

C H A P T E R : V I I

FORESTRY

The entire Himalayan region is endowed with rich nature flora and fauna and Nepal being a country within the Himalayan belt, is a natural paradise for nature lovers. Conservationists, botanist, zoologists and environmentalists.(1)

Without some scientific inventory showing density, quality and composition of forest, it is difficult to make a precise estimate of forest wealth of a country . In such cases, the area under forest may be reckoned as a rough indication of potentiality of a country. One foreign expert has estimated that an area of about 25,000 sq. miles in Nepal is under forest. while another expert who visited sometime latter has estimated the same at 17,500 sq. miles. In view of a reckless explanation of the tropical zones forest in the past it is quite probable that the latter estimate may be more realistic than the former. Thus at present something like 33% of total area of a country may be considered to be under forest in Nepal. It is not an unfavourable proportion, but with an exception of countries like India, Pakistan, Philippines, Afghanistan etc. the proportion of forest are in Nepal is quite smaller when compared with other ECAFE Countries. For instance, Burma, Combodia, Ceylon and Taiwan, China have

half or more than half of their total areas under forest.

While Malaya, Thailand and south Korea have more than 2/3rd of their land under forest.

More reliable information on forest resources of Nepal is now available. The information is based on the aerial survey of the terai. Churia range and the southern part of the Mahabharat range. Covering an area of 78 lacs acres. Of the total area aerially surveyed 52.6% (about 41 lacs acres) remained under forest, 38.9% under cultivation, 4.7% under water, 2.7% under grass and the remaining 1.1% under other purposes. The detailed break down of the area under forest is as follows :-

TABLE : 7.1 LAND UNDER FOREST (IN ACRES)

S.No.	Forest Division	Commercial Forest	Non-commercial Forest	Total
1.	Mechi	1,74,619	43,812	2,18,431
2.	Bhat Nagar	2,06,325	29,518	2,35,843
3.	Hanuman Nagar	1,94,153	1,12,253	2,06,406
4.	Janakpur	1,74,146	1,27,806	3,01,952
5.	Birganj	4,44,890	1,09,282	5,54,173
6.	Chitwan	23,911	40,981	64,892
7.	Lumbini	2,93,450	69,060	3,62,510
8.	Kapilavastu	1,95,300	37,522	2,32,422

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9.	Dong (Partial)	1,25,667	1,14,853	2,40,520
10.	Banke	2,91,635	1,15,452	4,07,087
11.	Barclia	2,65,758	56,026	3,21,784
12.	Kailali	3,52,603	1,02,565	4,55,168
13.	Kanchanpur	2,82,070	33,967	3,15,037
14.	Mahakali	37,005	24,237	61,137
	Total	30,61,532	10,17,230	40,78,762
	Percentage	75.1	24.9	100.00

Excluding T.C.N. area.

Nepal is however, fortunate enough to have been endowed with rich and valuable forest wealth, which if consumed, developed and exploited on scientific lines can contribute substantially to the initial stages of development in the country. It was rightly assessed that the forest resources could provide the most promising base for a rapid strengthening of the economy in Nepal. But the history of man's relationship to these immense potentialities of nature makes a sad reading. A tale of want on misuse and reckless explanations - through the recorded history of the country. (2).

In describing the aspects of vegetation the country may be divided into three zones roughly. These are

- (i) Tropical zone (stretching from the lowest level to below 1700 meters).

- (ii) Temperate Zone (Hence to below 4300 meters)
- (iii) Alpine Zone (above 4300 meters to the perpetual snow line of 5000 meters) (3)

The tropical zone comprising of the lower region of the terai plains and churi foot hills not extending above 1200 meters. The temperate zone incorporating the central region of the Mahabharat ranges between 1200 and 3000 meters, approx. Alpine zone comprising of the Himalayan chain above 3000 meters.

TABLE : 7.2 THE EXTEND OF FOREST COVER IN DIFFERENT REGIONS

REGION	FOREST AREA IN DIFFERENT REGIONS AND AREA IN HECT.	PERCENTAGE OF TOTAL
Hills	4,281,978	88.8
Terai and Bhabar	486,834	10.1
Dun	54,199	1.1
Total	4,823,000	100.0

The spatial extent of the coverage of different forest components is shown in percentage terms of the total forest area of the regions. (4).

