

PARTICIPATORY FOREST MANAGEMENT IN BANGLADESH

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Abstracts

With the Pace of Population booming, increased energy consumption, over exploitation of the natural resources and rapid depletion of the forest reserves accelerated natural disaster like flood, drought and cyclones in Bangladesh.

Once Bangladesh was famous for its evergreen/ semi evergreen tropical and world famous mangrove forest. But over the years due to over exploitation of forests and its non-participatory management, more than 50% of the forest resources has been depleted. Realising the grim effect of destruction of forests and to repair the lapidated environmental condition, both the government and non-government organization have taken up afforestation programme. The NGOs have added a new dimension in the forest management, which has ensured participation of the community people and protection of the vegetation. Although, the government has also adopted participatory forest management but due to bureaucratic attitude easy access of the poor habitants are restricted in many cases. To overcome these situations, the existing government forestry policy, which was formulated in 1994, needs radical modification. There should be room to accommodate the NGOs, grass root organisations and general people in policy formulation, execution and evaluation of the programme.

1. Introduction

Bangladesh lies in the North-Eastern part of South Asia between 20°34' and 26°38' North in latitude and between 88°1' and 92°41' East in longitude. The total area of the country is 144,000 sq. km with a population of about 120 million, density of population is 800 person per square kilometer. The most densely populated country in the world, Bangladesh is mainly a floodplain delta, which is formed at the confluence of the Ganges, the Brahmaputra and the Meghna rivers. Natural forest represents only 6 percent of the total land area of the country and is managed and controlled by the government. Village forest which contains annual and perennial trees and still provides a major source of food and income for majority of people, is managed by private individuals.

A rapidly increasing population is placing growing demand on natural resources, especially forest sector is under pressure to become more productive and efficient to keep pace with increasing demand. At present forest in Bangladesh is in unfavourable situation in terms of meeting increasing demand and also not adequate for maintaining ecological balance. This is primarily due to heavy population pressure and limited resource base, secondly, lack of integrated planning for development of multiple resource base with active participation of people

resulting in high degree of environmental degradation, as illustrated mostly by deforestation and destruction of Natural resources.

In the phase of rapid depletion of forest aggravated by increasing demand for forest resources, and considering the prevailing socio-economic condition of the country, Government has put emphasis on participatory approach in development of forest resources of the country.

2. Forest situation in Bangladesh

Bangladesh has lost over 50% of its forest resource over the period of about 25 years. Actual forest coverage is only 6 percent of the total area and the situation is worsening despite of an attempt to preserve it. At approximately 0.02 ha per person of forest, Bangladesh currently has one of the lowest per capita forest ratio in the world.

In Bangladesh, government-owned forest area covers 2.19 million ha, with the remaining 0.27 million ha being privately controlled homestead forests. Of the government owned forest land, 1.49 million ha are national forests under the control of the Department of Forest, with the rest being under control of local governments. Of the state owned forests, over 90% is concentrated in 12 districts in the Eastern and South-Western region of the country. However, due to over exploitation these forests have become seriously degraded.

The natural forests of the country are classified into three categories: 1) Tropical evergreen/ semi-evergreen forest in the eastern districts of Sylhet, Chittagong, Chittagong Hill Tracts, and Cox's Bazaar: 2) Moist/dry deciduous forest also known as Sal forests in the central and the northwest region and 3) Tidal mangrove forest along the coast, known as the sundarban, the largest mangrove ecosystem in the world. These forests are official reserves and placed under the jurisdiction of the Forest Department. Unfortunately, recent inventories indicate a continuing depletion of all major forests.

3. Forest management in Bangladesh

In Bangladesh management of government forest is the responsibility of the Forest Department under the Ministry of Environment and Forest. In this process the department is managing, protecting, developing the forest resources, forest land and also collecting the revenues. People have never been consulted nor involved in forestry activities. From the management point of view, forest of Bangladesh are being divided into three categories such as:

- State owned forest under the administrative control of Forest Department.
- State owned forest under the administrative control of Ministry of Land through District administration.
- Private village forest managed by private individuals. Forest under Forest Department control and management again divided into three major types viz; (a) Hill Forests; (b) Plain land Sal Forests, (c) Mangrove Forests.

