

Reckoning Social Forestry in Bangladesh: Policy and Plan versus Implementation

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Summary

The history of scientific forest management in Bangladesh dates back to the nineteenth century with defined forest policies and laws. Due to various socio-economic and socio-political factors, forest cover of the country reduced drastically and all such policy initiatives proved ineffective. Although traditional forest management objectives covered a wide range from economic benefit to ecological stability, these have never been attained fully. Huge population and limited land area compelled policy makers to think about alternatives to traditional forest management. One alternative, social forestry, was introduced in Bangladesh in early 1980s and has proved to be extremely successful. While traditional forest management resulted in a net loss of forest resource cover, social forestry on the other hand, is playing a vital role in the expansion of forest cover (40,387 ha of new forest cover and 48,420 km new strip plantation since the mid-1980s) benefiting thousands of poor people. Results show that during last four years (2000-2003) more than 23,000 individuals benefited from the final felling of different social forestry plantations (woodlot, agroforestry and strip plantation). This generated a total income of US\$ 5.6 million (hereafter mill) for the Government and US\$ 5.3 mill for participants plus US\$ 1.2 mill for the Tree Farming Fund (TFF) - a 10% depository reserve to sustain the practice in the long run. Although average individual final returns (US\$ 223 person⁻¹) are not so attractive some people got about US\$ 5000 to US\$ 8500 from final felling, sufficient to improve their standard of living and social position. Despite the success so far achieved, social forestry in Bangladesh still suffers from various institutional deficiencies like organization, skilled

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manpower, legitimate usufruct right, peoples' participation from policy to implementation and clear budgetary arrangements. Besides, until now the role of relevant actors is not well defined in all the steps of social forestry practice in Bangladesh. Unless the participants are given a clear legitimate usufruct right, they will remain skeptical towards this program. They should have good and meaningful access from planning to implementation. In the context of institutional development, there are policy guidelines (Forest Policy 1994) and a twenty-year Master Plan in Bangladesh. Although some steps have been partially completed, there is still much to do to comply with forest policy guidelines and the Master Plan. It is shown that in the last seven years (1995/96-2001/2002) only US\$ 15.41 mill year⁻¹ has actually been spent against an allocated sum of US\$ 68.37 mill year⁻¹. Therefore, if the intention is to institutionalize social forestry in Bangladesh, Government and policy makers should actively come forward. Otherwise the full potential of social forestry in Bangladesh will not become a reality.

Introduction

Forestry and Livelihood: A global overview

Forestry cover is shrinking worldwide in general. Net annual deforestation rates for the period 1990-2000 were estimated at 9.0 mill ha globally, as compared to previous estimates of 11.3 mill ha during the period 1990-1995 (FAO, 1997) and 13 mill ha during 1980-1990 (FAO, 1995). Matthews (2001) mentioned that deforestation rates have increased in tropical Africa, remained constant in Central America and declined only slightly in tropical Asia and South America. Tropical forests are disappearing alarmingly in particular. Matti (2000) viewed population and income at national level as the most important factors explaining deforestation at sub-national level. Eustaquio and Blanco (2000) in their case study 'Causes of Brazilian Amazon Deforestation' mentioned that accumulated deforestation in the Brazilian Amazon has resulted from a multiplicity of factors and actors where the causes and sources are intermingled. It is estimated that since 1961 tropical countries lost over 500 mill ha of forest cover (FAO, 2000) and consumption of forest products rose by 50 percent (Gardner-Outlaw and Engelman, 1999).

