

Forestry and agriculture: options for resource allocation in choosing lands for transmigration development

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Abstract

The Indonesian Transmigration program aims to resettle people from heavily populated areas of Java, Madura and Bali in the less developed Outer Islands. The development of a successful program poses problems for the resource planner in balancing three major variables: the economic activity which forms the basis of individual projects, the choice of sites to suit those economic activities, and the background and skills of the potential migrants. This paper concentrates on questions of resource allocation in choosing sites for transmigration development. It is based on the hypothesis that ample land resources are available and that of the three main ecosystems used—tidal swamp forests, mature upland forests, and alang-alang (*Imperata cylindrica*) grasslands—the economic opportunity costs of using forested lands can be considerable.

The biophysical characteristics of the three resource systems are examined and the options for the development of new agricultural sites or sustained-yield forestry are explored through the use of a Net Present Value Analysis. The analysis suggests that the choice is not one of forestry *versus* agriculture but that, with proper consideration of site selection and use of inputs and cultural practices, both forestry *and* agriculture can be developed. The main conclusion is that alang-alang grasslands provide potential sites for sustained agricultural production which avoid the loss of long-term benefits that can be derived from well-managed forests.

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