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THE TROPICAL ZONE ABOUNDS IN THE MOST

<u>COMPONENTS</u>	<u>TERAI</u>	<u>HILLS</u>
Sal	46.0	20.1
Terai-Hardwood	47.0	8.1
Sissor-Khair	3.8	-
Lower slope mixed hard wood	-	21.5

Valuable timbers in the country and consists of shores Robusta Dalbergia, Sisso, Acacia, Catecheu etc. Nepal has been unable to draw much benefit from her forests due to lack of proper managment, transport facilities, technology and capital, population pressure on accessible land resources resulting from migration of people from the hills and India to the terai is partly responsible for over exploration of accessible forests.

Transportation difficulties in the hilly regions have left conifer forests, that ocver large areas, particularly untouched. Between altitude, 1200 and 3000 meters a number of species of pine, fir and spruce are found. Oak, maple, louch, walnut and willow are characteristic trees of this area. (5)

A sub-tropical vegetation e.g. rattons tree ferms, plantations, screw pines and other tropical plants are available in the valley region.

The temperate zone coincides generally with the oak forest region, where the under growth becomes perceptibly less rank and dense, sub alpine zone, is practically the region of the rhododendrons and pine forest.

In the temperate zone epiphytical orchids, rhododendrons and mass of shrubby vegetation are also found, bamboo and tall grasses from the under wood in this zone. Rhododendrons are in their glory in April and May every year. Nepal has the largest varieties of orchids in the world as many as 600. (6)

The Alpine Zone above 10,000 ft. grows rhododendrons, juniper, oaks and maple, other conifers grows even at an altitude of 9,500 ft. The varied altitude and climate factors, thus help the growth of various species of trees from sal at the low land of less than 4,000 ft. to numerous varieties of temperate and alpine trees suitable for making of furniture paper pulp, plywood, newons match sticks and boxes. It is remarkable that a small country like Nepal is endowed with so many valuable species of trees which if conserved developed and exploited on scientific principles can contribute to an initial process of industrial development in Nepal as in Sweden. (7).

Nepal plants amount about 3000 species of which 150 are ferns. The orchid family is also extensively represented in Nepal. The natural order scitamineae is largely represented by both wild and cultivated species. It includes ginger, turmeric, plantain, Hedyotis, costus, Alpinia etc. Among the numerous notable tuberous plants are several species of Meconopsis, forsythias, deadly asconites, gentians, violets, geranium, potentillas, sanifrage, balsams, many species of pudicularies crow furdia, oidymocarpus, chirita, smialacina, jatamansi and ruhraba etc.

There are hundreds of varieties of flowers in Nepal other than orchids, Among them are primulas Meconopsis (Blue poppy) Iris, to mention only a few which adorn the mountain slopes during summer months. (8).

Pinus longifolia, an important source of resin turpentine, is extensively found between 900 and 1800 meters. Resins has a good market in India, full utilization of all available chir pine trees of the kingdom could produce 42,000 tonnes of resins every year. It is estimated that about 9.5 million chirpine trees could be tapped which would provide employment opportunities to about 7,000 persons and serve five resin and turpentine factories. The Central region could produce 10,000 tonnes of resin and 3,000 tonnes could be extracted from the eastern region. The area proved feasible for these

industries are Dhangadhi, Nepalganj and Sunkhet.

Semul (Bombar Malbarium) which is used in plywood, paper and pulp has so far been used in Nepal only for match boxes and sticks. A number of match industries exists in various parts of Nepal.

Bamboo, which has a good potential for paper industry is abundantly found in Jhapa and Baglung and is used for weaving mats, baskets and furniture.

Saw mills are the most common form of forest industries that used semi portable Indian Equipment. Most of these mills are found in the terai. The terai corporation the largest saw mills in Nepal.... is in Hetadue.

Herbs in Nepal grow from sea level to high levels through their full potential has not yet been ascertained. However alkaloid content in Nepalese herbs is considered to be quite high. Details of various kinds of herbs that grow are available from Royal Drug research laboratory. (9)

The country is richly endowed with forest wealth and out of total area 1,47,181 sq. km. are covered with forest which constitute about 55,334 sq. km. or 37.60 percent of the total area of the country.