Of the billion poorest people in the world – those living on less than US\$ 1 per day - two thirds live in rural areas (IFAD, 2001). Rural poverty is concentrated in many areas of the World's most threatened forest biodiversity (McNeely and Scherr, 2003), and over 90% of the world's poorest people depend on forests for their livelihoods (World Bank, 2001). Cincotta and Engelman (2000) reported that more than a billion people live within the world's 19 forest biodiversity 'hotspots'. Between the 1960s and 1990s rural population rose by 40% in developing countries and it is projected that by 2015, the world's rural population will be more than three billion (Scherr, 1999). It is found that in China most forests are located in officially designated 'poor counties' (Lele *et al.*, 2002). In India, about 66% percent forests are in economically poorer tribal areas and some 100 million people are estimated to be forest dwellers (Kumar and Saxena, 2002). Therefore, the crucial role of forests in the livelihoods of the poor has become more widely recognized (Scherr *et al.*, 2003)

Forestry: Bangladesh perspectives

Bangladesh with total population of about 126 mill in a total area of 147,570 km² is the most densely populated country in the World. Per capita land holdings are about 0.12 ha [GOB (Government of Bangladesh), 2002]. According to Forestry Statistics in Bangladesh, the estimated forest area of the country is about 2.53 mill ha (0.02 ha person⁻¹) and this is about 17.5% of the total land base of Bangladesh (unpublished data). Of this forest land, the Forest Department (FD) directly controls 1.53 mill ha having the legal status of Reserved Forest (RF) and Protected Forest (PF). The District Administration controls 0.73 mill ha of Unclassed State Forests (USF) and the remaining 0.27 mill ha belong to the category of privately owned village forest. However, the Forest Resources Assessment (FRA) 2000 (FAO, 2001) indicates only 10.2% of the land area of Bangladesh as forest. This is much lower than the Government estimate because the FAO estimate includes only the designated Government RF, PF and USF without taking into consideration the village forests and private forests (Table 1). Besides, the FAO estimate for forest plantations (625,000 ha) is also much lower than the forest statistics of Bangladesh (unpublished data).

Due to poor growth of industries, the unemployment rate is increasing day by day in Bangladesh. Agrarian rural people around the forests heavily depend on forests for their livelihood. As a result of

the tremendous demographic pressure – 975 people km⁻² (FAO, 2003) – for both housing and agriculture, use of land between and within forested areas is accelerating the rate of deforestation with loss of ecosystem, wildlife and biological diversity leading to overall environmental deterioration. According to the statistics drawn in the Forestry Sector Master Plan (FSMP), some 51.1% of Forest Department controlled and District Administration controlled forests are identified

Table 1: Comparative statistics on forest areas in Bangladesh

Total forest area (000 ha)	As a percentage of the country area (%)	Source
2,530	17.5	unpublished data
1,480	10.2	FAO (2001)

as productive forests and the rest as unproductive ones (GOB, 1995). Between 1960 and 1990 the estimated rate of deforestation in Bangladesh was 8,000 ha year⁻¹ resulting in a loss of 40% of forestlands (WRI, 1992). The deforestation rate in Bangladesh was 0.9% in 1970, but rose to 2.7% in 1984-1990 (GOB, 2001). A huge amount of land has been encroached upon and put to other land uses like agriculture, habitation and industry. Table 2 shows that among the designated forests, moist deciduous Sal (*Shorea robusta*) forest is heavily encroached upon (31.9%).

Table 2: Summary of forest land encroachment

Forest types	Total area (000 ha)	Total as a percentage of the country area	Area encroached (000 ha)	% of the forest area encroached
Hill forests	670	4.65	22.2	3.3
Moist deciduous forests	120	0.83	38.3	31.9
Natural mangrove forests	600	4.09	0	0
Mangrove plantation	140	0.97	0.8	0.57
Total	1,530	10.54	61.3	

* This area excludes the Unclassed State Forests (USF) which is about 1.0 mill ha

Source: Forest Management Planning Database survey 2003, Bangladesh Forest Department (unpublished data)

However, official records underestimate the true extent of encroachment. Unsupported sources suggest that more than 50% of Sal forests have been encroached upon. This forest is centrally located where the population density is high in comparison with other areas of Bangladesh. Timber

demand in central region of Bangladesh is very high on one hand and on the other hand, land near Dhaka (the capital of Bangladesh) is in greatest demand and is therefore, very valuable resulting in unprecedented land encroachment. Besides, this forest has a peculiar honey combed distribution with agricultural land, state owned forests occupy the higher ground and the adjacent low land is privately owned agricultural land. So frequent public access to the forest areas cannot be restricted which is another reason for land and forest resource shrinkage.

