



Report on the
Pre-Conference Training Workshop
“Working Effectively at the Interface of Forest Science and Forest Policy”

Organised in Partnership with

The Food and Agriculture Organization of the United Nations (FAO)
The Department of Botany, Panjab University, India
Dayanand National Academy of Environmental Sciences, India,
Institute of Climate Change and Ecology, India and
IUFRO Special Programme for Developing Countries (IUFRO-SPDC)

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Chandigarh, India, 14 – 15 March 2009



1. Background and Introduction

1.1. Background

The need for sound scientific information in the development of public forest policies at the local, national and international levels has grown significantly in recent years. So too has the need for such information within the private forestry sector and among non-governmental organizations, whose role in the development, sustainable management and conservation of forest resources in all regions of the world is steadily increasing in importance. Despite rapid advances in information technology that has, in theory, the potential to significantly improve the flow of research findings to policy-makers and forest managers, communication and interaction often is inadequate between the research community and the users of the information they generate.

Also, often research is planned and conducted before giving adequate thought to exactly how the results will be transformed into usable information. In order to generate value for society, research results should be used by someone – policy-makers, forestry practitioners, landowners, educators and other researchers. The science-policy interface is all about utilising scientific knowledge more effectively.

Towards this end, a Training Workshop “Working effectively at the Interface of Forest Science and Forest Policy” was held on 14 and 15 March 2009 as pre-conference event of the IUFRO International Meeting on Plant Invasion and Forest Ecology: Concerns and Solutions. The conference was organised by IUFRO Working Party 8.02.04 (Ecology of Alien Species) and 4.02.02 (Multipurpose Inventories) in cooperation with the Department of Botany, Panjab University, and the Dayanand National Academy of Environmental Sciences and took place at the Panjab University, Chandigarh India from 16 to 18 March 2009.

The training workshop benefited from substantial input by FAO (Regional Office for Asia Pacific) and the New Delhi based Institute of Climate Change and Ecology (ICCE). Dr. Simmathiri Appanah (FAO National Forest Program Advisor) and Dr. Promode Kant (Director of ICCE) joined the workshop as resource persons taking over parts of the lectures and moderating various interactive discussion sessions with the participants. Dr. Michael Kleine (IUFRO-SPDC Coordinator) acted as main moderator and facilitator of the workshop.

Financial support for the workshop and conference was provided by the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management through a grant allocated to IUFRO-SPDC. The grant allocation allowed covering the costs of participation of scientists from developing countries in the workshop and conference as well as paying for local meeting arrangements.

1.2. Objectives

The workshop addressed issues of science-policy interactions at the international level by presenting amongst others also the IUFRO-led Initiative on Global Forest Expert Panels. Policy input at the national level was explained using national forest programmes in the Asia Pacific region. The third element in the workshop addressed policy implementation at the local level providing examples of climate change mitigation projects in South Asia.

The training workshop aimed at:

- Providing concepts and methods to researchers on how to plan, conduct, and organise research activities so that research results can more quickly and easily be transformed into usable information for problem-solving and policy-making;
- Explaining key aspects of science-policy interactions, and best practices for work at the science-policy interface in the context of international, national and local policy processes with special emphasis on the incorporation of traditional forest knowledge.
- Presenting a wide range of case studies mainly dealing with forest-related forest management issues in Africa, but also from other regions.
- Conducting hands-on exercises in working groups with focus on the formulation of research processes that adequately incorporate elements of science-policy interfacing.

Although not all research is specifically focused on policy-relevant questions, best practices in transforming research results into usable information can 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 improving the understanding of policy- and decision-making and the roles scientists can play in informing such processes.

The training workshop brought together scientists from developing countries in Sub-Saharan Africa who wished to increase the impact of their scientific work (i.e. research, advocacy, supervision etc.) on policy-making through adequate contribution of research results and scientific knowledge to policy-making processes, addressing broader environmental and socio-economic issues.

1.3. Contents and methodology

The two-day training workshop was designed to provide latest thinking on concepts and tools for the improvement of the interface of forest science and policy. The workshop content is built on a “best practices guide” for working effectively at the interface of forest science and forest policy. These guidelines have been developed and published by the IUFRO Task Force on Science Policy Interface (IUFRO Occasional Paper No. 17, 2005) and is available online at <http://www.iufro.org/publications/series/occasional-papers/en/>.

