

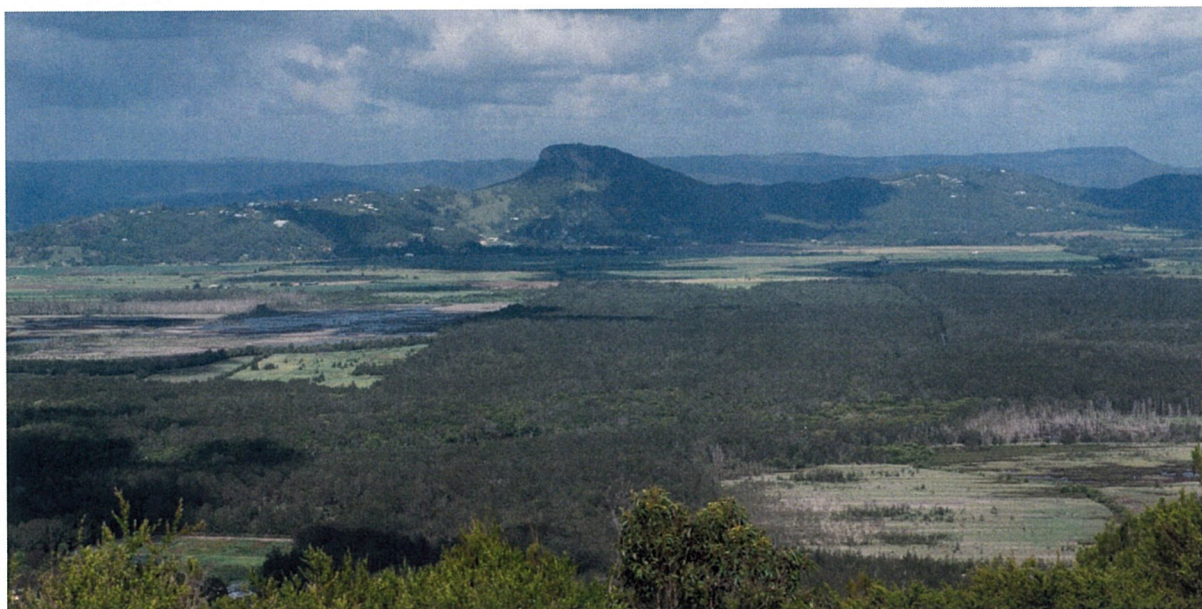
IUFRO Research Group 3.08 Small-scale Forestry

Small-scale and Community Forestry and the Changing Nature of Forest Landscapes

11 – 15 October 2015

Sunshine Coast, Australia

Book of Abstracts



Edited by Stephen Harrison, John Meadows and John Herbohn



Australian Government
Australian Centre for
International Agricultural Research



International Union of Forest Research Organizations



Ecosystem Services Supply from Small-scale Forestry: a Comparative Analysis

Mohammed Alamgir* and Stephen Turton

Centre for Tropical Environmental and Sustainability Science, College of Marine and Environmental Sciences, James Cook University, Cairns, Queensland 4870, Australia

*Corresponding author: mohammed.alamgir@my.jcu.edu.au and alamgirms@gmail.com

Ecosystem services are the benefits community derive from ecosystems. Uninterrupted supply of ecosystem services is an essential requirement for sustainable development, strong linkages between community wellbeing and ecosystem services having been identified. Although a growing number of research papers on ecosystem services assessment can be found, most of them focus on natural forests ecosystems. The capacity of small-scale forestry to supply ecosystem services has largely been ignored. This paper spatially assesses the capacity of small-scale forest restoration plantations to supply ecosystem services, and compares these with rainforests and sclerophyll forests in the Wet Tropics of Far North Queensland, Australia. The Wet Tropics consists of a landscape dominating by rainforests and sclerophyll forests, including the world largest rainforests World Heritage Area. Small-scale restoration plantations are designed to establishing ecological connectivity. Data on forest vegetation have been collected from 66 plots of 0.05 ha area distributed over rainforests, sclerophyll forests and restoration plantations, and spatially analysed. The supply of some ecosystem services including global climate regulation, air quality regulation and habitat provision from small-scale forests is found to be comparable with rainforests and sclerophyll forests. This study has policy implications for environmental decision-making focusing on ecosystem service supply from small-scale forestry.