

FOREST UTILIZATION BY LOCAL PEOPLE IN MAI SON DISTRICT, SON LA PROVINCE

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I. General Descriptions of the Research Sites:

1. Geographical location

Son La province is located in the northwest of Vietnam. Covering 1,405,500 ha or 4.29 percent of the country's total area, Son La is one of the five biggest provinces in Vietnam. The entire area of the province lies within the basin of the upper part of the Ma River and the basin of the Da River.

Mai Son is one of Son La's nine districts. The district center lies at latitude 21°02 North and longitude 104°01 East. Mai Son covers 141,026 ha, making up 10.03 percent of the province's total area. The district is comprised of three district towns and 17 communes. It is 300 km northwest of Ha Noi, the capital, and 30 km south of Son La Township along the National Highway 6.

2. Topographical and geographical features:

The topographical features of Mai Son district are diversified. The district is divided into different parts having steep slopes with the Northeast-Southwest declining direction. The average height is between 600-700 m above sea level.

Following are the five main topographical patterns:

- High mountain ranges have an average height of between 2,000-3,000 m and slopes of over 40 degrees with deep divisions.
- Average mountain ranges have an average height of between 1,600-2,000 m and slopes of between 30-40 degrees with rather deep divisions.
- Mountain and highland areas are long and narrow regions, winding in the Northwest-Southeast direction.
- Low mountain areas (average heights between 600-800 m) have gentle slopes and are located among high and average mountain ranges.
- Shallow and narrow basins.

Mai Son is considered a rather plain area when compared to others districts of Son La province.

3. Geological and soil features:

Mai Son has seven types of soil:

- Feralit soil developed on schist forms a good thick layer of soil.
- Feralit soil developed on sandrock forms a good land layer with a high water absorbing capacity.
- Feralit soil developed on poocfia diolit forms a good thin layer.
- Feralit soil developed on limestone forms a good thick layer.
- Feralit soil developed on granite forms a shallow and rather good layer.
- Ancient alluvial soil on basins is used for agriculture cultivation
- Soil in flooded areas around the bases of mountains and in valleys is alluminous with a high level of glayce, therefore it is left unused.

Soil in Mai Son is defined as good with thick and fertile layers, which is convenient for developing industrial crops such as tea, coffee, sugarcane, cotton, strawberries and fruit trees. However, soil potential in the district has not been fully and effectively tapped (see analyses in land use).

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4. Climate and hydrography:

a) Climate: Mai Son is located in the rather hot and humid sub-region of Son La. The annual average rainfall is between 1,500-2,000 mm and the average temperatures for the whole year is 20-22°C. The average temperature is not high but varies widely, from 14-38°C. The average humidity is between 75-85 percent throughout the year. The climate in Mai Son is divided into two distinct seasons due to the interaction between its topographical features and wind patterns. The monsoon season lasts from May to October with a high rate of rainfall concentrated in July and August, which accounts for as much as 80 percent of the yearly rainfall volume. The dry and cold season lasts from November to April. During the season, the temperatures are often low, even very low in mountain areas with fog in the valley and basin areas in December and January. This season often sees the highest number of forest fires.

b) Hydrography: The Da river runs through Mai Son in a North-South direction. Due to its topographical features, most of the main streams in the district run into the river. The river's high sloping level and large flow makes it unsuitable for water transportation but enables it to run small-sized hydro-electric power stations. The hydrographic mechanism is also divided into two seasons: the flood and dry seasons.

The flood season occurs in the rainy months. Mai Son is characterized by the mountainous geography with high sloping levels and rains concentrating in a short period of time, resulting in high flow velocities on a large surface - the main cause of floods. Frequent floods cause severe damage to the lives and economic activities of the local ethnic inhabitants.

The dry season occurs in months without rain. During this season the flow of rivers and streams drop markedly, resulting in low water levels in local reservoirs. As a result, water for cultivation activities cannot be met, therefore adversely affecting agriculture production in the area.

