



IUFRO Strategy 2015 - 2019

Interconnecting Forests, Science and People







FOREWORD

The IUFRO Strategy 2015-2019 is an essential tool for IUFRO to guide and implement its activities in the years to come: it provides a framework for IUFRO and its members to effectively respond to changing paradigms regarding forests and for IUFRO to position itself as a truly global network of forest science knowledge sharing and cooperation.

This strategy builds on three interrelated preparatory activities: (i) a review of progress made in implementing the previous IUFRO Strategy 2010-2014, (ii) an online survey carried out among the heads of IUFRO Member Organizations and officeholders, and (iii) the recommendations of an independent Review Panel.

The IUFRO Strategy 2015-2019 with its theme of “Interconnecting forests, science and people” provides guidance to IUFRO’s officeholders and Member Organizations on how to address the global changes in social, economic and ecological dynamics which require the IUFRO network to be nimble and responsive. More particularly, the strategy sets out five research themes with associated emphasis areas which are underpinned by three institutional goals. Addressing these themes and institutional goals will enable IUFRO units, Division Coordinators and officeholders to promote research excellence around the globe and effectively

share the latest scientific evidence on key policy issues. We call upon our IUFRO members and officeholders to work together in successfully translating this Strategy into action, following an Action Plan approved by the IUFRO Board.

Our sincere thanks go to the members of the Review Panel¹, the members of the IUFRO Board and in particular the writing teams² of the five themes, the International Council, IUFRO Headquarters, and the IUFRO individual members and Member Organizations for their significant contributions to the development of this Strategy.

With this Strategy, IUFRO will continue to promote global cooperation in forest-related research and to enhance the understanding of ecological, economic and social aspects of forests and trees. By engaging its global network and collaborating with scientists in related and fringe disciplines, IUFRO will be a global convener, bringing people together to address the complex natural resource challenges facing the planet and its people – in other words: *interconnecting forests, science and people*.

Niels Elers Koch
IUFRO Immediate Past President

Mike Wingfield
IUFRO President

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EXECUTIVE SUMMARY

The International Union of Forest Research Organizations (IUFRO) is the leading global network for forest science cooperation. It is the only worldwide international organization devoted to forest research and related sciences. Our unique membership brings together research organizations, universities and individual scientists, as well as decision-making authorities and other stakeholders with an interest in and focus on forests and trees.

IUFRO's mission is to advance research excellence and knowledge sharing, and to foster the development of science-based solutions to forest-related challenges for the benefit of forests and people worldwide.

With the Strategy 2015-2019, IUFRO addresses five research themes and associated emphasis areas, and three institutional goals. The following five themes aim to guide the science collaboration within IUFRO's global network in the forthcoming period:

- 1 Forests for People**
- 2 Forests and Climate Change**
- 3 Forests and Forest-based Products for a Greener Future**
- 4 Biodiversity, Ecosystem Services and Biological Invasions**
- 5 Forest, Soil and Water Interactions**

The three institutional goals adapted from the previous strategy present IUFRO's commitment to research excellence and interdisciplinary cooperation, to better visibility of IUFRO's knowledge products and network cooperation, and to science-based solutions and options for influencing policy processes.