The forests do not appear to contribute much to the revenue of the country. This is mainly due to the fact that total expenditure for conservation and development of forest is much more than the total revenue received out of forest resources, sales of timber is none of the main revenue from forest. In 1986-87 total revenue from forest is about 139 million rupees of which 81% was from selling of timber revenue from selling herbs is about 4% of the total revenue of 1986-87. As in many parts of country the ecological balance has been disturbed through indiscriminate felling and poaching of wild life. (10)

The shifting cultivation in the past as well as at present on some scale has been a cause of destruction of forests in Nepal as in other forested areas of the world. T.V. Collice, who had worked in Nepal as a forest advisor from 1918 to 1931, made a striking remarks that the history of mankind in Nepal, has been and still is in many places a story of struggle against forests and their denizens The original form which this took was that of shifting cultivation. The deforestation process due to conversion of rich forests into shifting cultivation is not good even for agricultural development since it does not imply a permanent settlement any more than hunting implies nomadism. On the contrary it has reduced the resistance power of land against flood and denudation. Consequently, erosion and land slides are encroaching more and more upon good cultivated neighbouring land. (11)

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Cultivation requires land, population growth results in pressure to expand the cultivable area by cleaning forest lands. The land requirement of a given population depends, among other things, on the productivity of the soil, and this can be considerably enhanced - or reduced by the agricultural techniques applied. Increasing population pressure also results in marginal land i.e. less suitable and mostly steeper slopes being brought under cultivation, thus leading to a reduction of overall productivity of the land. The quality of terracing is subject to local variation. The classic rice terrace has an outer bundh of about 30 Cm. height to retain the water, and generally provide a good resistance to erosion. Maize terraces on the other hand, are more susceptible to erosion, having no bundh and being generally inclined out wards to prevent water retention.

Irrigation of terrace can increase the yield of the available land, but entails certain dangers. As the main rivers usually flow far below the terraces the steeply flowing side streams are tapped for irrigation at a level high enough to permit a flow along the slope of the side valley to the fields in the main valley. There are usually no facilities for limiting flow, so that floods caused by excessive rainfall may enter the canal and overflow at the point where the steepest slopes are transversed and where the canal is generally smallest often causing his gully erosions.

Livestock is usually held in excessive numbers in the Himalayas, partly for religious reasons, partly account of the low yields of cattle and partly because of the need for animal manure. Livestock makes demands of the forest in two ways. First, the forest is used for grazing all the year round, and the cattle feeds on young plants and leaves and twigs of small trees. Second, the leaves and twigs are lopped for cattle feed by the population. (12).

The forests are exploited at all altitudes upto the cool temperature zones. One of simple reasons for the forests near the village being misused is that a majority of the farmers have no alternative source from which to get their fodder and energy. According to K.K.Pandey, At Tindhare in Sanapakhar village at about 1700 meter I was shown a hill slope where two years ago, there existed a thick banj forest. Now a part of it is a maize field and the rest is covered with Banmara weed (*Eupatorium* species) and other unimportant shrubs. Two hundred meters up and at about 5 Kms distance I saw a Banj forest at Jhulochaum in Jethul Panchayat, being heavily lopped for fodder purposes. The tree not many of them were Banj species, were standing like mosts devoid of leaves and lateral branches. A touching picture, the pallarding of trees in the forest is uncontrolled.

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Very often the individual farmers does hardly anything to safeguard take care of propagate or utilise the few fodder species. Properly, let along other species of importance to the forest. Thus a farmer who uses the forest today as his fuel and fodder source may also be the one distroying it at a rate faster than one would like to believe. The damage left behind by the migrating herds of chauries in search of fodder, can be devastating to the forest in the cooler areas. Consequently, symptoms of development in the mountain regions which are hardly promissing. The pressure of man and his animal population on the forests, pastures and on the crop lands has reached its saturation point. Already the cultivated average accounts for 16% of the total surface area and any are sided increase of the cultivated lands could being about irreparable ecological consequences.

The mountain regions are especially vulnerable to over-exploitation. In short, less of forest, seems to have two main causes :-

- (a) Use of important undergrowths and trees as fodders.
- (b) Felling of trees for energy and construction materials.

The second is an economical and financial problems of the country and the solution may lie in the concept and stage of development on the one hand and the cost, availability and possible diversification of energy carriers on the other.

The problem with forests as a source of animal fodders can be very local and the solution depends on how quickly farmers can be detracted from the forests. How this is to be accomplished is a technical and administrative matter. The number of farm ruminants today exceeds over capacity to keep them.