5. Natural resources and minerals

Mai Son is not rich in natural resources. Apart from its water and forest resources, the district possesses only one ore mine, which has been exploited by local inhabitants utilizing manual methods of extraction. (See details in forest resources part)

6. Population and labour force

a) Population: Mai Son, a densely-populated district of Son La, has a population of 109,400 in 19,935 households, accounting for 12.79 percent of the province's total, and a population density of 77.6 persons/sq.km. There are six main ethnic groups in the district, namely Thai, Muong, Kinh, Kho Mu, Sinh Mun and Mong. Thai residents make up 55 percent of the district's population, the Kinh, 30 percent, the Mong, 8 percent and the remainder consists of other ethnic groups. On average, each household has 5.5 persons and 2.78 workhands. Households of ethnic minority groups are often larger than those of the Kinh group. The population is distributed unevenly among regions and ethnic groups in the district. Different ethnic groups live in different areas and practice different modes of production.

b) Labour Force: The district has about 55,400 working people, accounting for 50.6 percent of the district's population, with 90 percent involved in agricultural production. The working people, though young, find it hard to apply scientific and technical advances into production due to low cultural standards a lack of expertise.

II. Land, Forest Resources and Forestry Production

1. The situation of forests and forest land in Mai Son district

Forest resources in Mai Son district have been used up with forest coverage standing at only 18 percent. The district has devised a scheme to zone-off land for production including 119,592ha for forestry production. There are 33,397 ha of forest in the district, accounting for 23.68 percent of the natural land or 27.96 percent of the land zoned-off for forestry production. Of the existing 33,397 ha of forests, 19,008 ha are natural forests and 4,306 ha are planted forests, accounting for 56.92 percent and 12.89 percent respectively. The remaining 10,000 ha are covered with shrubs and trees grown following the practice of slash-and-burn methods.

Forests in Mai Son district are divided into three groups according to their quality and reserves.

- *Medium forests* are those with reserves ranging from 120-130cu.m/ha. These forests make up 25.4 percent of the existing natural forests in the district.

- *Exhausted forests* have average reserves of up to 60cu.m/ha and are mostly covered by low-quality timber trees. They account for 48.6 percent of the existing natural forests in the district. Exhausted forests are quickly expanded as a result of irresponsible use of forest resources, forest devastation and primitive cultivation techniques. Natural conditions in Mai Son district facilitate the regeneration of exhausted forests, although this regeneration cannot keep pace with the current devastation. .

- *Bamboo forests* account for 26 percent of the natural forests in Mai Son with diversified composition and characteristics. They are easily regenerated and quickly bring returns.

A survey on the quality and reserves of each type of forest was conducted in 1998. However, statistics of this survey have not yet been made public. While the statistics of the 1993 survey are available, we cannot use them for our analysis, as they are outdated.

Table 1: Areas of Forest Divided According to Status and Use

| Forest Status | Area | According to use | | |
|--|--------|-------------------|-------------------|------------------------|
| | | Protection forest | Production forest | Forest for special use |
| 1. Natural forest | 19.088 | 15.338 | 3.750 | |
| 2. Afforested forest | 4.306 | 3.256 | 1.050 | |
| 3. Land partly covered with shrubs and barren land | 96.198 | 57.470 | 38.728 | |
| Total | 119592 | 76.064 | 43.528 | |

(Sources: Mai Son District's Ranger Unit)

2. Land use situation:

2-1. Classification of land according to State management

The district has a total area of 141,026 ha, which was used in 1998 as follows:

The data indicates that the agriculture production area of the district is small, covering only 17,000 ha or 12.06 percent of its total natural land area. Mai Son has a smaller agriculture area compared to other districts in the province. Land is considered an important natural resource as 61.44 percent or 86,600.5 ha of Mai Son's natural land is left unused. In order to have a better understanding of the district's unused land resources, please study the data provided in the following table (table 3).

