

Another major element is the firewood supply of the village. Because of the increasing firewood demand, more trees are needed to be cut, thus, causing the clearance of more forest areas in the future unless alternate sources of firewood are explored.

Other major elements are on labor utilization and interrelationship between the small and large tea farmers, and roles of landless farmers in firewood supply management. The present situation will deteriorate if even one of these elements fail.

(V. POLICY IMPLICATIONS AND FURTHER RESEARCH

In Ban Kui Tuai, the large areas of miang gardens where the village gets 63 percent of their income, labor supply in miang production and the forest-tea as a traditional agroforestry system indicate the villagers' heavy dependence on tea for their living as well as the forest for their supply of firewood in producing fermented tea. There is the tendency that demand for miang is decreasing. Consumption of miang per head is declining as well. With the decreasing price of miang in the future, other forms of livelihood activities such as handicraft and silverware-making, should be introduced which would also increase the quality of life of the villagers. Some economic activities should be explored further to substitute the miang production system because

of its low income.

An additional implication from the study relates to the future effect of current trend in firewood usage and household size on the future availability of firewood. Trends in the size and volume of firewood currently used can be expected to have further deleterious effects on the nearby forests, especially in terms of forest regeneration because young trees will have less chance to grow to maturity. This effect can be slightly observed in the condition of the forest in the village.

There are also implications for government policy toward the promotion of fuelwood trees. The increasing demand for firewood in the village justify the need for growing fast-growing species. This is line with the present thrust of the Thai Government (stated in the 6th NESDB Plan) of planting trees, particularly fast-growing species, to supply sufficient wood for energy purposes. Evidence has been presented to indicate that the villagers with enough incentive will plant trees, with fuelwood being one of their primary motivations. Hence, this calls for the introduction of fast-growing species in the village which will cope up with the firewood demand of Ban Kui Tuai. Furthermore, land management strategies should be planned for planting fast-growing species in miang gardens, vacant lots and other patches of available lands as long as they are not under Class 1 Watershed areas. Given the land areas needed and the number of trees planted from this study, the policy makers can know how much land can be allotted to the villagers for planting

fast-growing species as alternative sources of firewood.

The positive attitude of the majority of the respondents to planting fast-growing species makes social forestry a viable intervention program in the area. External highland development schemes such as community forestry should be recommended and implemented continuously until such time that social equity, people's participation as well as forest protection can be achieved.

Other forms of fuelwood substitutes and firewood use management should be explored and studied to ensure efficient use which could contribute to less consumption of firewood. A research could be done on the types of miang stove which use less firewood but processes the same amount of tea leaves.