As with forests, but even more rapidly the pastures are disappearing under the pressure of human occupation. Moreover, the misuse of forests seems to have a direct bearing on the condition of the pastures. Especially of these bordering the forests. They live in one of the elematically sensitive regions of the world mansoon region. The habit of burning the pastures in no way compatible with the cure and nature needed for mountain landscapes. This may well be due to the fact that the very simple management of pastures, such as the programme of stocking, ownership and agronomical measures is widely locking on the local level. Depending on the botanical dissection and the condition of the vegetation and the way they are being stocked they are prevailing or being eroded. The pasture up to the higher regions are covered more and more by SIR grass which is a sign of pasture deterioration. However, the prevailing pastures delapidated by over stocking and fires, rain and by sirc grass will be of no great help for a long time, even if they are taken care of the improvement measures are started intensively right now.

The technicians should take into account many factors before recommending sheep and goat for pastures in the higher regions with less rain and poor soils. Despite the lack of immediate returns the work of improving the pastures through administrative and technical means should in no way be slowed or stopped. In view of all the ecological and economical benefits from such actions in the long run it worth while continuing. Other traditional fodders such as the by-products of agriculture should always be used to a maximum but not at the cost of the quality of the organic matter which should stay in the field. A general improvement of terrace border fodder is highly feasible and essential for the sake of annual crop itself. (13).

In the absence of alternative the fuel needs of the population in the Himalayas are met by fire wood. Trees are robbed of all their branches except for the top crown. According to Robbe 1954, annual firewood consumption is of the order of 0.6 Cubic meter per family or well over one million cubic meter for the whole of Nepal. However, this figure seems to be a gross under estimate for F.A.O. calculates production of wood for fuel purposes in Nepal to be no less than 6.6 million cubic meters in 1967 (Donner 1972, p-354). In a study by March 1974, it is estimated that over 90% of wood extraction from the forests in the Kalinchowk area is for fuel purposes.

The forests also have to meet the populations need for construction timber. This varies considerably according to

climate and local building styles. As far back as 1931 (Meshe 1931 p - 531) criticized the wasteful use of timber in constructing houses in some parts and concluded that an average family of five persons require one trunk annually for construction purposes. Manch (1974 p - 9) confirms that in the central Himalayas (Eastern Nepal) about 70 cubic meters of valuable meters should suffice if properly and efficiently utilized.

Timber and fire wood extraction, forest clearance for cultivation, grazing, lopping for fodder and burning of the under growth in conjunction with in efficient timber utilization are causing a general degradation of forests by thinning, overaging and finally local destruction. It is evident that the destruction of the forests is progressing more rapidly every year and that Nepal for instance is likely to be all but totally denuded by the end of the century. Without alternative sources of energy this process cannot be stopped. (Manch 1974 p - 5) on the other hand (Donner 1972 p - 354) Donner considers the provision of alternative fuel resources in the near future an unrealistic proposition.

The state of the forest and vegetation cover has decisive effects on the water household of a given area. A good forest will provide relatively high infiltration rates or and a correspondingly low run off of water, because of the relative

stable and porous conditions of the soil and the protective layers of leaves and other organic substances. Numerous experiments in Europe, America and Japan have confirmed the absorptive capacity of the forest. However, the application of these results to Himalayan conditions is not without problems. Where rainfall is of long duration and intensive as is frequently the case the monsoon period saturation may occur and the run off retarding effect of the forest may decrease rapidly.

On the other hand it has been proved that denuded soil soon becomes compacted to such an extent that run off is accelerated and soil erosion results. The high kinetic energy of rain drops falling on the naked ground beaks up the soil and carries it away down the slope. The progressive dying out of the soil through over-heating leads to a destruction of organic matters, reduced water holding capacity and increased evaporation of moisture.

To complete the picture of man-made erosion in the Himalayas, a number of additional factors, are as follows, the cultivation of wheat in winter, propagated by several development assistance programmes, reduces the grazing area available to the cattle, so that forest grazing is on the increase. Recently, several authors have noted the fact that

that the increasing distance of the receding forests have made fire wood procurement difficult so that cattle dung is being dried for fuel. This deprives of the soil of valuable manure, so that productivity drops (ECKHOEM, 1975 HOGGER 1975) Finally road construction also contributes to erosion while some roads are aligned along the river valley and are relatively secure, other are aligned higher up, thus changing the run off of the slopes.

