



RUSSIA FOREST RESOURCE MANAGEMENT

Chen Qu¹, Dai Wen-Bin¹, Gao Yun^{2*}

¹*School of Land and Food, Department of Environmental Study and Geography, Tasmania University, Tasmania 7005, Australia.*

²*Institute of Hydrogeology and Environmental Geology, Chinese Academy of Geosciences, Shijiazhuang 050061, China*

*Corresponding author email: gaoyun0526@163.com

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ABSTRACT

The forest resource is the material basis of forestry production. The status of forest resources is the most important symbol to measure the effectiveness of forestry work. Due to the impact of human activities and natural factors, forest resources are always in dynamic change. There is a worldwide forest decrease, which has devastating effects on the environment ecosystem although regulatory measures have been taken to accentuate the significance of environment ecosystem preservation. So, management of forest resource becomes an important researching topic. Therefore, it is necessary to strengthen the management and supervision of forest resources and the establishment of a scientific and effective management system. Management of forest resource is decision-making and organized activities in forest protection, cultivating, updating and application of forest resources through planning, control, adjustment, inspection and supervision. The main purpose of this report is to identify and survey the management of forest resource in Russia where lies large areas of forest resource, introduce the components of forest resources, probe into the specific means of management of forest resource, evaluate the measure and point out effective management solutions and failing reasons. At last potential efforts for better management of forest resource is discussed.

1. INTRODUCTION

Forest management has been high-profile since ancient times. However, low level of technology and inadequate management do not have access to effective development and use of forest resources although there is an abundance of forest resources. Also, improper processing and utilization of forest resources to some extent damages the forest ecosystem on the grounds that different ways of forest resources management should be applied in different regions, nation's even countries. So precise analysis of forest resource management requires that we first recognize the classification of forest resources as well as the characteristics of different categories then applies different management methods to different places.

2. CURRENT STATUS OF FOREST RESOURCE IN RUSSIA

764 million hectares of forest lies in Russia, which is indicated in FAO's State of the world's forest 1999. However, deforestation happens and becomes worse. There is a trend of decrease of forest rate from 1650 to 2000 although an increase existed from 1930 to 2000. Almost 55 percent of land was covered in 1680. Since then, cover rate of forest declined sharply and decreased to 25 percent, the lowest percent in history. From 1930 to 2000, cover rate increased to almost 40 percent. It is distinct that large areas of forest have been cleared, a showcase of temporary upswing of over rate fails to compensate the damaged forest [1].

3. THE NATURE OF MANAGEMENT OF FOREST RESOURCES

The reasonable management of forest resources means total adaptability and effectiveness. It is conducive to forest ecological balance with the economic, ecological and cultural interests taken into account and also it does services to contemporary people and future generations [2]. In spatial view, a suitable scenario to mitigate deforestation, a perennial problem throughout the whole world should be accommodated with a certain country because difference exists and one-sizes-fits all model should be avoided. In temporal view, management style should combine the national background, for instance, political situation, economic policy and leaders in helm of the government because maximum benefits entail different management policies in different period.

3.1 Factors and Stakeholders of Management of Forest Resources

Wood-processing industries also accounts a lot in forest management because the lumber processing industry process lumbers as raw materials intensively, carries them to demanders, which speeds up lumber shipping industry since timbers are massive and not easy to transport and at last conforms to consumers and satisfy the market demand.

Miners and oil operators also cause direct damage to forest management.

They have to cut trees and dig holes to check the existence of mine and oil [3]. As the core of the management, governments and officials' policies guarantee the effective operation of forest management as well as national organizations and non-governmental organizations that advocate open and friendly circumstance for forest management. NGOs contribute a lot to the forest and other natural resources conservation and almost 200 NGOs keep close contact mutually with the assistance of Socio-Ecological Union [4]. Taiga Rescue Network in Russia, the national-wide non-governmental-organization, aimed at northern forest protection. Also, it exerted itself to advice Russian Karelia, Karelia Greens, Russian Greenpeace and other environmental organizations in Russia [5].

