



SUMMARY REPORT OF THE FOREST LANDSCAPE RESTORATION IMPLEMENTATION WORKSHOP: 4-8 APRIL 2005

The Forest Landscape Restoration Implementation Workshop (the Petrópolis Workshop) convened in Petrópolis, Brazil from 4-8 April 2005. The Workshop was a country- and organization-led initiative in support of the United Nations Forum on Forests (UNFF) hosted by Brazil and organized by the Global Partnership on Forest Landscape Restoration. The latter was created in March 2003 to identify and reinforce a network of diverse forest landscape restoration (FLR) examples that deliver benefits to local communities, fulfill international commitments on forests, and help manage forests for the ecological health of landscapes.

Bringing together over 100 participants representing local, provincial and national governments, international and non-governmental organizations (NGOs) and the private sector, the Petrópolis Workshop sought to find ways to increase understanding of good practices and opportunities in FLR activities, stimulate their political support, and catalyze and demonstrate their implementation around the world.

The report of the Workshop will be forwarded to the fifth session of UNFF (UNFF-5), which will convene from 16-27 May 2005, in New York, US. The workshop also sought to contribute to implementation of the work programmes of other international and regional policy processes, including the conventions on biodiversity, climate change and desertification, the International Tropical Timber Organization (ITTO), the Tehran Process on Countries with Low Forest Cover, the Millennium Development Goals (MDGs), and the World Summit on Sustainable Development (WSSD).

Participants at the Petrópolis Workshop convened in plenary sessions, group discussions and field trips focusing on five themes: understanding FLR; benefits of FLR to people, livelihoods, environmental services and sustainable economies; tools for decision makers; governance and partnerships; and investment opportunities, innovative financing and policy incentives. The Workshop outputs were: the Workshop report to UNFF-5, the *Petrópolis Challenge*, a declaration describing the goals and current status of FLR, as well as future steps to be taken by the Partnership and the international community, and a summary of proceedings on CD-ROM.

A BRIEF HISTORY OF THE UNFF AND THE GLOBAL PARTNERSHIP ON FLR

THE UNFF PROCESS: In October 2000, the Economic and Social Council of the United Nations (ECOSOC), in Resolution E/2000/35, established the UNFF as a subsidiary body with the main objective of promoting the management, conservation and sustainable use of all types of forests. The UNFF succeeded a five-year period (1995-2000) of forest policy dialogue facilitated by the Intergovernmental Panel on Forests (IPF) and the Intergovernmental Forum on Forests (IFF). To achieve its main objective, the following principal functions were identified for the UNFF: to facilitate implementation of forest-related agreements and foster a common understanding on sustainable forest management; to provide for continued policy development and dialogue among governments, international organizations and major groups, as identified in Agenda 21, as well as to address forest issues and emerging areas of concern in a holistic, comprehensive and integrated manner; to enhance cooperation as well as policy and programme coordination on forest-related issues; to foster international cooperation and to monitor, assess and report on progress of the above functions and objectives; and to strengthen political commitment to the management, conservation and sustainable use of all types of forests.

The IPF/IFF processes produced a body of more than 270 proposals for action towards sustainable forest management, known collectively as the IPF/IFF Proposals for Action. These

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proposals are the basis for the UNFF Multi-Year Programme of Work (MYPOW) and Plan of Action, various themes of which are discussed at annual UNFF sessions.

The UNFF organizational session and informal consultations on the MYPOW took place from 12-16 February 2001, in New York, US. At the organizational session, delegates agreed that the UNFF Secretariat would be located in New York. Delegates also addressed progress towards the establishment of the Collaborative Partnership on Forests (CPF) and the duration of Bureau members' terms.

The first session of the UNFF (UNFF-1) took place from 11-23 June 2001, at UN Headquarters in New York. Delegates discussed and adopted decisions on the UNFF's MYPOW, a Plan of Action and the initiation of the UNFF's work with the CPF. They also recommended the establishment of three *ad hoc* expert groups to provide technical advice to the UNFF on: monitoring, assessment and reporting approaches and mechanisms; finance and transfer of environmentally-sustainable technologies; and consideration with a view to recommending the parameters of a mandate for developing a legal framework on all types of forests.

It was clear from the outset that insufficient time would be available for in-depth discussions of several of the very complex and politically sensitive issues during regular sessions of the process. UNFF-1 therefore also invited country- and organization-led initiatives to facilitate its work. These expert meetings are organized to discuss and analyze particular issues before they are scheduled for discussion in formal sessions themselves.

UNFF-2 convened from 4-15 March 2002, at UN Headquarters in New York. The outcomes of UNFF-2 included a Ministerial Declaration and Message to the WSSD and eight decisions on: combating deforestation and forest degradation; forest conservation and protection of unique types of forests and fragile ecosystems; rehabilitation and conservation strategies for low forest cover countries (LFCC); rehabilitation and restoration of degraded lands and the promotion of natural and planted forests; concepts, terminology and definitions; specific criteria for the review of the effectiveness of the international arrangement on forests; proposed revisions to the medium-term plan for 2002-2005; and other matters.

UNFF-3 convened from 26 May - 6 June 2003, at the Palais des Nations in Geneva, Switzerland. UNFF-3 adopted resolutions on: enhanced cooperation and policy and programme coordination; forest health and productivity; economic aspects of forests; maintaining forest cover to meet present and future needs; the UNFF Trust Fund; and strengthening the Secretariat. UNFF-3 also approved decisions on the voluntary reporting format and on the terms of reference for the three *ad hoc* expert groups, a task that had been carried forward from UNFF-2.

UNFF-4 was held in Geneva, from 3-14 May 2004. Particular emphasis was given to negotiating a resolution on the process for facilitating the review of the effectiveness of the international arrangement on forests at UNFF-5. UNFF-4 adopted five resolutions on: social and cultural aspects of forests; forest-related scientific knowledge; monitoring, assessment and reporting and criteria and indicators; finance and transfer of environmentally-

sound technologies; and the review of the effectiveness of the international arrangement on forests. Delegates failed to adopt resolutions on traditional forest-related knowledge and enhanced cooperation.

