

# Role of Forestry in Socio-Economic Development of Bangladesh

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## 1. INTRODUCTION

Forest and forest products have provided food, shelter, clothing and other necessities of life to human beings since pre-historic days. With the development of knowledge, men gradually discovered better ways of living. Along with that they discovered better uses of forests and forest products. Thus, at different levels of the advancement of human civilization, men have utilized the forest and forest products in different ways to meet their socio-economic needs. While men of the Stone Age were satisfied with their abodes in forest caves, eating roots, shoots and fruits of trees and having the leaves and barks of trees as their clothing, the modern men have found other uses for forests and forest products to cater to their socio-economic needs. Forests and trees today, therefore help men in agricultural development, industrial growth, economic advancement, recreation, environmental control and meet the demands of the human being in all walks of life, from cradle to coffin. It is an irony that realization of the importance of forests has been quite late. Nevertheless, this late realisation if properly implemented by different nations of the world might save the human being from total destruction. To arouse public consciousness concerning (i) the significance of forest wealth (ii) the direct and indirect benefits derived from the forests and (iii) the importance of forest as a factor in nature conservation the World Forestry Day is being celebrated on the 21st of March every year in different countries of the world. Bangladesh emerged as a

sovereign independent country in 1971. Active participation of Bangladesh in the World Forestry Day is a proof of the importance of forestry in its socio-economic development.

## 2. BASIC FACTS FOR CONSIDERATION

Basic facts that are to be considered for socio-economic development in Bangladesh vis-a-vis the role of forestry can be listed as follows :

2.1. The total area of Bangladesh is 14.12 million hectares of which only 1.30 million hectares (9.2%) area is under the management of the Forest Department. There is another 0.96 million hectares of denuded state owned forests land, termed as Unclassed State Forest which is subject to shifting cultivation by the local tribes. The entire area is now almost devoid of tree growth and is, in many places, covered by thatch grass (*Imperata* species.) The yield of the 'Jhoom' crop has been reduced to such an alarming extent that this land can no longer sustain a very small population of about 0.30 per hectare.

2.2. The areas under the management of the Forest Department are classified into three main types (a) hill forests, comprising tropical evergreen and semi-evergreen species, (b) tidal forests, comprising mangrove and other species growing in the deltaic region of the Sundarbans and (c) inland sal forests, consisting of sal (*Shorea robusta*) with its semi-evergreen and deciduous associates.

2.3. (i) The hill forests are managed under a clear felling system followed by artificial regenera

tion mostly under the taungya system with a rotation of (a) sixty years for construction timber and (b) thirty years for soft-hard industrial wood and quick growing species. The bamboo areas in this forest type, either as pure crop or as understorey, are managed under the culm selection system with a felling cycle of 3 to 4 years.

(ii) The tidal forests are managed under selection-cum-improvement felling followed by natural regeneration with a felling cycle of 20 years. Golpata, leaves of *Nipa fruticans* growing on the banks of rivers and creeks of the Sundarbans forest is collected by the people of adjoining districts for use as thatching materials of the villages. Gewa wood from these forests is used as raw material for the Khulna Newsprint Mill and sundri for the Khulna Hardboard Mill.

(iii) The inland sal forests were being worked under a coppice system with a rotation of forty years. This forest type being scattered in nature and intricately mixed with habitations, poses a problem of protection against illicit felling and encroachment. Considering the damage done to these forests in the past, it has been decided that for the next ten years no felling will be done in these forests, except improvement felling in the form of the thinning and other silvicultural operations. Kumbhi leaves, collected from these forests are used as bidi wrappers in bidi manufacturing industries.

2.4. Bangladesh with a population of over 532 per square kilometer is the most thickly populated country of the world. Pressure on land being high, protection and conservation of forest wealth need special attention even to sustain and develop the agricultural economy.

2.5. Being densely populated, the scope for horizontal expansion is limited. There is some scope to increase the forest area by afforestation of denuded unclassed state forests in the Chittagong Hill Tracts. As recommended in Sandwell's Report, 0.40 million hectares of such denuded hills will be declared as reserved forests and afforested with suitable and superior tree species on a priority basis by utilizing the tribal labour force of the region readily available there.

