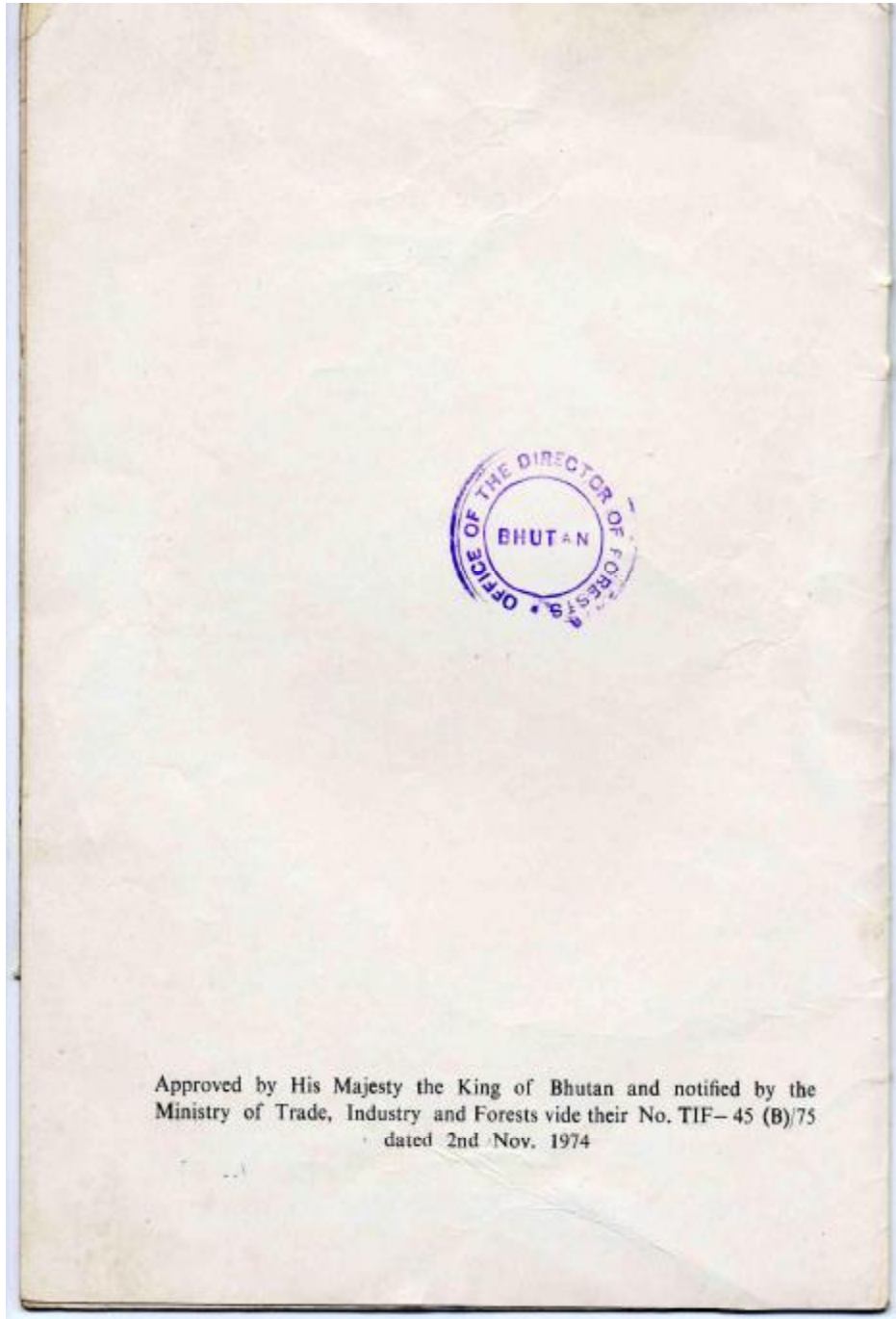


NATIONAL FOREST POLICY

1974



DEPARTMENT OF FORESTRY
MINISTRY OF TRADE, INDUSTRY AND FORESTS
ROYAL GOVERNMENT OF BHUTAN



Approved by His Majesty the King of Bhutan and notified by the
Ministry of Trade, Industry and Forests vide their No. TIF- 45 (B)/75
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PART-I