The course specifically focused on the following issues:

- Selecting research questions that are relevant to policy issues;
- Conducting research in a communicative and collaborative manner;
- Understanding, serving and engaging in policy processes;
- Creating organisational capacity and culture that enables and encourages work at the science-policy interface; and
- Demonstrating – with the help of case studies – the interaction between scientists and policy makers.

Science-policy interactions and best practices were explained against various backgrounds and contexts. These included (a) international policy processes, (b) national forest programmes; and (c) policies and management practices at the local levels.

Emphasis in the training workshop was placed on interactive sessions and group work so that participants could obtain significant insights in the complex nature of issues to be addressed in the science-policy interface. Towards this end, participants provided examples of research work from their own countries with linkages to policy- and decision-making, serving as basis for analysis and discussions.

The workshop programme is presented in Annex 1. All presentations given during the workshop by trainers and resource persons, the guidelines on science-policy interfacing, results of group work and supporting material were provided to the participants in electronic format at the end of the workshop.

1.4. Participants

The workshop brought together 22 participants from 6 countries in Asia (Bangladesh, India, Iran, Myanmar, Nepal, Thailand), and 3 countries in Africa (Nigeria, Tanzania, South Africa). All participants are - in one way or another - involved in research and academic education related to species invasion and forest ecology. In addition, they wish to increase the impact of their scientific work on policy making (i.e., research, advocacy, supervision etc.) through adequate contribution of research results and scientific knowledge to policy-making processes. In the context of the conference theme on invasive species this is of particular importance. The threat by invasive species to biodiversity and environmental services in many regions is a major concern to the science community and policy makers alike. Besides generating scientific information of high standard related to plant invasion and forest ecology, it is equally important to adequately inform policy levels as well as interact with policy makers so as to effectively shape regulatory and economic framework conditions for preventing irreversible damage to the environment.

2. Day 1: Forest Policy at International, National and Local Levels

2.1. Introduction: IUFRO-SPDC Initiative on the Science and Policy Interface

The training workshop was opened by Professor Ravinder Kohli, Department of Botany, Panjab University, Chandigarh, Coordinator of IUFRO Working Party 8.02.04 (Ecology of Alien Species) and 4.02.02 (Multipurpose Inventories), and Co-Chair of the Organising Committee for the IUFRO Meeting and Pre-Conference Training Workshop. Dr. Kohli welcomed the participants and highlighted the importance of advancing scientific knowledge and its application in policy and practice. Both the training workshop and scientific meeting on plant invasion provide excellent opportunities to this end.

After introduction of participants and presentation of the workshop objectives and programme, Michael Kleine gave an overview on IUFRO and the IUFRO-SPDC Training Initiative on Science-Policy Interfacing as part of IUFRO's contribution to research capacity building in developing countries.

Michael Kleine then introduced the participants to the subject of science-policy interfacing by presenting aspects of interactions between the science community and policy-makers. Important issues included (a) the difficulties in making the link between substantive knowledge and political decision-making and the barriers to science-policy interactions; (b) two ideal-type models explaining science-policy interactions; (c) types of knowledge use; (d) policy relevancy of research; (e) public attention cycle; (f) data versus frameworks and (g) the importance of establishing long-term processes of science-policy interactions. In his presentation he also outlined the specific tasks and challenges of linking science to policy.

The presentation concluded with some information about the work of IUFRO's Task Force on the Science Policy Interface and training on the subject organised by IUFRO-SPDC. The Task Force was established following the IUFRO World Congress in Malaysia in 2000 and has evaluated over 60 case studies on science-policy interfacing from around the world. Based on these case studies the best practices guide mentioned earlier in this report has been developed and is used in this training.

Over the past four years, IUFRO-SPDC has conducted several training workshops on science-policy interfacing in all three regions (Africa, Asia and Latin America) with about 250 scientists – thus far - benefiting from this type of workshops.