Habitat loss, habitat fragmentation and unauthorized felling in Bangladesh have resulted in very poor forest health and low stocking (unpublished data). It seems that it is quite difficult to bring a positive change of forest condition through traditional management system. With the exception of Sal forest, existing forest areas generally lie close to the country's borders where the population density is low relatively to central Bangladesh so that the forest products are not within easy reach of the majority of the people. The distribution of forests in Bangladesh shows that twenty eight districts out of the total sixty four virtually lack of any designated forests. Therefore, searching out alternative sustainable forestry practices was of great importance. Treue (2001) in a case study on Ghana's forest explicitly mentioned that 'Trees outside forest reserves are the key to sustainable forest and timber resources management in the future'. Realizing the success of social forestry in many other developing countries, the Bangladesh Government has undertaken this practice as a strategy for socio-economic development.

Objectives of the study

The people-oriented forestry program of Bangladesh, which started in the early 1980s through donor assisted programs, is the main focus of this study. This program is considered to be one of the most effective and successful forestry programs in Bangladesh. To adjust this new program to the existing structure, some new aspects with regards to manpower, institution and policy and legislation were added. The policy and program implementation now need to be evaluated. The specific objectives of the study are as follows:

- Identify the key social forestry issues, policies and institutional context in Bangladesh.

- Investigate the social forestry program structure, its achievements and impacts on participants in recent years.
- Analyze the institutional development in the light of forest policy and planning.
- Identify underlying barriers to social forestry in Bangladesh.

Methodology

The whole study has been carried out through an explorative research and the approach was holistic. Literature was reviewed to provide the national and international context. Relevant project documents on social forestry have been reviewed to explain the social forestry facts and figures. Field visits were made to all three Social Forest Circles namely Dhaka Social Forest Circle, Jessore Social Forest Circle and Bogra Social Forest Circle in Bangladesh to gather data on social forestry plantations (i.e. how much forest has been felled by each plantation category; how many participants involved; how much timber, fuel wood, poles derived; financial return etc.). In order to gather such data a structured questionnaire was used. Pertinent information was collected by interviewing forest officials and participants through on-the-spot interviews. As such 90 participants were randomly interviewed selecting 35 from Dhaka, 35 from Jessore and 20 from Bogra region. In addition, 12 participants who had received the minimum income from final felling were selected at random from these three regions and interviewed. Also 12 forestry professionals who are actively involved in forest policy and program implementation were interviewed. Then those data have been analyzed and compared with official records, planning documents and the views of the policy makers and beneficiaries. The Forest Policy of 1994 (GOB, 1994) and the Forestry Master Plan (GOB, 1995) have been critically reviewed with respect to achievements so far made in relation to the policy and plan provisions.

Development Principles of Forestry Sector in Bangladesh

Although the Bangladesh Forest Department started scientific forest management (i.e. with definite forest management plans, working circles, felling series and yield regulation) over a century ago, the net result is not satisfactory as forest and forest resources have been greatly depleted. The Forest Policy guidelines of 1894, 1955, and 1962 have been considered as the guiding principles of forest

management before Bangladesh came into being. Bangladesh has a short history of development since her independence in 1971. Since 1973, development activities of the country have been carried out through so called short-term development plans named as Five Year Plans. Sectoral plans are prepared keeping conformity with the National Development Plan. The Bangladesh Forest Department undertakes forestry programs to fulfill the sectoral policy objectives. The forestry program like all other sectoral programs are explicitly mentioned in the schemes normally named as development projects. Each such project has its own set of objectives, programs and budget. Presently the basis of forest management is the twenty years Forestry Master Plan prepared in 1993 and implemented since 1995, Forest Policy 1994 and the country's Three Years Rolling Investment Plan. In addition, in order to put forward the social forestry activities with respect to the Master Plan, the Social Forestry Rules 2004 has become effective after approval of the Government.

