Imperata economics and policy

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Abstract. Should policymakers – or anyone else – care about millions of ha of *Imperata* grasslands? The answer depends on the balance between costs of conversion to other uses and the net benefits produced in economic growth, poverty alleviation, and protection of the environment. The first section on *Imperata* economics sets up the analytical framework to address this question and draws on the wider development economics literature to consider whether growth and poverty alleviation are conflicting or complementary objectives. Although evidence is limited, it suggests smallholder-based agroforestry could provide the same economic growth with greater poverty alleviation than large-scale forestry estates. There is, however, no substitute for project appraisal for specific settings. The second section on *Imperata* policy reviews whether policy distortions and market failures provide a sufficient rationale for direct policy intervention to promote tree planting on *Imperata* grasslands. Estimates of imputed values of carbon sequestration to alleviate global warming are presented for *Acacia mangium* and rubber agroforestry. The conclusion summarizes the policy research agenda and examines the desirability and feasibility of policy intervention to promote carbon sequestration through *Imperata* grassland conversion to tree-based systems.

Introduction

There are countless references to the 'problem' of *Imperata cylindrica* grasslands in a variety of sources, including the leading textbook on economic development (Gillis et al., 1996). Garrity et al. (this issue) estimate that there may be as much as 57 million ha of *Imperata* grasslands in Asia. By their reckoning, *Imperata* covers much of Indonesia (4% of the area of its land), India (3%), and the Philippines (17%) and almost one quarter of the land area of Vietnam.

There has been almost no economic analysis of agroforestry approaches to conversion of *Imperata* grasslands. Indeed, Nair's general observation (1992, p. 426) that 'economic and financial studies in agroforestry have been grossly inadequate' is indisputable regarding its potential role in *Imperata* grassland conversion. For example, although Turvey (1994, p. 35) emphasized the importance of research to address the 'sociopolitical context within which