2.2. Science contributions to forest policy processes: participants' experiences

In the first interactive session of the workshop the participants were asked to share their experiences on science-policy interfacing related to their country and work environment. The following issues were highlighted:

- Science-policy interfacing is considered a brought concept addressing decision-making at various levels and sectors of society. Besides policy making by governmental authorities at international and global levels, policies are also formulated and implemented at local levels such as rural communities, within NGOs or companies addressing issues of the protection and management of forests.
- In countries with a strong hierarchy of government, key decision-makers need to be convinced about a new concept or scientific finding, before these can be further promoted at lower levels (Example: ban of polyethylene bags in the Haryana State of India).
- There are also cases where pressure from forest stakeholders lead to better enforcement of some forest protection regulations, in order to enhance the recovery of degraded forests. The motivation for putting pressure on the government was partly sparked by research results showing declining levels goods and services from the forests.
- Very often forest research within the process of national policy making is represented by the Director of Forestry who is member of a national advisory committee to the Minister of Agriculture and Forestry. In such situations, a broader information flow from science to policy does not take place.
- Among the countries represented in the workshop, there is also very little involvement of forest scientists in the negotiations within international policy processes. Rarely forest scientists are invited to join the country's delegation and provide scientific input to such negotiations.

The issues discussed in this session underline the fact that science communication and the interaction between the forest science community and policy makers is still limited. Therefore, the forest scientists should take a more active role towards informing policy.

2.3. International forest policy processes and agreements – challenges for science and research

As a starting point for discussions on the science-policy interface in international forest policy Michael presented an overview on international forest-related policy processes and agreements and the involvement of research and science. He outlined processes on sustainable development, the forest policy dialogue under the Intergovernmental Panel and Forum on Forests IPF and IFF, and the United Nations Forum on Forests (UNFF) and highlighted the commitments and obligations that derive from the so-called

international forest regime, including the non-legally binding instrument (NLBI) on all types of forests adopted under UNFF-7 in April 2007 and also the forest-related commitments from multilateral environmental conventions such as the CBD, UNCCD and UNFCCC.

2.4. CPF Global Forest Expert Panel Initiative

As an additional input to the discussion, Michael Kleine presented the IUFRO-led CPF Global Forest Expert Panel Initiative (GFEP) as an effort to provide scientifically sound information to the UNFF and other processes. UNFF members had chosen 'Adaptation of forests to climate change' as the priority topic to be elaborated under this initiative. The process includes the review of existing research by an Expert Panel and the elaboration of a report for policy-makers until UNFF-8 in April 2009.

The discussion during the subsequent interactive session clarified that UNFF members as policy-makers at the international level had chosen the topic of adaptation as a vital input to forest policy discussions. Because the CPF is part of the International Arrangement on Forests (IAF) it is ensured that the results of the initiative are being discussed in the policy process under UNFF. The results of the initiative would also be useful for national, regional and local levels.

2.5. National Forest Programmes

In his presentation on national forest programmes (nfp) Simmathiri Appanah outlined the concept of national forest programmes as an inclusive country-specific process for forest policy formulation and implementation towards sustainable forest management, based on multi-stakeholder consultation, communication and capacity building. He highlighted the nfp principles and the approach, and emphasised that nfp processes should be embedded in sustainable development policies and address a wide range of issues at the micro- and macro-levels, taking into account cross-sectoral linkages. He further explained that nfps do not confine to central policy planning but also include sub-national and local level policy-making and implementation. Beside, nfps include also the positioning towards the international forest policy dialogue and integrate the implementation of international forest-related agreements and commitments according to country priorities and specific conditions. They can provide an effective framework for collaboration and partnership at all levels and for donor coordination. The role of different actors was explained with specific focus on the role of science and research and related challenges.

The presentation continued with some lessons learned from research for sound policy making. Ideally, research should inform policy, particularly on human land-use and the impact on natural resources. However, in the past little recent research has percolated into policy guidelines for tropical forest management. Some examples were presented showing how science has made a contribution to policy debates and formulation. These include socio-economic surveys related to fire wood collection, debate on the "optimum"

forest cover for a country, Thailand's policy to promote indigenous tree plantations, and timber distribution rights within the context of a changing socio-economic environment in Himachal Pradesh, India.