Social forestry perspectives in Bangladesh

The Forest Policy of 1979 clearly laid down the participatory approach to be followed in Government owned forest land and plantations on marginal land (GOB, 1979). In 1982 under the auspices of this new forest policy, the Asian Development Bank (ADB) assisted the first community forestry project which was located in the northern part of the country, a recognized environmentally degraded zone where areas had been targeted for participatory forestry. This project has been successful even in the marginal land of the region. The first project was done only on marginal fallow land such as roadsides, the sides of railway lines and institutional premises but now social forestry is also being practiced in the degraded forests areas. The participants became more interested after getting their share of the income generated by the project. This project is considered to be the start of participatory forestry in Bangladesh. Since then the social forestry program in Bangladesh has been carried out under various aided development projects. The chronological development of this system is shown in Table 3.

Social forestry program performance

Since program initiation, social forestry with a participatory approach has gained momentum all

over the country despite many obstacles, for example lack of organizational capabilities, skilled

Table 3: Chronology of social forestry in Bangladesh

Programs	Period	Stage
1. Taungya System (introduced from Myanmar)	1871	Conceptual stage
2. Forestry Extension Service Phase-I	1967	
3. Betagi-Pomora Community Forestry Project	1979	Experimental
4. Development of Forestry Extension Service Phase-II	1980-85	stage
5. Community Forestry Project	1982-87	Large scale social
6. Jhoomia Rehabilitation Program in Chittagong Hill Tracts Phase I	1979-89	forestry
7. Jhoomia Rehabilitation Program in Chittagong Hill Tracts Phase II	1990-95	established
8. Thana Afforestation and Nursery Development Project	1987-95	
9. Extended Social Forestry Project (ESFP)	1995-97	
10. Coastal Greenbelt Project	1995-2000	Mass production
11. Forestry Sector Project	1997-2004	

Source: Forest Statistics, Bangladesh 2003 (unpublished data)

manpower, legitimate usufruct rights, peoples' participation from policy to implementation and clear budgetary arrangements. Government has put a special emphasis on social forestry considering it a successful strategy for poverty alleviation and socio-economic development. The Forest Policy 1994 gives clear guidelines on social forestry in Bangladesh (see Appendix 1). The achievements of participatory forestry in Bangladesh (Table 4) are considerable against the degradation of forest and forest resources shown in Table 2. With the evolution of social forestry, rural subsistence and marginal farmers have also become so called 'stakeholders' but their participation in the total process (i.e. from policy formulation to implementation) is somewhat limited. According to the policy guidelines, social forestry planning should follow a bottom-up approach, but in practice, the grass roots level people are not included in the planning process. Therefore, the people's actual needs and aspirations are not properly reflected in the policy and plan formulated. rotation of felling was never followed due to poor communication between the program's administrators, who have little or no technical knowledge on forestry, and forestry professionals. Therefore, many plantations did not realize their optimized financial return. This brought a negative feedback to participants

towards this newly introduced practice and as a consequence some well managed tree gardens were felled illegally without realizing a clear benefit either to participants or to the Government. Also, some plantations were reported to have been felled sporadically on the occasion of road expansion

Table 4: Achievement of Social forestry in Bangladesh since the mid–1980s

Programs	Achievement
1. Strip plantation	48,420 km
2. Woodlot plantation	30,666 ha
3. Agroforestry plantation	7,738 ha
4. Embankment plantation	1,338 ha
5. Foreshore plantation	645 ha
6. Village afforestation	7,421 villages
7. Seedlings for sale and distribution	201 mill

Source: Field Survey 2003 (unpublished data)

(i.e. in Rajshahi, Jessore, Natore, Pabna, Bogra and Sirajganj districts) without considering the maturity or target rotation length. Additionally, plantations affected by cyclones or other natural calamities were felled early.