Table 2. Land use in Mai Son

| Land types | Area (ha) | Percentage | Notes |
|---------------------------------|-----------|------------|-------|
| Natural land | 141,026.0 | 100.00 | |
| 1. Agricultural production land | 17,006.0 | 12.06 | |
| 2. Land covered by forest | 33,397.0 | 23.68 | |
| 3. Land for special use | 3,213.6 | 2.28 | |
| 4. Rural residential land | 628.5 | 0.45 | |
| 5. Urban residential land | 128.4 | 0.09 | |
| 6. Unused land | 86,660.5 | 61.44 | |

(Sources: People's Committee of Mai Son district)

Of the 86,660.5 ha of unused land in the district, 25,470.5 ha is appropriate for agricultural production. The figure is 1.5 times higher than the current area used for agricultural production in the district. The unused land that can be used for forestry production makes up 73,071 ha. However, the survey showed that a major part of the unused land was cultivated by local inhabitants who have been practising nomadic farming. Only a small part, which is often infertile or stone mountain, is left untouched. This seems to indicate that the Mai Son should exercise better land use management and devise a plan to effectively and properly make use of its land area.

Table 3. Concrete data on unused land in Mai Son

| Land types | Area (ha) | Percentage | Notes |
|---|-----------|------------|-------|
| Natural land | 141,026.0 | 100.00 | |
| Unused land | 86,660.5 | 61.45 | |
| 1. Unused plain area | 245.0 | 0.17 | |
| - Land that can be used for agricultural production | 230.0 | | |
| -Land that can be used for forestry production | 15.0 | | |
| 2. Unused mountain and hill area | 78,296.5 | 55.52 | |
| - Land that can be used for agricultural production | 25,240.5 | 17.90 | |
| -Land that can be used for forestry production | 73,056.0 | 37.62 | |
| 3. Rivers and streams | 635.0 | 0.45 | |
| 4. Mountain area uncovered by forest | 914.0 | 0.65 | |
| 5. Other unused areas | 6,570.0 | 4.66 | |

(Sources: People's Committee of Mai Son district)

- Wet rice field: an area reserved to plant wet rice. Wet rice fields are often located in low areas, sloping hill-side areas, river banks or areas adjacent to streams where favourable conditions exist for irrigation. Due to specific geographical and irrigation features, most of Mai Chau's area under wet rice is a single crop cultivation area. Only a small part can be used for two crops a year. The district's total area under wet rice cultivation is 1,274 ha or 0.9 percent of its natural land at present.

- Terrace field area: covering hilly and mountainous areas, this area is used for crop cultivation for local people. The area includes both terrace fields under cultivation and a currently unused area where the people had once practiced slash-and-burn practices. It is expected to be used when it becomes fertile again. According to the district's report, its terrace field area covered 2,050 ha or 1.45 percent of the

total natural area. However, the outcome of our practical survey indicated that the total terrace field area of Mai Chau is now over 20,000 ha, accounting for 14.2 percent of its natural area.

- Forest: an area covered with forest trees that local people can utilize for wood, firewood and other forest resources to serve their demands.

- + Natural forest: a region covered with non-planted trees.

- + Planted forest: an area covered by planted trees.

- Water surface, ponds and lakes reserved for aquaculture activities include water surface areas that are capable of aquatic cultivation and raising. Mai Son has an area of 296.5 ha of water surface for aquaculture.

- Housing and gardening land comprises residential areas, gardens, and hilly orchard areas planted with industrial crops that are cared for by household families. Mai Son's housing and gardening area totals 5,173.3 ha.

- Alluvial land under subsidiary crops is reserved for agricultural crops or short-term industrial crops. The total area of alluvial land in Mai Son is 8,622.1 ha or 6.1 percent of its natural area. This is an area that shows great potential for Mai Son to boost its economic development in the future.

- Other soil areas: covers 82,047.5 ha, making up 58.52 percent of the district's total natural area.

3. Possession of forest and forest land:

To implement the Land Law in the forestry sector and the Law on Forest Protection and Development, the Government of Vietnam issued Decree 02/CP on Jan. 15, 1995 and Decree 01/CP on Jan. 4, 1995 on the allocating by contract of forestry land to organizations, households and individuals for long-term forestry production purposes which aim to:

- Create favourable conditions for the people to use land effectively for forestry development on a stable and long-term basis.