Goal 1

Research Excellence: Strive for quality, relevance and synergies

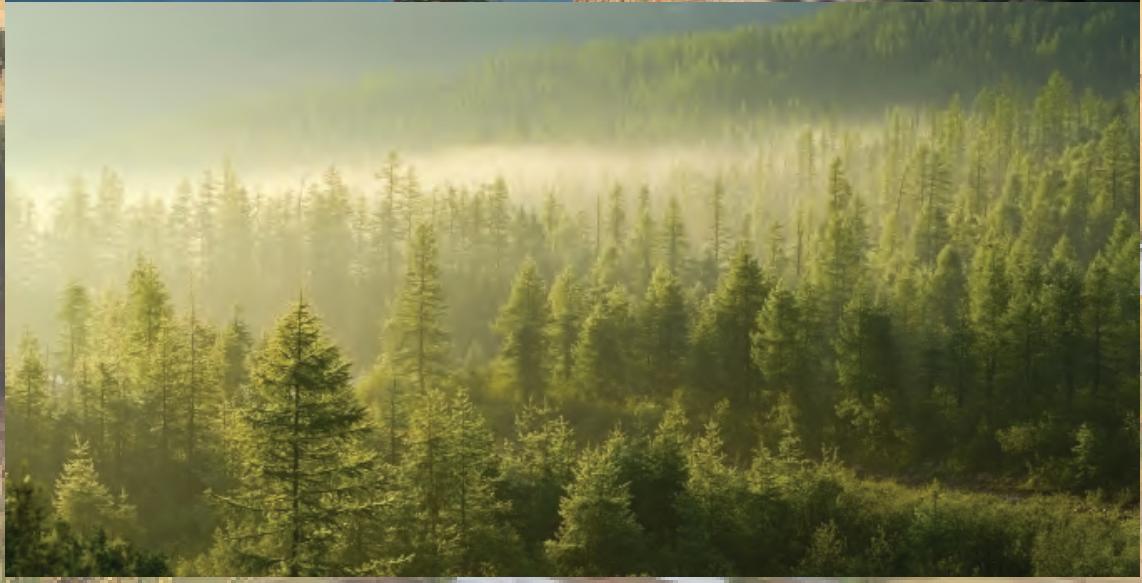
Goal 2

Network Cooperation: Increase communication, visibility and outreach

Goal 3

Policy Impact: Provide analysis, insights and options

Attaining both thematic and institutional goals should help IUFRO and its members to effectively respond to the changes in paradigms concerning forests and forest science, and should help IUFRO to position itself even more strongly as the leading global network for forest-related research.





RÉSUMÉ

L'Union internationale des organisations de recherche forestière (IUFRO) est le premier réseau mondial de coopération en science forestière. L'IUFRO est la seule organisation d'envergure mondiale qui se consacre à la recherche forestière et aux sciences connexes. De façon unique, elle compte parmi ses membres des organisations de recherche, universités et chercheurs individuels aussi bien que des autorités et décideurs politiques et d'autres parties prenantes ayant des intérêts relatifs aux forêts et aux arbres.

La mission de l'IUFRO est de promouvoir l'excellence scientifique et l'échange des connaissances, ainsi que d'encourager le développement de solutions à la base scientifique à des défis relatifs aux forêts en vue du bien-être des forêts et des peuples dans le monde entier.

Dans sa stratégie pour la période 2015-2019, l'IUFRO adresse cinq thèmes de recherche et des domaines prioritaires y relatifs, ainsi que trois objectifs de portée institutionnelle. Les cinq thèmes suivants sont destinés à orienter la collaboration scientifique au sein du réseau global IUFRO dans cette période:

- 1 Forêts pour les hommes**
- 2 Forêts et changements climatiques**
- 3 Forêts et produits forestiers pour un avenir plus vert**
- 4 Biodiversité, services écosystémiques et invasions biologiques**
- 5 Interactions forêts - sol - eau**

Les trois objectifs de portée institutionnelle adaptés depuis la version antérieure de la stratégie reflètent l'engagement de l'IUFRO en faveur de l'excellence scientifique et la coopération interdisciplinaire, une meilleure visibilité des produits IUFRO de recherche scientifique et de la coopération en réseau, ainsi qu'en faveur de solutions à la base scientifique et des options pour influencer les processus politiques.

Objectif 1

Excellence scientifique: Viser la qualité, la pertinence et les synergies

Objectif 2

Coopération en réseau: Renforcer la communication, la visibilité et l'action directe

Objectif 3

Impact dans le domaine politique: Fournir des analyses, les contenus et les options

L'atteinte de ces objectifs de recherche et de portée institutionnelle permettra à l'IUFRO et à ses membres de répondre de manière efficace aux changements des paradigmes concernant la forêt et la recherche forestière et de se positionner d'une manière durable en tant que premier réseau mondial de coopération en matière de recherche forestière.



