



Intensifying Shifting Cultivation in Southeast Asia

By Building On Indigenous Fallow Management Strategies

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Abstract

Swidden cultivation continues as the economic mainstay of upland communities in many countries in Southeast Asia. These communities may be located on the forest margins or in grassland ecosystems (particularly the *Imperata cylindrica* grasslands that occupy about 35 million hectares in the region). They share the challenges posed by mountainous terrain: sparse road infrastructure and distant markets constrain alternative livelihood options. The circumstances that historically underpinned the sustainability of long-fallow swiddening, however, have largely vanished. These conditions included extensive tracts of forested lands, sparse population densities, and few opportunities to produce surpluses for outside markets. In addition, the imperative to intensify swiddening into more permanent forms of land use has been exacerbated by rapid population growth, gazettement of remnant wildlands into protected areas, and state policies to sedentarize agriculture and discourage the use of fallows and fire. In the absence of mitigating adaptations, farmers are forced to shorten fallow periods and extend the cropping phase, eventually pushing their swidden systems beyond their ecological resilience and into a tailspin of degradation. Weeds proliferate and crop yields decline. They earn decreasing returns to labor, and food security is threatened. Upland tribal groups, already on the economic, political and geographic fringes of society, find their resource base and standard of living declining even further. The urgent need to increase human carrying capacities of upland farming systems is clear. Regardless of the merits of the long-fallow forms of shifting cultivation of the past, pathways to stabilize and improve productivity of today's declining systems are essential, preferably building on indigenous practices. However, there are many compelling examples where swidden cultivators have successfully managed local resources to solve local problems. The relevant issue is HOW TO INTENSIFY. This is a high priority research and development issue across many Southeast Asian countries. Technical approaches to stabilizing and improving productivity of shifting cultivation systems in the sloping uplands of Southeast Asia have not been notably successful in identifying alternate technologies widely adoptable by farmers. Farmer rejection of researcher-driven solutions has led to greater recognition of farmer constraints such as labor availability, access to planting materials, and uncontrolled fires or communal grazing. This experience underlined the need for participatory, on-farm research approaches to identify solutions sharply focussed to farmer circumstances. This paper reviews the status of current knowledge about indigenous strategies to intensify shifting cultivation. It examines the pathways by which indigenous intensification has occurred and categorizes these solutions. It summarizes the outputs of a workshop that was convened in June, 1997, to focus on farmer-generated strategies as a basis for intensification. It reviews the progress made to evolve a network of research and development focussed on these processes, discusses the emerging process for research and development on indigenous strategies, and the unique methodological challenges that must be addressed. Finally, it takes a brief look ahead at the challenges for the future.

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