- Provide legal basis for land use.

Mai Son has not yet finished land allocation to local family households as regulated by the State. Areas near communication networks were allocated to family households. However, allocated areas were small and scattered. In addition, necessary land allocation procedures have not been completed. Government decision #364/CP on land classification and land and boundary demarcation was strictly carried out at all Mai Son's communes. At present, the district has been intensifying its efforts to allocate land to local households and inhabitants. It expects to complete this work by early 1999. Until this goal has been achieved, the district people's committee will continue to serve as the land administration agency of the locality.

The results of land allocation and forest allocation by contract in Mai Son district:

The district has allocated and allocated by contract a combined area of 45,057.689 ha of forestland and forests respectively, to 12,958 households for forest planting and care. The acreage accounts for 37.68 percent of the district's total area for forestry. On average, each household was allotted 3.48 ha. Land allocated to households in Mai Son were implemented as follows:

- 35,653.213 ha were allocated by contract for care and restoration

- 9,404.476 ha of unused land and barren hills were allotted for forest planting, of which 803.41 ha had been planted with forests.

4. Interests of households allocated with land

The Government issued Decision 661/QD-TTg on July 29, 1998, the latest one of this kind, stipulating the interests of households allocated with forestry land as follows:

- Households allocated on a contractual basis to protect the special use and protection forests in important areas are paid VND \$50,000 per ha per year, for a maximum period of five years. For those

receiving land for rehabilitating forest in combination with planting more forest, they will be provided with State investment, but the sum should not exceed VND \$1 million for each hectare and the investment duration should not exceed six years.

- Those who receive land to plant protection forests in very important areas will be provided with VND \$2.5 million.

- Organizations, households and individuals who invest their own capital in planting forests of precious timber trees over a 30-year rotating period will receive on average, VND \$2 million for each ha they plant.

- Organizations, households and individuals receiving land to plant and maintain protection forests in less important areas and production forests are entitled to preferential treatment provided for by Vietnam's laws designed to encourage domestic investment, such as access to loans from national investment support funds, preferential credit and other capital sources in accordance with the Government's regulations.

- In addition, households, organizations and individuals receiving forest land to conduct forestry production and business are entitled to the following benefits:

- + With special use and protection forests:

- . Households allocated by contract to protect the forests are entitled to gather firewood and subsidiary forest products under the forest canopy.

- . Households allocated by contract to maintain and rehabilitate in combination with planting more forest are entitled to the wood leftover from tree pruning and subsidiary forest products under the canopy.

- . Households allocated by contract to plant protection forests are entitled to wood from tree pruning, as well as farm and subsidiary forest products grown under the forest canopy.

- + With production forests: Households investing in planting production forests are owners of the forests and have the right to decide all issues relating to production and business on the allocated land in accordance with the State's regulations.

Apart from the benefits decreed by State regulations, the people also enjoy the following privileges:

- The freedom to exploit forestry resources from forest areas that have not previously been controlled by any individuals (forests controlled by the community or communes).

- Making use of land for cultivation purposes: Results released by a survey indicated that over 80 percent of the income of local households come from food crop cultivation, animal husbandry and forestry resource exploitation. As a poignant example, 100 percent of the income of the Mong, Kho Mu, and Xinh Mun ethnic communities is earned from food crop production activities. It is difficult to control the cultivated land of a group of people who were not allocated land and forest, and that is one factor leading to heavy forest destruction.

5. Momentum for community forest development

Exploitation-type use of forest products has led to the exhaustion of natural resources. Increased population has increased demands for land to cultivate food crops and forest products, thereby placing more pressure on the local economy. Fewer natural resources and forest products were harvested, causing a hike in forest product prices. The devastation of watershed forests adversely influenced the lives and agricultural production of the local people. All these problems forced the people to change their way of thinking, and to carefully consider the fragile nature of the forests. The local people are well aware of the important role played by the forests under their management to their lives. They therefore agreed upon and joined together in an effort to implement a new strategy that featured the economical use of natural resources, as well as striving to put an end to forest devastation that had occurred as a direct result of mankind's disregard for nature.