2.6. Very frequently cyclones and tidal bore do considerable damage to the life and property of the coastal districts of the country. To create a protection belt an afforestation scheme has been

taken up in this region. All new land accretions in the coastal belt are to be declared as reserved forests. Like the Sundarbans forests these coastal forests will not only protect the inland life and property but will be a source of supply of forest produce to cater to the needs of the people of coastal districts. This will also increase the scope for employment to the local labour force.

2.7. Most of the forest areas of Bangladesh have a low yield. It is, therefore, necessary to increase the potential value of such forests by replanting with high yielding and fast growing species so that these forests can produce more to meet the increased demand of timber, fuelwood and industrial raw material.

2.8. The hill forests of Bangladesh, particularly in the inaccessible areas, still remained untapped due to lack of facilities of roads. The forests of Bangladesh contain over 400 tree species most of which have presently no commercial value. At present 40% of the forest produce in the hill forests is left inside the forests. With the development of infrastructure, particularly forest roads and extraction facilities, and with better methods of harvesting with a trained labour force, the present wastage can be reduced to a considerable extent.

2.9. The forest areas in Bangladesh are very unevenly distributed. The plain districts contain little forest. There are about 1.20 million hectares of high land presently devoted to village homesteads and urban habitations. In the course of years a substantial number of trees have been cut. Forest extension facilities in the countryside can improve the position. In the First Five Year Plan provision has, therefore, been made to develop 59 (47 new and 12 existing) nurseries for growing seedlings for distribution. 24 million seedlings will be distributed to the people during the plan period. This will help in obtaining the essential requirements of the villages, support cottage industries and give employment to the unemployed, and underemployed labour forces of the villages. This will also go a long way in maintaining the balance of the environment.

2.10. The multiple use concept of forest is getting popularity in Bangladesh. Consequently national parks, recreation centres, botanical gardens and wild life sanctuaries are being established in the country.

2.11. The Bangladesh Wild Life (Preservation)

Order has been promulgated from the 27th March, 1973 and it applies to the whole of Bangladesh. Under this order, the killing and trapping of certain wild-life on the verge of extinction has been totally banned. The First Five Year Development Plan includes schemes for the development of wild-life management and wild life reserves at an estimated cost of Taka 20 million. Bangladesh is already a member of I. U. C. N. Steps have been taken to secure assistance from the World Wild-Life Fund for the scientific management of wild life. These actions surely prove the eagerness of the Government to conserve and develop the flora and the fauna of the country.

2.12. The economy of Bangladesh is predominantly agricultural. Of the 74 million population, about 90% live in rural areas and over 75 percent are engaged in agricultural activities. With a rate of population growth around 3 percent, high initial unemployment and limited non-agricultural employment opportunities, it is likely that agriculture will have to provide the bulk of productive work opportunities to the population for at least a decade to come.

2.13. As stated in the First Five Year Plan out of total labour force of 25.97 million forestry employs only 0.35 million persons at the present. About twenty five thousand people live as forest villagers in the forests. They are engaged in the taungya method of cultivation to raise forest plantation. Except for these forest villagers most of the labour force is brought from villages outside the forests.

2.14. People living outside the forest areas close to the forests derive considerable benefits and are fully or partly employed by (i) collecting materials for construction (ii) supplying labour in forestry work, forest trade and forest industries, (iii) fishing in forest water areas (iv) trading on forest products (v) grazing cattle in the adjoining forests (vi) collecting and trading in minor forest products (vii) the agricultural economy of the rural people is supported by part time and seasonal employment in forestry work (viii) villagers get agricultural implements from the adjoining forests (ix) the labour force employed in small and cottage industry such as bidi manufacturing, sawmilling, making furniture etc. and trading of such products contributes to the socio-economic condition of the rural people to a great extent.

2.15. Bangladesh has limited natural resources. Forest, a renewable natural resource, although it has limited scope for horizontal expansion should be properly harnessed and developed for the socio-economic development of this thickly populated country, where the vast majority of the people live in villages and will have to live under rural economy. as the scope for migration to towns is limited under the existing conditions.