KURZFASSUNG

Der Internationale Verband Forstlicher Forschungsanstalten (IUFRO) ist das führende globale Netzwerk der waldwissenschaftlichen Zusammenarbeit. Er ist die einzige weltweite internationale Organisation, die sich mit forstlicher Forschung und verwandten Disziplinen beschäftigt. Die Mitgliedschaft können sowohl Forschungsorganisationen, Universitäten und Wissenschaftler als auch Entscheidungsträger und andere Interessenvertreter, für die Wald und Bäume von Bedeutung sind, erwerben.

Unsere Mission ist die Förderung von Forschungsexzellenz und Wissensverbreitung sowie die Förderung wissenschaftsbasierter Lösungen für waldrelevante Probleme zum Wohle der Wälder und Menschen auf der ganzen Welt.

Mit der Strategie für die Jahre 2015-2019 konzentriert sich IUFRO auf fünf Forschungsthemen mit den damit verbundenen Schwerpunktbereichen und formuliert drei institutionelle Ziele. Die wissenschaftliche Zusammenarbeit im weltweiten IUFRO-Netzwerk soll sich in der kommenden Periode an den folgenden fünf Themen orientieren:

- 1 Wälder für die Menschen**
- 2 Wälder und Klimawandel**
- 3 Wälder und Waldprodukte für eine grünere Zukunft**
- 4 Biologische Vielfalt, Ökosystemleistungen und biologische Invasion**
- 5 Wechselwirkungen zwischen Wald, Boden und Wasser**

Ausgehend von der vorherigen Strategie unterstreichen die drei institutionellen Ziele das Engagement von IUFRO für Forschungsexzellenz und interdisziplinäre Kooperation, für eine bessere Sichtbarkeit von Wissensprodukten und der Zusammenarbeit im IUFRO-Netzwerk, sowie für wissenschaftsbasierte Lösungen und Optionen mit Einfluss auf politische Prozesse.

Ziel 1

Forschungsexzellenz: Streben nach Qualität, Relevanz und Synergien

Ziel 2

Zusammenarbeit im IUFRO-Netzwerk: Verstärkung von Kommunikation, Sichtbarkeit und Reichweite

Ziel 3

Einfluss auf politische Prozesse: Präsentation von Analysen, Erkenntnissen und Optionen

Die Erreichung der thematischen und institutionellen Ziele soll IUFRO und seine Mitglieder darin unterstützen, auf den Paradigmenwechsel in den Bereichen Wald und Waldforschung effizient zu reagieren und IUFRO noch stärker als das führende globale Netzwerk für waldbezogene Forschung zu positionieren.



RESUMEN EJECUTIVO

La Unión Internacional de Organizaciones de Investigación Forestal (IUFRO, por sus siglas en inglés) es la principal red mundial para la cooperación en ciencias forestales. Es la única organización internacional de alcance mundial dedicada a la investigación forestal y otras ciencias afines. Nuestra membresía reúne de manera excepcional a organizaciones de investigación, científicos individuales, y universidades, así como autoridades de toma de decisiones y otras partes interesadas cuyo enfoque está en los bosques y en los árboles.

La misión de IUFRO es promover la investigación de excelencia y el intercambio de conocimiento, así como fomentar el desarrollo de soluciones con base científica para los desafíos relacionados con los bosques, en beneficio de la gente y de los bosques alrededor del mundo.

Con la Estrategia 2015-2019, IUFRO abarca cinco temas de investigación y áreas de énfasis asociadas, y tres metas institucionales. Los siguientes cinco temas tienen como objetivo orientar la colaboración científica dentro de la red global de IUFRO durante el próximo periodo:

Tema 1 Bosques para la gente

Tema 2 Bosques y cambio climático

Tema 3 Bosques y productos forestales para un futuro más verde

Tema 4 Biodiversidad, servicios ecosistémicos, e invasiones biológicas

Tema 5 Interacciones entre bosque, suelo, y agua

Las tres metas institucionales, adaptadas de la estrategia anterior, muestran el compromiso de IUFRO con promover la investigación de excelencia y la cooperación interdisciplinaria, una mejor visibilidad de los resultados de investigación y de la red de cooperación de IUFRO, y soluciones con base científica, así como opciones para influir en los procesos políticos.

