

The International Forests & Water Dialogue

Final Report

8-9 September 2015

XIV World Forestry Congress – Durban, South Africa

“No forests, no water, no people.” – Tony Simons



Co-organized by: FAO, IUFRO, ICRAF, INBAR

Report compiled by
Elaine Springgay, Forestry Officer, FAO

1. Rationale and objectives

Rationale

Forests regulate surface and groundwater flows by intercepting precipitation; capturing transpiration of soil moisture and evaporation from vegetative surfaces; using water through evapotranspiration and maintaining soil infiltration. They can also influence atmospheric moisture flows, including cloud formation and precipitation. Forests contribute to maintaining high water quality by stabilizing soils, reducing surface erosion and sedimentation in water courses and filtering pollutants from upstream activities. Forests and trees also help reduce water-related risks, such as landslides, floods and droughts as well as prevent desertification and salinization.

Worldwide, more than one in six people still do not have access to safe drinking water and approximately 80 percent of the global population lives in areas where water resources are insecure. At least one third of the world's biggest cities such as Durban, Jakarta, Rio de Janeiro, Bogotá, New York, and Madrid draw a significant portion of their drinking water from forested areas.

There is increased consensus on the important roles trees and forests play in the hydrological cycle. With a greater understanding of our knowledge and knowledge gaps, it is important to integrate science, practice and policy, stating the practical and political implications of forest-water interactions and the management of forests for water-related ecosystem services, including economic incentives and institutional mechanisms. Land managers and policy makers need to balance the trade-offs between the ecosystem services provided by forests and trees and forest-induced changes in water availability.

Objectives

The International Forests and Water Dialogue, a two-day special event during the XIV World Forestry Congress, was conceived to encourage discussion on forest-water interactions and the integration of forest-water science, practice and policy, and launch the Five-year Forests and Water Action Plan. The Dialogue was the latest milestone in the Forests and Water Agenda and represented the transition from discourse to action. It was co-organized by the Food and Agriculture Organization of the United Nations (FAO), the International Union of Forest Research Organizations (IUFRO), the World Agroforestry Centre (ICRAF) and the International Network for Bamboo and Rattan (INBAR).

The objective of the event was for participants to have the opportunity to gain awareness of the status of forest-water interactions in research, in practice and policy, as well as to discuss and refine the direction of the Forests and Water Agenda. As such, the Dialogue was designed to feature three thematic areas: science, practices and policy, presented in a combination of traditional and innovative formats.

Overall, the International Forests and Water Dialogue aimed to achieve the following:

1. Increase awareness of forest-water interactions and the critical role trees and forests play in the hydrological cycle, particularly the regulation and provision of high quality water for various uses;
2. Advocate for the integration of forests and water in practice and policy;
3. Generate dialogue regarding forest-water interactions, strengthening engagement between scientists, practitioners and policymakers around the world;
4. Expand the network of researchers, practitioners and policymakers committed forests and water;

5. Launch the Forests and Water Action Plan, moving the forests and water topic from discourse to action, and calling for the tangible integration of science, practice and policy.

In addition, there were specific objectives related to the individual thematic areas:

- **Science:** To share international research and address knowledge gaps. Inspire cost-effective and reliable research methodologies on forest / tree-water-interactions that can be replicated across the globe to support forest –water management in different contexts.
- **Policy:** In view of the fact that the forest and the water sectors are traditionally housed in different administrative units, inspire the development of innovative institutional mechanisms, as well as the adoption of policies for forest conservation, sustainable forest management and agroforestry practices to safeguard water resources.
- **Forest practices and economics:** Identify countries or forest management entities with whom to promote the integration of forest-water relations in forest management practices. Disseminate information that can assist in the development of compensation for environmental services schemes and the integration of forest hydrology in forest management plans.

It was expected that participants would commit to and join in the implementation of the Five-year Forests and Water Action Plan. The target audience for the event were foresters, experts from the water and private sectors, and colleagues from other stakeholder groups, including civil society.

