

# FOREST RESOURCE MANAGEMENT IN THE DIRECTION OF SUSTAINABLE DEVELOPMENT IN VIETNAM

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## **Abstracts**

The paper deals with forest resource management in Vietnam in sustainable development direction aimed at management and use of forest and forest land, raising their capability in protection role, ensuring environmental security, diminishing natural calamities, conservation of gene resources and biodiversity. The policy of the Government of Vietnam is pushing up forest planting, revegetating bare land and denuded hills towards banning of natural forest exploitation, implementing the project of planting 5 million hectares of forest (1998-2010). One of the important directions in socio-economic development in mid-land and mountainous regions is to push up the allocation of land for use and forest for protection on contract to the households for long-term forest production and management, attracting them to the management and sustainable use of forest.

## **Introduction**

Vietnam in the mind of the people is a tropical monsoon country, a country of water rice civilization, a country that is developing and undergoing renovation. This idea is based on the physical, cultural social condition and the policy of economic development in the direction of industrialization and modernization of Vietnam.

Vietnam covers an area of 332,541 km<sup>2</sup> stretching from 6°50' N to 20°08' N latitude with the coastal line of over 3.600 km. Geological make-up is with complex topography, 3/4 of the country's area is mountains and hills. Natural environment is much differentiated giving rise to many ecological regions with high biodiversity.

Forest resource of Vietnam is very rich in the number of plant and wildlife species with various forest types: mangrove, *Melaleuca leucadendron* forest, forest on fresh water marsh, broad-leaved evergreen forest, semi-deciduous forest on low land, limestone mountain forest, alpine evergreen forest and mixed pine forest.

Up to now according to statistics Vietnam has over 7,000 high vascular tree species. As predicted by botanists there are at least in Vietnam 12,000 plant species of which about 2,300 species are already used by the people as food, foodstuff, medicine, animal feed, timber, essential oil and others.

Fauna of Vietnam is very rich. There have been listed 275 mammal species, 825 bird species, 180 reptile species, 80 amphibian species, 471 fresh-water fish species, about 2,000 sea fish species. The Fauna of Vietnam is not only rich in species composition but also has many unique features representing South East Asian region. Mean biodiversity index is 6.2% of the world.

In 1992 The World Conservation Monitoring Center (WCMC) classified Vietnam 16th in the world in biodiversity.

Environment protection, natural resource conservation do contradict with development activities. Economic growth is not possible without natural resources exploitation and industrial development. Being aware of the above problem, the Government of Vietnam always lays emphasis on economic growth being closely linked with ecological environment protection. The highest expression is the "Environment Protection Law" 12/1993 and some sub-law documents. Forest, ecological systems, nature reserves, natural landscapes, scenery spots, historical relics are regulated as environment components and in Vietnam forests receive focused attention among ecological matters.

### **1. Threats on biodiversity in Vietnam.**

The same as in other developing countries in tropical region, in Vietnam forests were formerly mainly used for forest products exploitation and little attention was paid to their environmental function. Therefore forest area gradually decreases, forest resources are depleted. Main causes of forest loss are:

- Most of forests lack actual masters in the context of loose implementation of forest law. Farmers are not economically motivated to actively participate in forest protection, planting and forest capital development. This is an overwhelming cause leading to deforestation.
- Poverty, shifting cultivation and unplanned migration of the population.
- Abused forest capital exploitation.
- Forest fire, wars and changing land use.

### **Context of forest management now in Vietnam:**

- Drastically decreased forest cover and deterioration of forest resources. In 1943, forest area in Vietnam was 14 million hectares, forest cover was 43%. There remains now only 9.3 million ha of forest (of which 1.1 million ha is forest plantation), forest cover: 28.3%. Most of the remained forests are poor or average ones with low timber stocking.

In 1976 - 1990 period mean annual forest loss was 190,00 ha.

In 1990 - 1995 period, mean annual forest loss was 35,000 ha.

- Fast population growth rate of over 2%. In 1997 the population of Vietnam was over 76 million, 51 million increase as compared with 1945. Fast population growth leads to higher and higher timber and firewood demand.

Moreover there are still in mountainous regions over a million of ethnic minority people practicing shifting cultivation or shifting cultivation combined with home moving.