Hill Forests: The tropical evergreen/semi evergreen forest cover as approximately 1.32 million ha of which 0.67 million ha is controlled by the forest department and rest is under the control of hill district council. Clear felling followed by replanting with suitable species (both long and short rotation) is the method of management in hill forest. Because of increased demand for timber and fuel wood and prevailing socio-economic condition of the country this forest has greatly affected and rate of denudation is considerably high. The forest department is mainly confined in raising of single species plantation. Inventory shows that most of these plantations would not give the desirable output. This programme suffers from technical, social and administrative soundness. Another problem is most of the high forest are subjected to shifting cultivation by the hill tribes. The tribes are entitled to shifting cultivation in forest land under administrative control of district administration which has resulted in the total destruction of these tropical evergreen forest. The growing stock has depleted from 23.8 million m³ in 1964 to less than 20.7 million m³ in 1998.

Mangrove Forests: Known as Sundarbans, the largest mangrove ecosystem in the world. Sundarban forests are being managed by selection felling method followed by natural regeneration. Beside Sundarbans, plantations are being raised with mangrove species in the newly accreted char land all along the Coast of the Bay of Bengal. Sundarban forest is an official reserve forest, unfortunately recent inventory shows a continuous depletion due to over-cutting, illegal felling. It is estimated that in less than 25 years, the volume of commercial species Sundari, Gewa, has declined by 40 to 50% respectively.

Plain land Sal Forests: Silvicultural system applied for Sal forest was coppice with standard system. In this system matured trees were felled and the areas were protected for coppice regeneration. The typical nature of Sal forest is that this forest is scattered. In the forest areas there are agricultural lands owned by the adjacent people. Frequently these land owners are extending their lands and encroaching to forest and in the process they are destroying the forest and subsequently converting the area to agricultural land. In this process forest lands are being marginalised day by day. FAO estimated that only 36% of the Sal forest cover remained in 1985; more recent estimates that only 10% of the forest cover remains due to over exploitation and illicit felling through there is an official base on logging since 1972. Most of the Sal forest are now substantially degraded and poorly stocked. The situation calls for involvement of community people in the forest management.

Inventories how that there has been overall depletion in forest resources in all major state owned forest. The growing stock in Sundarban has been depleted from 20.3 million m³ in 1960 to 10.9 million m³ in 1998. In the Hill forest of hill districts, the growing stock has depleted from 23.8 million m³ in 1964 to less than 20.7 million m³ in 1998. Over-cutting by timber merchants, increased consumption linked to population growth, shifting cultivation, encroachment, illegal felling and land clearing for agriculture, lack of participatory management have been the principal causes of deforestation and shrinking of forest land in the country.

Since 1960 two major approaches regarding the role of forestry in development have been reflected in the forestry sector of Bangladesh. In the 1960's, Bangladesh as a part of Pakistan and then as an independent nation has followed 'An Industrialisation Approach' consonant with the international conventional wisdom at that time. As a result, Department of Forest raised large-scale Industrial plantation which were seen as conversion of low-yielding natural forest into artificial plantation of species (mostly teak) of great economic importance. This conversion of semi-evergreen and evergreen forest into deciduous teak plantation was largely concentrated in hill forest areas. During the plantation raising local people were not consulted and often they did not derive any benefits from these plantations. The lack of support by the local people/ communities in combination with lack of silvicultural knowledge and lack of proper maintenance contributed to raise low quality plantations and these plantations were also lost due to illegal felling. In the name of plantation the genetic resource of the evergreen/ semi-evergreen forest was lost. Forest Department was considered as revenue earning department. The main activities of Forest Department were concentrated in extraction of trees from the forest and replanting of those felled areas where applicable, Forest Department has not considered the people and their participation in managing forest of the country.