Tuesday 8 September 2015 (Hall 3A)		Wednesday 9 September 2015 (Hall 3A)	
10:00 - 10:45	Introduction to the International Forests and Water Dialogue <ul style="list-style-type: none"> • H.E. Nomvula Mokonyane, <i>Minister of Water and Sanitation, South Africa</i> • Mike Wingfield, <i>IUFRO President</i> 	10:00 - 10:45	Forests and Water in Policy <ul style="list-style-type: none"> • Maharaj Muthoo, <i>Roman Forum President</i> • Thomas Hofer, <i>FAO</i>
10:45 - 12:00	Discover Forests and Water <ul style="list-style-type: none"> • David Ellison, <i>Swedish University of Agricultural Sciences</i> • Irena F. Creed, <i>Western University, Canada</i> • Richard Harper, <i>IUFRO Task Force on Forests, Water and Soil Interactions</i> 	10:45 - 13:00	Forests and Water Network Discussion Groups Discuss the expectations for an international forests and water network: How would you like to benefit from the Network? How could members contribute? What support would be useful to advocate to policymakers? <ul style="list-style-type: none"> • Oliver Frith, <i>INBAR</i>
12:45 - 14:15	Lightning Talks Rapid-fire presentations on the latest research on forests and water. Get the answers to your questions during a discussion period.	14:00 - 15:00	From Discourse to Action The official launch of <i>Forests and Water – a five-year action plan</i> . <ul style="list-style-type: none"> • Lusenga Lindiwe, <i>Deputy Director General of Department of Water and Sanitation, South Africa</i>
14:15 - 15:35	Forests and Water in Practice <ul style="list-style-type: none"> • Philip Dobie, <i>ICRAF</i> • Yigremachew Seyoum, <i>Minister of Environment and Forestry, Ethiopia</i> 	15:30 - 17:00	Dialogue in Review and the Way Forward Journalist Debora Patta, CBS Africa Correspondent, moderates the review panel: <ul style="list-style-type: none"> • Thomas Hofer, <i>FAO</i> • Irena F. Creed, <i>Western University, Canada</i> • Richard Harper, <i>IUFRO Task Force on Forests, Water and Soil Interactions</i> • Tony Simons, <i>ICRAF Director General</i> • Anders Malmer, <i>SLU Global Director</i> • Hans Friederich, <i>INBAR Director General</i> • Lotta Samuelson, <i>SIWI</i> • Eduardo Rojas-Briaies, <i>Polytechnic University of Valencia</i> • Tatenda Mapeto, <i>IFSA</i>
15:35 - 17:30	World Café Visit examples of forest-water interactions from around the world. Discover best practices, and share lessons learned and your forest-water experiences. Network with organizations engaged in the forests and water topic. Featuring: Mangroves, Ecosystem Services, South Africa, the Mediterranean, Participatory Governance, Watershed Management and Integrated Landscapes.		

Programme for the International Forests and Water Dialogue, 8-9 September 2015.

2. Outcomes and key messages

Key messages to the XIV WFC

1. The interaction between trees, forests and water and the role this plays in addressing critical issues, such as food security, access to quality water, climate change and landscape resilience deserves greater recognition at national, regional and international levels;
2. The dialogue reaffirmed that there is a strong demand, need for, and willingness to participate in and contribute to a newly established network of partners that will consolidate, synthesize and share knowledge, best practices and common methodologies, as well as build the capacity of scientists, practitioners and policymakers on the interaction between forests and water;
3. There is a need for decision makers to allocate greater resources for research on forest-water interactions and the translation of this research into policy action and practical implementation, including at the community level.



Alexander Buck, Executive Director of IUFRO, presents the key messages of the International Forests and Water Dialogue to the final plenary of the World Forestry Congress on 11 September 2015. Photo: FAO/Giuseppe Carotenuto.