Population pressure in the hills had led to deforestation and erosion and the situation is becoming more critical every year. Many have no other choice than to look for alternative means of livelihood. The terai at the foot of the Himalayas now presents such an opportunity since the main reason for the low density of population there has been removed by the eradication of malaria. In fact, the terai belt is gradually filling up. Generally the more enterprising members of a group will take this drastic step first, leaving behind an aged, dispossessed population incapable of reversing the negative spiral (ECKHOLM 1975 page - 764).

Migration is creating new problems. The more important factors and relationships are as follows. There are two types of settlement in the terai. The Government of Nepal, together with international organisations like FAO and IMRD is implementing organised resettlement schemes in various places. By far the largest groups of settlers is constituted by illegal

settled on FAO quotes an even higher figures and estimates that about 36,000 hectares of good forest land are lost annually through squatting (UNDP/FAO forest development, Nepal land use 1974 p - 7) On the basis of ERTS satellite imagery. FAO estimates that no more than 8,18,600 hectares of forest area remains in the terai (UNDP/FAO forest development Nepal land use 1974 page -7) and ECKHOLM 1975 p - 765 points out that less than half of this will be suitable for cultivation.

It is clear that the destruction of forests in the hills, through the destruction of the previously balanced ecology, is indirectly resulting in the destruction of the forests in the terai. Both squatting and legal settlement are dependent on forest clearance. While a growing population is placing increasing demand on the dwindling forests for fire wood and construction timber. In addition the falling of trees of the Indian lumber market takes its toll. This is not easy to stop since Nepal depends on the export earnings for the import of essential items to meet the needs of a growing population.

Deforestation in the terai does not have the same destruction effects on the hills. (14)

The commendable measures undertaken for the forest development during the first plan included, among other things

(i) the nationalization of private forests under the Private Forest nationalization Act 2013.

(ii) enactment of fuel conservation (special Management) Act 2014.

(iii) Declaration of National forest policy 2016

(iv) Establishment of a forest institute

(v) Offerestation measures at some selected places.

(vi) Demarcation of forest boundary of about 100 miles

(vii) Establishment of a forest school for training foresters and rangers.

The programme for forest development in the three year plan was drawn up on the basis of the experience gained in the course of implementation of five years plan. The availability of relatively larger number of trained hands also helped to workout a more extensive programme during the plan.

The notable works done under the three years plan for development of forest resources include among other things the following :-

- a. Demarcation of forest boundaries of 2,384 miles in 9 hills and 13 terai forest administration divisions.

- b. Construction of 202 miles of fire lines.
- c. Construction of 298 miles of forest paths.
- d. Plantation of sapling in more than 10,000 acres of land in Kathmandu, Trisul, Chitwan, Ilam, Pokhara, Salyam and Lumbini.
- e. Organisation of forest survey works for assessing forest resources and also for conservation development and exploitation of these resources on scientific lines.
- f. Necessary arrangements for wild life preservation in Chitwan, Kanchanpur and Biratnagar.
- g. Training of 112 rangers and 214 foresters.

The programme in Third plan for development of forest resources has drawn up along the lines of two previous plans and the activities undertaken during the earlier plans were therefore, extended and expanded further during this plan period. The actual progress made over the period of five years may be summarised as follows :-

(a) Completion of arial survey of forest resources in the terai, churai range and southern part of Mahabharat range and implementation of forest development working plan in T.C.N. area and establishment of offices for implementation of such plans in Birgunj, Biratnagar, Kanchanpur, Chitwan, Banke and Bardia.

- (b) Demarcation of forest boundaries of 1493 Km. construction of forest road of 547 Km. and fire lines of 237 Km in the first four years of the plan.
- (c) Afforestation in 4150 hectares of land.
- (d) Training of 61 rangers and 96 foresters. (15)

In 1954 Mr. Robbe estimated the annual consumption of wood in Nepal at 31.0 million cu. ft. the break down of which into fuel wood and industrial wood were 24 million cu. ft. and 7 million cu. ft. respectively. He estimated the annual fuel wood consumption on the basis of 20 Cu. ft. per family. According to total annual fuel consumption in Nepal should be about 35.5 million cu. ft. in 1961 as against 24 million cu.ft. in 1954 for the simple reason that the 1961 census reported 17,75,645 families in the country of the consumption of industrial wood remain same. Total annual requirements may be estimated at about 42.5 million cu. ft. as against 31 million cu. ft. in 1954. However, it is not the low per capita consumption as fuel that should deserve a more serious consideration. This itself is an indication of back word economy of the country. Roughly, higher the stage of industrial development, the greater is the use of wood of industrial purposes.