- Timber and firewood supply relies mainly on natural forests because there are now only over a million hectares of forest plantations with low productivity.
- There implemented now in Vietnam the policy of pushing up forest planting, revegetating bare land and denuded hills as a step to ban natural forest exploitation. An active expression in implementation of this policy is to reduce mean annual timber exploitation from natural forests of 620,000 m<sup>3</sup> at present to 300,000 m<sup>3</sup> by the year 2000 and a special importance is the carrying of the project of planting 5 million hectares of new forests from 1998 to the year 2000 stated in Decision 661/ QD-TTg of the Premier.

## **2. Actual management of various forest types and forest land in direction of sustainable development**

Total forest land area is 18,692 million ha, divided in to: Forested area 9.3 million (of which 8.2 million ha is natural forest, forest plantations is 1.1 million hectares).

Forest land devoid of forest: 9.392 million ha Based on the use objectives, the forests in Vietnam are grouped in to 3 categories: Protection forest, Special-use forest; Production forest.

### **Protection forest.**

Total area 6.8 million ha (there exists now 3,478,700 ha of forests). It includes upstream watershed protection forest, anti shifting sand forest, wave breaking, mangrove forest, environment protection forest.

Coastal anti-shifting sand forest and coastal wave - breaking forest are already allocated mainly to the households in these regions for management and protection.

With upstream watershed protection forest, main objective is water conservation, soil protection against erosion and sedimentation in water reservoirs. This forest category is allocated to the Upstream watershed protection forest Management Boards. The 327 programme has also allocated protection forest to households for tending and protection on contract. The remaining is managed by forest protection force.

### **Special-use forest.**

Total area 2,092 million ha. (There exists now 898,300 ha), belonging to 105 special-use forest divisions, of which:

- National Park: 252,000 ha.

- Nature Reserves: 1,692,000 ha.
- Cultural, Historical, Environmental protection site: 147,886 ha.

The above-mentioned special-use forests are distributed in many regions in the whole country representing different climate belts and in places for of endemic plant and wildlife species in Vietnam. These forests are managed by the National Park and Nature reserves Management Board.

**Production forest.**

Total area: 9.8 million ha (now exists 4.9 million ha), of which:

- Natural forest: 4.2 million ha.
- Forest plantation: 0.7 million ha.
- Bare land and denuded hills: 4.9 million ha.

These areas are allocated to State Forest Enterprises, households, cooperatives and other organizations for forest production and management.

**3. Objectives in forest resource and forest land management and use in nature conservation action plan in Vietnam in the direction of sustainable development.**

Forest and forest land management is aimed at raising the protection capability, ensuring environmental security, diminishing natural calamities, conservation of gene sources and biodiversity.

**As regards natural forest:**

Implementation of the policy of least exploitation of natural forest towards total banning of exploitation. No exploitation is allowed where the ratio of forest cover is low. Pushing up forest planting; investment in processing and utilization of forest plantation wood; utilization of timber and firewood substitutes in production and construction by the people; timber import.

**As regards bare land and denuded hills:**

Planting 5 million hectares of new forest on bare land and denuded hills together with strengthening the protection of the existing 9.3 million ha of forest; raising the capability of national environment protection, bringing the forest cover up to 45% by the year 2000.

Contributing to creating more employment, raising the income and living standard of over 20 million people in the forested areas. Allocation of forest land for use and forest for protection on contract to farmers so that they can participate in forest production activities in contribution to elimination of hunger and alleviation of poverty, fixed cultivation and sedentarization in mountainous regions.

Wood supply for paper raw material, composite board production; meeting

the demand of timber, firewood and other forest products for home consumption and export.

#### **As regards system of special - use forests:**

Effort is made so that basic perfection is reached by the year 2000 of the area dimension of the special-use forest system with total area of about 2.2 million ha representing 10% of the forest cover in the whole country.

- Organizing well the protection of and prohibiting all activities harmful to flora and fauna of National Park and Nature reserves.
- Organizing well scientific research.
- Investment in infrastructure construction, socio-economic development serving the people living in buffer zones of National Parks and Nature Reserves.

Management and sustainable use of forest resources and forest land is one of the forest development strategies in Vietnam. Specially, the programme for planting of 5 million hectares of forest is one of the important directions for socio-economic development in midland and mountainous regions, pushing up forest and forest land allocation to households for long-term forest production and management, attracting the households to forest resources management and stable, sustainable use.

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