Key messages from the Dialogue

Science

- **Where forests are located and where they are conserved or planted matters.** Forest-water interactions are not at all simple. They involve a number of non-linear and non-deterministic relationships, lags in space and time that occur at multiple scales, interactive effects with feedbacks, and also a number of unavoidable trade-offs.

- **Forests play a role in water regulation and availability beyond watershed scales.** Tree and forest-water interactions occur at multiple scales, from individual tree to continental scales. The “Hydrologic Space” proposes that forests play a key role in feeding terrestrial precipitation. Trees evapotranspire water and hence produce atmospheric moisture, which is then moved across continents by airflow. In this way forests and trees can influence rainfall in distant locations. Policy and management frameworks need to consider these larger scale relationships.
- **Existing frameworks can be used to integrate forest and water resource management and policy.** The ISO 31000 Risk Management Framework is a credible, internationally-recognized framework that allows us to reduce complexity and enables integration of aquatic ecosystem services into strategies for forest management and policy. Many government programmes focus on identifying risks, but then fail to actually manage these risks. ISO 31000 may enable the development of resilient and robust policies and management strategies that have the capacity to learn and adapt, which is particularly important within the context of climate change and increasing pressures on forest and water resources.
- **Forest-water interactions are not limited to the forest.** The forests and water topic interacts with other sectors and land uses, affecting agriculture, energy, urban areas, etc. Therefore, it is important to take an interdisciplinary approach, collaborating with people from other disciplines to develop relevant messages, actions and policies. In reality, it is not forests and water, but a nexus of forests, water, food and energy.

Practices

- **Participatory approaches with multiple stakeholders are key to sustainable land management.** As water is a vital resource for domestic, agricultural, industrial and other uses, it is important that forest managers and management practitioners confer and collaborate with other stakeholders within the landscape, including upslope/downslope and upwind/downwind¹ communities.
- **Scientific understanding of forest-water interactions needs to be communicated clearly to practitioners.** Although simplified messages may lose scientific integrity, it is still important to convey scientific knowledge in clear messages for practitioners and policymakers. More importantly, these messages need to be presented with greater confidence in order to adequately support decision-making. The tendency of science to focus on uncertainties impedes the application of scientific understanding in practice and policy.
- **Win-win scenarios are possible.** There are successful forest and water case studies where ecosystem restoration coupled with economic incentives has resulted in improved forest health and functionality, forest management, and improved socio-economic situations for local communities. These case studies should be leveraged for political and financial support for forest-water interactions, as well as replicated (and modified as appropriate) to provide similar benefits to other areas of the globe.

Policy

- **Increased political will is necessary.** Generally, the water and forestry sectors operate in silos. Currently, only nine countries have integrated forest-water Ministries. While this suggests collaboration, even within these Ministries forest and water departments do not have integrated

¹ Forests can affect water availability at regional and continental scales through influencing the atmospheric flows of air and moisture. For example, there is evidence that mass deforestation in the Congo Basin is reducing precipitation in regions further east, or downwind.

policies or functions. Integrating departments and/or Ministries is not necessarily the answer; however, inter- or multi-sectoral collaboration is. The water and forestry sectors need to recognize that forests are sources for high quality water and not just competition for water resources. The political environment needs to be adequately informed on the forests and water topic and the successes that have been achieved on the ground. The optic of forests and water is often overshadowed by climate change; however, the two are linked and forests and water is equally, if not more important. Greater advocacy and education of decision-makers is necessary.

- **Scientific understanding of forest-water interactions needs to be communicated clearly to policy-makers.** Coherent, simplified messages need to be extracted from the complexity and these messages need to be made relevant to politicians and their agenda.
- **An international network for forests and water is wanted.** Over 170 participants confirmed that not only is an international network wanted, but it is needed. The network could best serve its membership if it consolidated and shared knowledge and activities, including emerging science, knowledge systems and tools, best practices and successful examples of integrated science, practice and policy. Members would also be interested in knowing about upcoming and previous forest-water related events, conferences and resources. Most participants claimed they were not only looking for gaining access to information, but would be willing to provide and share information to the network.