1. INTRODUCTION

Forests constitute one of the major national resources of Bhutan and they play a vital role in the physical balance and economic development of the country. They exercise vital protective functions with regard to soil, water and climate and as a result influence the agricultural economy, the development of hydro-electric projects and general welfare of not only the country in which the forests are located but also neighboring countries as well. Forests are the source of raw material for a wide range of industries, thus constituting an important element in the social stability and progress of the country as a whole. Moreover the necessity for setting aside forest areas for the preservation of ~vild life and recreational purposes should not be ignored.

The overall objective of the National Economic Policy of Bhutan is the achievement of self-reliance. A major share of the contribution to the national exchequer will have to be from forests. Therefore, the starting premise of this policy should be that the entire forests belong to the State and there should not be any private right to any part of them. The economic policy contemplates a growth rate of 10 % per annum in the revenue generation from forests. The National Forest Policy of Bhutan is based on the above cardinal principles of vital national interest.

II. EXISTING FOREST POLICY

At present, though there is no laid down forest policy, the

following principles have been observed for the management of forest resources.

1. To protect forest resources in order to derive economic and other benefits.
2. To meet the requirement of timber for construction, fuel, forage for cattle, barks, herbs and medicinal plants for local use and export.
3. To obtain revenue for the Government by sale of timber and other forest products.
4. To set up Wild Life Sanctuaries.
5. To create the required organizational set up for the efficient management of forests.

PART-II

The National Forest Policy of Bhutan is formulated with the following major objectives :

1. Forest conservation
2. Afforestation
3. Resources survey
4. Utilization programme
5. Wild Life and Recreation
6. Forest Administration and Training
7. Investment
8. Revenue
9. Research and Publicity
10. Forest Law

1. FOREST CONSERVATION

1.1. Proportion of Forest area - In consideration of the geo-physical conditions of Bhutan and the necessity of maintaining soil and climatic equilibrium, the objective will be to maintain a minimum of 60% of the total land under forests. The existing area can be clearly ascertained only after a comprehensive survey. If it is proved that the existing area is below the minimum, programmes of afforestation will have to be taken up using all available land unfit for agriculture. The forest area in excess of the prescribed proportion will not, however, be sacrificed.

1.2. Demarcation - The first step towards forest conservation is to demarcate the boundaries of forests, without which it is impossible to know the correct proportion of land under forests. The programmes of the Forest Department will be formulated in such a manner as to complete the total demarcation of the forest area in Bhutan within the next 15 years. The present hindrance in implementing quick and efficient demarcation has been the existence of local rights. These local rights vested with the population will be purchased, denied or admitted in whole or in part as deemed necessary by the Government for facilitating the programmes of demarcation.

1.3. Grazing - The present practice of allowing grazing rights in perpetuity within the forest area over large tracts to individuals is damaging to the soil, vegetation cover and the re-generation process. In tune with the accepted policy that the entire forests belong to the State such rights will be abolished. All the grazing area within the forests will vest with the Forest Department and it will be the responsibility of the Department to regulate grazing in such a way as to

avoid harm to the forest wealth. Grazing will be allowed only on payment of the tax to be fixed by- the Government from time to time.

1.4. Shifting cultivation - Shifting cultivation has been another cause for the depletion of the forest wealth by means of destruction of forests, soil erosion and fall in soil fertility. The practice has, therefore, to be abolished if forests have to be conserved. In order to avoid hardship to the present population dependant on this practice of cultivation within forest areas, appropriate compensation will be given to the dis-possessed who can take up alternative avocations or adopt intensive forms of cultivation. The Agriculture Department will extend necessary assistance and co-operation in this respect.