Meta 1

Investigación de excelencia: aspirar a la calidad, la relevancia, y las sinergias

Meta 2

Red de cooperación: incrementar la comunicación, la visibilidad, y el alcance

Meta 3

Impacto en el ámbito político: proporcionar análisis, perspectivas, y opciones

Alcanzar los objetivos, tanto temáticos como institucionales, permitirá a IUFRO y a sus miembros responder con eficacia a los cambios de paradigmas en materia de bosques y ciencias forestales, y contribuirá a posicionar a IUFRO como la principal red mundial de investigación relacionada con bosques.





VISION

The leading global network for forest-related research that serves the needs of all forest scientists, research organizations and decision-makers.

MISSION

IUFRO advances research excellence and knowledge sharing, and fosters development of science-based solutions to forest-related challenges for the benefit of forests and people worldwide.

CORE VALUES

The following core values and associated behaviours will guide the work of IUFRO's officeholders:

*Service
Independence
Integrity
Excellence
Networking*





OVERVIEW

An increasing world population, coupled with resource-intensive lifestyles, is putting more pressure on forests and trees. Expected climate disruptions and ongoing environmental degradation are likely to further exacerbate these pressures.

Forests cover more than 30% of the world's land base and provide numerous ecosystem services that are vital for human well-being and livelihoods. IUFRO, the largest worldwide network on forest research, aims at improving the knowledge base required to mitigate the threats affecting forests in a broad sense, and to contribute to worldwide capacity building required to develop and implement solutions that are locally adapted and broadly accepted.

Forests can no longer be seen in isolation but rather as systems that are interconnected with other environmental or human systems. IUFRO's 2015-2019 Strategy is built on the conviction that the main challenges for forest research relate to the interconnections between ecosystems and services for people; climate and land-use; the natural resource-base and environmentally-sound products; biodiversity and human health and well-being; and, ecosystems and global water cycling. IUFRO plans to approach these challenges through five themes which will guide the scientific collaboration within its global network in the forthcoming Board period.

First, "Forests for People" addresses the full range of services provided by forest ecosystems, supporting people's livelihoods and quality of life, and the institutional arrangements to secure those services in the future.

Second, "Forests and Climate Change" addresses how forest ecosystems can be made more robust and more resilient against both anticipated and unknown climate disruptions.

Third, "Forests and Forest Products for a Greener Future" deals with the development of new, environmentally-sound, bio-based forest products and how the environmental performance of existing bio-based forest products can be improved.

Fourth, "Biodiversity, Ecosystem Services and Biological Invasions" addresses how the loss of biodiversity may be prevented or mitigated across ecosystems and landscapes and how management regimes could be adapted to enhance biodiversity and control biological invasions.

Fifth, "Forests, Soil and Water Interactions" deals with how the provision of freshwater from forest catchments – estimated at about 75% of the total freshwater volume – could be guaranteed in the future with novel cross-sectorial management regimes for forest ecosystems that are particularly important for water conservation and regulation.



Forest governance is a cross-cutting issue relevant to all of the five themes impacting on forests and forest land use. The fact that governance issues in other sectors also impact on the forest sector further adds complexity. Today forest governance is characterized by a shift from governmental decision-making to steering by policy networks and by a shift from political decision-making at nation state level, to the regional, international and sub-national levels. Understanding and explaining complex governance arrangements from local to global levels is central to providing policy-relevant

information for a framework that supports sustainable forest management.

Scientific research has shown that global prosperity and human well-being depend on the productivity and robustness of the world's ecosystems and the services they provide. With the 2015-2019 Strategy, IUFRO wants to contribute to a knowledge base that will support our efforts to tackle climate and man-made threats to sustainable development and to human well-being.