Harvesting summary of social forestry plantations

Due to the various issues stated above, social forestry plantation felling before 2000 was not significant. Table 5 summarizes the participatory social forestry plantation felled during last four years (2000-2003) in Bangladesh. It shows that more than 23,000 people got their correct share (i.e. according to the written agreement between the Forest Department and the individual social forestry participant) from the final felling of different social forestry plantations (woodlot, agroforestry and strip plantation). Woodlots are continuous block plantations mainly raised for fuel wood and timber. Agroforestry is a land use technology where trees and cereal crops are grown simultaneously and or sequentially with wood production as the major objective. Strip plantations are mainly raised in two or more strips either on roadsides or on railway lines sides. The Government got a total of US\$ 5.59 mill and participants got a total of US\$ 5.26 mill during the last four years. In order to sustain the practice, i.e. to undertake further plantings after felling, a monetary reserve is being made by

depositing 10% of final return from each plantation into a Tree Farming Fund (TFF); a total of US\$ 1.19 mill is thus saved so far. This fund should be sufficient to prevent a monetary crisis in the Forest Department.

Table 5: Summary of total harvested plantations during 2000 to 2003

Type of plantation	Area felled (ha or km)	Timber produces quantity			Participants (no) involved	Total sale proceed (000 US\$)	Participants share (000 US\$)	TFF* (000 US\$)	GOB** share (000 US\$)
		Timber (000 m ³)	Fuelwood (000 m ³)	Poles (000 no)					
Woodlot	5,079 ha	64	90	1,429	4,934	6,207	2,531	621	3,055
Agroforestry	1,597 ha	20	22	334	2,119	2,156	968	216	973
Strip	2,897 km	44	42	45	16,442	3,650	1,752	350	1,549
Total		128	154	1,808	23,561	12,013	5,251	1,187	5,577

* Tree Farming Fund, ** Government of Bangladesh

Source: Field Survey 2003 (unpublished data)

Considering the average yield of social forestry plantations in Bangladesh (Table 6), timber yield was highest in strip plantations (15.2 m³ ha⁻¹) followed by woodlots and agroforestry plantations. In the case of fuelwood, this was highest in woodlots (17.7 m³ ha⁻¹) followed by strip and agroforestry plantations. This is of course, a low yield per ha because of the heterogeneity in felling age. The total individual financial return (US\$ 223 person⁻¹) is not attractive to a person engaged in tree planting program for more than ten years. This was found while interviewing particularly the beneficiaries of very small final incomes. The underlying reason for low individual shares is that some plantations were too immature to fell and some were felled after the planned rotation period. Besides, during first rotation period, the participants doubted that the Forest Department would really fell the plantation or they would really be given their agreed share. Unit returns from the different kinds of plantations were examined. Tree density is highest in woodlot plantations (2980 seedlings ha⁻¹) followed by agroforestry (1380 seedlings ha⁻¹) through alley cropping (an alley of two or more lines of trees are planted followed by a 30 meter interval for agriculture) and lowest in strip plantations (1000 seedlings km⁻¹). Therefore, conceptually, woodlot plantations should generate the highest financial return, about three times that of strip

Table 6: Average yield of social forestry plantation in Bangladesh during 2000 to 2003

Type of plantation felled	Timber quantity (m ha ⁻¹)	Fuelwood quantity (m ha ⁻¹)	Poles (no ha ⁻¹)
Woodlot	12.6	17.7	281
Agroforestry	12.5	13.8	209
Strip*	15.2	14.5	16

* in case of strip plantation, unit will be m³km⁻¹ for timber and fuelwood and no. km⁻¹ for poles Source: Extracted from Table 5

plantations and double that of agroforestry plantations. But the actual return streams from harvested plantations did not follow this sequence (Fig. 1). In 2003, it was found that the 25% of the felled strip plantations was cut before the rotation age due to road expansion; it was also common in 2000 and 2002 for this type of plantation. Woodlots were felled in 2003 from well stocked productive sites in comparison to previous years and that's why per unit return was little bit higher. However, the reason for the lowest per unit return from agroforestry in 2003 could not be clarified either from the field survey or from the official remarks.