In the 1980s following a change in thinking about the role of forestry in development, and peoples participation in forestry activity was encouraged. People participation with the forestry sector realised the need of people oriented forestry programme to replenish the degraded forest resources of the country. Accordingly, in 1994 Government formulated a forest policy replacing earlier one enunciated in 1979 with a due emphasis to the need for people's participation in forest management.

4. Participatory forest management approach in Bangladesh

4.1 Past activities

Forest extension activities were formally launched in the country in the year of 1964 with the establishment of two forest extension divisions at Dhaka and Rajshahi and later two divisions at Comilla and Jessore. It was really a very small programme and the activities were confined only to establish nursery in the districts headquarter and raised seedling and sell the same to individuals and organizations. The location of this programme was so urbanized and limited that it only partially served the needs of the affluent town dwellers only.

4.2 Betagi- pomora community forestry project

The first community forestry programme in the country, started at Betagi and Pomora mouza (village) under the district of Chittagong in the year of 1979 with the personal initiative of Prof. A. Alim, renowned forester and Prof. Dr. Mohammed Yunus, founder of Grameen Bank. Initially the project covered 160 ha of Government denuded hilly land at Betagi and with 83 landless participants

from adjacent community and subsequently extend over another 205 ha of Government owned denuded hilly land at Pomora with another batch of 243 landless (families) participants. Under this programme each landless participant was provided with 1.62 ha of land for growing tree and horticultural crops with technical and financial assistance from the Forest Department.

This community programme has given the landless an identity of their own and a sense of direction in life. But this model has not been replicated in the other areas due to lack of initiative of the Forest Department as well as the Government.

4.3 Rehabilitation of Jhumia families (shifting cultivator families)

Another project was undertaken by the Forest Department in the Hill tract areas to establish plantation through rehabilitation of Jhumia families in 1980. Main objectives of the programme were (i) to rehabilitate tribal families in the Unclassed State Forest(USF) lands along with rehabilitation of denuded USP land; (ii) to introduce a sustainable agroforestry production system; (iii) to improve the socio-economic condition of the tribal people and (iv) to motivate tribal people in development of forestry. Under this programme each family was allocated 2.02 ha of USF land for growing agricultural crops (over 1.20 ha), raising plantation (0.80 ha) and for house construction (0.20 ha). The rehabilitated families were given land use rights and were allowed to enjoy 100% benefits accrued to those lands. The participants were given input support for growing agriculture, horticulture and forestry crops and cash support for house construction. This programme continues for quite a long period of time but could not sustain mainly because of nomadic character of the tribal groups. Another reason of failure was that the families were rehabilitated in clustered villages without considering their cultural and religious values. Thus in most of the cases it was found that the families have left the area. A parallel programme was also initiated by the Chittagong Hill Tract Development Board in which Forest Department was responsible for implementation of afforestation component where Cittagong Hill Tract Development Board was responsible for the rehabilitation component. This program was also not found so much responsive to hilly people except for some plantation establishment.

4.4 Development of community forests project

The activities of the first phase of this project began in 1981 and were completed in 1987 in seven greater districts of the North-Western zone of the country. The main components of the project were:

- Strip plantations along roads and highways, railways, canal sides, district and Union Parishad roads, totalling about 4,000 km.
- Fuelwood plantation on 4800 ha of depleted Government land on participatory concept.
- Agroforestry demonstration farms over 120 ha also with participatory con-

cept.

- Replenishment of depleted homestead wood lots in 4,650 villages.
- Training of Forest Department Personnel and Village leaders.

4.5 Development of forest extension services (1980-1987)

Development of Forest Extension Services (Phase II) began in 1980 with the Government funding and subsequently amalgamated in some areas (i.e. North-North West district) with Asian Development Bank funded Community Forestry Project. The main activities under this programme were:

- afforestation in some 3100 villages.
- roadside tree planting along 3600 km of primary highways and roads and about 600 km of Union Parishad roads.
- production of 49 million seedlings for distribution.