2.6. Science contributions to forest policy at the national level

Following the presentations on the national forest programmes a lively discussion took place among the participants on various issues of science contributions to national policy making. The topics raised include:

- In South Asia, large proportions of land available for tree planting are managed by local communities and small holders. Because of early expected returns farmers prefer fast growing, mostly exotic species. However, research on indigenous tree species thus far, could contribute valuable information on growth performance and economic values as input to the tree species debate.
- Whether or not decentralisation leads to forest depletion is another issue raised in various national debates. Depending on the specific local context, research could provide independent assessments in order to guide local policy making. Besides the fact that the capacities of existing local institutions are critical to successful decentralised forest management, it was also mentioned that today by and large more research results are taken into consideration for policy development compared to the past.
- A case was also described where existing forest rules have been changed so that illegal operations became legal, followed by active interventions to make these actions more environmental friendly.
- The issue of biodiversity conservation and use of wild medicinal plants in national parks was also raised. While in many areas people have turned to modern medicines (because of their effectiveness and availability) in some forests extensive exploitation still takes place. Research on local markets, people's demand and sustainable harvest levels could assist to find a balance between utilisation and conservation. In this context, an example from Africa with commercialisation of tree bark was also highlighted.
- In some countries scientists of national research organisations are faced with the problem of rapidly changing priority themes addressed by policy makers. Research cannot always provide full information on short notice in order to react to the immediate needs of policy makers. Therefore, state-of-the-art needs to be communicated even if data are incomplete and more research would be needed.

In conclusion, it was emphasised that the nfp process should not be based on a project approach with limited time frame and funding, but should become a continuous process built into regular policy discussions to be sustainable. Science input to have an impact must be an integral component of this process. External funding as provided by the NFP Facility is only catalytic and can not replace the commitment of governments for the nfp process.

2.7. Translating policy into practice

The ultimate objective of any policy is its implementation on the ground. In many cases policy implementation has proven a difficult task. In this context, Promode Kant presented ongoing activities in India towards setting up forest-related climate change mitigation projects.

Under the United Nations Framework Convention on Climate Change (UNFCCC) national governments have made a number of commitments to address climate change issues at the national level. These commitments include, amongst others, national greenhouse gas (GHG) inventories, promotion and application of technologies that reduce GHG, and the sustainable management of sinks and reservoirs of GHG including biomass in forest ecosystems. The latter is the starting point for the forestry sector of a country to be involved in climate change mitigation measures.

However, progress over the past 16 years in implementing these commitments has been slow, not only in developing countries. The main reasons are related to the fact that there are no costs of non-implementation involved for the countries and reluctance on the part of developed countries to provide the necessary funding for mitigation projects. Since 2007 renewed efforts have been undertaken by the global community to promote the implementation of climate change policy at national levels through the so-called Bali Action Plan. This plan emphasises nationally appropriate measurable, reportable and verifiable action on climate change mitigation through nationally appropriate mitigation actions, enabled by technology, financing and capacity-building. Decisions what is nationally appropriate appear to be one of the most difficult tasks for governments. Thus civil society and academics need to undertake initiatives to promote specific options along with developing institutional capacity for research and implementation of mitigation projects.

Such an initiative is currently undertaken by the Institute of Climate Change and Ecology, India with the aim to

- explore carbon market opportunities in shifting cultivation lands in Northeast India, and
- develop a Clean Development Mechanism (CDM) Project with appropriate baseline and monitoring methodologies.

In this region there is good potential for growing trees over parts of the land under shifting cultivation, provided economic returns are prompt, adequate and reliable. It is expected that the maturing trade in CDM and voluntary carbon markets (VCM) can significantly enhance returns from forestry on these lands, promoting poverty alleviation while contributing to mitigation of climate change through enhanced carbon storage in well managed forests. The project is conceptualised as a research and development undertaking with focus on investigating opportunities for the sustainable management of tribal community owned lands without affecting the communities' cultural values, and development of a CDM Project Design Document (PDD) on some of these lands, based on a new small scale CDM baseline and monitoring methodology.

The project is the first of its kind in the region and will assist in translating a commitment made by India within a global policy process into action at the local level. As demonstrated in the presentation, research plays an essential role, by investigating and testing field options, thus providing the basis for large-scale implementation.

3. Day 2: Working at the Science Policy Interface

The day started with a summary on the previous day by Michael Kleine, highlighting the key issues discussed with regard to international policy processes and national and local implementation, and summarising the contributions of participants concerning the practical application of the science-policy interface.

3.1. IUFRO Guidelines on science-policy interface

Michael Kleine presented the “IUFRO Guidelines for Working Effectively at the Interface of Forest Science and Forest Policy - Guidance for Scientists and Research Organizations” that had been elaborated by the IUFRO Task Force on the Forest Science-Policy Interface.