Debora Patta, CBS News Africa Correspondent, moderates the review panel discussion on the key messages of the International Forests and Water Dialogue and the next steps for the Forests and Water Agenda. Photo: ICRAF/Daisy Ouya.

The Dialogue in Media

The following articles and video featured the International Forests and Water Dialogue and/or the Action Plan, or the importance of forest-water interactions:

- www.foresteuropa.org/news/forest-water-five-year-action-plan-launched-international-forests-water-dialogue
- blog.worldagroforestry.org/index.php/2015/09/11/safeguarding-the-worlds-freshwater-resources-global-forest-and-water-action-plan-launched/
- www.iufro.org/news/article/2015/09/08/safeguarding-the-worlds-freshwater-resources-new-global-forest-water-action-plan/
- alive2green.com/the-forests-and-water-five-year-action-plan-launched-in-durban/
- www.facebook.com/photo.php?fbid=714132468716665
- www.sabc.co.za/news/a/65e8218049c9af3cb4dafdc59f56a7b6/The-Forests-and-Water-five-year-action-plan-launched-in-Durban-20150909
- www.efi.int/portal/news___events/news/?bid=2119&utm_source=twitterfeed&utm_medium=twitter
- www.youtube.com/watch?v=QuUQu6n2v7U&feature=youtu.be
- www.youtube.com/watch?v=LEzyXgl1sMk

Regarding social media, a FoWaNetwork Twitter account was created to help monitor social media buzz related to the Dialogue and Action Plan, as well as forest-water interactions more generally. Leading up to, during and after the World Forestry Congress, approximately 170 tweets made reference to aspects of the International Forests and Water Dialogue. Highlights included:

- There was high momentum during HE Mokonyane’s introductory speech, especially making reference to “sustainable forest management is essential to ensure the supply of good quality fresh water;” “South Africa is the 30th driest country in the world;” and “Indigenous knowledge, gender and conservation, key aspects of water security.”
- The powerful statement from Mike Wingfield: “people have more access to televisions than clean water for drinking and sanitation.”
- A WFC video interview of Caesar Kimbugwe, Water Aid Uganda, sparked interest: “Water doesn't come from the tap...”
- The presentation by Irena Creed caught the interest of participants who tweeted: “What are forests doing for you;” “Livelihoods depend upon our recognition of the transboundary nature of the Hydrologic Space;” and “Use ISO 31000 framework for risk management around water.”
- There was a positive response on youth participation: “Great youth involvement at FoWaNetwork Discussion Groups a success for FoWa Dialogue;” as well as a photo of “Eugene Greyling reporting on what the youth expect from a water-forest network.”
- The Action Plan launch received a lot of attention: “Maharaj Muthoo: We must move from discourse to action. Now.” ICRAF highlighted “Tony Simons: Nothing's better than a tree at providing myriad environmental services. #soil #water.”

3. Proceedings

Day 1 – Tuesday, 8 September

The International Forests and Water Dialogue was an integral special event of the XIV WFC held on 8-9 September. On Tuesday, Thomas Hofer, Team Leader of Mountains and Watersheds of the FAO Forestry Department, opened the event by presenting the facts and figures that underlined the importance of the forests and water topic, and described how the International Forests and Water Dialogue is part of a broader process that started in 2002, referred to as the Forests and Water Agenda.

Nomvula Mokonyane, Minister of Water and Sanitation, South Africa, noted the role of sustainable forest management for water security in South Africa, and that reforestation and rehabilitation of natural forests is promoted through specific policies. She emphasized the need for policies to be people centered, acknowledging local knowledge and solutions, and that political leadership is essential for the integration of forests and water issues.