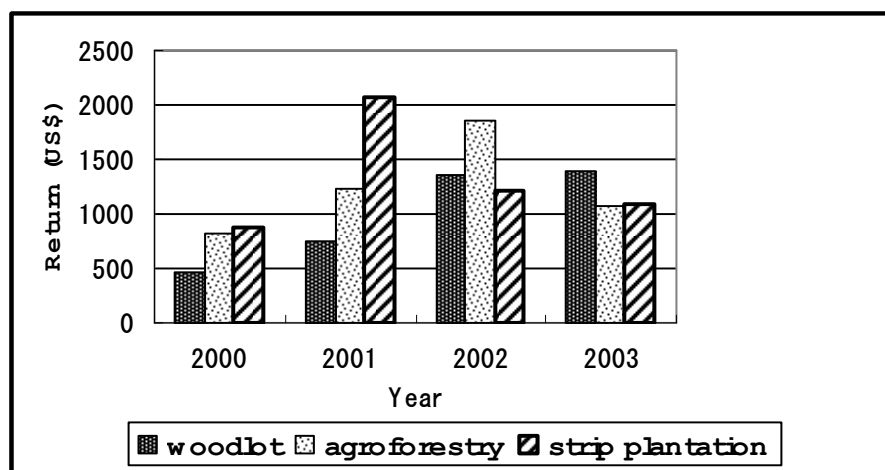


Figure 1. Return expressed on a per hectare basis for woodlots and agroforestry and per km for strip plantations in different plantations over years

Source: Extracted from Table 5

Analytical results on critical issues of Social forestry in Bangladesh

In this section we compare the provisions of the major policies and plans relating to social forestry in Bangladesh as outlined earlier with their actual achievements and returns.

Out of twenty nine policy statements of the current forest policy (see Appendix 1), most are not yet implemented. For example, the first policy statement of the Forest Policy 1994 sets a target to bring about 20% of land under the afforestation program during the period between 1995-2015. In 1995, the country's designated forest land was about 10% of the country. So if it is to reach 20%, then another 10% forest cover must be achieved during the next 20 years i.e. an average increase of 0.5% year⁻¹. But by 2002, forest resource cover had increased by only 1%, i.e. 0.14% year⁻¹ which is far below the targeted increment. Therefore, either this policy declaration has not followed carefully or the estimated target was not set judicially.

The 17th Policy statement clearly emphasized the transportation of forest products within Bangladesh by making it updated, easier and time effective. Social forestry plantations are being felled but there is no Transit Rule for social forestry products. This is now a major issue for the Forest Department who should issue Transit Passes to the timber bidder and other customers for timber transportation. Therefore, primary purchasers must sell on their timber in nearby localities where it fetches comparatively low prices.

The 27th Policy statement talked about strengthening the Forest Department and creating a new Social Forestry Department. An institutional restructuring was started in 1998 but is yet to be completed. In this regard, it is felt that this institutional reform did not follow the intention of Forest Policy. Instead of a separate Social Forestry Department with proper staffing solely to look after social forestry activities, a Social Forestry Wing has been created within the capacity of Forest Department having neither specialized manpower nor any sort of autonomy. So this wing is limited in its ability to fulfill the stated policy goals and objectives. While interviewing the professionals of Forest Department, some suggested that the institutional reform was rather done to fund on going development projects that were no longer supported by donor countries.

The final policy statement emphasized the amendment and promulgation of relevant laws, rules and regulations in consonance with National Forest Policy. During the last ten years some steps have

been made to promulgate the Social Forestry Rules which were finally approved in late 2004. Also the Forest Law has not been amended sufficiently at least to the present time.