4.6 Thana afforestation and nursery development project

This project is a follow-up of Development of Community Forestry Project and Forest Extension Project and has been designed primarily to: (i) increase the production of biomass fuels and (ii) enhance the institutional capability of FD and local administration in implementing a self-sustaining nationwide social forestry programme.

In order to increase the production of biomass fuel and to arrest the depletion of tree resources, the project envisaged to develop tree resources base through planting of depleted sal forest as well as brining all suitable and available land in the rural areas under tree cover with active participation of the rural poor of the locality.

Originally the project was to be implemented by the Forest Department and former Thana Parishad during the period of 1987 to 1994. But in 1992 Government decided that the all project activities were to be implemented by Forest department alone. The major components of the project were:

1. Establishment of plantation over 20,225 ha depleted Sal forest areas.
2. Development of agroforestry over 4,200 ha in the Sal forest lands.
3. Raising strip plantation on 17,272 km along Road and highway, Railways, Embankment and Feeder Roads.
4. Raising 1,282 ha plantation in the land outside the BWDB.
5. Planting 7.017 million seedlings at the premises of different education, religious and social institutions
6. Establishment of 345 nurseries at Thana headquarters.
7. Raising of 10.618 million seedling for distribution to public.

8. Training of some 76,000 people of different levels.

Here this may be mentioned that at the last stage of the project implementation, the Government has found that this was quite impossible to protect the strip plantation and also impossible to trained 76,000 people by the Forest Department alone. The Government invited NGOs to participate in this programme for successful implementation. PROSHIKA, POUISH, GRAMMEN BANK and other NGOs came forward to help the Government for successful completion of the project; NGOs employed their group members to protect the strip plantation and ADAB came forward to train people at different levels with the help of its member organisations.

The above plantation activities were carried out with the direct participation of the local people with the help of the NGOs by executing benefit sharing agreement.

4.7 Coastal greenbelt project

Another project financed by Asian Development Bank is under implementation in the Coastal region of Bangladesh. The main objective of the project is to create a vegetative belt all along the coast to save the lives and properties of the people living in the coastal areas from devastated cyclone and tidal surges which occur very frequently in those areas. All of the activities of this project are also being carried out following participatory approach. In this project also the participants have been selected among the poor people living in the adjacent areas by involving NGO and a pre-designed benefit sharing agreements also being executed with the participants to protect their rights over plantations and to ensure benefit expected to be received out of the plantation.

4.8 Agroforestry research project

Pilot Agroforestry Research and Demonstration was implemented by the FD in the Sal forest areas. The project had been developed precisely to design/develop agroforestry modules which is environmentally feasible, socio-economically acceptable enhance tree and crop production at the same time to uplift the socio-economic condition of the participants. The project aimed at using 120 ha of encroached Sal Forest land of Dhaka, Mymensingh and Tangail Forest Division to develop suitable participatory plantation models.

4.9 Food assisted social forestry programme

The World Food Programme assisted the Government to develop Social Forestry as a national programme and the Government incorporated WFP assisted social forestry programme in its annual development plan from 1998. Poverty alleviation, economic rehabilitation of rural poor especially the destitute women of the society by engaging them in forestry activities, social uplift of rural poor and environmental improvement are the main objectives of this project. Historically this programme was conceived in the country since 1989 on pilot basis allocating in kind resources (Wheat) to a limited number of NGOs for raising strip

plantation along roads, embankments, Highways etc. in rural areas following the participatory mechanism. In implementing this programme FD was involved later on to provide technical guidance to the NGOs and other GOB agencies. At present probably this is the largest Participatory Forestry Programme in Bangladesh. From 1990, 100 NGOs are involved in this programme and at present about 60 NGOs are continuing with the programme. Commencing from 1990 up to 1998 about 31 million trees were planted involving 0.062 million people directly and 0.62 million people indirectly. The programme has created employment to the tune of 68 million man days. This programme is being implemented by the NGOs through contractual benefit sharing among participating poor men & women 60%, NGOs 10%, the rest land owners.