A rational statement is made that those factors and stakeholder are not separate from each other. Instead, they exist in a chain of causation. The forest management add incentive to every field of forest industry with a myriad of profits and the satisfaction of all stakeholder's guarantee that forest management operates smoothly

3.2 The System of Forest Resources Management

3.2.1. The Governance Structure

Governance structure refers to a management system of a given country at all levels including state regulation, inter-governmental system, regional government, local government and self-government even international institutions on a certain issue. In Russia, state regulation sets the tone for inter-governmental system, regional government and so on. For example, Federal Forest Service of Russia accentuates the value of centralization of the national-wide forest management. The Karelian Forest Campaign was an overriding organization movement initiated by Taiga Rescue Network in mid-1990s. Also, it cooperated with foreign environmental organization such as Finnish environmental institution and Finnish companies importing woods from Karelian Republic [6].

Russia's forests are mainly located in four regions, Europe, West Siberia, East Siberia and Far East. Main part of forest land lies in Far East with 312.9 million hectares. East Siberia is ranked second with 224.8 million hectares. And Europe has 139.1 million hectare and West Siberia 78.4 million hectare. We conclude that uneven distribution of forest land in Russia requires supervision and management departments in different regions. Also, management system should be tailored to the region and cooperation and exchange between regions should be strengthened [7].

In March 2000, when in power, Putin started to carry on the reform of institutions of centralization administrative. The presidential order in May 17 abolished independent federation forestry bureau responsible for the national forestry work and transferred forest management function into

natural resource department. At the end of February 2005, the forestry management body was set as follows: Federal Forestry Bureau under the Ministry of natural resources; local forest authority as the Federal Forest Service Agency in all federal bodies. In Khabarovsk, Khabarovsk branch was established. Supervision Bureau was set as follows: Natural resource utilization supervision bureau under the Ministry of natural resources, inspector general bureau in the Far East area.

3.2.2. The Value of Forest Management

3.2.2.1. Decentralization

Decentralization management refers to the power transfer from national government to regional officials, organization and experts and so on, which causes positive effects, for example full use of forest resources and negative effects, namely disorder in forest industry market for maximum profits [8]. There is a trend of decentralization of forest management in Russia history.

As one of the overriding forestry institution the Federal Forest Service of Russia takes control of almost 94% of the forest land, which is a prognosis of the priority of center government control over forestry in accordance with the political situation at that time. The Basic Law for Forest indicated market was injected into the forestry management and leasing and auctions were allowed. It inaugurated a new area on the grounds that shift from government-control to market-control renders a myriad of opportunities despite the competition. The Federal Forest Service also changed into a competitive forestry company from an independent controller [9].

In 1995 the whole Russian logging system accelerated the establishment of market condition work, actually completed the conversion of all kinds of enterprises to industry-wide private ownership. For example, 90% percent of National transport enterprises were 'joint stock'. Currently, a total of 47 forest industry holding company existed throughout the whole Russia with more than 600 enterprises. Financial and industrial group is to be built and National Forest Bank has been established, whose branches have begun operated. As for the investment in forestry, with the advance of privatization, forestry investment structure has shifted from state-override into private investment with appropriate investment subsidies given by nation according to the actual situation. Production performance is evaluated mainly by market economic effects.

Another major concept in Russia is forest fund, which is closely linked with forest resource management. It was once restricted to forest management while now it comprises more than forest and refers to the real estate in Russia [8]. In 2011 funds in Russian forest sector amounted to 33,200,000,000 rubles with an increase of 50%. 10 billion rubles was used for forest fire prevention in various regions including the acquisition of private fire-fighting equipment. The financial plan of Russian forest sector in 2011 also includes the costs for forest surveying and cartography, forest management and forest records management.

3.2.2.2. Law Protection

Russia officials revised stringent laws to dwindle unlawful acts and penalize them severely. The First Code issued in 1977 is considered as the most significant forest management law in Russia. And it is applied to all the Federal forests. In 1995, amendments and supplementing for the forest law was drafted in accordance with the spirit of the times to protect the orderly, rational use of forces and regeneration, which provided legal basis for forest protection. There was no certain form of ownership of forest resources, resulting in a deadlock in forest use and forest protection in former Russia forest law while according to the Russian Constitution, possession, use and disposal of natural resources of forest were subjected to Russian Federation. Therefore, "revised draft" stipulated explicitly that the forest resources belong to the federation country, but the forest product (lumber, mushroom, wild fruit and so on) obtained in forest resources process may have private, state-owned and other many kinds of forms.