6. Land Disputes

As a result of the relevant decisions of the Government, the district demarcated communes by national-standard posts. All land-related disputes had been solved before the communes were demarcated and decisions thereon were reported to the people in all hamlets. Land disputes no longer existed among communes in the district but they happened sometimes among the hamlets of some communes due to the fact that the commune had failed to develop a land use plan to allocate all land plots to households and to establish the boundary of the hamlets. Such disputes originated from the encroachment of land for cultivation. Timely and proper measures were taken to deal with the disputes by the local authorities, thus preventing disputes from re-occurring.

III. Forest Resource Use by the Local Population

1. Exploitation of Forest Products

For generations, the local people in Mai Son have been living in harmony with the forests which provide them with materials for building houses and making household utensils, firewood for cooking and heating, food such as birds, animals, vegetables and fruits, and medicinal herbs and other forest specialties. The value of the total quantity of forest products exploited annually by the local people is not available.

- Timber is exploited from natural forests for building houses and sties, and making beds, cupboards, tables, chairs etc ...
- Firewood is taken from natural and planted forests or gardens for cooking and heating.
- Bamboo is exploited from natural and planted forests for use as building materials.
- Other forest products include:
 - + Birds and animals;
 - + Rattan;
 - + Vegetables;
 - + Bamboo shoots for food;
 - + Medicinal herbs,
 - + Other.

Most of the above-said products are exploited for their own use by farmer households with a small quantity for market which leads to the loss of once-rich natural forests.

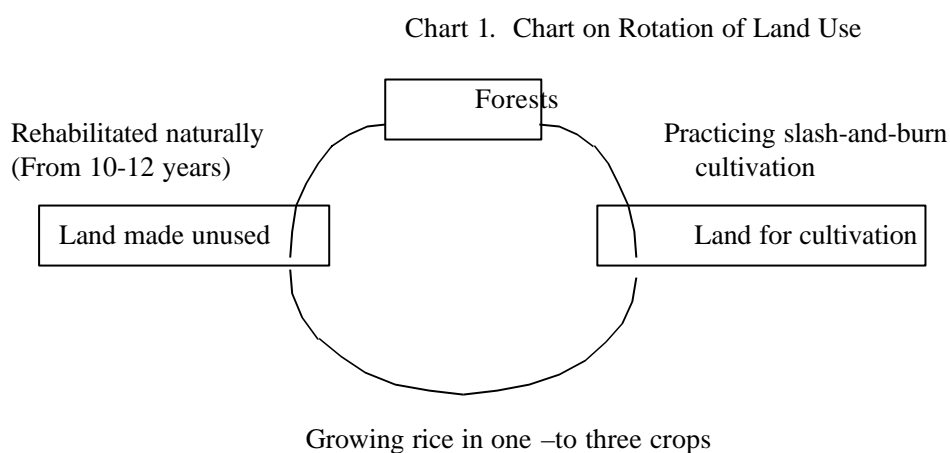
2. Difference in Forest Use in Mai Son

2-1. Features of Land Use by Each Ethnic Group in Mai Son

- People of the Kinh, Thai and Muong ethnic groups have long practiced wet-rice growing as well as cultivation on hills. They often live in areas up to 500 meters above sea level and near a transportation network, thus facilitating wet-rice cultivation. They possess relatively high farming techniques so the land in areas inhabited by them is used more economically.
- The Mong people often live in areas of between 800 and 1,000 meters above sea level. They have long practiced nomadic farming and cultivation on hilly land with a minority of them growing wet rice. This traditional way of life has led to serious forest devastation.
- People of other ethnic groups like Kho Mu and Xinh Mun mainly survive on rice grown on hills, and fruits and other products of the forests. They tend to move deeper into remote areas due to their practice of nomadic farming; a practice that maintains their primitive way of life.