1.5. Watershed management - The whole of Bhutan forms catchment areas for all the rivers which originate either from China or in the country. The river valleys form the fertile care which sustains the present agricultural economy. A number of hydel projects have come up and many more are likely to be set up in the near future. The existence of bare hills and the progressive denudation of hill slopes on the pretext of horticultural and agricultural activities reduce the fertility of the land, eating away life-giving top soil. They also cause devastating floods. Remedial measures, therefore, are necessary to re-forest bare unproductive hills, stop further clearance of forests in the river valleys and surrounding hills, improve the methods of agriculture by terracing and planting fuel and fodder trees along contours of the terraces for prevention of land slips. The Forest Department will carry out necessary

surveys and implement all these protective measures. The programmes of the Agriculture Department in this respect also should be oriented to achieve these measures.

1.6. Deforestation - The allotment of forest land for agricultural and horticultural cultivation and for various other purposes will not be done without the concurrence of the Forest Department. This is necessary to ensure that indiscriminate deforestation does not take place and only such lands as are suitable for agriculture are deforested without in any way endangering the protective and productive aspects of forest conservation. The present practice of dotted habitation and cultivation inside the forests destroys the forest wealth and forms a nucleus for concealed expansion. This creates problems for forest conservation and management and such isolated pockets of settlements within the forest areas also pose problems regarding communication and provision of educational and medical facilities. Therefore, in the national interest as well as in the interest of the public, such dotted habitations inside forests deserve to be abolished. Felling of trees along both sides of streams running through private lands will also be restricted in order to prevent soil erosion and to preserve sub-soil water sources. The felling of trees within private lands will be regulated by the Forest Department so that indiscriminate exercise of individual rights may not endanger general welfare.

2. AFFORESTATION

This follows as a corollary to the programme of conservation. Afforestation is required not only to compensate for the loss of forests by natural decay and

other programmes of utilization, but also to improve the growing stock of inferior and degraded forests, to cover denuded and unproductive hills and to raise plantations for utility and aesthetic reasons. The Forest Department will formulate suitable programmes as to achieve afforestation of at least 2,000 acres per year during the remaining III plan period and 2,500 acres per year during the 1V plan period.

3. RESOURCES SURVEY

The economic and full utilization of the forest resources is impossible without a comprehensive resources survey. The entire forest region has to be mapped out by surveys and accurate data collected of the growing stock and their annual increment. Unless this is done, no clear picture can emerge of the total area of forests which is necessary to form the basis of all the other programmes and decide on the best and economic methods of utilization both for industrial and non-industrial purposes. This is a primary prerequisite for the preparation of detailed and scientific working plans for the forest areas. The survey will include the collection of data not only of timber and other resources, but also of the herbal and plant wealth in the country. This is necessarily a long drawn out process. The Forest Department will organize this programme in phases so as to complete the total mapping of the forest area and preparation of an inventory of the resources and the scientific working plans within a period of the next 15 years. These working plans in due course will be the only basis for the operation and utilization of forest wealth.

4. UTILIZATION PROGRAMME

Pending the formulation of detailed working plans for the utilization of various forest regions, it is necessary to have certain clear-cut principles which would guide the utilization of forest wealth until working plans come into effect.

4.1. **Accessibility** - At present the utilization of forest wealth is not balanced on account of the fact that large tracts of inaccessible areas remain absolutely untapped and the accessible areas are over-exploited. This has also repercussions on the yield of revenue from forests. Programmes will be drawn up with the view to the economic utilization of the large forest resources. Roads and pathways have to be constructed to open up inaccessible regions where tappable forest wealth exists, including installation of cable ways wherever economically feasible. The Forest Department will aim at constructing roads according to the actual requirement, so that the economic opening up of inaccessible areas is achieved in the shortest possible time. Here, the guiding principle will be that of achieving economic utilization of forest wealth which is blocked at present owing to inaccessibility and the incidental advantages that accrue to the general public in connecting farflung and interior villages. Many of these roads may continue to function more as channels of communication and transport for the public than as a sole means of forest exploitation. The maintenance of such roads may be entrusted to the Public Works Department by the Government wherever felt necessary.

4.2. Introduction of economic and efficient methods of exploitation - Wastage and depletion of forests result from the use of primitive and unscientific methods of conversion. Dragging and rolling of timber along the hill slopes spoils the re-generation prospects and leads to soil erosion. The exploitation programmes must aim at the most economic conversion and extraction. The object will be that of maximizing the benefits and minimizing wastage. Efficient logging methods should be introduced and proper training given in the use of such equipments. The Forest Department will also supply improved tools and conservation equipments on hire or on subsidized sale to the poorer sections of the people.

