

## PREFACE

Climate change is of global concern as it affects virtually everyone on this planet. With the general agreement that climate change is likely to occur as a result of human activities, countries are increasingly concerned about the likely adverse impacts of climate change. The role of forest in climate change remains to be one of the most contentious issues in negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. The forests are a major reservoir of carbon, containing some 80% of all the carbon stored in land vegetation, and about 40% of the carbon residing in soils. The UNFCCC called for the stabilization of “greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous (human) interference with the climate system”. The Kyoto Protocol, a significant legally binding treaty created under the UNFCCC for greenhouse gas emission reduction, came into force in February, 2005. The Protocol incorporates the vital role of forests and wetlands in its mechanisms to reduce greenhouse gases. Forestry activities can influence the amount of greenhouse gases in the atmosphere because forests can act both as a sink (absorbing emissions) and as a source of emissions when trees are felled. When a tree or forest is increasing in size, it absorbs carbon as part of the process of building up its biomass - a growing forest is a sink. Thus, sustainable forest management is the way forward in ensuring that more carbon is absorbed than being released. Being a Party in the Protocol, Malaysia is now committed to the full implementation of the Clean Development Mechanism (CDM). It is the only one of the three mechanisms for climate mitigation under the Protocol that allows the participation of the developing countries including Malaysia. Concurrently, the Convention on Biological Diversity (CBD) emphasizes the conservation and sustainable use of forests and wetlands that harbour biological diversity. The rich biological diversity of the forest will be threatened by rapid climate change. Guidelines need to be developed without sacrificing these mutually exclusive requirements. Hence, more studies should be conducted to understand carbon management and biodiversity conservation.

The publication of the Proceedings of the 2<sup>nd</sup> International Workshop on ‘Synergy between Carbon Management and Biodiversity Conservation in Tropical Rain Forests’ held at Sepilok, Sabah, on 30 November, 2005, is timely. The information contained in this volume demonstrates the application of the concept of synergy between carbon management and biodiversity conservation in production forests, which has been suggested by international participants in the workshop. It is also meant to disseminate the results of the on-going research conducted by researchers from the Sabah Forestry Department and also Japanese researchers. Most of the research is carried out at the Deramakot Forest Reserve, a Commercial Forest Reserve that has been certified as a well-managed forest by SGS Malaysia based on the principles and criteria of the Forest Stewardship Council (FSC). Undoubtedly, such collaborative research work would further strengthen Deramakot as a model for demonstrating the synergy between carbon management and biodiversity conservation in productive forests at the international level.

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