

Economic Sustainability of Rice Terraces and Forest Resource Management in the Mountainous Area of Northeast Myanmar (Burma)

by Akio TAKAHASHI

Numerous rice terraces are scattered here and there in the mountainous area of northern and north-eastern Myanmar (Burma). This article discusses the socio-economic circumstances which sustain rice terrace farming and the income distribution of the village where rice terrace farmers live, based on a case study in Namkham Township, Shan State.

Presently in Japan, thousands of web sites are accessed through the keywords “rice terrace” and “environmental preservation”. This reflects the great interest in rice terraces here. In Myanmar, the government is pursuing a program to transform the so-called “environmentally destructive” swiddens into terrace-like fields using heavy machinery. According to the plan, rice terrace acreage will increase threefold within the five years to 2007/08. We must admit that such rice terraces or terrace-like fields preserve the environment per se. However, if we assume that income from cultivation there is insufficient and farmers must inevitably seek income from other economic activities, then all of those economic activities must be taken into consideration from the viewpoint of environmental sustainability.

In the ethnic Palaung village under study, there are three categories of land: rice terrace, teagarden and coppice. The number of households holding rice terraces makes up only one-fifth of the total number in the village. Moreover, paddy production in the rice terraces is mainly for self-consumption, and cash is actually earned through income other than from rice terrace cultivation. Tea in particular is the most important cash crop,

and more than four-fifths of the total number of households own tea gardens. Firewood is required to steam tea leaves, but overharvesting of firewood may lead to deforestation. To prevent such a disaster, the people of Palaung have included both teagardens and coppices in their agricultural management, a combination which has been inherited. Two-thirds of the farm households possessing rice terraces have teagardens and coppices as well. They are in a favorable position economically, as they do not need to lay out money on food, and they have accumulated income from tea and charcoal production and have also extended their concern toward the brokerage and/or transportation of the agricultural produce. As a result they form the high income class in the village. By contrast, those households which have no agricultural land or only extremely small patches of teagarden have to engage in wage labor in the rice terraces and teagardens and/or in peddling to earn a living. Consequently they belong to the low income class. The middle income class does not have rice terraces but has sufficiently-sized teagardens, adding income from peddling, stock breeding and charcoal burning to income from the teagarden. Thus, rice terraces, teagardens and coppices have been organically linked to one another, in accordance with the size of the operation and the economic strategy of each household.

However, the acreage of inherited land has decreased drastically because of the custom of divided succession among all sons and because of increasing population. That is the reason why it has become difficult for the young generation to inherit both teagardens and coppices. When they hold only small patches of teagarden or coppices, overproduction of tea leaves or excessive lumbering of the firewood may take place in order to maintain income level. As a result, if the tea production system breaks down, the maintenance of the terrace paddy field will also become impossible. But before this happens, the villagers may take countermeasures, such as modifying inheritance customs, relocating excessive population outside the village, and shifting the labor force to resource-saving occupations, etc.