THEME 1: FORESTS FOR PEOPLE

PROBLEM STATEMENT

Climate change, urbanization, globalization, demographic changes and changing consumption patterns affect forests and their social, cultural, ecological and economic functions resulting in consequences for social values of forests, for people's livelihoods and quality of life. These consequences affect urban and rural populations (particularly forest-dependent people) globally but their impacts are more acutely felt in regions where people are directly dependent on the environmental services provided by forests. They also place demands for improving governance of forests.

JUSTIFICATION

Understanding the drivers of the changing relationship between forests and people is a major

challenge of forest research and a prerequisite for development of more sustainable relationships between forests and people, as individuals, households or in larger governance structures at the local, national or international level. These challenges need to be addressed by scientific efforts across different disciplines and regions and by demonstrating strong evidence of material and intangible benefits to individuals and communities. International scientific collaboration is needed to improve management of forests and forested landscapes, enhance and optimize the flow of forest ecosystem services (particularly to vulnerable communities) and provide advanced information tools that underpin policy decisions and lead to the equitable delivery of forest benefits.



EMPHASIS AREAS

1. Forests for livelihood

The current and potential contribution of forests and trees to agricultural productivity, food security, energy security, nutrition, human health, and enhancement of traditional and alternative livelihoods (such as ecotourism and non-timber forest product development) for sustainable rural development, community well-being and resilience in the face of global change.

2. Forests for quality of life

The role of forested landscapes and their management in rural and peri-urban areas, and trees and forests in urban centres, for providing environmental services to expanding urban populations, with an emphasis on human health, well-being and quality of life, giving special consideration to children, youth and the elderly.

3. Social values of forests

The traditional and emerging cultural relationships between people and forests in rural and urban areas, with an emphasis on the cultural services provided by forests in different societies, public perceptions of forests and forest use, health benefits provided by nature-based recreation, forest education and “citizen science”, and communications.

4. Forest governance

The role of land and forest tenure, rights and governance systems at different scales with special consideration of cross-sectoral policy coordination, community participation and current and emerging markets for forest ecosystem services, emphasizing sustainable management of forests for reducing rural poverty and enhancing services to growing urban populations.





THEME 2: FORESTS AND CLIMATE CHANGE

PROBLEM STATEMENT

Overall, global temperatures are virtually certain to increase by 2100. Regionally, more frequent heat waves, storms and heavy precipitation are very likely, and more intense and longer droughts are likely. Elevated levels of CO₂, ozone and nitrogen deposition impact on forest structure and function as well as ecosystem services. The most significant short-term effects are caused by altered disturbance regimes, such as wildfires, insect infestations, soil erosion, flooding and drought-induced tree mortality. In light of different contexts and an uncertain future evolution, different solutions will be needed for each forest region.

JUSTIFICATION

Forests mitigate global warming and affect climate by controlling carbon and water cycles. Deforestation, forest degradation and peatland emissions account for approximately 15% of greenhouse gas emissions. Increasing temperatures, frequent and long-lasting droughts, elevated levels of air pollution, and improper management practices affect growth and health of forest ecosystems in many regions. Catastrophic storms may result in floods and windthrows affecting global human well-being and health, and in particular that of forest-dependent people. Mitigation and adaptation strategies are needed to ensure the continued provision of high-level forest ecosystem services.

EMPHASIS AREAS

1. Impacts of climate change on forest ecosystems and forest-dependent people

The relationship between on the one hand, changes in temperatures, frequent and long-lasting droughts, elevated air pollution, and improper management practices, and on the other, outbreaks of insects and diseases, weakening forest stands and regional diebacks, and how this relationship affects forest-dependent people so as to design strategies that can reduce impacts on both forests and people.

2. Feedbacks between climate, land cover, forest disturbance and provision of energy and water

The resilience of forests to disturbances such as pollution, insect and disease outbreaks, erosion, flooding, drought and wildland fires; and ensuring the sustainable growth of forests and afforestation for optimal carbon and water management.