THE GLOBAL PARTNERSHIP ON FLR: FLR was originally defined at a workshop organized by WWF and IUCN held in Segovia, Spain, in July 2002 as: "a planned process that aims to regain ecological integrity and enhance human well-being in deforested or degraded forest landscapes." The idea of setting up a Global Partnership on FLR emerged during a consultative meeting organized by the UK Forestry Commission and IUCN in Edinburgh, UK, in September 2002. Since its creation in March 2003, the Global Partnership has organized and supported over 11 national and regional workshops on FLR. In addition, the ITTO brought its series of restoration workshops under the umbrella of the Partnership, as did the FAO with its initiative on LFCC. The Global Partnership currently has more than 20 partners and sponsors.

REPORT OF THE FOREST LANDSCAPE RESTORATION IMPLEMENTATION WORKSHOP

On Monday morning, 4 April, Session Chair Tasso Rezende de Azevedo, National Forest Secretary, Ministry of the Environment, Brazil, welcomed participants and thanked the sponsor organizations as well as the Brazilian associations and institutions. He said the Workshop should enable participants to exchange visions and experiences and support efforts to restore forest landscapes at all levels.

Paulo Kageyama, Biodiversity Director, Ministry of Environment, Brazil, on behalf of Marina Silva, Minister of Environment, Brazil, noted that forest restoration is particularly important in highly biodiverse tropical countries. He described the various forest types in Brazil and stated that urgent action for restoration is needed. Kageyama explained that the Brazilian government aims to achieve a zero deforestation level and stressed the importance of protecting water bodies. Noting that in the state of São Paulo legislation sets the minimum number of species per hectare for restoration at 80, he said planting mixed forests should be part of public policy.

Tim Rollinson, Director General, UK Forestry Commission, on behalf of the Global Partnership on FLR, stated that the purpose of the Partnership was to catalyze and reinforce an information network of diverse examples of FLR experience, facilitate partnerships, highlight opportunities for and identify obstacles to implementation, and stimulate public and private investment in FLR. He underlined lessons learned, including: engaging people at all levels; building on existing resources, initiatives and commitments; adopting a strong regional perspective; and tailoring commitment and collaboration to the means of the people involved. He highlighted accomplishments of the Partnership, including: an increased understanding of FLR; the development of projects to operationalize FLR in several countries; and the establishment of several national committees addressing FLR issues. Among the future actions of the Partnership, he mentioned: representation at UNFF-5;



further development of decision and support tools for FLR implementation; identification of further champions of FLR; and enhancing linkages with other multilateral environmental processes.

Antonio Carlos do Prado, UNFF Secretariat, on behalf of Pekka Patosaari, Coordinator and Head of the UNFF Secretariat, stated that FLR is a practical application of sustainable forest management at the landscape level, and that the Partnership is instrumental in linking international commitments on forests to concrete actions at the field and operational levels. He stated that the Partnership and UNFF share the objectives of restoring degraded landscapes and balancing the maintenance of forest ecosystems and the provision of goods and services. He also stressed the importance of presenting the outcomes of the Workshop and lessons learned on forest restoration at the UNFF-5 Ministerial High-level Segment, and using this opportunity to strengthen the linkages between forests and internationally agreed development goals.

Emmanuel Ze Meka, Assistant Director, ITTO, underscored the role played by the Partnership in degraded forest restoration and rehabilitation and noted progress achieved in the good management of forests since the Rio Earth Summit. He noted that 60% of world wood production comes from secondary forests and called for the participation of local communities in forest management.

Jiang Zehui, President, Chinese Academy of Forestry, presented on FLR programmes in China. She recognized China's responsibility and role in preserving the global environment and noted that forests play an irreplaceable role in that effort. She described progress made in China on forest restoration, including increased forest and natural reserve cover, and outlined national plans on ecosystem restoration of degraded land. She said the programmes aimed at maintaining and restoring the structure and function of ecological systems and highlighted some of the measures taken, including: combating desertification; converting cropland into forest; controlling land erosion; managing water resources; and rehabilitating grasslands. She said China introduced the concept of integrated ecological management and is working with international organizations to find innovative ways to restore degraded land.

Stewart Maginnis, Head of the Forest Conservation Programme, World Conservation Union (IUCN), presented on the Workshop's structure and outcomes, stressing its role as part of a process, building on lessons, experiences and actions that have emerged from regional and national workshops on FLR in the past two years. He emphasized the importance of linking FLR with the broader international development agenda, the need to address issues on governance structure at the landscape level, and called for investment in FLR. He stated that participants should work toward creating a framework to describe different FLR cases to others, rather than defining a restoration paradigm.

Following this opening session, participants settled into the first thematic session on understanding FLR. On Tuesday, participants went to three field trips to FLR sites in the state

of Rio de Janeiro. On Wednesday and Thursday, participants engaged in plenary and working group discussions. On Wednesday, participants addressed the themes of benefits of FLR to people, livelihoods, environmental services and sustainable economies, and tools for decision makers. On Thursday, participants took up the themes of governance and partnerships, and investment opportunities, innovative financing and policy incentives. On Friday, in a closing plenary, they focused on the theme of trends and future directions. This report chronologically summarizes the proceedings of the Petrópolis Workshop, including the presentations and the outcomes of the plenary and working groups, a brief description of the field trips and a summary of the *Petrópolis Challenge*.

PLENARY AND WORKING GROUPS

UNDERSTANDING FLR: This plenary session was held on Monday afternoon, 4 April, and was chaired by Sergio Besserman, WWF-Brazil. It consisted of an introduction to the panel session, presentations of case studies, and a round table discussion.

Chair Besserman stressed the importance of recovering the Atlantic Forest for the improvement of livelihoods and the provision of ecosystem services. He described the restoration of the Tijuca forest in Rio de Janeiro in the 19th century and the local community's support for the replacement of coffee plantations by forests. Through this example, he explained that the restoration process is cost effective and underscored the need to include local communities in the processes of forest restoration. In conclusion, he stated that forest recovery provides the opportunity to restore nature while favoring a quality of life increase, especially for the poor.

