Forests for the Future

Forests are essential for human well-being in many ways. They provide a broad range of goods and services, which contribute to the livelihoods of around 1.6 billion people worldwide. Forests also contribute fundamentally to quality of life, protect water resources and enhance local climate.

Global trends such as urbanization and population growth influence the relationship between forests and people, and shape the demand for forest goods and services. Changing markets may provide new economic opportunities, such as traditional and innovative non-timber forest products, contributions to health and wellbeing, and ecotourism.

To ensure the quality of forests and the flow of benefits to people, many research questions need to be tackled in an interdisciplinary manner in collaboration with various actors. The increasing number of governance challenges related to forests is among them.

IUFRO Task Force

The International Union of Forest Research Organizations (IUFRO) has established the Task Force “Forests for People”, with the goal to develop a profound basis of scientific knowledge on forest management, planning and administration, and to disseminate research findings and identify future research needs.

As a first step, the Task Force organized an international conference in May 2012 in Austria, where researchers from 40 countries congregated to exchange knowledge and discuss future research challenges. A follow-up conference will be organized in the USA next year:

2nd Conference on Forests for People: A Growing Interdisciplinary Task
19-23 May 2013, Traverse City, Michigan, USA

The IUFRO Task Force’s results will be presented at the 24th IUFRO World Congress in Salt Lake City, USA, in October 2014.
Challenges and the Role of Research

The IUFRO Task Force Forests for People started its work by summarizing and defining areas of required expertise and knowledge. The overarching theme “forests for people” can be divided into four main clusters which are described and illustrated in the following.

Livelihoods - issues of agro-forestry, food security, fuels, poverty alleviation, and human dislocation

For a large number of people, forests play a vital role for their livelihood, food security, nutrition and fuels. A loss or further degradation of forests may lead to poverty and human dislocation.

For example, research on community forest management in Western Bhutan showed that communities using non-wood forest products such as mushrooms and leaf litter had a 10% higher household income from the forest. Similar trends are reported from many other regions.

Other research findings emphasize the significance of women who have extensive knowledge about the use of non-timber forest products (NTFP). However, several studies indicate that in some areas, knowledge about NTFP has disappeared already. To counter this trend, researchers are developing concepts to train people in traditional knowledge and how these products can be utilized for enhancing community income.

Health, Recreation and Tourism - issues of human health, outdoor recreation and nature-based tourism

In developed countries, the functions of forests have changed over time. There, several social services are recognized increasingly as the major benefits from forests such as their contribution to health, well-being and quality of life of their citizens.

All over the world, tourism is a growing economic sector, which is always in search of new attractions to serve as opportunities for new recreation and nature-based tourism experiences.

Forests and natural environments everywhere offer opportunities for regional development around nature-based tourism and outdoor recreation.

National surveys in a few select countries and many in-depth studies demonstrate the increasing relevance of forests for recreation and personal restoration. For example, in a highly forested country such as Sweden, total annual expenditures on outdoor recreation amount to about 10 billion Euros, contributing to some 75,000 jobs. Furthermore, first results from innovative research clearly document that forest visits contribute significantly to people’s well-being and mental restoration.

All over the world, researchers are studying the impact of forests on people’s physical and psychological health. This is of particular interest for urbanized, developed countries where the increasing risk of cardiovascular disease, type 2 diabetes, cancer and psychological disorders constitute a major societal problem.

Measurements show that even short visits to urban forests reduce the blood pressure and heart rate. Further research will help to substantiate the evidence found in various parts of the world that the described positive effects of forests contribute to longer-term health benefits.

The use of medicinal plants derived from forests is another challenging issue worldwide and of continuously increasing relevance.

Recent research findings show how indigenous people such as Native Americans applied traditional medical practices or how forest herbs are used in Nigeria. In the light of an increasing antibiotic resistance there is a growing need for these research findings and the preservation of indigenous medicinal knowledge.
The international trend of **urbanization** presents an ongoing threat to forests close to cities and metropolitan areas. The reduction of forest area goes hand in hand with significant losses of ecosystem services, which in turn reduces the quality of spaces and places for living.

In rural areas, the increasing **demand for biomass** is one emerging trend with large potential to affect the character of the landscape and its ecosystem services in a fundamental manner.

International research and case studies show how communities and initiatives can actually protect their forests and associated forest products, and preserve environmental service functions as well as historical and aesthetic values. Case studies from various parts of the world describe the success-factors for public involvement, voluntary initiatives and collaborative governance.

A new challenge is to enhance and protect ecosystem services especially in urban environments in order to mitigate the effects of **climate change**, such as heat waves in cities. Metropolitan areas and cities will benefit from more green space and the selection of suitable tree species and management actions to maintain the green infrastructure in and around the urbanized environment.

**Urban and Rural Landscapes** - issues of ecosystem services, economic benefits and development, spaces and places for living

Many countries have a strong cultural relationship and history associated with forests, the use of timber, related professions, traditions and practices. It is important to preserve this knowledge and integrate it into **educational programs** in order to maintain and increase the awareness of forest and forest products.

Studies with school children in Germany and Austria already describe a significant alienation from nature. Children from an urban environment were able to recognize one or two tree species only. New concepts have been developed to enhance the educational programs by forest administration and management.

Furthermore, **participatory planning, communication and good governance** play a crucial role in including the perception of forests and their importance into decision-making processes.

**Culture and Education** - issues of perception of forests, spiritual character, education, historical tradition and practice, communication and governance

Technical innovation, new machines in forest management and genetically modified tree species constitute further ongoing challenges for the society but also for forest education and training. Beside the technological evolution and the emergence of new opportunities, local knowledge, culture, tradition and standards must be considered equally to increase the acceptance of innovation and, to increase the economic and social benefits from forests, while reducing risk situations.

Therefore Forestry training centers across the world need to develop new training methodologies, experiences and opportunities for knowledge transfer.

New technical options and new forest management actions need to be presented in such a manner that they become acceptable by the local population. Sound social science integrated in adapted planning tools and management frameworks will assist in the achievement of these sometimes challenging goals.
The International Union of Forest Research Organizations (IUFRO) is the only world-wide organization devoted to forest research and related sciences. Its members are research institutions, universities, and individual scientists as well as decision-making authorities and other stakeholders with a focus on forests and trees.

**Forests for People** is about tools, initiatives and solutions, so that we are able to respond to the multiple objectives of forest management.

**IUFRO Task Force Forests for People**
http://www.iufro.org/science/task-forces/forests-people/

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