4.3. Cultivation of valuable herbs and plants - Apart from the scope for industrialization based on wood, forests offer prospects for yielding revenue from plants and herbs of economic value. The Forest Department will draw up suitable programmes for cultivation and exploitation of medicinal herbs and essential oil plants such as *Rawolfia Serpentina*, *Podophullum*, *Mentha*, *Citronella*, *Lemon Grass* etc. The programmes for commercial exploitation of these herbal and plant wealth will be drawn up in liaison with the Department of Industries.

4.4. Regulation for felling of trees and utilization of other forest products for construction and other purposes - The present practice of allowing the felling of trees beyond the actual requirement for purposes of construction at very nominal rates of royalty has resulted in the depletion of forests apart from plugging, one of the sources of forest revenue. In order to curb the tendency for

persons to fell trees beyond the actual requirement, the rates of royalty have to be raised and a ceiling imposed on the permissible limit of trees for various construction and other purposes. The question of royalties will be discussed in detail under the chapter "REVENUE". The following will be the ceiling for grant of trees for various purposes :

Purpose	Maximum No. of trees
Residential construction	Coniferous wood 100 Others 20
Monasteries and similar constructions	80
Industrial purposes	Will be regulated according to the actual requirement based on the type and capacity of the industry
Government constructions	As per actual requirement

The above ceiling will be subject to revision from time to time by the concerned Ministry.

No forest area will be leased to private parties. The Department will regulate felling of trees and extraction of various produce by means of marking trees or demarcating areas. No felling of trees and extraction of any forest produce will be permitted without prior marking trees or demarcation of areas by the Forest Department. The existing agreements with parties entered into by the Government prior to the promulgation of this policy will be altered, amended or cancelled in tune with this policy.

Firewood, as heretofore, will be granted free of royalty for domestic use in rural areas.

5. WILD LIFE AND RECREATION

Besides a variety of flora, Bhutan is endowed with rich tropical, sub-tropical and temperate fauna. Some of the rare species are the Golden Langur, Rhinoceros, Musk Deer, Takin and the Tiger. There are also the Elephant, Sambar, Barking Deer, Snow Bear, Wild Boar Goral, Bison, Snow Leopard and a large variety of avifauna. Therefore, creation and maintenance of national parks and sanctuaries for protection of wild life and natural vegetation forms an integral part of forest policy. Special laws to protect the existing national parks and wild life sanctuaries are to be framed.

For the preservation of wild life and protection of natural vegetation the following National Parks and Wild Life Sanctuaries have been created :

National Parks	Area in Sq. miles
Doga National Park-Comprising the home of Ghoral around the Dobzi Dzong	8.40
Wild Life Sanctuaries	
Jigme Dorji Wild Life Sanctuary	1,432.40
Laya Wild Life Sanctuary	570.30
Gasa Wild Life Sanctuary	1,049.40
Manas Wild Life Sanctuary	161.60

The Forest Department will be responsible for drawing up suitable rules and regulations for maintenance and operation of these sanctuaries and parks.

6. FOREST ADMINISTRATION AND TRAINING

6.1. Administration - The Forest administration will increase in complexity along with the introduction of more programmes for utilization and conservation. The collection of scientific data regarding the resources will also add to the burden of administration. The administrative set up will, therefore, have to be reorganized on a functional basis to achieve maximum efficiency. Periodic reorganizations will be done by the ministry concerned according to the changing requirements.

6. 2. Training - At present the management of Forests faces serious difficulties for lack of adequate local trained manpower. Owing to the wide extent of forest area, the difficult terrain and the increasing number of technical jobs to be undertaken in the maintenance and utilization of forests, the requirement of forestry personnel has been on the increase. Therefore, suitable training programmes to equip qualified persons from Bhutan to take up forestry jobs calls for the utmost priority. The position of the existing staff ratio between indigenous personnel and personnel from outside will highlight this point.