3. Biodiversity and invasive species

Options to halt and reverse the threat of extinction from species invasions caused by increasing globalization.

4. Mitigation and adaptation strategies

The development of strategies for transforming science-based adaptation options into practices, and the identification of effective ways for communication to support the development of coping strategies.





THEME 3: FORESTS AND FOREST-BASED PRODUCTS FOR A GREENER FUTURE

PROBLEM STATEMENT

With one third of the Earth's land mass covered in forests, our forests and the renewable products they yield will play a critical role in the future welfare of the world's population. The livelihoods of more than a quarter of the Earth's population depend on forests, and woody biomass constitutes the main fuel for cooking and heating for a majority of the global population. Forests also provide freshwater, clean air, biodiversity, carbon storage, and many other ecosystem services. Consequently, demand for forest-based products is increasing as population grows, but so is demand for the ecosystem services provided by forests. Yet, forests, and the services they provide, are repeatedly and consistently under-valued resulting, amongst other things, in deforestation and forest degradation.

JUSTIFICATION

Although the critical role that forests play in the welfare of the Earth's population is well recognized, how forests and wood-based products can meet future needs while continuing in their existing role is poorly understood. We know that forests could play an increasing role in the sustainability of the global economy, greater roles in regional and local economies and in the welfare of people, and a key role in the emerging bio-based economy, but meeting these demands without compromising the ability of forests to meet other societal requirements is a serious interdisciplinary challenge. Are

forest resources being allocated optimally, both nationally and internationally? How does international trade affect the optimal use of forest resources? Can or should planted forests replace natural forests as the dominant source of forest products? Are forest-based products really more sustainable than other competing products (e.g., concrete, steel, hemp, cotton), especially when a holistic approach to environmental impact and life cycle analysis is adopted? All of these questions need to be answered through forest research.

EMPHASIS AREAS

1. New forest-based products and services

The discovery and valuation of new ways of using wood in construction, bio-materials, bio-chemicals, bio-plastics, energy products and food additives for their current and future contributions to humankind.

2. Use of forest resources and raw materials

The maximization of economic, social and environmental benefits of forest products while ensuring their sustainability and contribution to a greener future.

3. Valuing forests and their ecosystem services

The design of valuation systems that recognize the true value of forests, especially in relation to competing products, and that are in line with the green/bio-economy.





THEME 4: BIODIVERSITY, ECOSYSTEM SERVICES AND BIOLOGICAL INVASIONS

PROBLEM STATEMENT

Forests are home to much of the world's biodiversity and provide a wide range of forest products and ecosystem services that are vital to humanity. Accordingly, the loss and degradation of forests and the impacts of invasive forest pests and diseases are major environmental concerns. At the current rate, we will lose another third of the global forest cover and associated biodiversity by the end of this century. Furthermore, increasing globalization has led to species invasions which have immense impacts on forest ecosystems, notably leading to species extinctions. Climate change also contributes to important shifts in the abundance and distribution of species, communities and biomes, including undesirable expansion of invasive species in forests. Both planted and natural forests contribute a wide range of ecosystem goods and services, but these are often under-appreciated and under-researched.

JUSTIFICATION

In our globalized world, the provision of forest goods and services and their linkages with biodiversity need to be viewed in an international context and addressed at multiple spatial scales. Pressures, including from biological invasions, on the conservation of forest biodiversity and its sustainable use, affect most aspects of forest manage-

ment. The consequences of invasions on biological diversity, as well as the role of biodiversity and climate change on susceptibility to invasions, are still poorly understood. Determining the effects of forest and biodiversity loss, and developing effective strategies for the conservation of forest biodiversity and associated ecosystem services, requires a collaborative research effort building on previous achievements.

EMPHASIS AREAS

1. Trends, causes and impacts of biodiversity loss at all levels

The causes and effects of forest and biodiversity loss - including loss of genetic diversity - on ecosystem services, and measures to reverse biodiversity loss.