3.2.2.3. Electrical Communication Application

As is known, sound and fast development of forestry entails technical innovation. With the development of science and technology, electrical communication technology is also widely used in the management of forest resources. As early as in 1990s in

Russia, it was possible to connect forest organizations in different countries and regions due to the access to electrical communication facilities. "Electronic Russia" was introduced in 2001 and its revised essential target in 2006 is to improve the government staff's ability by telecommunication technology application and promote the serve quality and administration of the government for the citizens. Now, the advanced electrical communication technology facilitates dates and information transmission and measure forest area, growth proportion, destruction degree to forest resources of natural disasters and human factors and even the frequency as well as the high incidence of forest fires.

4. THE OBJECTIVE AND EVALUATION OF FOREST MANagements

4.1 Economic prosperity of forest industry

Booming forest industry, the commercial goal of forest management, is a prognosis of sustainability, which include an upswing of wood and non-wood forest products, growing timber available and so on. The forest industry in the Russia is an important social economy domain with almost 23,700 lumber industry enterprises and more than 100 thousand workers. It is pillar industry in Russia of 45 federation main body. Forest industry and lumber processing industry are the vital role as the local specialization production department. So forest resources management promotes the prosperity of lumber processing industry and furniture industry development, maximizes their profits and also simultaneously created the harmonious ecological environment other industry development.

4.2 Awareness of Forest Management

One of the social influences is to deepen the public's impression of forest resources protection and profound understanding so as to increase awareness of forest resource management and encourage people to join in the management of forest resources voluntarily. Therefore, civil society organizations are particularly important. It is a lot to recommend combining public activities such as media, exhibitions, and fairs with forestry subjects.

4.3 Conservation of Biodiversity

Biodiversity emerged as early as in 1980s considered as an important environment-related issue (Lévéque and Claude Mounolou) due to the reduction of species caused by human activity and even extinction of rare biological ones. Biological diversity is a total of ecological processes related with organisms (animals, plants, microbes) and the environment including ecosystems, species and genetics. Biological diversity is the base, upon which the survival of mankind, sustainable economic, social development and ecological security and food safety depend.

To start with, soil and water conservation is a significant measure to evaluate forest management along with carbon dioxide reduction. In a microcosmic perspective, management also needs soil moisture, level of water table and sediment load evaluation.

5. OPPORTUNITIES FOR BETTER FOREST MANAGEMENT

5.1 Problems in Forest Management

It can predicate that forest resource management in Russia has contributed a lot. However, problems still exist. In Russia specific geographical situation requires different laws and systems, which leads to the collision between state legislation and local ones. What is more, information is not exposed to the public transparently, which renders vindication of government actions inaccessible. For instance, 40 percent of land is reforested after clear-cutting while roughly 2% is showed in Greenpeace Russia. As the biggest forest country in the world, the Russia lumber profound processing falls behind other developed countries. The Russia forest industry is confronted with the default of fund, modernized infrastructures such as lumber industry equipment. Ministry of Forestry's cancellation has caused three kinds of adverse consequences directly: The forest management department's cadres drain massively; the forestry domain lacks the unified management and production disorder stirs; Criminalities on forestry domain timber become rampant [7, 10].

Another issue warrants attention is forest fires, which occurs nearly in 400 million hectares each year, namely 10% of forest area in the world, for instance, Russia according to statistics and 9 billion tons of biomass during a raging forest fire reduced to ashes. It has been a chronic problem although successful fire management strategies have been made. The number of forest fires in Russia in 2009 and 19,600 in 2008 with more than 291,000 hectares effected, up to more than 25,000 in 2006 with total affected area of 1.3 million hectares. In Russia, the number of fire increased by 1.8 times and fire area increased 7 times.

5.2 Opportunities for Better Management

Russia has abundance of forest resources and overwhelming potential for forest industry. And that entails more efforts and endeavor. First, law and regulation perfection should be accentuated persistently, which lay underground for policy performance. Also, penalties and rewards should be combined [11]. Second, transform of business practice and management mode should be accelerated. Intensive processing of limber should be encouraged. Third, monitor and supervision of forest fire should be strengthened and forest rate minimized.

6. CONCLUSIONS

This study shed light on forest resource management including the nature, system, value and so on in Russia. It concludes that forest management should be tailored to the specific situation of a given country. This essay puts emphasis on the sustainable forest management from its origin, its development and its application in Russia. Also, significance and prospect of forest management is illustrated.

As is known, the whole world is faced with forest exploitation and damage so forest management draws more attention. However, complicated factors exist in different countries so the best solution to ameliorate and eliminate it entails the meticulous investigation of the previous forest management. Conclusion is arrived based on limited information and dates then further survey is necessary.

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