
Seminar on Forests and Natural Disasters

PROVISIONAL PROGRAMME

Pre-session Seminar: 25th session of the Asia-Pacific Forestry Commission

Monday 4 November, Rotorua, New Zealand

Works Room, Rotorua Energy Events Centre

Background and objectives

Increasing frequency and intensity of natural disasters all over the world have drawn attention to the need for a more holistic approach in dealing with such natural disasters including floods, landslides, storm surges, tsunamis, earthquakes, cyclonic winds and wildfires. In the period 2002–2011, the International Emergency Disasters Database (EMDAT) recorded an annual average of 396 disasters. The average annual total of disaster fatalities in the period is 114,500 people. Average annual economic losses total more than US\$142 billion. Annually, 268 million people have been affected by disasters during 2002-2011. Floods and storms account for most of the fatalities and damage to property.

Most recent assessments indicate that anthropic factors have significantly enhanced the severity of these disasters and many so-called natural disasters are triggered by human actions, often driven by population expansion and economic development. In the wake of increasing losses of life and damage to property, many countries are making efforts to take preventive measures to minimize damage and to improve their abilities to deal with rescue, rehabilitation and restoration.

While disasters have always occurred, there are indications that their frequency and intensity are increasing. In particular, climate change is expected to increase the frequency and intensity of disaster events in the future. The most vulnerable in this regard are the small island developing states (SIDS), whose very existence is being called into question in the context of rising sea levels and the potential for recurring disasters such as typhoons and storm surges. There are also clear indications that the impacts of natural disasters are particularly severe on the poorer sections in society, who often live in the most hazard-prone areas and whose ability to take appropriate measures – even when early warnings are available – remains limited.

Land uses in hazard prone areas are a critical issue, both in reducing the severity of natural disasters and in the speedy rehabilitation of affected populations. Forests and forestry often can play crucial roles – but, also have limitations – in mitigating some natural disasters and their impacts, and in post-disaster reconstruction and recovery. Evidence from the Asia-Pacific region demonstrates that forests, when appropriately planned and managed, can withstand and protect against natural disasters of varying degrees and types including tsunami, storm surges, cyclones, landslides, and floods. Appropriately planned forests and tree planting can mitigate the spread and impacts of wildfires, rehabilitate landslide-affected areas, help to stabilize slopes, and protect riparian zones. Wood is an important building material in post-disaster reconstruction and particularly appropriate in earthquake-prone areas. It is in this context that this seminar aims to assess the linkage between people, forests and natural disasters and identify what forests and

forestry could do in the first place to avert or reduce the impact and help in the relief and rehabilitation including preventing future recurrence of disasters.

This seminar will build on the collaborative *International seminar on the role of forests in natural disasters and revival of forests and forestry* held in Sendai, Japan in February 2012. It will provide opportunity to showcase extensive work carried out in relation to the role of forests in protecting against and mitigating floods, cyclones, landslides, tsunami impacts and wildfire risks as well as highlighting the use of wood in earthquake rebuilds. The seminar will be held as a pre-session event to the 25th session of the Asia-Pacific Forestry Commission.

The main objectives of the seminar are to:

- Discuss the current state of knowledge on the role of forests in preventing, reducing and mitigating natural disasters;
- Examine the human dimensions of natural disasters and the potential role of forests in mitigating disaster-related problems.
- Indicate how forests and forestry could be integrated in the disaster management strategies and plans at the local, national and regional levels.
- Discuss the potential value and a framework for a regional action plan on forests for natural disasters.

Important issues and questions that will be addressed during the seminar include:

- Based on the current state of knowledge, what is the role of forests as regards preventing and mitigating natural disasters such as floods, cyclones, landslides, storm surges, tsunamis, wildfires, etc?
- What is the role of forests in the rehabilitation of communities and areas affected by natural disasters?
- How do we pursue a holistic, ecosystem approach in managing natural disasters and in what ways should forests and forestry fit into such a strategy?
- What should be done to mainstream forestry into disaster management strategies at different levels?
- What needs to be done to enhance community involvement in disaster management and what roles should forestry departments play in strengthening community initiatives, especially in forested areas where they are the primary agents of government jurisdiction?

PROGRAMME

Session	Time	Topic/ Activity
Opening session	09.00 – 09.05	Welcome
	09.05 – 09.15	Introduction
Session 1: Forests and natural disasters: The underlying science	09.15 – 09.35	The tsunami mitigating effects of forests in the Great East Japan Earthquake
	09.35 – 10.00	Forests and floods: drowning in fiction or thriving on facts?
	10.00 – 10.20	Forests and landslides
	10.20 – 10.40	Coffee break
	10.40 – 11.00	Managing wind risk in forests
	11.00 – 11.20	Science of wildfire: experiences in protection and mitigation
	11.20 – 11.40	Building with wood for earthquake damage-resistant solutions
	11.40 – 12.30	Discussion
12.30 – 14.00 Lunch		
Session 2: Forests and natural disasters: The human dimension	14.00 – 14.20	Impacts of natural disasters on local communities
	14.20 – 14.40	Forests and forestry in enhancing resilience of local communities
	14.40 – 15.00	Rebuilding the natural capital and rehabilitation of affected people: What forestry can do and what it cannot?
	15.00 – 15.30	Discussion
	15.30 – 16.00	Coffee break
Session 3: The future: Addressing the uncertainties	16.00 – 16.20	Future scenarios for people, forests and natural disasters in the context of climate change
	16.20 – 16.40	Mainstreaming forestry in disaster management strategies: Opportunities and constraints
	16.40 – 17.20	Discussion: Coping with disasters – towards a regional action plan on forests and natural disasters
Concluding session	17.20 – 17.30	Summing up the deliberations and the way forward