2. Landscape-level strategies for biodiversity conservation and sustainable use

The inclusion in biodiversity conservation strategies of landscape-scale considerations (e.g., thresholds, connectivity, buffers, corridors and matrix management); the provision of ecosystem services across landscapes and their role for livelihoods.

3. Ecosystem services

The ecosystem services forests provide, their relationships with biodiversity, and the beneficiaries of



ecosystem services, including the influence of policies on payments to landowners, and the importance of awareness by the general public on their willingness to support ecosystem services delivery through conservation.

4. Contribution of restoration to the conservation and sustainable use of biodiversity and ecosystem services

The restoration of forests, combining understanding of ecological processes, traditional knowledge

and collaboration in ways that respect the needs of forest communities and promote ecological integrity.

5. Biological invasions threatening biodiversity and ecosystem services of forests

The assessment of the risks and impacts of biological invasions, pathway risk management, surveillance and incursion response.

THEME 5: FORESTS, SOIL AND WATER INTERACTIONS

PROBLEM STATEMENT

Forests and forested landscapes are recognized for their critical role in providing many ecosystem services such as water conservation and regulation, and soil protection. Three-quarters of the world's freshwater is provided through forested catchments, whereas 8% of the world's forests have soil and water protection as their primary objective. However, increasing numbers of communities and countries are affected by soil erosion, decreasing water quality, water shortage and desertification in relation to deforestation, forest degradation, land-use changes, pollution and climate change.

JUSTIFICATION

There are still knowledge gaps about the interactions between forests, trees, soils and water resources, and large uncertainties on the feedbacks between climate, forest management, soil conservation and water supply. To address those gaps, global research efforts and collaboration are required for: (i) better understanding of the eco-hydrological processes and interactions within and between ecosystems at multiple scales; (ii) better recognition and capacity strengthening in forest eco-hydrology, soil sciences and long term ecosystem research and monitoring; and (iii) integrating



this knowledge at landscape level and translating it into policies, best practices and inclusive decision-making processes. Development of multi-sectoral and integrated landscape approaches are urgently needed to address those issues and to meet growing demands of the green economy on forest ecosystems without detriment to soil and water resources.

EMPHASIS AREAS

1. Macro-level land management and impacts on the water cycle

Landscape level modelling, decision-support tools and monitoring systems for integrated forest, soil and water resource planning and management, through long-term forest ecosystem and watershed experiments.

2. Climate change adaptation and mitigation, and interactions with water yield and quality, nutrients and soil resources

The application of sustainability principles and maintenance of water and soil resources for the successful deployment of climate change adaptation or mitigation strategies such as intensification of forest management or development of forest bioenergy schemes.

3. Forest ecosystems and water conservation

The protective role of different forest ecosystems for water conservation: the mitigating role and adaptation of mangrove ecosystems in response to rising sea levels; adaptive management of ripari-

an forests and protection of aquatic and riparian biodiversity; roles and responsible management of boreal and tropical peatlands and peatland forests.

4. Forest ecosystems and disaster prevention and reduction

The development of best forest management practices to mitigate impacts of disasters and provide ecosystem services, such as natural hazard protection and erosion control, with an emphasis on mountain forest management in relation to watershed sustainability and natural risk management; management of forests for soil and water conservation and drought mitigation in arid and semi-arid areas; and the role of trees and forests for remediation of contaminated sites and mitigation of soil and water pollution.







INSTITUTIONAL GOALS

In the framework of our vision and mission, IUFRO has oriented its institutional strengths and capacities towards three institutional goals which highlight research excellence, network cooperation and policy impact.

The institutional goals, objectives and related actions build on past achievements, and aim to further sharpen the strategic orientation of IUFRO by focusing on areas in which we want to perform better or where we see a need to be more active in the next five years.