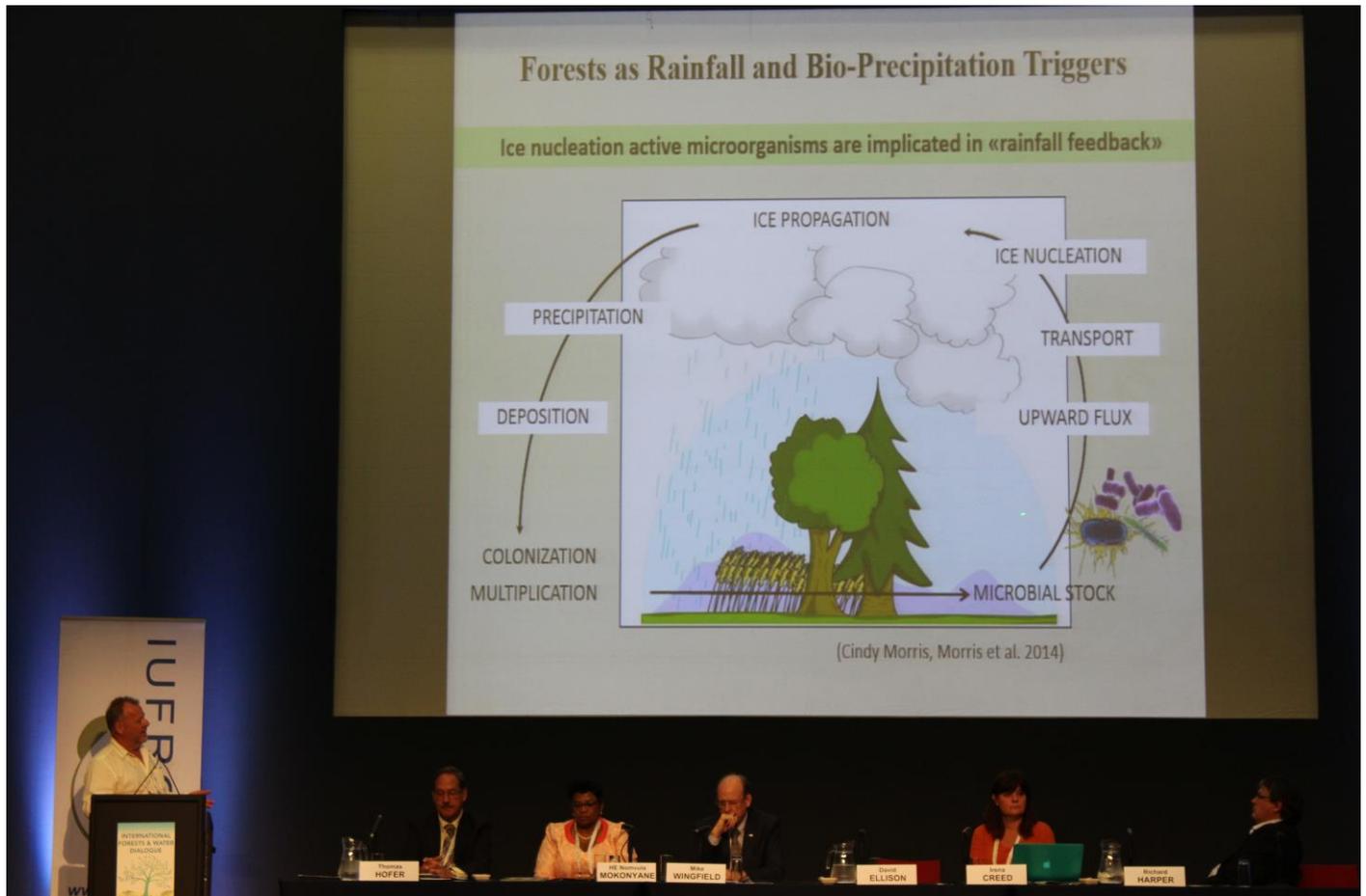
Mike Wingfield, President of IUFRO, described the many forest functions related to water from a scientific perspective and placing forests in a landscape context, while recognizing that knowledge gaps on many aspects of these interactions exist. He addressed the importance of ensuring the availability and sustainable management of water and sanitation for all people, which is one of the new Sustainable Development Goals (SDGs).