These facts represent a fundamental hindrance to forestry development in Bangladesh. Instead of establishing a Social Forestry Department, a Social Forestry Wing has been created which is not yet fully operational. Besides, it is also advised to review and update the Master Plan and Forest Policy at periodic intervals to accommodate changing circumstances and also to avoid problems preventing implementation. But after enacting Forest Policy in 1994 and the Master Plan in 1995, no such initiatives have been undertaken. Therefore, it becomes clear that policy is not fully obeyed in practice. Although some steps are undertaken in the light of policy statements, these are still inadequate. Under these circumstances, it is not possible to attain the stated vision and goals either of the Master Plan or of the Forest Policy 1994.

In the Forestry Sector Master Plan, to reach the stipulated target of forestry, there is an estimated expenditure of US\$ 1368 mill for 20 years (1995-2015), i.e. US\$ 68.37 mill year⁻¹. Actual expenditure during the last seven years in the forestry sector of Bangladesh (Table 7) remained well below the estimated allocation. So low financing is one of the reasons for poor performance. If the pace of financial expenditure remains as it is, the Master Plan target will never be achieved and likewise, the Forest Policy will lose its effectiveness.

Table 7: Expenditure scenario in forestry sector of Bangladesh

Year	Estimated expenditure (mill US\$)	Actual expenditure (mill US\$)	Actual expenditure with respect to estimated one (%)
1995/96	68.38	13.4	19.6
1996/97	68.38	14.0	20.5
1997/98	68.38	13.2	19.3
1998/99	68.38	11.6	17.0
1999/00	68.38	17.4	25.4
2000/01	68.38	20.4	29.8
2001/02	68.38	17.9	26.2
Total	478.66	107.9	22.5

Source: Development Planning Database survey 2003, Bangladesh Forest Department (unpublished data)

Conclusion and Recommendations

Social forestry has been practiced for more than two decades in Bangladesh and is now at a stage of mass production (unpublished data). However, there are unresolved problems embedded in current practices. Unless the participants are given a clear legitimate usufruct right, they will remain skeptical about the program. They should have meaningful access to all stages in the process from planning to implementation, so that they would not have to wait for bureaucratic decisions on felling and other relevant social forestry operations. The average individual final returns (US\$ 223 person⁻¹) are not attractive. However, some people got about US\$ 5000 to US\$ 8500 from final felling, sufficient to improve their standard of living and social position. Therefore, in order to keep up the current pace of social forestry development in Bangladesh, the Government needs to more institutionalize the practice, so that every stakeholder will be more aware of their responsibilities to derive maximum output. Also, efficiency studies (technical and production efficiency of social forestry) like SFA (Stochastic Frontier Analysis) and DEA (Data Envelopment Analysis) should be done in social forestry in Bangladesh. However, efficiency measurement is highly data dependent, and difficulties common in the forestry sector, such as long production periods, still apply. Efficiency measurement provides information about the direction of change as well as useful management inputs (Carter and Siry, 2003). As far as the monetary return and environment are concerned, there should be a regular flow of investment to sustain the practice. As is clearly shown the physical target has not been achieved due to limited budgetary allocation, therefore, the Government should ensure sufficient funds. Otherwise, the plan and policy will remain unachieved.

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Bangladesh Forest Policy 1994

