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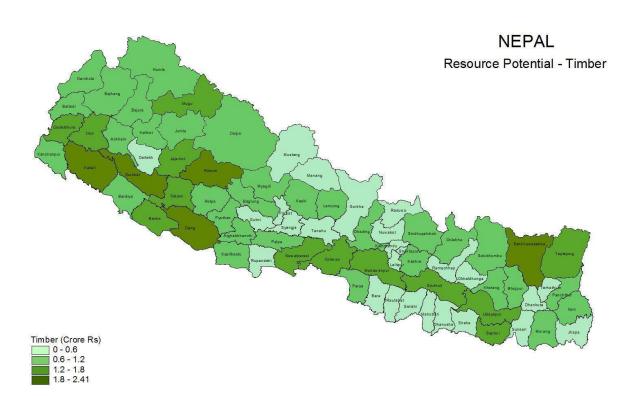
**Federalism and Natural Resources of Nepal-1** 

## **Timber, Woods and Herbs**

## Which district is rich?

(Photo of Author)

By Dr. Sunil Pokhrel



To make the federalism successful, lots of state restructuring options are proposed from various groups, intellectuals, and political parties. For the self governance of the local and regional government they need resources. The natural resources are mainly the major resources for this cause in the case of Nepal. Detail information regarding the natural resources in each district makes the restructuring of state uncomplicated. Current situation and the probable income from natural resources such as woods and herbs are discussed in this paper. Other natural resources information and analysis will be discussed in future episode.

Every country has its understanding and concept regarding natural resources. Around two dozens of countries in the world currently are going through conflicts for the ownership right, access, and distribution of natural resources (Refer to Table 1). Though the conflicts begin showing the reason of caste or regional identity right, cultural, and language identity, the main reason for the conflicts are who can have ownership and access over natural resources.

The identity of the person is an important matter. With the assurance of personal cultural identity, people are focused on the development and livelihood of their family. In developed countries, the livelihood of the public is connected with industrialization and technology rather than natural resources. But with minimum industrial development and technology dependency, people of under-developed countries need to depend on the natural resources for their livelihood. Nepal is one of the countries that listed as under-developed countries ranking almost last in the position. So, it is important to include a clear concept and briefing of ownership and access on natural resources, its utilization and distribution mechanism. For that, it is necessary to keep the detail information regarding the available natural resources that we have. There are chances that if ownership rights, stability, and distribution of natural resources in the constitution are not put

in organized, inclusive, and logical way, then there will be the high probability that country will return to violent conflicts again.

What types of natural resources available in the country in what quantity? What will be the income to the government from it and what situation will arise after distributing the income to per person? How to implement the concept of the rights of self-decision and self-governance on natural resources? Will it be practical and lawful to give all the rights of natural resources to the local level? If provided complete right to local level then what situation will be created due to the economic discrepancy between people having sufficient natural resources and with minimum? To get the answer to these questions, it is important to analyze availability of natural resources like forest, gravel and sand, mineral resources, water resources, tourism, and agriculture and livestock and its feasibility study in each district.

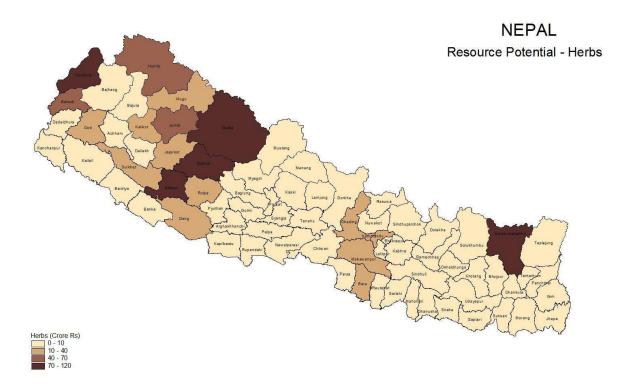
This article calculates probability of the economic benefit gained from timber, woods, and herbs by the country.

## Nepali forest from the perspective of timber and woods

Analyzing based on image taken from geo-satellite in 1978/79, there is around 5.7 million hectares forest was available in the country. The area declined to 4.3 million in 1997. After that, with the implementation of community forestry and from the support and pressure of NGO/INGO, the forest area is not reduced since 1997 to date.

The average stem volume of trees in the forest of Nepal is 178 cubic meter per hectare. The annual growth of the forest is 3 cubic meter per hectare in the Himalayan region to 13 cubic

meters in Terai. Based on this, the average national growth of the forest is around 5 cubic meters as per experts' assumption. The mostly found timber in Nepal is Sal tree. The tree has covered around 28 percent of the total forest area. Sal wood is also considered best for furniture related work in Nepal as well as in neighbors. The government takes NRs. 250 per cubic feet as royalty in Sal tree. Similarly, Sisau, Masala, Jamun, Chap and other woods are also found in enough quantity in the country. The government takes Rs.40 per cubic feet in other wastage type timber as royalty. Calculating the royalty collected from Sal tree and other timber the government is receiving a royalty of NRs. 87.50 per cubic feet on an average.



This study is based on these assumptions about the royalty and other charges collected by the government in each district from the forest.

- The government royalty is calculated based on the 5 cubic meters wood extraction per hectare from the forest annually. This extraction will make the existing areas of the forest same level and it will have no negative impact in the ecosystem suggested by experts.
- Assumption is made that there will be no illegal deforestation; the government will receive the entire royalty amount.
- 3. Analyzing the deforestation done in different districts in the last 15 years and royalty received; only royalty of one cubic feet wood has received by the government whereas tree cut down were around 14 cubic feet wood per hector per year. But for this study, the royalty income is calculated based on the wood resource of total 14 cubic feet wood per hector per year assuming no leakage as in past. According to this assumption, maximum royalty received in Sankhuwasabha, Dang, and Kailali (more than NRs. 20 million annually) and minimum in Bhaktapur (NRs. 200,000).

The details of the royalty, if received, will be shown in Table 2.

## Possibility of economic benefit from herbs

From the herbs production perspective, Nepal is considered as one of the countries with the maximum potential of herbs production globally. Because of the high natural diversity within the small distance of 500 miles, Nepal has Yarsagumba that grows in the Himalaya at low zero degree temperature to Cinnamon which grow in the Terai of high temperature of around 40 degree centigrade. Herbs that are expensive in the world market like Yarsagumba, Chiraito, Jatamanshi, Pakhanbed, Sugandhawal, etc. can be produced enough in the country.

The royalty gained by the government in the last 15 years and studying different informal sources jointly, a huge leakage was found in the production of herbs. While calculating the economic possibility of herbs, a leakage co-efficient analyzed in the timber and woods were made base. As there is no data on the land area producing herbs, the area covered by forest is considered as the area of herbs. So the calculation is made based on an average annual increment of the forest is made same in the case of herbs. Yarsaumba, Chiraito, Rittha, Jatamanshi, Timur, Dalchini, Pakhanbed, Pawankobokra, Bojho, Sugandhawal, Chutro, Majito, Cha Aamle are considered as basic herbs for income sources. Considering the mentioned basis and zero leakage and corruption concepts, Darchula and Dolpa are the districts that will get royalty more than NRs. one billion while districts like Tanahu, Kapilvastu, Kailali, etc. have minimum income from herbs.

(Civil Engineer Pokhrel has done detail research on "Natural Resources and Conflict in Nepal." He received research scholarships from Harvard University and Brandeis University USA for this research.)