Technical summaries, detailed reports would go through RRCO (RDCs) to Technical stakeholders

**Channel 3:**
Translation, Simplification of project results through RRCO (RDCs) to local communities
Activity 2: Capacity Development Detailed

Implementation agencies
- Training on presentation techniques, interpretation of data, academic writing

Dissemination
- Training of scientists in science communication skills
- Website improvements
- Social science methodologies
- Publications

4.4 Concluding function

Participants were awarded certificates of attendance by Dr Michael Kleine and Dr Promode Kant along with documented proceedings of the workshop sessions in electronic format.

The workshop was brought to conclusion with a closing speech by Mr. Tshewang Dorji and expression of thanks by Dr Michael Kleine and Mr. Karma Tenzin and Mr. Dorji Dukpa.