

## Short Communication

# A Study on Land Tenure Complexities of Sal (*Shorea robusta*) Forests in Bangladesh

NUR MUHAMMED, MASAO KOIKE<sup>1</sup> AND MD. SAJJADUZZAMAN<sup>†</sup>

Forest Policy Laboratory, Department of Forest Science, Shinshu University, Japan

<sup>†</sup>Bangladesh Forest Department, Ban Bhaban, Mohakhali, Dhaka-1212, Bangladesh

<sup>1</sup>Corresponding author's e-mail: [makoike@gipmc.shinshu-u.ac.jp](mailto:makoike@gipmc.shinshu-u.ac.jp)

## ABSTRACT

World's forests are one of the most vulnerable renewable resources posing threat to our economic usage and signaling various environmental disasters as well. Bangladesh being an over populated agrarian country has integral dependency on forests for livelihood. Sal (*Shorea robusta*) forests due to its position in the central part of Bangladesh, land around this forests is utmost demanding and expensive. Long temporal aspect of land ownership transfer created lot of complexities and in course of time multiple stakeholders claim ownership of the same piece of land. Land conflict coupled with other biotic and abiotic problems leads this forest more or less to below critical zone and meanwhile a considerable forest area has been encroached. Under existing socio-political perspectives, keeping land tenure matter unsettled thinking of sustainability of this forest may be futile exercise. This study clarifies the land tenure complexities in details and introduces different views of relevant stakeholders accrued through field investigation.

**Key Words:** Sal forests; Land tenure; Bangladesh; Policy issue; Shrinkage

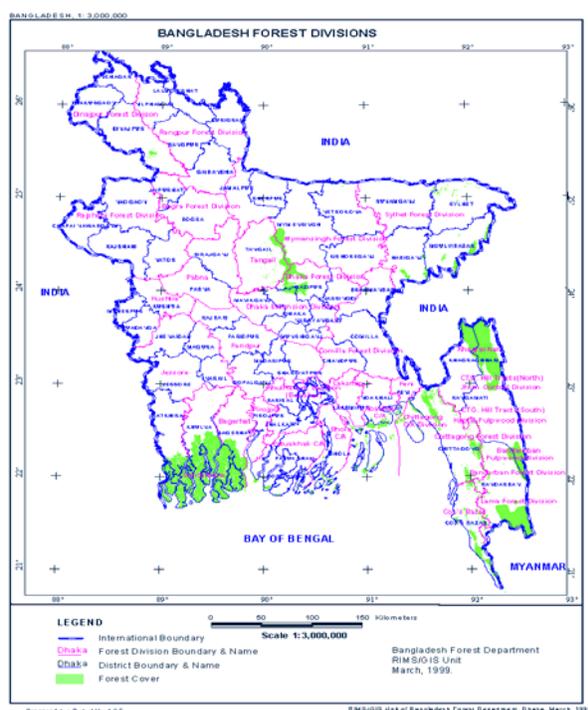
## INTRODUCTION

Sal (*Shorea robusta*) forests with an area of 0.12 million (here after mill) hectare (here after ha) are distributed scatteredly in the relatively drier central and north-western parts of Bangladesh including Dhaka, Mymensingh, Tangail, Dinajpur, Rangpur, Rajshahi and Comilla district (Ismail & Mia, 1973). Silviculturally Sal forest falls under Tropical moist deciduous forests types. The dominant species (about 80-100%) of this forest is Sal (*Shorea robusta*) (GOB, 2003). Sal is a valuable timber because of high density and durability especially in construction and other structural uses. In former time these forests belonged to feudal lords employed by the then British government prior to nationalization (GOB, 1993). Long temporal aspect of land ownership transfer created lot of complexities and in course of time multiple stakeholders appeared as owner of the same piece of land by illegal means. Among the designated forests of Bangladesh, moist deciduous Sal (*Shorea robusta*) forest is heavily encroached and degraded. Due to the position of this forests near Dhaka- the capital of Bangladesh, land is utmost demanding and expensive. Thus pilferage of forest and forest products is a common feature in forest areas bordering human habitation. All attempts at arresting the process are proving futile and the situation is deteriorating day by day. In order to improve the forest condition for sustainable use, the issue of Sal forests has got a consideration in the new Forest policy 1994. The policies emphasize on identification of

denuded or encroached area and undertake afforestation in these lands through people's participation i.e., social forestry (GOB, 1994). Besides, for making this forest productive and sustainable Forestry Sector Master Plan (1995-2015) prescribes to delineate and manage the forest areas as i) environmental management in the core areas, ii) agroforestry and woodlot plantation in the encroached and denuded areas under poverty alleviation concept and iii) Sal forests Rehabilitation through natural forest enrichment and replacement plantations (GOB, 1995). However, the policy does not give any special directives to mitigate land tenure complexities. This paper aims to identify and prioritize the problems of Sal forests and explain the land tenure complexities in details suggesting measures for sustainable resource management.