If the present level of consumption of 4.25 million cu. ft. alongwith the estimated annual export of 3 million cu. ft. is to be maintained, there should be a net annual

addition of 26,000 cu. ft. per sq. miles or 29 cu. ft. meter per hectare or else the existing forest resources will be gradually depleted.

If the standard of growth in Nepal is far greater than that in Indian or in many other Asian countries, the present level of consumption and export can possibly be maintained without contrary. If it is as low as that of Burma (0.6 cu.m.) the position will be just reversed.

What the country needs at present is the most vigorous measures for protection and conservation of the existing forests from further abuses and misuses by man and afforestation of deforested areas on a planned basis. There should be an optimum relationship between the rate of exploitation and the rate of growth of forests. The principle which has received a wide recognition for maintaining this relationship is known as the principle of sustained and maximum yield. The idea underlying the principle is that if the removal is limited to a net increment of forest output. It will ensure, on the one hand, the sustained yield in perpetuity and on the other, the forest capital will also remain at least intact. Assuming that this principle of sustained yield is followed, this yield will also be maximum, if at the prescribed intervals, the products harvested are both of the highest possible

quantity and if the policy of government is guided by the objectives of discrete use and scientific conservation and development of forests in future. Nepal with her present 4.5 million hectares of land under forest containing a large proportion of sal trees of great dimensions, a sufficiently large proportion of conifers and oaks and an equally great amount of sabai grass can well feed a number of industries on economic scales comparable with those in some advanced countries of the world. (16).

Conservation, development and exploitation of forest should go hand in hand, so that its products do not rot or suffer a premature destruction. This requires a proper relationship between the rate of exploitation and the rate of growth of forest. Such relationship can be established only when the principles of sustained and maximum yield are followed.

From the appraisal of forest resources on Nepal, it appears that the country is endowed with immense potentialities, which if conserved, developed and exploited on scientific lines as suggested above can really be the most promising base for a rapid strengthening of national economy. Nepal has still not only a large proportion of her land under forest but also valuable species of trees, because of typical climatic and topographical conditions of the country. One of the important factors in the location of plywood industry is an availability of large diameter logs of goods from which can be

found in the plenty in Nepal. In the initial stages, a large number of small saw mills can be run without any difficulty at all. In Newyork state more than 52% of the saw mills produce less than 118 cu.m. a year. Fore a mill producing 118 cu.m. it requires 364 hectares of forest land for regular supply of raw materials in scandin even standard. Paper and pulp industry demands a considerable size for economic operation. In North America, 1300 pulp and paper mills are operating with an average annual production of 20,000 tonnes. To sustain a mill of this size it requires 46,666 hectares of land under forest. In the light of probable output of raw materials the FAO experts. Mr. Earnest Robbe has also recommended an early investigation due to viability of following :-

- (i) Saw milling with permanent plants in chitwan and in Morang withthe production capacity of one million cu. ft. per annum in each case with seasoning and carpentary works combined.
- (ii) Saw milling with small portable oaws with an annual output capacity of 73,000 cu. ft. sforthe use of improvement felling products.
- (iii) Plywood manufacture in Chitwan and in Morang.
- (iv) Saw milling, plywood manufacturing and wood puping in the chin forests of Mahakali and Karmali districts.
- (v) Char coal burning in most of the cut over forests of the Bhaban to use impreovement felling products.

(vi) Khair wood conversion to make 'catch and Katha' in Chitwan Kanchanpur and elsewhere.

(vii) Wood pulping for paper making using exholopsis binata (sabsi grass) and;

(viii) Resin distillation in the chin forest of the west.

All these illustrations roughly indicate the possibility of a number of wood industries in Nepal, so far as raw material supply is concerned. The readily accessible markets in neighbouring countries like India and other countries of the ECAFE region, provide a better change of success for such industries, in Nepal. What the country demands at present is just the rigorous measures for conservation and development of the existing forests from further abuses and misuses of man. On the one hand and afforestation of deforested area on the other. (17).

CHAPTER : VII

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