The ratio among officers is 1:2 and among other grades of services 2.3: 1.8. This only shows the present staff strength which may be considerably enhanced as and when more items of work are taken up by the Forest Department. This problem as regards recruiting the required number of officers in the Forest Department has been the difficulty of getting adequate number of qualified graduates who could be sent for further training. The Ministry of Development will be furnishing the annual list of personnel to the Forest

Department who could be sent for training. The Forest Department will initiate action to recruit adequate number of local personnel to impart training wherever necessary and replace imported personnel with the local recruits according to a clearly drawn out schedule. The objective will be to achieve self sufficiency except as regards a few specialized items of work by the end of the 5th plan.

7. INVESTMENT

Forests are admittedly one of the most important sectors of Bhutan's economy. By the very nature of the extensive area under forests and the immense scope they offer for various programmes of utilization, this sector constitutes one of the major sectors for revenues for the country. They demand the attention of the Government as regards the formulation and implementation of suitable programmes of preservation and development.

This sector will require considerable inputs in the form of men and money to develop it to its fullest potentiality. The programmes of the Forest Department will be formulated from this practical angle and will work out the investment programmes with an eye to achieve optimum utilization of the vast forest resources. The yield from forests may not be proportionate to the investment in the initial years. This is owing to the fact that optimum utilization programmes will have to await the completion of surveys and establishment of heavy forest based industries. However, it is certainly possible to increase the revenue from its present level by devising suitable methods, but maximum yield from forests will start pouring in only after considerable investments have been made for their development.

8. REVENUE

The over-riding object of the National Economic Policy to achieve self-reliance is dependant on the optimum utilization of such sectors which have high revenue yielding potentiality. The potentiality of the forests in Bhutan to yield maximum revenue continues to be dormant. Various programmes are contemplated in the Forest Policy to develop this sector to its fullest extent. Even at present forest wealth has been put to various uses and the state has been earning revenue from various facets of forest exploitation. This yield has unfortunately been low and static even in the context of the present utilization possibilities. The following table shows the income from forest from 1963 onwards :

Ngultrums in Lakhs							
63-64	64-65	65-66	66-67	67-68	68-69	69-70	70-71
10.02	8.82	8.03	10.85	12.07	9.04	11.10	10.35
			71-72	72-73	73-74		
			15.35	13.44	18.74		

Subject to negligible fluctuations the income has not risen. One constraint definitely has been the absence of detailed working plans for utilization. It cannot, however, be denied that utilization has gone up over the years. Again if the inflationary trend in the economy over the past years is also taken into account it will be apparent that the revenue in real terms has rather dwindled than increased. There have been a number of factors which are responsible for this trend of inelastic revenue earning from forests.

8.1. Factors responsible for the static income - Owing to various reasons the royalties for timber in Bhutan were fixed at an exceptionally low rate. One was the condition of the terrain and geography which has made extraction difficult. Another was the lack of demand for forest produce including timber on account of the poor industrial base and infrastructural facilities.

Though these conditions have very rapidly changed in the last decade no serious revision of the royalty rates has been attempted. The abnormally low rates of royalty have on the one hand curtailed the income from forests and on the other hand have encouraged large scale depletion and wasteful utilization of forest resources. People grow oblivious to the value of forest wealth which were at their disposal at a very low cost.

The practice of free grant of trees has also played a serious part in reducing forest revenues. This practice impedes the achievement of the objectives in the National Economic Policy also by removing sources of forest income outside the purview of the state.

Apart from the low rates of royalty for general purposes there has been the practice of granting trees for house construction on purely nominal royalty such as Nu. 2/- per tree. This no doubt has an element of subsidy for the poorer sections, but the long range implications of such a practice both from the point of view of economic utilization of forest wealth and from that of national revenue has been harmful. When the rates of royalty remain only nominal amounting to practically nil, there is no motive for the people to practice economy in construction or use of timber. The

advantage which is proposed to be given to the general public by means of subsidy in the matter of supply of trees for house construction will have to be balanced against the consideration of revenue that is foregone.