5. NGO participation in the participatory forest management

In Bangladesh the history of NGO involvement in the field of development is not very old. After liberation, NGO started their activities through relief and rehabilitation of the war victims. During mid-seventies, NGO switched over to the socio-economic development of the rural poor, and at present there are thousands of NGOs most of whose mandate is to organise rural poor and provide awareness, education, skill training and various support services including credit to enhance participation of landless poor in the development process towards self reliance.

On the basis of the networking throughout the country the NGO can be classified into two levels; (i) local and (ii) National. At present more than 100 NGOs both local and National are implementing social forestry programme in Bangladesh. It is not possible to enlist activities of all the NGOs involved in the Social forestry programme in the country. The participatory forestry activities of some of the NGOs are highlighted here who are playing pioneer role in this field.

BRAC:The Bangladesh Rural Advancement Committee (BRAC) has been established in 1972 and this is the largest NGO in Bangladesh. BRAC has six categories of projects/ programmes in broad sense among which Social Forestry falls within rural development programme. The Social/ Participatory forestry has three components; (a) Nursery establishment; (b) Plantation and (c) Establishment of agroforestry. They claim that they have assisted their women members in raising more than 225 homestead nurseries and 100 large nurseries with a combined production capacity of a million seedlings of fruits and forest seedlings. They have established 200 mulberry nurseries with the production capacity of 2 million seedlings. Social afforestation programme of BRAC is WFP assisted which has been commenced from 1989 and till now it is going on. Most of the plantation under this programme has been established along the strips. Up to this time about 33.72 million seedling have been planted over an area of 33,700 km strips along road, railway and embankment. This programme involves about 670,000 participants of which 80% are women.

PROSHIKA:Proshika - A center for human development is one of the largest NGO in Bangladesh. The Social Forestry Programme of Proshika is a systematic

intervention effort to enhance afforestation in the country and to make a case that the poor are the best managers and protectors of forest resources if they are granted usufruct rights on these resources. Proshika has introduced its group members in social forestry activities and provided them with credit and technical support, which contributed significantly to their self-sufficiency. The main components of social forestry programme of Proshika are; i) Homestead plantation; ii) Strip and block plantation; iii) Natural Forest protection, and iv) Nursery establishment. Proshika has planted 71 million seedlings which covered along 8,887 km strips, 37,662 areas of block plantation which included natural Sal forest protection throughout the country. One of the most significant contributor of Proshika to the development areana is the introduction of the concept of participatory forest management for natural forest protection. Proshika has successfully involved the forest dwellers in the Sal forest areas of Kaliakoir, Mirzapur, Shakhipur and Shreepur thanas under district of Tangail and Gazipur for the protection of coppice Sal forest by involving group members of Proshika. It has already been proved that when poor people surviving on the forest resources are organised, trained and granted usufruct rights, they present on enormous human potential needed for afforestation and forest protection.

RDRS:The Rangpur - Dinajpur Rural Services operating in 28 thanas of greater Rangpur and Dinajpur districts covering 28 thanas. It is the largest International Integrated Rural Development NGOs operating in Northern Bangladesh for more than two decades. Its entry point in forestry was through road side plantation in 1977. Initially, seedling were protected with bamboo cages. Situation has been changed a lot nowadays and protection of seedlings with bamboo cage has become a part of history. Besides strip plantation, they also extend their tree plantation programme in homestead, institutional grounds as well as raising of local nurseries. With the assistance of WFP they have planted about 10.66 million trees under their participatory afforestation programme.

TMSS:It stands for Thangamara Mohila Sabuj Sangha. It is an NGO exclusively meant for women. Although, it was initiated in 1976, its presence was visible only since 1965. This NGO believes in the concept of simple living and high thinking. TMSS was also involved in the social forestry programme particularly in the Northern districts of Bangladesh. The organisation has been implementing both road side and farm forestry with assistance from the WFP and Swiss Development Corporation (SDC) respectively.