## METHODOLOGY

The whole study was carried out through a painstaking review and random interview and focus group discussion with relevant stakeholders. In doing so random sample survey with open ended questionnaire was done on three stakeholders viz., Expert group, Professional group and the grassroot level group to identify the Sal forest management problem. A total of fifty eight persons were randomly interviewed selecting eight from expert group, twenty from professional group and thirty persons from grassroots level category. After stakeholder analysis regarding Sal forest problem, the land tenure problem is

**Fig. 1. Forest map of Bangladesh showing study area**

further analysed in more details. The grassroots level group belongs to Gazipur areas of Dhaka who are living in and around Sal forests. The forest map of Bangladesh (indicating study area) is shown in Fig 1. Finally the data are processed and interpreted to come up with this paper.

## RESULTS AND DISCUSSION

**Problem analysis from stakeholders view.** Despite the favorable climatic condition and fertile soils in Bangladesh, a number of institutional, socio-economic and political problems are generally apathetic towards forests destruction (GOB,1993). With regards to sal forests, land is one of the important problems as identified by this study. The result of these problems is the loss of forest land and forest resource cover as well.

**Expert group.** The result of the expert group opinion is shown in Table I. It shows that under institutional category six problems have been identified where land tenure (100% respondent's opinion) is the highly scored problem (score 21). Under socio-economic category, corruption of the professionals is the mostly identified problem with a score of 19. It is wrong political decision as identified the most severe problem under political problem category.

**Professional group.** Professional group also opined that land tenure is the most important institutional problem regarding Sal forest management. This group identified high demand for timber and fuelwood as the leading socio-economic problem and interests for land and forest

resources by the elite people as important political problem. Details of the opinion are shown in Table II.

**Grassroot level group.** According to the summarised view of the grass root level group (Table III) lack of coordination (score 52) is the most recognised institutional problem which is followed by land tenure problem (score 48). However, corruption of the professionals (score 64) and Interests for land and forest resources (score 74) are the most severe problems identified under socio-economic and political problem categories respectively by this group.

**Land tenure.** Land Tenure problem has long root of development starting from Mughal era (16<sup>th</sup>-18<sup>th</sup> century) through British period (1757-1947) and pakistani regime (1947-1971) and is still existing in present date with slighter modification. During Mughal era cultivators were recognised as the owners of this forest land and were satisfied with the share of products paid in cash. During this period Diwani Rights<sup>1</sup> were introduced in land management that grew dissatisfaction to the farmers. British government further modified the Diwani system and renamed as Permanent Settlement in 1793 introducing Zamindari system. (appointed feudal lord). This rule brought a radical change in the land tenure system where Zamindars appeared as proprietors of land with all forms of property rights and the cultivators lost their property rights and relegated to the position of *tenants-at-will* under Zamindars. As a result discontent and resentment developed gradually among the tenants. In order to mitigate this conflict The Bengal Private Forest act law was enacted in 1945 under which permanent settlement was abolished, the tenants were brought in direct relationship with the Government and all types of rent receiving interests were acquired by the state. But with this Act the owners of the private forests became even more scared and they began to cut down the trees and clear the forests even more extensively and continued giving settlement of forest lands. The Government was not able to take control over the private forests immediately accomplishing official procedures in time. The Zamindars took the advantage of this time and continued felling and settlement of their forest lands to many other individuals. To accelerate acquisition process, the Pakistani rulers introduced The State Acquisition and Tenancy Act 1950 (SATA) abolishing private ownership of forest lands and prohibiting sub-letting. In order to escape the clutches of the law most of the owners of the private forests and the Zamindars adopted the device of giving settlement of lands in their forests, as well as outside with back-dated papers. Despite the problems created by illegal settlement, the state acquired the forests on paper but illegal occupants remained in the forests with so called documents of property rights. Therefore, the past problems still exist with more delicate dimension.

<sup>1</sup> Right to collect the land revenue of Bengal, Bihar and Orissa in return for payment of Rupees 2.60 million annually to the Emperor

**Table I. Problem identification and prioritization of Sal forests (Case: Expert Group)**

Problem category	Problems identified	Respondent	Total
		No. (%)	score
Institutional	Land tenure	8 (100)	21
	Lack of coordination	5 (62.5)	11
	Policy, rules and regulations	4 (50)	8
	Lack of professional dignities	6 (75)	13
	Absence of peoples participation	6 (75)	14
	Custodian law	2 (25)	3
	Population density	6 (75)	14
Socio-economic	Poverty	4 (50)	7
	Corruption of the professionals	8 (100)	19
	High demand for land and fuelwood	6 (75)	12
	Encroachment	7 (87.5)	14
Political	Wrong political decision	8 (100)	18
	Interests for land and forest resources	8 (100)	16

Total respondents: 8, Scoring for individual problem as 3= High, 2= Moderate and 1= Low (Source: Field Survey, 2004)

