

SHIGA DECLARATION ON FORESTS AND WATER

**International Expert Meeting on Forests and Water
20-22 November 2002, Shiga, Japan**

Background

Forested catchments supply a high proportion of the water for domestic, agricultural, industrial and ecological needs in both upstream and downstream areas. Forests also provide society with a range of other productive, conservation, amenity, environmental and livelihood benefits. A key challenge faced by land, forest and water managers is to maximize this wide range of multi-sectoral forest benefits without detriment to water resources and ecosystem function.

To contribute to the discussion and outcomes of the 3rd World Water Forum to be held in Japan in March 2003 – about 100 forest and watershed management experts from 18 countries and 16 international organizations/NGOs met in Shiga, Japan under the organization of the Forestry Agency of Japan and the Shiga Prefectural Government.

There is a growing international debate and concern about an impending ‘water crisis’, and increasing pressures on the land resource to provide food, water and to sustain production, conservation, amenity, recreation and environmental benefits. In this regard, the management of forests in relation to water is a critical issue that must be afforded high priority.

Sustainable forest management is a key factor in water resources management in general and upland resources development in particular. Both intact natural forests and well-managed forests generally produce high quality water. In certain circumstances, they can also contribute to reducing storm flow peaks for a given input of precipitation. These forests also play an important role in reducing soil erosion and subsequent downstream sedimentation.

The Expert Meeting reviewed the current state of knowledge and future needs to better understand the hydrological and environmental services of forests, and their role in alleviating poverty, the provision of safe drinking water, food security, conservation and sustainable use of biodiversity, and providing other cultural and socio-economic benefits, as outlined in the paragraphs 6, 7, 23 and 43 of the World Summit on Sustainable

Development (WSSD) Plan of Implementation.

The experts also recognized the need to take actions at all levels with regard to sustainable forest management, as outlined in the paragraph 43 of the WSSD Plan of Implementation, which emphasized the multiple benefits of both natural and planted forests and trees. Such sustainable forest management should be incorporated within the development and implementation of national/regional strategies, plans and programmes with regard to integrated river basin, watershed and groundwater management.

There is also a need to employ the full range of policy instruments, together with regulation, monitoring, voluntary measures, market and information-based tools, land-use management and cost recovery of water services, identified in the paragraph 25 of the WSSD Plan of Implementation. The Expert Meeting also took into account of the Millennium Development Goals and the recommendations and targets set by the WSSD which called for a people-oriented approach towards achieving integrated management of land, water, and living resources in fulfilling human needs.

Finally, the Expert Meeting developed recommendations to guide decision makers, researchers, academics, the public, NGOs, private sector, donors, and implementing agencies in designing and implementing effective policies to achieve multiple objectives for sound forest and water management.

Key Issues

The following key issues were identified:

1. Promoting the development and the wider adoption of holistic approaches to forest and water management that integrate the needs of people and the environment

The success of holistic approaches requires the effective involvement of a diversity of stakeholders. As such, there is a critical need to develop cross-sectoral and participatory watershed management frameworks to achieve long-term multiple benefits for a broad range of stakeholders and the environment. This will also require an appropriate policy environment and incentives for stakeholders, including local communities, government agencies, and the private sector, to effectively participate in the development and implementation of management programmes.

To ensure the long-term sustainability of forest and water resources there is a need to integrate these management programmes into local and national sustainable development. It is also important to monitor and evaluate the full impact of management programmes and

to build on lessons learned.

2. Improving understanding of the bio-physical interaction between forests and water

Much is known about hydrological processes in forests at a small catchment scale. However, there is a critical need to initiate and strengthen long-term eco-hydrological monitoring for further research to improve understanding of large-scale interactions and the influence of forests on dry season flows, flood mitigation and groundwater recharge in a range of environments in line with the paragraph 27 of the WSSD Plan of Implementation.

A critical research need is to enhance our understanding of the hydrological impacts arising from the rehabilitation of degraded lands through various afforestation-reforestation strategies. Long-term data sets are also required to better understand the impacts of climate variability from interannual to multidecadal time scales on forest hydrology and the utility of various forest management practices. Such research needs to cover all forest types.

3. Improving understanding of the cultural and socio-economic impacts of different forest and water policies and management practices

There is a need for better understanding of the economic costs and benefits of forest and watershed services. There is also a need to better understand the impact of different forest/water policies on the livelihoods and interests of both upstream and downstream stakeholders.

4. Developing better mechanisms for managing upstream/downstream linkages and interactions

There is a critical need to develop better understanding of the economic, environmental, and social linkages between the upstream and downstream resource users. Improving the mechanisms for including local communities and other stakeholders in the design and implementation of watershed management policies is also required. More experimentation and further development of equitable and effective compensation mechanisms are crucial.

5. Enhancing knowledge and information sharing

Better dissemination of scientific knowledge to policy makers, managers, educators, media and the general public is urgently required. To this end, it is necessary to identify the information needs of different stakeholders and to design information and educational

products that are easily understood by these groups.

Recommendations

Effective forest and watershed management are valuable for long-term sustainability of water resources. Governments and other stakeholders should develop policies and implement programmes that promote holistic, multi-disciplinary and multi-stakeholder approaches that link forests, water, watersheds, the environment and people.

The Expert Meeting recommends that decision makers:

1. Move from a sectoral to an integrated and cross-sectoral approach to economic, social and environmental planning at local, national and international levels. This approach would build on and develop the necessary bio-physical and socio-economic understanding of forest and water interactions to identify key forest and water issues in the context of the location concerned.
2. Establish the total economic value (capturing all products and services) of forest and water resources, and the economic implications of different policies and management practices. The distribution and the importance of benefits to particular stakeholders should also be established.
3. Put in place appropriate incentives to support the sustainable management of forest and water services to ensure that those who use resources pay the full cost of their exploitation and those who bear the costs of conservation are equitably compensated. In particular, consideration should be given to the provision of secure resource rights, the reform of water pricing policies, the development of market-based or other mechanisms of payments for environmental services, and the removal of undesirable (perverse) subsidies to the agricultural and forestry sectors.
4. Promote effective and equitable collaborative arrangements and partnerships among governments, local communities, research institutions, civil society, the private sector, forest and water managers, and other stakeholders. These will facilitate knowledge sharing and capacity building, leading to sound science-based policy development and tangible improvements in forest and water management.
5. Address forest and water interactions in forest resources assessments, and request that the international community provides sufficient resources to accomplish this important task.