Jim Ball, consultant, presented a review of national and regional workshops on FLR where the adoption of a common definition of FLR had been recommended. He said steps have been taken to set up national action plans and he outlined the principles upon which FLR aims to adhere, including: improving livelihoods; restoring biodiversity; drawing on local knowledge; and balancing trade-offs between environmental, social and economic objectives. He stressed the importance of cooperation, partnerships and the involvement of all stakeholders for successful FLR and explained that the Global Partnership on FLR aims to act as a network for the exchange of information and experience.

William Jackson, IUCN, presented on the role of forests in supporting human well-being. Noting that forests are home to 300 million people, he stressed the link between forests and ecosystem services. He underlined the growing pressure on forests, highlighting increases in deforestation rates as well as forest fragmentation and degradation. He explained that adopting a landscape perspective enables the incorporation of a broader range of ecosystem services, and said FLR seeks to move away from a top-down approach to include local communities in forest management. He also recognized that trade-offs are necessary in implementing FLR and that outcomes must be negotiated. Among the future challenges in implementing FLR, he mentioned: the



difficulty of measuring performance at a landscape scale; feeding FLR lessons into national and international policy forums; and adopting flexible institutional arrangements.

During ensuing discussions, participants addressed the link between FLR and biodiversity programmes and adaptation to climate change, and whether the international community should adopt a common definition of “landscapes” and “FLR.”

Participants then heard presentations of three case studies on understanding FLR issues. Wendelin Mlenge, Ministry of Natural Resources and Tourism, Tanzania, shared experiences on soil and water conservation in remote and highly degraded woodland areas in Tanzania. He pointed to failed attempts at afforestation that did not address local needs, perspectives or behaviors. He then described successful experiences with the traditionally-managed *Ngitile* system of enclosing patches to allow for natural forest regeneration. He highlighted the main components of successful implementation, including: increasing economic benefits to communities derived from the *Ngitile* system; understanding and respecting people’s capacities, perceptions and needs for landscape restoration; and improving people’s livelihoods through supportive leadership, policies and markets.

On the role of planted forests and trees in landscape restoration in LFCC, Jim Carle, Food and Agriculture Organization (FAO), presented the results from six case studies and four regional workshops in the Near East and Africa. He identified the root causes of deforestation and degradation in LFCCs to be: arid physical conditions; population pressure on forests in highly populated areas with low forest cover; poverty and food insecurity; and conflicting government policies. He listed the effects of these root causes, including: low land-use capability; erosion of livelihood options; the breakdown of social and cultural customs; abandoned lands; and a weakened economy. On the major constraints to restoration, he pointed to the marginalization of the forestry sector in national processes, the lack of transfer of knowledge and capacity for participatory approaches, unclear land tenure and crop-owner rights, and the failure to take livelihoods into account. He listed lessons learned from the LFCC case studies including: the need to integrate landscape and sustainable livelihood approaches in national development plans; decentralization; and integration of technical, scientific and traditional knowledge on livelihoods and landscapes. He stated that future steps will include inter-sectoral, multi-disciplinary and multi-level actions that balance benefits to livelihoods and conservation concerns.

Lal Bharat, Joint Secretary to the Government of India, presented a case study on community approaches to FLR in the state of Gujarat and its impact on water security, drought mitigation and livelihood. He discussed the role of forests in drought-prone, arid, and semi-arid regions, and listed the challenges faced by communities in managing water scarcity. He described the successes of an integrated watershed management and development project in: improving water availability for drinking, agriculture and horticulture; preventing soil loss; increasing forest cover; and reducing forest degradation. He said the project was successful in promoting the construction of

several water management structures, protecting forested areas, planting of local species, and shifting economic focus away from timber extraction.

In the ensuing discussion on the case studies, participants addressed the causes of degradation, the major constraints in implementation of restoration, the social sustainability of FLR projects, and the up-scaling of the projects to other countries and regions.

Participants then engaged in a plenary discussion on specific experiences in FLR, facilitated by Stewart Maginnis. On the social aspects of FLR, participants highlighted the importance of involving local communities in a transparent and participatory process in order to ensure sustainability, ownership of FLR projects and food security.

On the environmental aspects of FLR, participants mentioned that the appropriate policy framework can play a key role in the successful conservation of forests and underscored the importance of maintaining restored forests.

On the financial aspects of FLR, one participant explained how legally guaranteeing a percentage of the benefits drawn from FLR projects to local farmers was crucial in their successful implementation. Some participants underscored the role played by marketing forest products, the need for economic incentives and penalties to encourage FLR, and the importance of cash flow for farmers.

In a wrap-up session, Gill Shepherd, International Fund for Agricultural Development, summarized the issues addressed, highlighting the need for FLR processes to include a wider range of stakeholders and institutions, as well as the importance of local knowledge. She said future challenges include rethinking ownership aspects and economic incentives.

Joseph Cobbinah, Forestry Research Institute of Ghana, called for linking FLR to the improvement of livelihoods.

Paulo Kageyama underscored the importance of involving the private sector, securing land tenure, as well as providing economic alternatives for producers in FLR projects.

BENEFITS OF FLR TO PEOPLE, LIVELIHOODS, ENVIRONMENTAL SERVICES AND SUSTAINABLE ECONOMIES: This session took place on Wednesday, 6 April, and was chaired by Gill Shepherd. The session consisted of an introduction to the theme, presentations of case studies, and discussions in working groups.

Chair Shepherd explained that the session sought to examine poverty and people issues in FLR. She said FLR should be more inclusive by involving a wide range of stakeholders and a diverse mosaic of land use and land ownership. She stressed the need to raise awareness of the interdependence of all stakeholders, developing collaborative forms of monitoring and evaluation, and finding short and long term economic drivers for FLR. She underlined that appropriate “pro-poor” FLR projects need to be adapted to the landscape and the people as there are no “one size fits all” solutions.

Mark Aldrich, WWF-International, underscored the importance of having a wide definition of stakeholders when implementing FLR projects and listed the potential benefits of FLR to people



and livelihoods, including: increased involvement in planning; improved tenure rights, employment opportunities; alternative income generation; and an increased range of forest goods and services. He outlined the benefits of FLR for enhanced provision of environmental services, *inter alia*: soil and water conservation, cultural and spiritual values, and carbon sequestration. He underscored the importance of identifying and negotiating FLR's trade-offs, as well as monitoring and evaluation for adaptive forest management.