Before entering into the details of the best practices guide, a short presentation of an example of science-policy interfacing in India related to invasive species was given by Professor Kohli. In this case study a policy issue over tree species selection for reforestation in Northern India could be addressed with research on physiological aspects of Eucalypts. It was shown that the Eucalypts under the ecological conditions of the region do not take up more water compared to indigenous tree species, but that other aspects particularly those associated with allelopathic behaviour can cause Eucalyptus to change the environment to the disadvantage of native plant species. The research had been requested by the government with the aim to address concerns by local people about the use of exotic tree species for reforestation.

The session continued with more detailed presentations and discussions on key aspects of the best practices guide addressing the role of scientists in policy processes and their contribution to policy making. In this context it is important to formulate research questions that are of relevance to policymakers, communicate results effectively and build partnerships. At the institutional level, it was emphasised that capacities and arrangements are needed to assist scientists to better interact with policy makers. Although it is desirable for the science community to get involved in policy processes, it is vital to maintain neutrality and independence.

3.2. Group work on the science-policy interface

The participants then split into four groups to work on improving science-policy interfacing on the basis of concrete examples of their own research projects. For this purpose the groups were asked to fulfil the following tasks:

- Evaluate specific research projects against the IUFRO best practices guidelines;
- Present research projects to the group members explaining the process on how the research has been conducted;
- Discuss the project based on the following guiding questions:
 - Which of the elements in the best practices guide have been implemented?
 - Have these practices helped to make the project more useful for policy-making? If yes, how?
 - Should additional elements given in the best practices guide be included into the project? If yes, which ones?
- Select one project and develop the research process explaining the elements of the best practices guide that you would apply to make this particular project a role model for science-policy interfacing.

3.3.Presentation of group work: Analysis of research projects on science-policy interfacing

In the afternoon participants presented and discussed the results of the group work on research projects with regard to the application of the IUFRO guidelines on science-policy interfacing.

In total four groups analysed a number of research projects and selected one for further development of role models for science-policy interfacing. The projects presented addressed the following research themes:

- Conservation of endangered species in South Asia
- Control and management of weed/grass invasion (Eupatorium, Lantana, and Pennisetum);
- Domestication and popularization of native plant species in Chittagong Hill Tracts; and
- Identifying and developing the management techniques of suitable forest tree species for the agro-ecological zones using climate change scenarios for Bangladesh.

All four projects, currently in the process of implementation, were systematically analysed using the major aspects of science-policy interfacing as outlined in the best practices guide.

As far as relevance of research is concerned these projects address issues that are important for forest stakeholders. For example, the project on weed/grass invasion deals with the negative impacts of invasive species on forest regeneration and enhanced forest fire hazards, while the project on popularisation of native plant species takes up a major concern in national forest policy agenda of Bangladesh. In this context it was also

discussed that relevance needs to be expressed not only in terms of the issues but also the specific stakeholder groups concerned with a problem.

The aspect of conducting research in a communicative and collaborative manner has been partly considered in the research projects. The tree species selection under different climate change scenarios project is disseminating research results to a wide range of stakeholders through journal articles, newspapers, workshops and TV talks. However, NGOs have not yet been involved in this dissemination process and would significantly enhance the effectiveness in reaching a wider audience. In the project on popularisation of native species community orientation is the major focus, thus local stakeholders including farmers, nursery growers and local forest staff receive most of the information produced by the project. Forming partnership with scientists of various specialisations was pursued to conduct multi-disciplinary research in the project on weed/grass invasion.

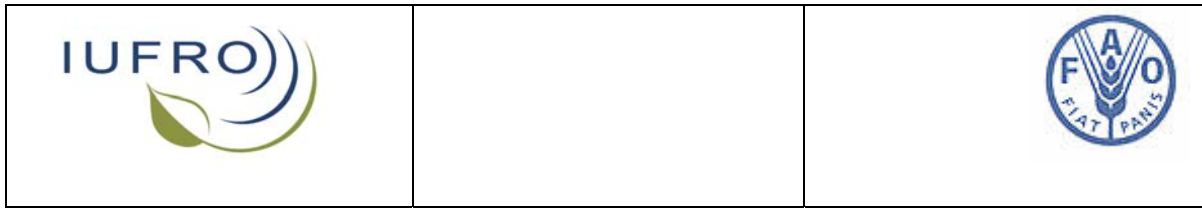
Directly serving and engaging in policy processes has not been part of any of the research projects presented by the groups. However, informing government officials about latest scientific findings is common in South Asia, although it does not always mean that the information is used for policy making.