It should not be totally out of proportion to the royalty rates that are normally charged for other purposes. There has been also the practice of Government organizations not paying for the forest produce used by them. It is not proper to argue that the income only passes from one wing of the Government to another. Each sector will have to work on a commercial basis and such concealed transfer of income upsets the calculations regarding national revenue and expenditure. Just like the Posts and Telegraphs, Transport, PW D. and Telephones Departments, the Forest Department will be functioning as an organization fully accountable for its revenue and expenditure.

8.2. Remedial measures - In order to streamline the practices in the Forest Department regarding royalties and to plug the leakage in revenue to the State the following policies will be implemented.

a) The royalty rates will be worked on an elaborate schedule based on species, size- and quality of trees. Compared to the rates in other countries our rates have been considerably low. Even providing for the difficulties in accessibility and extraction, the rates call for considerable enhancement. The Forest Department will revise their schedule of rates in detail to accommodate this objective. The basic guide line will be that the enhancement should not fall below 75% more than the present rate for industrial and other uses.

b) The practice of free grant of trees will cease completely except in cases where dwelling houses have been destroyed by natural calamities like flood, fire, wind, earthquake etc. Each application for free grant of trees in such cases must be affixed with a Bhutanese stamp of Nu. 1/- and must be recommended by the concerned Civil authority to the effect that the house of the applicant has been destroyed by natural calamities and that the number of trees, applied for, are actually required to reconstruct the house. No application without stamp and such recommendation will be entertained.

c) In revising the rates for trees used in house construction and repair one consideration has been the necessity to give subsidy to the poorer sections without at the same time encouraging wastage. Another consideration has been to prevent this facility being used by the higher income groups. To safe-guard these objectives a ceiling on the number of trees to be used in house construction has been prescribed and a graduated scale of rates are imposed. The concessional rates will be available only to the construction taking place in rural areas. Constructions in the urban areas will be governed by the normal rates of royalty. The following will be the table of rates for trees for house construction in rural areas:

Species	No. of trees	Rates
Coniferous	1 to 50	Nu. 2/- per tree
	1 to 75	Nu. 3/- per tree
	76 to 100	Nu. 5/- per tree
	above 100	Nu. 101- per tree
Others	1 to 10	Nu. 201- per tree

	11 to 20	Nu. 55/- per tree
Poles		
(a) (below 6" diameter)	as per actual requirement	Nu. 0.06 per tree
(b) (6" and below 12" diameter)	-do-	Nu. 0.25 per tree

Note: Under other species not more than 20 trees will be granted for any single construction. Each application affixed with a stamp worth Nu. 1/for grant of trees for house construction will have to be recommended by the local Civil authority who will be responsible for ensuring that the trees have been put to bonafide use.

d) There will be no free grant of forest produce to the various Government organizations. Any indenting organization will pay the prescribed rates of royalty for all forest products required by them.

9. RESEARCH & PUBLICITY

The management of forests has become a highly specialized and technical job. The utilization programmes have also to keep abreast with the latest developments in technology. Each country has to evolve the methods most suited to its terrain and forest wealth. The Forest Department will develop its own research wing where the latest technological advance in forestry is brought in line with the exigencies and the requirements of our country.

An important natural wealth like the forests would require full understanding of the public in its preservation and development. The public must be made aware of the

immense wealth that surrounds them in the form of forests. The Forest Department will be responsible for creating this basic awareness among the people by means of mass contact, educational programmes and audio-visual communications.

10. FOREST LAW

The maintenance and operation of the forests have been guided by the provisions of the Forest Act 1969 and other rules and regulations under this Act.

With the promulgation of the present policy embodying various goals for the Forest Department, this act and other regulations will be amended for the efficient achievement of these objectives.

Conclusion

The Forest Policy covers in a comprehensive manner various aspects of forest maintenance, development, and utilization. The paramount objectives have been that of preserving and promoting this vital sector in the national economy, with the purpose of obtaining maximum revenue to the country compatible with general welfare. The efficacy of any policy depends on the exactitude with which it is implemented in the field. No single organization of the Government can work in isolation. There should be a concerted and coordinated move on the part of all Government organizations who should synchronize their various actions towards the achievement of the basic goals of the National Economic Policy. The Government organizations will also have to gain the willing co-operation of the general public in

implementing these policies which are ultimately directed towards the common welfare of the entire Nation.