Participants then heard presentations on two case studies. Using the example of a community woodlands study in the South Wales Coalfield, Mike Dudley, UK Forestry Commission, presented on how FLR could restore the landscapes of areas affected by past mineral extraction and benefit disadvantaged communities. He described the consultants and stakeholders involved in the study and outlined its findings, including: identifying a portfolio of possible candidate sites; providing the basis for funding bids; and contributing to finding a mechanism for the management of under-utilized land.

San Van Nguyen, Non-Timber Forest Products Research Center, Vietnam, presented on the evolution of forest restoration in Vietnam. He explained that a top-down planning process had led to overexploitation because production quotas were mainly based on the government's needs rather than on the productive capacity of forests. He outlined the range of macro measures adopted to preserve the remaining forests and their biodiversity. He said forest rehabilitation had succeeded in demonstration plots, but not on a larger scale. He listed the drawbacks to top-down forest rehabilitation, including institutions overlapping on tasks and reduced possibilities for adaptation to local realities. He stressed the need for policy frameworks not only to promote forest cover increase and the generation of income via forestry, but also to guarantee the quality of forests and reduce poverty.

At the end of the morning, participants broke into four working groups on the benefits of FLR, each to consider two of the following four questions: How can the environmental, economic and cultural benefits of FLR be increased, especially to the rural poor? What experience is available on monitoring of costs, benefits and other impacts of FLR interventions for adaptive management, and what are the lessons to be learned? Who are the potential beneficiaries of FLR and how may they be involved in planning and management? And what experience is available on balancing trade-offs between different groups of stakeholders and what are the lessons to be learned? In the afternoon, four group rapporteurs summarized the discussions held.

On increasing the environmental, economic and cultural benefits of FLR, especially to the rural poor, Fady Asmar (Lebanon) commented on the importance of: incorporating stakeholder needs, addressing the causes of degradation, developing appropriate macroeconomic policies, strengthening participatory processes, encouraging the full valuation of forest resources and services to benefit the poor, and creating economically viable management alternatives for small-scale producers. He commented on the need to improve understanding of the difference between FLR and site-based restoration, since

net benefits from FLR are greater than the summation of site-based activities. Victor Ageyman (Ghana) stated that FLR should be viewed as an end in itself, rather than as a means to an end. He said that existing toolkits for other management systems can be used, and stressed the importance of addressing indigenous needs and building on indigenous knowledge and existing good practices.

On available experiences on monitoring of costs, benefits and other impacts of FLR interventions for adaptive management, Asmar commented that there is a lack of indicators and monitoring processes at a landscape scale, and that the working group had no available experience to draw upon. Ageyman noted existing socio-economic and ecological indicators that have been used for leveraging political and NGO support. He called for mechanisms for conflict management and managing trade-offs, as well as the adoption of dynamic and adaptive monitoring processes.

On the potential beneficiaries of FLR, Álvaro Luna Terrazas (Bolivia) identified the following groups: direct users, such as subsistence collectors or forest dwellers; indirect users; private land owners; NGOs; local and central governments; and tourists. Helena Maltez (Brazil) explained that beneficiaries are country, location, situation and project specific, and can evolve over time. Noting the need to differentiate between beneficiaries and stakeholders, she said beneficiaries could not all be identified at the start of FLR projects, but that all stakeholders should be involved from the beginning.

On the experience available regarding balancing trade-offs between different groups of stakeholders, Luna Terrazas recommended either identifying the main bottlenecks and prioritizing their resolution, or solving easier problems first to allow the initiative to get started. He said the process should be flexible to allow for the involvement of different stakeholders and stressed the importance of raising awareness among stakeholders about: the risks and consequences of failure to take action; the benefits of FLR; and the timeframe of expected results. He said it is essential for the process to find integrated solutions, establish networks and build trust through dialogue. Maltez said the generation of income and the presence of an initial agreement between communities and organizations on the environmental benefits arising from FLR projects are key for its implementation. She called for increasing natural capital and capacity building, and revising legislation, policies and land tenure schemes.

TOOLS FOR DECISION MAKERS "TOOLS-MART OR GRANDE VIRÉE": This session took place on Wednesday afternoon, 6 April, when participants visited five FLR "tools stations" for assessment and appraisal, landscape selection and restoration guidelines.

David Lamb and David Pullar, University of Queensland, Australia, presented a Landscape Indicator Analyst Geographic Information Systems decision-making tool that uses weighted indicators in simulation models to explore the consequences of alternative restoration options. The model produces graphical outputs showing spatial patterns and numerical outputs showing changes in key conservation and economic parameters as a



consequence of different types and locations of restoration activities.

Emmanuel Ze Meka, ITTO, presented ITTO Guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests. He explained that the guidelines seek to provide a knowledge base on all relevant issues that need to be taken into account in planning and implementing strategies for the restoration and rehabilitation of degraded primary and secondary forests and degraded forest land.

Gerard Rambeloroisa, WWF-Madagascar, presented on the ranking of landscapes for FLR implementation in Madagascar. Among the socio-economic criteria used for the selection of landscapes, he listed land tenure, the level of social cohesion, and the literacy rate in the area concerned. He said the economic criteria included the importance of agriculture, the risk of conversion of forest into grazing land, and the commercial potential of forest products. He also mentioned ecological criteria such as the presence of threatened and endemic species, and political criteria such as the presence of functional structure for landscape management.

Jim Carle presented on tools for National Forest Assessments (NFA) and Integrated Land Use Assessments (ILUA). He said NFA is a process to collect and manage country-wide forest resource, socioeconomic and environmental information.

He explained that NFA seeks to enable scenario development for national policy analysis. He noted that ILUA involves a similar process of information gathering, but also integrates land uses for livestock, cash crops and fisheries. He emphasized that the information gathered is based upon country needs, gathered at the local level, and made available to the national and international communities.

Melanie Desrochers, IUCN, presented web-based tools for FLR, including the Forest Restoration Information Service of the FLR Global Partnership. She explained that this web-based tool provides information and facilitates exchange of knowledge about FLR. It can be found at

<http://www.unep-wcmc.org/forest/restoration/homepage.htm>. She also mentioned the Global Forest Information Service, an Internet gateway to global forest information resources (<http://www.gfis.net>), and the Global Land Cover Facility, an institution that develops and distributes remotely sensed satellite data and products concerned with land cover at all scales (<http://glcf.umiacs.umd.edu/index.shtml>).