The discussion highlighted the importance of understanding policy processes as a precondition for formulating research questions according to needs of policy makers. The involvement of policy makers also includes local authorities and traditional leaders, who know about farmers' needs and are also those who are concerned about implementation of local regulations. Traditional knowledge, customs and rules should be incorporated in research. Participants stated that keeping independence of research is not always easy when participatory approaches are being applied, that engage the researchers in a different way. It is important to acknowledge that human beings are part of the (eco-)system, and their management needs need to be incorporated into research. Therefore active participation of local stakeholders is of key importance.

3.4. Closing

The workshop was concluded by Professor Ravinder Kohli by commending all participants for their active contribution and thanking IUFRO-SPDC for conducting this pre-conference event, which was found to be very useful for scientists in the region. Michael Kleine thanked the organisers the Department of Botany, Panjab University, Dayanand National Academy of Environmental Sciences for the excellent local arrangements for the workshop as well as FAO and the Institute of Climate Change and Ecology for sharing their expertise. Participants then received their certificates of attendance along with the documentation of the workshop in electronic format.

ANNEX 1



Pre-Conference Training Workshop

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

Chandigarh, India, 14 to 15 March 2009

Workshop Programme

Date	Time	Subject (Description)	Responsible
Friday, 13 March	Whole day	Arrival of participants	Local Workshop Organisation
	19:00	Dinner and Icebreaker	
Saturday 14 March	08:30 – 09:00	Registration	
	09:00 – 09:10	Welcome address and opening of the workshop	Chair/Co-Chair of Organising Committee
	09:10 - 09:30	Introduction of participants: experiences and expectations Workshop objectives and programme	M. Kleine, Participants
	09:30 – 10:00	What is the Science-Policy Interface? <ul style="list-style-type: none"> • IUFRO's Task Force • IUFRO-SPDC Training 	M. Kleine
	10:00 – 10:30	Interactive Session: Science contributions to forest policy processes: participant's experiences	Moderator: S. Appanah
	10:30 – 11:00	Tea Break	
	11:00 – 11:30	International Policy Frameworks and Agreements (UNFF, UNFCCC, CBD, UNCCD)	M. Kleine
	11:30 – 12:30	CPF Joint Initiative on Science and Technology “The Climate Change Adaptation Panel”	M. Kleine

Table continued

Date	Time	Subject (Description)	Responsible
Saturday 14 March	12:30 – 13:30	Lunch	
	13:30 – 14:30	National forest programmes <ul style="list-style-type: none"> • Processes, issues and challenges • Science contributions 	S. Appanah
	14:30 – 15:30	Interactive Session: Science contributions to international and national forest policy processes	S. Appanah/M. Kleine
	15:30 – 16:00	Tea Break	
	16:00 – 17:30	Translating policy into practice: Forest-related Climate Change Mitigation Projects <ul style="list-style-type: none"> • Concepts • Ongoing projects • Discussions 	P. Kant
	19:00	Dinner	Local Organisation Workshop
Sunday 15 March	08:30 – 08:45	Summary of results obtained on previous day	M. Kleine
	08:45 – 09:45	Best Practices Guide: Working Effectively at the Interface of Forest Science and Forest Policy	M. Kleine
	09:45 – 10:30	Preparations for Group Work: (Tasks and expected results)	M. Kleine
	10:30 – 11:00	Tea Break	
	11:00 – 12:30	Group Work: Evaluation of research projects based on best practices guide <ul style="list-style-type: none"> • Groups discuss individual case studies • Developing a role model for science-policy interfacing 	Participants, S. Appanah, P. Kant, M. Kleine
	12:30 – 13:30	Lunch	
	13:30 – 15:00	Group Work continues: <ul style="list-style-type: none"> • Describing the role model for science-policy interfacing • Compilation of a group presentation 	Participants, S. Appanah, P. Kant, M. Kleine

Table continued

Date	Time	Subject (Description)	Responsible
	15:00 – 15:30	Tea Break	
	15:30 – 17:30	Presentation of group work Discussions	Participants
	17:30 – 18:00	Closing of Workshop and Handing-over of Certificates	Chair/Co-Chair of Organising Committee