POUSH:Another NGO has been engaged in planting in the private lands also by persuading the owner farmers in Baroibari, Kaliakoir thana with the food aid from WFP. Its activities in the forestry field are limited to strip plantations and it plans to expand its programme extensively. Target groups of POUISH are mostly landless destitute, widow and divorced women. POUISH also happens to be the first of its kind to get involved in participatory forestry in the hill district of Bandarban

6. Problems and prospects of participatory forest management

Considering the demand and supply situation for forest products to meet the economic and environmental needs, no one can deny the need of people's participation in forestry. Probably there is no second answer except participatory forestry in developing, managing, and protecting the country's forest land and the forest resource. But there are numbers of issues remain unresolved. As a technical department, Forest Department is playing pioneer role in implementing and popularising Participatory Forestry in the country. Up to this time Forest Department is managed by the professional foresters who have educational background only in managing traditional forests and who do not consider people as development partners. Participatory Forestry, if we recollect the Chinese proverb, needs mental development managers towards the people.

Realisation has started among the planners, policy makers, administrators and Senior managers to involve people in forestry development activities. But up to this time Government has failed to adopt real Participatory Forestry programme to address the basic need of the peoples.

Mobilisation of the people in participatory forestry programme is another bottleneck of the Forest Department who has not had the machinery to reach the community people. NGOs who work at the grassroots level have developed their own expert to mobilise people and ensure their participation in any development programmes as partner. So NGO should be involved in the implementation of the participatory forestry programme where Forest Department should confine their activities only in technical aspect.

In the context of Bangladesh, the scarcity of land is a most vital problem. On the other hand, Forest Department controlling over 16% of the total land area of the country is still hesitant to allow Participatory Forestry in reserved forest areas. According to FD, it should be confined only in public and private lands beyond reserved forest areas through these are devoid of trees. The Participatory Forestry is being practiced in marginal lands which are under administration control of other Government departments. Recently, due to pressure from planners and donor communities, Forest Department has allowed to practice participatory forestry in Sal Forest areas. Tenure of the contract was found as a bottleneck for implementing Participatory Forestry. Forest Department allowed rights of participants over these lands for a period of seven years, but there was a strong desire, that this tenure should more and at least for rotation period, so that participants can manage and protect trees till harvesting.

A negative attitude was also observed among the Foresters to involve women in forestry activities. They viewed that activities of women should be confined in the areas where there is a locality apprehending the social problems. But in participatory forestry both men and women should be treated equally.

Recommendations

- The forest policy of 1994 needs a fundamental change to make participatory forestry approach as a core concept for social fencing against forest destruction and for poverty alleviation through income generation. An independent Forest Policy needs to be formulated to promote Participatory Forestry in the country.
- For implementing Participatory Forestry programme, Land as an input is to be ensured with authority. Preset land lease system is not responsive nor effective for practicing Participatory Forestry in the country. Tenurial rights of land instead of land use right is to be given to the participants.
- To make effective participation of the people on a sustained basis sufficient motivation is required and this responsibility must be given to the NGOs.

Involvement of the groups in planning and decision making is to be ensured through proper policy directions.

- Provision should be made for giving subsistence to the participants so that they can survive and keep confined their activities in the programme.
- A National forum where there will be representation all from Government politicians, NGOs and private sector. They will act as a coordination body to coordinate among all the participants like land owning agency, NGO, Forest Department and the participants.
- NGO should act as a catalyst and they should not be treated as a competitor of Forest Department.
- Process of recruiting NGOs by inviting tender for implementing any Participatory Forestry programme of the Government must be avoided. ADAB may be given the responsibility to identify the NGOs for a particular programme implementation.
- Major reforestation and afforestation programmes with community participation in a profit sharing basis and improvement in technology and management of plantation is required.
- Institutional capacity, policy and legal framework of forestry management should be strengthened.
- Forestry professionals should be trained in environmentally sound forestry.
- Implementation strategies for community management of forestry resources should be developed.

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