Participants briefly commented on the presentations in a plenary session chaired by Joseph Cobbinah. Some participants called for looking to past experiences and agencies outside the Partnership for additional tools for FLR, and for simplification of tools in order to ensure their usability in countries with lower technological capacities. One participant expressed concern with the high cost of the tools presented.

GOVERNANCE AND PARTNERSHIPS: This session took place on Thursday morning, 7 April, and was chaired by William Jackson. After an introduction to the panel theme, participants broke into two working groups to hear presentations on case studies on “stakeholders and partnerships” and “enabling

conditions,” and each then discussed a set of two questions. Rapporteurs for each group summarized the discussions in plenary.

Álvaro Luna Terrazas, Center for International Forestry Research (CIFOR), introduced the panel theme of governance and partnerships by describing an evolving governance context that has shifted from emphasizing large-scale, government-implemented FLR with little community engagement, to an emphasis on decentralization, corporate responsibility and participation. He stressed the importance of consistency and continuity of policies and regulations for access and benefit sharing. He cautioned against dependence on external financial support, emphasized the need for a fair return to investors in FLR efforts, and noted the importance of equalizing negotiating capabilities. He called for attention to spatial, temporal and organizational scales when considering appropriate evaluation indicators. On tools and approaches to improve FLR partnerships, he described tools used by CIFOR to identify appropriate stakeholders, and to facilitate communication and negotiation of needs, expectations, and the sharing of costs and benefits. Participants then broke into two working groups.

Stakeholders and partnerships: Teresa Moncarz, Los Algarrobos, and Manuel Jaramillo, Fundación Vida Silvestre Argentina, presented on participative planning for FLR in Argentina in the Misiones Green Corridor and the San Roque Lake Watershed, Cordoba. Moncarz described the social and environmental conditions that led to the adoption of a watershed management plan, emphasizing the importance of awareness raising in communities. Jaramillo described a research program that incorporates shade-grown yerba-mate plantations and other forest-friendly economic activities within forest restoration efforts. They underlined farmer interest in alternative production activities and training in forestry practices. They also underscored the importance of: addressing root causes of degradation in FLR models; documenting experiences; and adapting models to particular socio-economic and political contexts.

Vaethelengam Selvam, MS Swaminathan Research Foundation (MSSRF), presented on a science-based and community-centered approach for the restoration of the Pichavaram mangrove wetlands in Tami Nadu, India. He described a restoration technique using canal systems for free tidal flushing of lands, developed informally with the local community. He said the success of this technique stimulated interest among many stakeholders and led to the creation of a formal tripartite management mangrove programme among local communities, the forest department and MSSRF. He stated that the programme had extended to other coastal areas, with successful upscaling having been dependent on early community involvement.

Jim Reeves (US) reported to plenary on the group’s discussion and listed the concerns raised, namely: ensuring genuine participation of all members of partnerships; clearly explaining the project’s mission and benefits to all stakeholders; building upon local knowledge and bridging local and scientific knowledge; expanding the scope of FLR to include non-forest activities; talking with local families to stimulate



project ownership and motivation; sharing information among communities; and locating funding sources for their local allocation.

Enabling conditions: Thomas Stadtmüller, Intercooperation, presented an assessment of the enabling conditions for community forestry in Nepal. He explained how an inappropriate top-down approach resulted in forest degradation and how community forestry has proved to be an effective tool for FLR. He said FLR requires: the active participation of local stakeholders; a supportive legal framework; and autonomous, independent and decentralized community-based institutions. He listed the impacts of this enabling environment, including a halt in forest degradation, restoration of forest cover, improvement of the forest-agriculture interface, reduction of soil erosion, and the increase of local capacity. He concluded with a call for including the “poorest of the poor” in forest management.

Aliou Faye, IUCN-Mali, presented on the restoration of humid forests in the Niger delta in Mali. He explained how the competition for access to natural resources, inappropriate land tenure and conflicts had led to land degradation and over-exploitation. He outlined the restoration project carried out by IUCN, stressing the importance of raising awareness amongst all stakeholders of the essential value of forests and establishing participatory and consultative institutions at all levels. He listed the impacts of the project, including the restoration of two forests, increased fishery production, the resolution of conflicts, improved social cohesion and the building of local capacity.

Rose Ondo (Gabon) reported to plenary on the outcomes of the group’s discussions. She listed ways the group identified to develop equitable partnerships for FLR, including: representation of all stakeholders within collaborative structures; respect of local decisions at a higher level; adequate training of all partners; and decentralization of decision-making processes. She said policy dialogue could be enabled by round tables, increased awareness and capacity building, and stressed the importance of clear policies for land tenure, investment and recognition of values of non-timber goods and services. She called for guaranteed access to markets for local communities and the removal of policies that restrict FLR, such as taxation of community product sales.

INVESTMENT OPPORTUNITIES, INNOVATIVE

FINANCING AND POLICY INCENTIVES: This session, chaired by Tim Rollinson, took place on Thursday afternoon, 7 April, and consisted of an introduction to the panel theme, presentations on three case studies, and five regional working group discussions.

Michael Jenkins, Forest Trends, introduced the theme of innovative financing for FLR by underscoring the potential size and importance of markets for payments for ecosystem services (PES). He stated that a diversity of markets and payment schemes were needed to accommodate the diversity of ecosystem services, land tenure systems and constituents. He elaborated on market types: self-organized private deals; public payments to private land and forest owners; open trading of environmental credits; and eco-labeled forest and farm products. He highlighted cases of successful ecosystem payments on carbon, water and

biodiversity markets. He listed several direct benefits of PES to industries, municipalities and rural livelihoods, and stressed the need to design ecoagriculture landscapes consisting of a mosaic of productive and protected areas and interstices. He brought attention to the “Ecosystem Marketplace,” a web-based global information platform on PES that democratizes information by encouraging broad participation in policy dialogue and reduces learning and transaction costs.