2-2. Features on Land Use by People of All Ethnic Groups in Mai Son

- Due to lack of land for food production, the local people have long practiced rotary food crop cultivation on hills and mountains. Rotation of land use is seen as follows:



- The local people clear forests for cultivation for one to three crops until the land becomes infertile at which point the land is left unused.
- How the cultivated forests are restored depends on the regeneration of nature as activities to plant new forests or to preserve existing ones are unfamiliar to people of ethnic minority groups.
- Surveys on the income of households in Ta Hoc commune where re-forestation and forest preservation have been carried out effectively show that 94.5 percent of the income from forest-related activities come from products collected from the forests.

The following table is from a survey that shows income from production activities on the economic life of a number of households in Mai Son district:

Table 4: Income Structure of Households

| Ethnic Minority Group | Total | Income Sources | | | | |
|-----------------------|-------|-----------------------------|---|------------------------------------|-----------------------------|---------------|
| | | Income from wages, salaries | Income from agriculture, forestry & fisheries | Income from industry, construction | Income from trade, services | Other sources |
| 1. Kinh | 100 | 27.51 | 25.23 | 4.51 | 10.90.09 | 31.8 |
| 2. Thai | 100 | 4.13 | 86.66 | 0.37 | 0.03 | 8.75 |
| 3. Muong | 100 | 3.47 | 85.15 | --- | --- | 11.35 |
| 4. Mong | 100 | 1.22 | 96.87 | --- | --- | 1.91 |
| 5. Other | 100 | 1.22 | 90.86 | 0.51 | --- | 7.4 |

| | | | | | | |
|--------|--|--|--|--|--|--|
| groups | | | | | | |
|--------|--|--|--|--|--|--|

- Land zoned off for forestry development is used to raise animals in a traditional free-range manner, which has been practiced for centuries by the local population.

3. Differences in Forest Product Use

3-1. Difference in Forest Use in Accordance with Regulations of State Management

According to State regulations, forests and forestland are divided into three categories:

- Regions for protection forests:
 - + Areas housing protection forests
 - + Unused land areas zoned off for planting protection forests.
- Regions of special use forests zoned off to preserve biological systems and gene sources and to serve other purposes of the people.
- Regions of production forests comprise forests and forestland to be re-forested as a service of production.

The Vietnamese government issued regulations on the management of each category of forests. (See Table 1 on data on categories of forests).

3-2. Difference in the Practical Use of Forests and Forest Land by Local People

- The Kinh group depends little on natural forest products thanks to a high cultural development level and appropriate economic conditions.
- The Muong and Thai groups: have a high cultural development level and advanced cultivation techniques but they are affected by poor economic conditions. They mainly use timber and firewood.
- The Mong groups live in remote and isolated areas, thus depending almost entirely on forest resources from forests and forest land. For the Mong people, the forest provides as much as 80 percent of the materials needed in their lives.
- The Kho Mu and Xinh Mun groups depend almost entirely on forest resources as the forest provides more than 60 percent of the materials needed in their lives.

IV. Changes in the local people's exploitation of forests

1. Changes in land use

- As population growth continues to put pressure on food production, more and more mountain fields are cultivated, thus the period during which land is left unused for rehabilitation becomes shorter (from 10-12 years previously is shortened to 4-6 years depending on soil conditions in each place). The land is not given enough time to regenerate before being used again. This leads to short land use rotation, which means lower crop yield and output at the same time enlarging areas of cultivated mountain fields and unused land and barren hills.
- Weakened protective capacity of the forests due to forest area loss, steep sloping terrain and unfavorable climate have led to serious degradation and erosion of the soil. As a response to this crisis, a group of local people has found ways to conduct business and production on the basis of a long-term sustainable exploitation of the forest. After receiving forestland, cooperation in forest protection and the care of saplings has been established among households or groups of households. The slash-and-burn practice has been greatly reduced and did not occur on land allocated by contract. Many households have invested labour and capital into protecting, planting, maintaining forests and the combined production of forestry-farming. A suitable tree strain with high economic efficiency is quickly determined. Attention has been paid to measures to improve the soil's fertility, fight erosion and create a stable and sustainable ecological system, bringing about improved economic value. With suitable

farming methods and appropriate crop choices, many households have been successfully turning barren hills into thriving farms, exhausted mountain fields into forests, as well as introducing industrial crop plantations and orchards of high value.