HE Nomvula Mokonyane, Minister of Water and Sanitation, South Africa – also known as “Mama Action” – opens the International Forests and Water Dialogue with a keynote speech on the importance of forest-water interactions in South Africa. Photo: ICRAF/Daisy Ouya.

Science

The Science block commenced with three keynote presentations that considered different scientific dimensions of forest and water relationships. The first presenter, David Ellison, a consultant previously of the Swedish University of Agricultural Sciences (SLU), introduced the concept of the hydrological space and emphasized the need to consider the transboundary nature of hydrologic basins in water and land use management and planning strategies. He proclaimed that “It is time to get our heads out of the catchment basin” and the importance of considering upwind and downwind communities as much as upstream and downstream communities. He stated that forests represent powerful adaptation tools; in the right context, forests can positively impact atmospheric moisture production, cooling, rainfall, infiltration, groundwater recharge.



David Ellison presents on the latest scientific findings on forest-water research, including the concept of the hydrological space, and the effects of forests on climate and precipitation. Photo: ICRAF/Daisy Ouya.

Irena Creed, the Canada Research Chair for Watershed Sciences and the Director of the Africa Institute at Western University, Canada, presented a risk management framework for aquatic ecosystem services (AES). She proposed that AES should be explicitly incorporated into modern forest management planning and practices. However, confusion about how to apply the concept of ecosystem services is hindering formal integration of AES into forest policy and management decisions. By addressing these challenges, improved forest management policies and practices can be developed that reveal the risks of alternative approaches, and thereby promote the sustainable delivery of aquatic ecosystem services now and in the future. She suggested that the ISO 31000 framework for managing risks can be applied to AES and should be adopted.

Richard Harper of Murdoch University, Australia and the Chair of the newly established IUFRO Task Force on Forests, Soil and Water Interactions discussed a range of new and evolving issues that will affect the topic of forests, water and soils. Although climate change is a major issue, population growth and the food-

water-energy nexus will become increasingly important. He suggested that future progress will be related to identifying and understanding linkages and interactions between different elements and the ability of science to contribute to policy and forest management.

The Science Block culminated with twelve “lightning presentations” moderated by Emma Van Archer Garderen, Council for Scientific and Industrial Research (CSIR), South Africa. The twelve speakers presented the latest findings in forest-water interaction research, including: the impacts of forest restoration on water balance; the contribution of forests and trees to food production in the tropics; salvage logging to protect watersheds; and forests and water relationships in the Mediterranean. Each presentation focused on the objectives and results of the research and the wider implications. The session emphasized that science messages for the public should focus on results and its application in policy and practice rather than on methodologies.

Practice

To launch the Practices Block, Philip Dobie of ICRAF, explained the difference between green and blue water and noted that water is increasingly scarce, particularly in Africa. Reforestation, projects piloting payments for ecosystem services, etc. could provide potential solutions to improving water availability and quality. One of the great challenges, however, is that science messages for politicians and policymakers that could assist them in managing for trade-offs do not exist.

To showcase forest-water interactions in practice, several case studies were presented. Yigremachew Seyoum from the Ministry of Environment and Forests, Ethiopia, presented the environmental, social and economic benefits of sustainable landscape management, highlighting the benefits of afforestation for protecting watersheds. He also emphasized the importance of land use planning and enhanced community participation.

Thuy Nguyen, of the SNV Netherlands Development Organization, presented an initiative for mangrove restoration and community resilience in coastal forests in Viet Nam. The initiative has developed a sustainable integrated mangrove-shrimp model with multi-stakeholder platforms and partnerships.

Roland Schulze, University of KwaZulu-Natal, South Africa, presented a study on the streamflow reduction effects of planted forests in South Africa under projected climate change scenarios. He stressed the complexity of the issue and the role of local conditions and forest management practices on these effects.

Sara Namirembe, ICRAF, discussed innovative payments for tree watershed services in East Africa, highlighting the need for policy and institutional revision to enable payment for ecosystem services (PES) and to build trust between buyers and sellers.