1. The Government shall take all endeavors to bring 20% of land under forest by the year 2015 to maintain the ecological balance and attain self-sufficiency in forest produces. To achieve this objective the Government shall work jointly with Non-Government Organizations and ensure peoples' participation.
2. Since the area under Government-managed forest is very limited, the afforestation activities shall be extended to village areas; newly accreted mud-flat areas and in the denuded areas of un-classed state forests of Chittagong Hill Tracts.
3. People will be encouraged to plant up trees in their own fallow and marginal land, on the bank of tanks and homesteads. Technical advice and assistance will be provided for using 'Agro-Forestry' practices, to the people if they introduce agro-forestry in their marginal and sub-marginal land. While introducing agro-forestry in state owned and private land appropriate attention will be given to produce fodder and in maintaining the herbs and shrubs.
4. The Government will encourage people to plant up in the premises of public institutions like union council office, schools, idgah, mosque, maktab, temple, orphanage, mardasha and their surrounding areas. Both technical and other assistance will be provided.
5. The Government will undertake afforestation with peoples' participation and with assistance from the NGOs in the state owned marginal lands like the roadsides, railway trackside and both the sides of the embankments.
6. To ensure pollution control in the cities, the Government shall take up special afforestation activities in all the municipal areas of the country. To achieve this goal, the municipalities, town development authorities and other related autonomous bodies shall help the Government in the implementation of the programs by way of zoning and allotting land for tree plantation. The town planning authorities must keep provision for tree planting in their development plans by setting aside specific sites for the purpose.
7. In the hill districts of Banderban, Rangamati and Khagrachari massive afforestation programs will be undertaken in the USF (Unclassed State Forest) by public and private agencies. The local Governments keeping the land rights retained by the land ministry will execute the program.

8. In order to preserve the soil, water and biodiversity, the natural forests of the hilly areas and the catchments of the rivers within the country shall be declared as Protected Areas, Game Sanctuaries, and National Parks. It will be the endeavour of the Government to keep 10% of the national forests as 'Protected Area' by the year 2015.
9. An integrated management plan will be prepared for Sunderbans incorporating the management of forest, water and wildlife.
10. State owned hill and Sal forests will be managed as production forest except those declared as 'Protected Areas' for preserving soil, water and biodiversity. The production forests will be managed on commercial basis with due consideration to environment.
11. The critical areas like steep hill slopes, vulnerable watersheds, wetlands will be designated as 'forests' and will be managed as Protected Areas.
12. Denuded and encroached Government forest lands will be identified and brought under afforestation program with peoples' participation on benefit sharing approach preferably under agro-forestry wherein NGOs may be associated.
13. Modern and appropriate technologies will be introduced as attempts to minimize the loss at all steps of collection and processing of forest produces.
14. Emphasis will be laid on the modernization of forest-based industries to maximize the utilizations of forestry raw materials.
15. Steps will be taken to bring in competitive and profit-oriented management to the state owned forest based industries under the purview of open market economy.
16. Labor intensive small and cottage industries based on forest products will be encouraged in the rural areas.
17. Forest transit rules will be made simpler to meet the present day needs.
18. Since wood deficit exists, the ban on export of logs will continue. Processed wood products can however be exported. Import of wood and wood products will be liberalized, but reasonable import duties will be levied on forest products that are abundant in the country.
19. Due to shortage of forest area in the country, no forestland will be allowed to be used for any purpose other than afforestation, without the permission of the head of the Government.

20. In absence of clearly defined land ownership, the tribal people inhabiting adjoining forest lands in some parts of the country used to cultivate any where in the forest land at random. Clearly delineated forest land will be set aside for them through forest settlement operation and the rest will be brought under permanent forest management.
21. Training, technical assistance and financial support will be enhanced towards private afforestation and tree based rural development programs, from the funds received as international grants and from donors.
22. Women folk will be encouraged more in programs such as homestead afforestation, rural tree farming and participatory forestry.
23. Eco-tourism will be encouraged keeping in mind the carrying capacity of the forest and the nature.
24. To create massive awareness about afforestation, protection and utilization of forests and forest products, mass media campaigning shall be taken up both in Government and in Non Government channels.
25. Under forestry programs, fruit tree planting shall be encouraged in addition to timber, fodder, fuel wood trees and other non wood products, in the habitations.
26. Steps will be taken to modernize the methodology of extraction of forest produces to minimize loss and increase efficiency.
27. Forest Department will be strengthened to achieve the objectives and goals of the policy and a new Social Forestry Department will be established.
28. The research institutions, education and training institutions related to forestry will be strengthened to achieve the policy targets and their roles will be enhanced and integrated.
29. In the light of the aims, objectives and targets set up in the policy statement the acts and rules related to forestry shall be modified, amended and if necessary new Acts and Rules will be promulgated.