

FARMERS' MANAGEMENT OF FALLOW SUCCESSION IN THAILAND

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The importance of fallow succession on long-term productivity of traditional shifting cultivation is well known. As long as the length of fallow periods can be kept adequately to allow fallow regeneration to reach maturity stages, the shifting cultivation will be functioning on sustainable basis. With increasing pressures on land, productivity of shifting cultivation may be declined and flipped to unproductive stage with annual weed or grass dominant fallow.

In Thailand, ethnic minorities in the northern part of the country are the major shifting cultivators who practised traditional shifting cultivation for food and some cash crops including opium. Certain groups of people, e.g., Karen and Lua, had been settled in the country for a few hundred years but others, e.g., Hmong, Lisu, Lahu, Akha and Yao, had just arrived from neighbouring countries in the sub-region for the past few decades. Since early 1970s, government policies on the suppression of opium growing area and forest protection have put tremendous pressure on land required for long fallow regeneration. Many have turned to alternative practices with commercial crop production while others are facing with difficulties in maintaining productivity of their shifting cultivation with fairly short fallow periods, up to a maximum of 6 years.

In PLEC demonstration sites, farmers are managing fallow succession successfully by their own innovation, despite the condition of the change in traditional agricultural practice in northern Thailand. In a Hmong village with more or less sedentary agriculture, a weedy species (*Mimosa invisa*) which were accidentally introduced for fencing a small vegetable garden, has shown to be very effective for building soil fertility of severely degraded land. The species is now managed as a dominant fallow species before planting the following cash crops and high value vegetables. For the Karen community site, a pioneer tree species (*Macaranga denticulata*) is used to sustain productivity of upland rice in a short 7-year cycle of rotational shifting cultivation. Management of these local fallow species by farmers may be a key to understand the success of sustainable land management. The management of these species will be presented and discussed.