For the remainder of the afternoon of Day 1, a World Café showcased examples of forest-water interactions from different countries and engaged participants in an exchange of information on best practices and lessons on topics including mangroves, ecosystem services, participatory governance, watershed management and integrated landscapes. The World Café also featured the forest-water related activities of several organizations, including Stockholm International Water Institute (SIWI), The Center for People and Forests (RECOFTC), Plan Bleu and European Forest Institute (EFI). The World Wide Fund for Nature (WWF) New Generation Plantations programme also presented an interesting video on the forest-water-food nexus in a watershed in South Africa. There was also an exhibit on the Forests and Water Agenda.

The World Café was perceived as an innovative, positive networking and knowledge exchange event. Lotta Samuelson, SIWI, stated that “Sessions like this World Café, gives opportunities to share experiences and knowledge from other work. These kind of open sessions, as compared to closed meetings or bilateral conversation, enable people who do not yet have strong networks to get access to knowledge and experiences which help them work more holistically and progressively.”



Left: Catherine Muthuri shares ICRAF case studies and practices with a Dialogue participant. *Right:* Participants engage in the Forests and Water in practice World Café. Photos: ICRAF/Daisy Ouya.

Day 2 – Wednesday, 8 September

Elaine Springgay, Forestry Officer (Forests and Water) at FAO, recapped the highlights and key messages of the Science and Practices Blocks of Day 1. Day 2 of the Dialogue focused on policy issues and the next steps for the Forests and Water Agenda.

Policy

The Policy Block started with two keynote presentations. Thomas Hofer provided an overview of the current political environment for forests and water, noting that all countries but nine have separate ministries for forests and water, and that even those countries that have combined ministries do not have integrated forest-water policies. He emphasized the need for enhanced institutional dialogue. He also highlighted that a scientific understanding, a harmonization of trade-offs and policy frameworks are important challenges for forests and water integration.



Left: Participants engage in breakout discussion group sessions. *Right:* Youth discuss how an international forests and water network could best cater to the future generation, led by David Ellison, consultant, and Yemi Adeyeye, FAO. Photos: ICRAF/Daisy Ouya.

Maharaj Muthoo, President of Roman Forum, emphasized the need to analyze forest-water issues in a broad context and to remove misconceptions about forests and water interactions. He also noted that the Sustainable Development Goals and the Decade of Water for Sustainability are important international agendas that can be leveraged to promote forest-water interactions and should be contributed to.

The majority of the Policy Block was spent in a breakout group session moderated by Oliver Frith, Acting Director of Programme at INBAR, where participants took part in 8 discussion groups, consisting of representatives from youth (1), Francophone countries (1), Hispanic countries (1), science (2), policy (2), and practice (1). The discussion groups aimed to take forward the dialogue on how to move the Forests and Water Agenda forward, specifically through the potential establishment of a new network. The main goal of the session was to discuss the following three questions:

1. What would you expect from a Forests and Water Network?
2. How could members contribute to the Network?
3. How could the Network support members to advocate for integrated forests-water policies (from their governments, organizations, etc.)?

The breakout group session featured the participation of over 30 youth, with approximately 15 youth volunteering to co-facilitate the discussion groups. The youth discussion group provided the perspective of future generations, sharing their views on how youth could best engage with a potential international network for forests and water. Moreover, youth co-facilitators were paired with professionals who had similar interests, providing an opportunity for potential mentorship and networking. All youth co-facilitators were provided a certificate of appreciation from the organizers of the Policy Block, FAO and INBAR.



Youth co-facilitators pose with Oliver Firth (INBAR) and Elaine Springgay (FAO) and display their certificates of appreciation. Photo: FAO/Thomas Hofer.

Overall, participants agreed that the network should provide a multi-stakeholder, bottom-up platform for information sharing and capacity building; consolidate global activities and research to avoid duplication of work, and to share methodologies and resources; and be effectively supported by resources.