**Table II. Problem identification and prioritization of Sal forests (Case: Professional Group)**

Problem category	Problems identified	Respondent	Total
		No. (%)	score
Institutional	Land tenure	17 (85)	44
	Lack of Technical staff	14 (70)	27
	Distribution of the forests	13 (65)	24
	Inadequacy of policy and rules	10 (50)	24
	Timber and fuelwood demand	17 (85)	41
Socio-economic	Industrial and residential demand	16 (80)	32
	Biotic interference	11 (55)	20
	Encroachment	15 (75)	32
	External pressure	17 (85)	42
Political	Interests for land and forest resources	15 (75)	38
	Forests degraded during liberation year.	4 (20)	7

Total respondents: 20, Scoring for individual problem as 3= High, 2= Moderate and 1= Low (Source: Field Survey, 2004)

**Table III. Problem identification and prioritization of Sal forests (Case: Grass root level Group)**

Problem category	Problems identified	Respondent	Total
		No. (%)	score
Institutional	Land tenure	19 (63.3)	48
	Lack of coordination	20 (66.7)	52
	Top down planning	14 (46.7)	34
	Lack of professional dignities	10 (33.3)	32
	Absence of peoples participation	17 (56.7)	45
	Custodian law	3 (10)	5
	High demand of timber and fuelwood	18 (60)	47
Socio-economic	Corruption of the professionals	25 (83.3)	64
	Poverty	20 (66.7)	48
	Encroachment	8 (26.7)	16
	Interests for land and forest resources	30 (100)	74

Total respondents: 30, Scoring for individual problem as 3= High, 2= Moderate and 1= Low (Source: Field Survey, 2004)

**Consequence of land tenure complexities.** The issue of Land tenure is still unsettled and with the passage of time it has got delicate dimensions. In areas closer to Dhaka, elites and politically influential groups are expanding their industries and residential business through producing false documents of possession. A total of 34,180 ha (about 31.89%) and 38269.72 ha forest land have been degraded and encroached respectively (Ghani *et al.*, 1990; FD, 2004). Tree covers exist only in 32% area (Huq & Alim, 1995).

Soil erosion has exceeded the areas carrying capacity. Conflict has increased for varied interests from this forest.

**Recommendations.** Although there are policy and master plan guidelines on Sal forests, it seems that under the existing socio-politico-economic perspectives, it may not possible to preserve the forests or to rehabilitate the degraded ones. Because land tenure is a basic question of ownership; hence, keeping land tenure matter unsettled thinking of sustainability of any practice, even it is social forestry, it might be ineffective in the long run. However, the specific suggestions would be as follows:

- ◆ Modification/formulation of specific law and policy on land tenure
- ◆ Creating buffer zone to rehabilitate the poor and tribal people living around the areas through participatory social forestry with proper land tenure security.
- ◆ Demarcation and delineation of intersected and intermingled forest lands and agricultural land on the ground.
- ◆ Recover the encroached land and practice social forestry motivating encroachers to active partner in the practice.
- ◆ Maintain certain areas as strongly protected to main biodiversity and environmental development and complete the legal procedure including land tenure as soon as possible.
- ◆ Ensure better coordination among the actors.

**Acknowledgements.** The authors pay deep sense of gratitude to many individuals who helped from planning the research up to the end; especially the forestry officials of Dhaka forest division, conservator of forests, central circle Dhaka Bangladesh.

## REFERENCES

- F.D., 2004. *Forest Management Planning database*, Bangladesh Forest Department, Bangladesh, Dhaka
- GOB, 2003. *Forestry Sector Project Inventory-2003*. Government of the Peoples' Republic of Bangladesh
- GOB, 1993. *Forestry Master Plan Technical Project*, p. 73. Government of the Peoples' Republic of Bangladesh
- GOB, 1994. *National Forest Policy Document*, Government of the Peoples' Republic of Bangladesh, Dhaka
- GOB, 1995. *Forestry Sector Master Plan (1995-2015)*, pp. 52-5. Government of the Peoples' Republic of Bangladesh Dhaka, Bangladesh.
- Ghani, C.Q., A. Alim and P.R. Stevens, 1990. *Rehabilitation and Land use Planning of Sal Forests*, Part-3, p. 10. FAO/UNDP project BGD/85/085. Working Paper No. 39, Dhaka
- Huq, M.F. and A. Alim, 1995. *Social Forestry in Bangladesh*, p. 7. State of art study. BARC-Winrock International, Dhaka
- Ismail, M. and M.M. Mia, 1973. Studies on some deciduous 'Sal' Forests of Bangladesh. In: Ismail, M. (ed.) *Ecology of Bangladesh Vegetation*, pp. 79-103. Botanical Survey of Bangladesh, Department of Botany, University of Dhaka, Dhaka

(Received 01 December 2004; Accepted 16 February 2005)