2. Changes in the use of forest products

+ Facing the fact that the forest's capacity to meet demand is low while social development has created a need for new materials, the use of forest products has experienced many changes. Materials coming from forest products are increasingly being replaced by other materials, thus the quantity of forest products exploited for people's needs has been reduced.

Table 5. Statistics on the exploitation of several major forest products in Mai Son

| Year/Product | Timber (cu. m) | Wood (Ste) | Bamboo (1,000 trees) |
|------------------|----------------|------------|----------------------|
| 1990 | 12,118 | 120,675 | 396 |
| 1995 | 13,611 | 139,084 | 694 |
| 1998 (estimated) | 12,994 | 135,665 | 511 |

(Source: Mai Son district's People's Committee).

Looking at the table, it can be seen that three major forest products of timber, firewood and bamboo in Mai Son are exploited in great quantity. The exploitation in 1998 decreased compared with 1995, with individuals using an average 0.1-0.2 cubic meters of timber, 1.1-1.4 ste of firewood and 4-6 bamboo trees a year. The large volume of forest products exploited every year is due to the demands of the local people. The reduction in the exploitation of forest products is partly due to diminished forest resources and the replacement of forest products with alternative materials.

3. Changes in people's awareness of the forest's role

Changes in people's awareness of the forest's role has had a major impact on reduced forest exploitation. Previously, local people thought the forest was an inexhaustible resource and that everyone had the right to exploit it. This way of thinking led to careless forest destruction. Results of an already conducted survey revealed that in 1993, Mai Son's forest area was 6 percent less than its original area. To date, the awareness of the people has greatly improved. From exploiting without any restraint, local people are now aware of the need to protect the forests, especially forests managed by the community.

V. Valuation of forest exploitation based on sustainability

The management and exploitation of forest resources in Mai Son has seen steady progress recently but has yet to achieve the goal of sustainable exploitation. The reasons and the potential consequences of the shortsighted use of forest resources in Mai Son are as follows:

- 1- Continuous destruction of the forest due to a primitive slash-and-burn cultivation method and local climate has worsened the forest situation. Ancient forests have been exploited at high speed to exhaustion, while exhausted forests continue to be exploited and rapidly replaced by bamboo. Destroyed forests and land left behind by nomadic tribes become fallow land and barren hills.
- 2- Intensive exploitation and lack of care after exploitation have led to a loss of valuable trees and a reduction of forest resources. Particularly damaging has been the rampant cutting of mature trees that has affected the natural recovery process of the forest.
- 3- The great slope of Mai Son's terrain, together with forest destruction have caused the serious erosion of soil limiting or preventing the re-planting of trees, thus affecting forest rehabilitation. Additionally, many kinds of timber trees cannot grow on sloping land.

4- On land that has been cleared for cultivation, the great number of dry trees and tree stocks have become a breeding ground for pests.

5- Other reasons include a failure to protect forests and eco-systems, as forests are still considered as having been given by nature. This view has led to careless forest destruction. As well, the management of forest and forest land is not strict, and is complicated by a short-sighted plan for rational forestry production.

VI. Conclusion

The forests and forest land of Mai Son district have great potential as they contain many kinds of valuable timber and forest products. The tens of thousands of people of five minority ethnic groups in Mai Son have had a close connection with the forest for a long time, as the forest has played an important role in national construction and defense. However, there is evidence of the negative impact the current forest situation is having on people's lives and on the environment itself. As the future unfolds, the forests will play an increasingly important role in the protection of the environment, providing products for the national economy, and meeting local people's cultural and aesthetic needs. It is time to further improve forest management, protection and to implement sustainable development in Mai Son on the basis of recent achievements and lessons drawn out from the study as Vietnam strives to meet the needs and requirements of its people.