Launch of Forests and Water Action Plan

The climax of Day 2 and the International Forests and Water Dialogue in general, was the launch of *Forests and Water: a Five-year Action Plan*, moderated by Lusenga Lindiwe, Deputy Director-General of the Department of Water and Sanitation, South Africa.

Keynote speakers Maharaj Muthoo and Tony Simons, Director-General of ICRAF, highlighted the urgency of forest-water issues and noted the timeliness of launching the Action Plan a few weeks before the UN Sustainable Development Summit 2015. During the official introduction of the Action Plan document, Tony Simons proclaimed “No Forests, no water,” emphasizing the importance of trees to proactively address water scarcity, especially under the context of climate change.



Maharaj Muthoo, Lusenga Lindiwe and Tony Simons launch the Forests and Water Action Plan. Photos: ICRAF/Daisy Ouya (left) and FAO/Thomas Hofer (right).

Representatives of several organizations, including EFI, INBAR, IUFRO, RECOFTC, Forestry Research Network for Sub-Saharan Africa (FORNESSA) and FAO endorsed the Action Plan, which currently has 25 partner institutions, and a project portfolio of approximately US\$10.5 million for research to understand forest-water relationships, and for improving water resources through sustainable forest management.

Review panel

A closing panel, moderated by Debora Patta, CBS News Africa Correspondent, reviewed the outcomes of the Dialogue. Nine panelists shared key messages of the Dialogue and their recommendations moving forward from different perspectives, including the; science-policy; the IUFRO Task Force on Forests, Soil and Water Interactions; practice (and the private sector); agriculture; policy; water; the International Development Agenda; and youth.

In regards to the progression of the Forests and Water Agenda, Thomas Hofer highlighted that the sessions affirmed the importance of forest-water interactions; that an international network is welcome and that implementation must happen at the landscape level. On the interface between science and policy, Irena Creed, said that such a network has the potential to close the gap between science and policy and scientists must develop coherent messages for policy makers. Meanwhile, Richard Harper reaffirmed the

commitment of IUFRO's Task Force to the network, and the Action Plan and invited scientists and researchers to contribute to its activities.

From the perspective on practice and the inclusion of the private sector, Tony Simons emphasized the need for synthesizing disjointed studies and knowledge to help understand the complex interactions, and said the role of forests and trees should not be downplayed.

Anders Malmer of SLU addressed the audience from the agriculture perspective. He supported developing risk analysis frameworks, but suggested that these frameworks need to look at solutions at the local level and pointed out that there needs to be recognition of the diversity of situations and solutions.

Regarding policy, Hans Friedrich, Director-General of INBAR, also stressed the importance of integrated water resource management from a landscape perspective and also stressed the role of bamboo in achieving the goals of the Forests and Water Action Plan.

Lotta Samuelson of the Stockholm International Water Institute, representing the water sector, remarked that the success of integrated forest-water resource management was dependent on stakeholder involvement and collaboration between science and policy; and that a key message from the dialogue was the importance of sharing experience.



Tatenda Mapeto, IFSA Board member, and Eduardo Rojas-Briales, Polytechnic University of Valencia, provided their insights on youth and the international agenda, respectively, during the final review panel of the International Forests and Water Dialogue. Photos: ICRAF/Daisy Ouya.

Eduardo Rojas-Briales spoke on forests and water within the context of the international agenda and underlined the opportunity presented by the post-2015 development agenda to reinforce forests-water interactions. He also stated that there is a need to broaden the debate, moving away from discussions on intensive forest use versus biodiversity conservation. He reminded participants that the amount of noise

surrounding a topic is not necessarily proportional to their importance. Climate change tends to overshadow other critical issues in the international agenda; therefore, it is important to provide clear messages supported by tangible action.

Tatenda Mapeto, a PhD student and International Forestry Students' Association (IFSA) Board Member, represented the youth perspective and noted that a forests and water network should be relevant, and represent a two-way platform to connect youth to science and policy.