

Session 9. Innovative management and policy approaches to climate change adaptation

Summary report

Future climate change impact scenarios have been developed, but uncertainty about risks and responses remain. The impact of climate change and extreme weather events on forest ecosystems is generally framed, with anticipated increased impacts of higher temperatures, less rainfall in some areas and higher rainfall in others, increased risks, incidence, and severity of impacts of typhoons/cyclones, fire, insects, diseases and other pests risks.

Participants discussed potential adaptation measures and management actions and identified the following options.

- Focus priority initiatives on the communities and forest ecosystems that are the most vulnerable (hot spots) to climate change and support (achievable) response options with the necessary resources (personnel and funds).
- Increase public awareness of the impacts and need for adaptation management in response to climate change and extreme weather events, document success stories and support champions.
- Elevate the importance of the social sciences in the adaptation of communities, land-uses and forest management and engage in participatory planning, community and forestry dialogue, shared understanding and long term goals in adapting forest management to climate change.
- Greater focus in adaptation of forest management response options that address risk aversion through breeding programmes (species that are robust, flexible, adaptable), greater incorporation of mixtures (species and provenances), introduction of structural variation (uneven spacing, age classes and silviculture) and simulation of near to nature forests (semi-natural) and integration of productive and protective functions of forests across landscapes to maintain, as far as possible, the functions of forests in the provision of goods and services.
- Use simple tools (illustrations, landscape models, best practices guidelines, etc.) that communities and foresters can visualize and understand before they can have dialogues on responses towards closer to nature forests that are closer to people and communities. This requires collaborative, adaptive forest management approaches in the planning and learning by doing in the implementation, constantly reviewing based upon emerging conditions and forest management performance.
- Increase monitoring, early warning, detection, preparedness, prevention, early response/suppression and restoration in integrated, inter-sectoral, landscape approaches to fire management and forest health (insects, diseases, pests and invasive species).
- Improve knowledge in past and present climate change impacts, with the aim to quantify the drivers of change and to reduce the uncertainty, understand the sensitivities, vulnerabilities and the needs for adaptation.
- A proactive management response to climate change is to identify management goals, evaluate vulnerabilities, risks and uncertainties to climate change, derive a management response strategy (toolbox) that will increase resilience by minimizing current stressors and protect against direct and indirect impacts of climate change, i.e. creating resilience, respond to climate influences (e.g. adopt landscape approaches, connect fragmented forests, expand genetic and structural diversity, establish refugia), constantly seek new opportunities, constantly reassess responses and adapt/realign goals under changing conditions.
- Confront what can and cannot be done – do the doable – adaptation to climate change is as much a cultural and intellectual challenge as it an ecological one – think outside the institutional and intellectual silos.
- Build partnerships and collaboration with the key land-user groups, including the private sector.

- In the face of incomplete scientific knowledge, data and information, a start must be made with what we currently know, constantly reassess, adapt to new goals and management responses, focus on win-win adaptation options. As most impacts are irreversible, if we wait for more complete knowledge/technology, we will be too late and the climate change impacts may be greater.
- Protected area managers need to integrate protected areas into larger landscapes, include restoration activities, engage local communities, value protected areas, reduce barriers, prioritize more resilient habitats and protect against fires, insects, diseases and other pest attacks. Decision makers need to recognize the value of protected areas, incorporate climate change and disaster risk management into strategies and include protected area management in REDD strategies. Scientists need to develop new monitoring (species, soil, water etc), decision-making tools, build scientific capacity in developing countries and bridge the knowledge/technology divide between science and policy makers and managers.
- Promote in-situ and ex-situ conservation of genetic resources.

Participants concluded that there is a need to:

- integrate climate change and disaster risk management strategies, policies and institutions that focus on pro-poor and specific ecosystem, landscape or community hot spots;
- introduce climate change adaptation and mitigation policies, planning and institutional frameworks in governance that will undertake more intersectoral, multidisciplinary and integrated approaches, improve advocacy, strengthen awareness and capacity on climate change, carbon management and reporting, particularly in developing countries and least developed countries;
- provide greater commitment and capacity building, particularly in developing countries to REDD readiness towards Copenhagen, COP 15, December, 2009.