Matthew Logan, Potomac Conservancy, presented on the Growing Native initiative, a partnership funded by the US Federal Forest Service for the restoration of the Potomac river watershed. He described how the partnership accelerated riparian forest buffer restoration by providing economic incentives to farmers. He explained how volunteers had helped collect native hardwood tree seeds that were sent to state nurseries as the latter were unable to meet the increased demand for trees. He listed the benefits to state nurseries, including the avoided yearly seed purchasing expense of US\$30,000 and the sale of seedlings for US\$275,000 per year.

María Patricia Tobón Hincapié, Autonomous Regional Corporation for the Rionegro - Nare Region (CORNARE), presented on a pilot project in Colombia combining sustainable forest management and the clean development mechanism. She explained that project activities had been agreed upon with landowners through the maintenance of a regional participatory forum. Among lessons learned, she stressed: enhancing the sharing of decision-making responsibilities of communities in the planning and implementation of restoration strategies; showing stakeholders the benefits of their participation; and sharing the costs and benefits among them.

Petri Heinonen, Metsähallitus, presented on the Forest Biodiversity Programme for Southern Finland. He stated that landowners voluntarily enter into long-term agreements to maintain or improve specified forest biodiversity values in return for regular government payments. He noted that landowners also engage in competitive tendering, where environmental authorities invite landowners to submit tenders on areas to be protected based on biological conservation criteria and the price at which they are willing to offer their sites for protection.

Following the presentations, participants broke into five regional working groups on investment and financing to discuss the following two questions: How can community investments in FLR be better recognized and supported? And how can private sector, both corporate and smallholder, be better engaged?

On ways to better recognize and support community investments in FLR, Mike Dudley (UK), representing the EU, US and Russia group, suggested: offering tax breaks to communities for restoration activities; providing employment opportunities in FLR; and celebrating FLR activities through awards and media coverage.

Sam Mwandha (Uganda), on behalf of the Africa group, called for: accounting for local knowledge and opportunity costs of FLR to communities; recognizing local labor inputs; supporting appropriate technologies for local use; and identifying and encouraging international and local organizations that support FLR.

Noting communities can provide traditional knowledge based on wisdom and practices, Lal Bharat (India), reporting on the discussions of the Asia group, called for: community participation in planning, implementation and benefit sharing; economic incentives; privatization and ownership of FLR projects; an enabling legal policy framework; equity in benefit sharing; and a change in attitudes.

Malick Diallo (Burkina Faso), reporting for the LFCC group, recommended promoting the integration of FLR in local and regional development strategies, exploring broad marketable opportunities and innovative funding mechanisms, and creating information networks at all levels.

Ana Luiza Coelho Netto (Brazil), for the Latin America group, said the benefits of FLR can be disseminated through the valuation of ecosystem goods and services, building on existing experience and knowledge, and the establishment of common rules between industrialized and non-industrialized countries.

On better engaging the private sector, Dudley underlined understanding the motivations of corporations and smallholders in order to identify benefits to them. He identified corporate image and responsibility as entry points for engaging corporations, and stressed the importance of making activities easy, fun and useful.

Mwandha stated that laws are required to engage the private sector in FLR activities, as well as to distribute benefits. He also called for the provision of incentives such as certification, access to credit, and a guarantee of returns on investments.

Bharat suggested commercializing seedling raising, creating sustainable employment opportunities, and valuing ecosystem services for hydro-power and ecotourism.

Diallo underlined the need to engage the political sector, create an enabling legal framework for investment and a toolkit for potential buyers, encourage education and international assistance for FLR, make micro-finance available, and create specific economic incentives for FLR.

Coelho Netto suggested establishing an enabling legal and institutional framework using incentives, certification and audits, and raising awareness on the importance of sustainable development.

FIELD TRIPS

On Tuesday April 5, participants went on field visits to three restoration projects in and around the Atlantic Forest in the state of Rio de Janeiro. The first group visited an ecological reforestation project carried out by the hydroelectric power company *Light*, in Ribeirão das Lages. The purpose of the visit was for participants to learn about *Light's* reforestation efforts aimed at achieving soil protection to prevent lake sedimentation, spring water maintenance and recuperation, and natural restoration of remnant vegetation of the Atlantic Forest. The second group visited a forest restoration project in the Poço das Antas Biological Reserve, habitat of the endangered Golden Lion Tamarin. Participants were shown how forest habitat was protected and restored to ensure a minimum viable population of tamarins. The third group visited a communitarian reforestation project in Tijuca National Park in the city of Rio de Janeiro.

The objectives of the visit were to witness how cleared and cultivated lands have been reforested and rehabilitated to benefit communities through: prevention of landslides; job creation from rehabilitation activities; water security; soil stability; recreation and environmental education; and prevention of urban sprawl.

On Wednesday morning, 6 April, participants gathered in plenary to hear presentations on each of the field trips. Lal Bharat, reporting for the group that visited the *Light* reforestation project, described the benefits of reforestation activities to water and power users downstream, but stated that local communities were not involved in restoration activities, and that mainly exotic species were used for reforestation.

Herman Savenije (the Netherlands), rapporteur for the group that visited Poço das Antas Biological Reserve, presented on habitat restoration activities and challenges in a highly fragmented and degraded landscape. He stated that most land in the area is privately-owned pasture land and most land-owner participation in the project is informal and on a bilateral basis, with no real participatory process in land-use planning. He emphasized the need to shift from a site-specific to a landscape approach.

Michael Peter (South Africa), rapporteur for the group that visited Tijuca National Park, presented on the reforestation project's successes in achieving water and soil stability. He also pointed to the project's weaknesses in continuing to create employment opportunities in restoration activities, providing alternative livelihoods to cattle raising, and ensuring economic sustainability of activities.

The main concerns raised by participants in the ensuing discussion included: the fact that initial project plans failed to include participatory approaches; the site-specificity of the projects and capacity may hinder up-scaling of existing initiatives; and the need for flexible management approaches to restoration that can adapt to changing ecological and social needs.

THE PETRÓPOLIS CHALLENGE

On Friday morning, 8 April, during the closing plenary, Tasso Rezende de Azevedo read the Petrópolis Challenge, which he said will be presented by Brazil and the UK at UNFF-5 together with the report of the Workshop. Participants then commented on the Challenge, suggesting references to the private sector, national forest programmes and the role of FLR in achieving the MDGs. Rezende de Azevedo said the comments will be incorporated into the document.