### 3. CHANGED PHILOSOPHY OF FOREST MANAGEMENT

The traditional approach of forest management, to conserve forests for soil conservation, watershed management, to maintain balance of nature etc. and without disturbing such non-tangible benefits to produce wood has been changing. Forest is looked upon not only as a source of wood but also as a source of food and above all forest is to be managed for the benefit of the people. The employment potential in forests and forestry and its proper utilization is gaining importance. A consultation organised by F. A. O./I. L. O./SIDA in Chiang Mai, 10-28. 2, 1974 made concrete recommendations how the scope for employment can be increased. This will help the socio-economic development of the country.

These are some of the recommendations which are of special significance to us :

The Consultation recommended that —

- (i) Forest management be modernised and integration with industry and agriculture be intensified so as to create increasing employment opportunities and amelioration of basic social conditions ;
- (ii) Studies be undertaken to determine levels of mechanisation and extent of infrastructure development consistent with the policy of optimizing the utilization of labour force ;
- (iii) Local technologies be examined and evaluated to achieve labour efficiency productively ;
- (iv) Increased efforts on work study through strengthening and/or establishment of additional institutes be made ;
- (v) Facilities for vocational training and in-service training be established both at regional and local levels for workers.

For this purpose particular attention be given to the training of instructors,

- (vi) Special attention be given to extensive field instruction for workers ;
- (vii) Work situations be examined and safety standards formulated and enforced ;
- (viii) Acceptable working and living standards are achieved and maintained in forestry employment and adequate legislation be introduced and enforced.

#### 4. CONCLUSIONS

In view of the basic facts stated above and with the changed philosophy of forest management as translated in the recommendations of the consultation at Chiang Mai and in view of the fact that although we have limited forest area (smallest percentage of land area among the South-East Asian Countries), it is imperative that our management policy be such as to give the maximum benefits to the people. In the proposed forest policy of the country and in the First Five Year Plan some importance has been given for the development of the forests in a country with an agricultural economy and with its vast increasing labour force without much natural resources and forestry should continue to get importance to help the socioeconomic development of the country. For forestry to play its proper role in the socio-economic development of the country managing the forests for the people, the forest policy of the country should include the following action programme ;

4.1. The organisations responsible for forestry development including the State corporations and all other institutions connected with forests and forest products should work in close co-operation and co-ordination under a single ministry for unified forest policy, management and execution.

4.2. The forest management policy should not aim at maximizing the yield of forest products and forest revenue only but aim at increasing the potential value of the forests and also at increasing & properly utilizing the employment potential of the forests & forest products,

4.3. The shortage of funds should not be an obstacle in the execution of schemes which would increase the value of the forests and increase the employment scope. In Thailand the net profit

of the Forest Industrial Development Organization is ploughed back for reforestation work. Similarly at least 50% of the forest revenue and profits of the State Corporations and other organizations should be used for executing schemes which will increase the value of the forests and results in greater yields of forest produce and more employment for the people of the country.

4.4. Infrastructure, particularly road developments inside the forests, should be developed on a priority basis, to increase the yield of forest produce and to increase employment.

4.5. Forest extension work and horticulture should go hand in hand so that village people get food, wood and employment by growing trees.

4.6. Labour intensive schemes should be encouraged in forestry but forest labourers should be trained to work with more efficient hand tools (readily made available in the country) to increase efficiency of work and to minimize wastage.

4.7. In extension services, along with other species, plants that will support cottage industries should be distributed so that unemployed person can get employment in villages and can improve their economic conditions.

4.8. The importance of forestry, forest conservation and development should get proper publicity to the people in all walks of life. Schools, colleges and other training institutions should have short courses in their syllabus on forestry and its importance in socio-economic development.

4.9. Administrators and planners should be oriented toward the opinion that forestry and agriculture, and forestry and forest industry are complementary to each other and are not in clash. Neglecting forest management will reduce the agricultural output whereas a well managed forest or tree cover will help the Green Revolution on hand, in addition it will not only support the existing forest industries but its development will help industrial growth.

4.10. Above all in each union, with the people's support, a well managed forest or tree cover will help its agriculture, cottage industry, and will improve its livestock. This will also open scope for employment to the villagers to live a happy life with readily available food, fodder, fuel wood and other daily necessities of life.