

# NATURAL RESOURCE USE AND MANAGEMENT IN PADDY FIELDS IN SAVANNAKHET PROVINCE, LAO PDR

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## **Abstract**

Agricultural landscapes have attracted increasing attention in line with the general rise in concern about the conservation of biodiversity. This paper focuses on plant resource use and management in paddy fields, the predominant form of agricultural land use throughout much of Asia. Field surveys on paddy vegetation were carried out at two contiguous villages in central Laos: Bak village, which has a large forest adjacent to it, and Nakhou village, which does not.

The method of use and management of woody species in the paddy fields differed between the two villages. In Bak village, there were few trees in the paddy fields, for their presence was not needed following the conversion of the area into agricultural land, since the large area of surrounding forest provided ample firewood and timber for daily use. On the other hand, a total of 119 species were recorded in forest-deprived Nakhou village, and they were found to supply various kinds of products. In addition, a total of 184 wild herbaceous species were recorded in the two villages, with 19 being used directly by local people. It is considered that livestock grazing as well as various types of agricultural activities prevent paddy vegetation from making the succession to monotonous meadows of grasses and sedges, and thus enable high species diversity.

Thus, although paddy fields are primarily used for the monoculture cultivation of rice, multiple species of plants coexist in the landscape under human use and management. Recently, progress has been made on a biological conservation program in Laos involving the establishment of a protected area where human activities are limited. However, the results of this study indicate that it is also important to incorporate the activities of local people into natural resource management.