THE PETRÓPOLIS CHALLENGE: The Challenge defines FLR as a vehicle for delivering internationally agreed commitments on forests, biodiversity, climate change and desertification, and notes its key role in achieving the MDGs. It calls for the linkage of FLR with national level development processes.

The Challenge notes the track record of FLR in restoring key goods and services in degraded or deforested lands to improve livelihoods. It states that FLR aims to restore ecological integrity and improve the productivity and economic value of degraded land, rather than to reestablish the pristine forests of the past. The Challenge notes that there is no blueprint for successful FLR and



that it provides a gradual, adaptive and responsive approach that starts from the ground up and involves stakeholders.

The next steps identified by the Challenge include: a call for new members to join the Global Partnership on FLR; and the launching of a portfolio of new landscape restoration initiatives by the Global Partnership by the end of 2006 in order to build a learning network.

The Challenge concludes on a call to the international community to restore forest landscape to benefit people and nature and contribute to reversing trends of forest loss and degradation.

CLOSING SESSION

On Friday morning, 8 April, Jim Reeves opened the closing session on trends and future directions. He commended the group's enthusiasm and hard work, and called for making FLR a reality.

Jim Ball, Workshop rapporteur, listed the participants' expected Workshop outcomes and summarized issues addressed. On understanding FLR, he said the Workshop clarified: the landscape concept; the importance of planning and adaptive approaches; and the similarities between FLR and other natural resource management approaches. He also emphasized the recurring theme of the difficulty of implementing participatory approaches. On the benefits of FLR, he listed strengthening capacity, addressing cash flow and debating the use of exotic versus native species as key issues addressed. On tools for decision makers, he said the group called for: reliable and current data for decision-making; tools adapted to target users; new technologies; and appropriate tools and methodologies developed by looking to other disciplines. On governance and partnerships, he said the group stressed: democratization, decentralization and devolution, with the latter remaining a challenge; recognition of the diversity of possible partnership formats; recognition that many challenges remain in political and institutional areas; moving from projects to programmes; and the importance of land tenure security. He also noted the continuing discussion on monitoring and evaluation, with participants disagreeing on the availability of appropriate tools. On investment opportunities, innovative financing and policy incentives, he summarized the group's concerns on: the need to find economic drivers, specifically those that benefit the poor; the need to create incentives and economically viable management alternatives for small-scale producers; and the need to involve the private sector and acknowledge the emergence of new markets for ecosystem service payments. He listed ways to move forward, including using pilot projects to learn by doing, building on existing knowledge with multi-stakeholder planning and negotiation, mobilizing key groups, educating the public, and improving technical and market information.

Mike Dudley presented on future plans, possibilities and challenges for the Global Partnership on FLR. He said the issue of FLR will be addressed during the upcoming UNFF-5 during a ministerial roundtable, that the report of the Workshop will be presented during the formal session, and that a side event on FLR will be held. On future activities, he mentioned that a number

of regional and national workshops on FLR have been set up by ITTO and IUCN, and called for marketing and discussing the benefits of FLR with the private, agricultural and financial sectors.

In the ensuing discussion, participants stressed the need to lobby both the public and the private sectors and to adjust marketing activities to regional specificities. On participants' individual commitments in moving forward, one participant noted the preparation of a national programme of action at an upcoming workshop of the Ghanaian FLR working group. Another offered to work on the "notion" of FLR to enable promotion of the concept without assigning it a set definition.

Tasso Rezende de Azevedo said participants had made the most of the Workshop, urged focusing on the upcoming UNFF-5 and thanked the organizers, sponsors and participants.

Tim Rollinson said the Workshop had achieved its aim of exchanging experiences and sharing knowledge on FLR. He thanked participants and the government of Brazil, and closed the meeting at 12:11 pm.

UPCOMING MEETINGS

PLUM CREEK SYMPOSIUM ON KYOTO, FORESTS, AND LIVING TREE MARKETS: SCIENCE AND LAND USE POLICY IN CARBON SEQUESTRATION: This meeting will convene from 13-14 April 2005 in Missoula, Montana, US. The University of Montana's College of Forestry and Conservation will host this meeting on the latest scientific findings regarding the role of forests and land use decisions in sequestering carbon, and the linkages between carbon forestry initiatives and environmental and social co-benefits. For more information contact: University of Montana's College of Forestry and Conservation; tel: +1-406-243-5521; fax: +1-406-243-4845; e-mail: carbonconference@forestry.umn.edu; Internet: <http://www.forestry.umn.edu/kiosk/Conference/Carbon/>

ITTO WORKSHOP ON PHASED APPROACHES TO CERTIFICATION: This workshop of the International Tropical Timber Organization will take place from 19-21 April 2005 in Bern, Switzerland. The workshop will seek to promote the use of phased approaches to certification in tropical timber exporting developing countries. For more information contact: Manoel Sobral Filho, ITTO Executive Director; tel: +81-45-223-1110; fax: +81-45-223-1111; e-mail: itto@itto.or.jp; Internet: <http://www.itto.or.jp>

COMMITTEE FOR THE REVIEW OF IMPLEMENTATION OF THE CONVENTION (CRIC – UNCCD): CRIC-3 will be held in Bonn, Germany, from 2-11 May 2005. Consultations among country Parties of the Regional Implementation Annexes will take place from 2-3 May 2005. For more information contact: UNCCD Secretariat; tel: +49-228-815-2802; fax: +49-228-815-2898; e-mail: secretariat@unccd.int; Internet: <http://www.unccd.int/>

WORKSHOP ON OPTIONS FOR INCLUDING LULUCF ACTIVITIES IN A POST-2012 INTERNATIONAL CLIMATE AGREEMENT: This meeting will take place from 5-6 May 2005 in Graz, Austria. Joanneum Research and a number

of other organizations and agencies are hosting this international workshop on options for including land use, land-use change and forestry (LULUCF) activities in a post-2012 international climate agreement. For more information contact: Neil Bird, Joanneum Research; tel: +43-316-876-1338; fax: +43-316-876-1320; e-mail: neil.bird@joanneum.at; Internet:

<http://www.joanneum.at/CarboInvent/post2012/workshop.html>

FIFTH SESSION OF THE UN FORUM ON FORESTS:

UNFF-5 will take place from 16-27 May 2005 at UN Headquarters in New York. For more information contact: Elisabeth Barsk-Rundquist, UNFF Secretariat; tel: +1-212-963-3262; fax: +1-917-367-3186; e-mail: barsk-rundquist@un.org; Internet: <http://www.un.org/esa/forests/session.html>

GLOBAL FOREST AND PAPER SUMMIT 2005: This meeting will take place from 1-3 June 2005 in Vancouver, Canada. This Summit is intended to bring together senior executives from forest and paper companies with government policy makers to discuss key issues and challenges facing the sector globally over the next decade. As part of this event, the 18th annual PricewaterhouseCoopers Global Forest and Paper Industry Conference will take place on 1 June. It will be followed by "Vision 2015: The Global Forest and Paper Industry's Coming Decade" on 2-3 June. For more information contact: Forest Products Association of Canada; tel: +1-604-775-7300; fax: +1-604-666-8123; e-mail: info@globalforestpapersummit.com; Internet: <http://www.globalforestpapersummit.com/main.cfm>

PREPARATORY CONFERENCE FOR THE EUROPE AND NORTH ASIA FOREST LAW ENFORCEMENT AND GOVERNANCE MINISTERIAL MEETING: This meeting is expected to convene from 6-8 June 2005 in Moscow, Russian Federation. This meeting will prepare for the initiation of a Forest Law Enforcement and Governance (FLEG) process for Europe and North Asia; the ministerial conference is expected to take place in late fall 2005 in the Russian Federation. For more information contact: Nalin Kishor; tel: +1-202-473-8672; fax: +1-202-522-1142; e-mail: nkishor@worldbank.org; Internet: <http://lnweb18.worldbank.org/ESSD/ardext.nsf/14ByDocName/ForestGovernanceProgram>

38TH SESSION OF THE INTERNATIONAL TROPICAL TIMBER COUNCIL: ITTC-38 and Associated Sessions of the Committees will convene in Brazzaville, Republic of Congo from 19-21 June 2005. For more information contact: Manoel Sobral Filho, Executive Director, ITTO; tel: +81-45-223-1110; fax: +81-45-223-1111; e-mail: itto@itto.or.jp; Internet: <http://www.itto.or.jp/live/PageDisplayHandler?pageId=189>

THIRD PART OF THE UN CONFERENCE ON THE NEGOTIATION OF A SUCCESSOR AGREEMENT TO THE INTERNATIONAL TROPICAL TIMBER AGREEMENT, 1994: This meeting will be held from 27 June - 1 July 2005 in Geneva, Switzerland. For more information contact: UNCTAD Secretariat, Intergovernmental Affairs and Outreach Service; tel: +41-22-917-5809; fax: +41-22-917-0056; e-mail: correspondence@unctad.org; Internet: <http://www.unctad.org/Templates/Meeting.asp?intItemID=3323&lang=1>

XXII IUFRO WORLD CONGRESS: This Congress of the International Union of Forest Research Organizations (IUFRO) will be take place from 8-13 August 2005 in Brisbane, Australia, and will focus on "Forests in the Balance: Linking Tradition and Technology." For more information contact: Congress Manager, PO Box 164, Fortitude Valley QLD 4006, Australia; tel: +61-0-7-3854-1611; fax: +61-0-3854-1507; e-mail:

iufro2005@ozaccomm.com.au; Internet: <http://www.iufro2005.com>

INTERACTIVE FOREST & NATURE POLICY IN PRACTICE - MANAGING MULTI-STAKEHOLDER LEARNING IN SECTOR-WIDE APPROACHES AND NATIONAL FOREST PROGRAMMES: This course will be held from 12 September -1 October 2005 in Wageningen, the Netherlands. This course aims to provide participants with insights, knowledge and skills for designing and managing interactive policy development and implementation processes in forest and nature management. For more information contact: International Agricultural Centre (IAC); tel: +31-317-495-495; fax: +31-317-495-395; e-mail: training.iac@wur.nl; Internet: <http://www.iac.wur.nl/iac/courses/module.cfm?code=34/00/2005>

8TH WORLD WILDERNESS CONGRESS: The 8th WWC will take place from September- 6 October 2005 in Anchorage, Alaska. The theme of the congress is Wilderness, Wildlands and People - A Partnership for the Planet. This Congress will generate the most up-to-date and accurate information on the benefits of wilderness and wildlands to contemporary and traditional societies, and will review the best models for balancing wilderness and wildlands conservation with human needs. For more information contact: Secretariat; e-mail: info@8wwc.org; Internet: <http://www.8wwc.org/>

SEVENTH CONFERENCE OF THE PARTIES TO THE CONVENTION TO COMBAT DESERTIFICATION: CCD COP-7 is scheduled to take place from 17-28 October 2005 in Nairobi, Kenya. For more information contact: UNCCD Secretariat; tel: +49-228-815-2802; fax: +49-228-815-2898; e-mail: secretariat@unccd.int; Internet: <http://www.unccd.int/>

EUROPE AND NORTH ASIA FOREST LAW ENFORCEMENT AND GOVERNANCE MINISTERIAL MEETING: This meeting is expected to take place in late fall 2005 in the Russian Federation. This meeting will contribute to the initiation of a Forest Law Enforcement and Governance (FLEG) process for Europe and North Asia. The exact dates and location of the meeting have yet to be determined. For more information contact: Nalin Kishor; tel: +1-202-473-8672; fax: +1-202-522-1142; e-mail: nkishor@worldbank.org; Internet: <http://lnweb18.worldbank.org/ESSD/ardext.nsf/14ByDocName/ForestGovernanceProgram>

39TH SESSION OF THE INTERNATIONAL TROPICAL TIMBER COUNCIL: ITTC-39 and Associated Sessions of the Committees will convene in Yokohama, Japan from 7-12 November 2005. For more information contact: Manoel Sobral Filho, Executive Director, ITTO; tel: +81-45-223-1110; fax: +81-45-223-1111; e-mail: itto@itto.or.jp; Internet: <http://www.itto.or.jp/live/PageDisplayHandler?pageId=189>