Fundraising is of vital importance for all IUFRO activities and spans all thematic and institutional domains. Currently, IUFRO's core operations and programmatic activities are funded mainly by a rather limited number of donors. Hence, there is a need to diversify IUFRO's funding base. Moreover, implementing the IUFRO Strategy and especially the institutional goals will require new and additional resources. Fundraising constitutes thus a cross-cutting goal which requires:

- creating a fundraising culture within IUFRO's decision-making bodies - notably the IUFRO Board and International Council (IC) - including, in the longer term, a balanced representation of expertise in research, fundraising, communications and business administration;

- developing a fundraising strategy – combined with IUFRO's communication efforts – with clear fundraising objectives, targeted funding sources, procedures and tools; and
- strengthening IUFRO's institutional capacity for donor intelligence and fundraising.

GOAL 1 RESEARCH EXCELLENCE: STRIVE FOR QUALITY, RELEVANCE AND SYNERGIES

OBJECTIVES

Improve capacities for science cooperation

Actions:

- Train scientists in economically-disadvantaged countries, and promote their participation in meetings and activities of IUFRO
- Facilitate mobility and exchange of scientists and students across IUFRO member organizations
- Convene IUFRO regional events in between IUFRO World Congresses

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Identify emerging areas of research

Actions:

- Establish a foresight mechanism
- Periodically share results of foresight with IUFRO network

Increase interdisciplinary cooperation from a global science perspective

Actions:

- Encourage the alignment of work from all IUFRO units to the five themes
- Promote interdisciplinary research and cooperation within the IUFRO structure
- Identify and engage scientific partners from outside IUFRO
- Promote participation of IUFRO scientists in activities of other scientific organizations
- Fill thematic gaps in the IUFRO structure

GOAL 2

NETWORK COOPERATION: INCREASE COMMUNICATION, VISIBILITY AND OUTREACH

OBJECTIVES

Enhance communication at all levels

Actions:

- Develop a communication strategy for better internal and external communication, including innovative tools and technologies
- Encourage direct communication between scientists, and among IUFRO Headquarters and IUFRO officeholders
- More actively involve members, especially directors of research organizations and IC members in network cooperation
- Further develop a more dynamic IUFRO website, with special attention to specific target audiences

Widen and strengthen the member base and pool of officeholders

Actions:

- Identify and approach relevant institutions from other disciplines
- Further promote activities in IUFRO regions/ regional networks
- Improve gender, geographic and age balance
- Encourage and support more scientists from economically disadvantaged countries to become IUFRO officeholders

Disseminate information about research findings

Actions:

- Increase visibility of research findings on the IUFRO website, and via other information services
- Offer free access to IUFRO knowledge products
- Develop a publication strategy
- Periodically assess needs of scientists, students and other stakeholders regarding IUFRO knowledge products and cooperation

GOAL 3

POLICY IMPACT:

PROVIDE ANALYSIS, INSIGHTS AND OPTIONS

OBJECTIVES

Prioritize IUFRO's participation in policy processes

Actions:

- Expand IUFRO's capacity for research synthesis and scientific advice
- Systematically assess impact of IUFRO's outputs on policy processes

Respond rapidly to new policy needs

Actions:

- Increase IUFRO's capacity to rapidly mobilize its scientific knowledge to respond to needs at the science/policy interface
- Create an electronic repository of recent analyses to answer questions on forest trends and issues



Strengthen education on forests

Actions:

- Enhance collaboration and cooperation with international and regional university and deans' associations, education networks and student associations
- Encourage linkages between educational bodies and IUFRO scientists and member organizations
- Establish a joint mechanism with the International Forestry Students' Association to promote the further development of forest and forestry education



LIST OF ACRONYMS AND ABBREVIATIONS

CPF	Collaborative Partnership on Forests
IC	International Council
IUFRO	International Union of Forest Research Organizations
MC	IUFRO Management Committee
RECOFTC	The Center for People and Forests
SPDC	Special Programme for Development of Capacities

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International Union of Forest Research Organizations
Union Internationale des Instituts de Recherches Forestières
Internationaler Verband Forstlicher Forschungsanstalten
Unión Internacional de Organizaciones de Investigación Forestal

