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Forestland Concession, Land Rights, and Livelihood Changes of Ethnic Minorities: The Case of the Madhupur Sal Forest, Bangladesh

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Received: 14 February 2019; Accepted: 19 March 2019; Published: 23 March 2019



Abstract: Forestland concession has been the dominant governance tool for the acquisition of natural state-owned forest resources in many tropical countries, including Bangladesh. Moreover, the forestland concession process confers the holder a bundle of rights. The Sal forests of Bangladesh are treated as some of the greatest concession forests, as a number of ethnic minorities use these forests for their daily living. Therefore, the objectives of the study were to assess the impacts of Sal forestland concession and land rights on the livelihood development of the ethnic minorities living in the Madhupur Sal Forest (MSF) area of Bangladesh. Using both qualitative and quantitative data collection techniques, the study found out that about two thirds of the original Sal forestland was grabbed by the state and non-state actors. As a result, the ethnic minority inhabitants have lost their traditional land and free access rights to the Sal forests. The process of losing ethnic minorities' land and forest access rights has been enhanced by the institutional arrangements of the state, which had also created severe conflicts between the Forest Department and the ethnic communities. The study also revealed that the forestland concession has negatively affected the five livelihood capitals development of the ethnic minorities, consequently, their forest-based livelihood has shifted to non-securing jobs or poor income sources, like daily wage labor and subsistence agriculture. Despite this, the development drivers have emphasized the Sal forests and biodiversity conservation, while the livelihood development of the ethnic minorities has been ignored from every level. Therefore, this study would recommend establishing a legitimate process in order to settle the issue of traditional land and the forest rights of ethnic minorities, which could also attain the conservation and development goals of the Sal forests.

Keywords: Land concession; rights; conflicts; Sal forests; ethnic people; livelihood

1. Introduction

Concessions have existed in the world for hundreds of years. Concession is a legal instrument between two entities, usually the state and a private party, that delivers rights from the government to other parties in terms of payment or the provision of services [1]. The variation among the concession deals and responsibilities of the stakeholders is enormous, and in most cases, the forest concessions have been severely criticized by scientists, because they failed to provide the expected benefits and services [1,2]. The land covered by trees is considered to be forestland [3], and the forestland concession process confers the holder a certain set of rights. There are many concerns about forestland concessions, which seem to have a bad track record, particularly in the tropical forests of developing countries [1]. Tropical forestlands and biodiversity are in decline worldwide, and an estimated 80%

of new agricultural lands (including plantations) have been taken from forestland [3,4]. Although resources from forestland have always been key to the livelihood of forest-dependent people, the recent interest in commercial food, biofuel production, and industrialization have resulted in a growing interest in land resources [2,5]. This has led to a rapid expansion in the conversion of forestland to arable land in developing countries, including Bangladesh. At the end of the day, forestland concession mostly threatens poor forest-dependent people, who need land the most for their daily living.

Bangladesh is a densely populated developing country in South Asia, with a population of 158.9 million people [6,7]. The country has only 2.52 million ha (17.08% of the land surface area) of forests. Of them, the Forest Department (FD) of Bangladesh directly manages 10.3% of the forestland (1.52 million ha), which includes Hill forests, Sal forests, and mangrove forests [8–10]. However, another 0.73 million ha of forest is also under the control of the government (Ministry of Land) and the remaining 0.27 million ha of village forest is privately owned by the people [8]. The evergreen Hill forests (0.67 million ha), mangrove forests (0.73 million ha), and plain land Sal forests (0.12 million ha) are the natural forest types of Bangladesh owned by the state where the general people's access and rights are restricted [8]. Recent statistics showed that the government owned forests do not have satisfactory tree cover [11,12] and only 6.5% (0.93 million ha) of the state forest has good tree cover [12]. In addition, the degraded forestland has been converted to other commercial purposes, which has created an enormous threat to forest conservation and development.

The tropical moist deciduous Sal forest is one of the most economically and ecologically significant forest types in Bangladesh, and is also considered to be a leading concession forest [10,13,14]. As a consequence, only one third of the Sal forests remain (FD 2015) in Bangladesh. The Madhupur Sal Forest (MSF, locally called Madhupur Garh) constitutes a major portion of the Sal forests of Bangladesh [9,14]. Historically, the Bangladesh forest policy and management stemmed from the British colonial period, followed by the East Pakistan (former name of Bangladesh) bureaucratic policies. These policies emphasized the exploitation of forest products as revenue income only. As a part of the management policy, the state entities within the control of the FD claimed a major portion of MSF land for rubber plantations and social forestry programs in the 1980s [8,15,16]. At the same time, the government also made a national park out of 20,837.2 acres (8436.1 ha) of MSF land in order to conserve and protect forests [8]. Besides the national park area, some institutions—namely BFRI (Bangladesh Forest Research Institute), BADC (Bangladesh Agricultural Development Corporation), and BAF (Bangladesh Air force)—claimed the MSF land. Those institutions have taken Sal forestland on a long-term contract basis and they enjoy land-user rights, but the ownership of the land remains with the Bangladesh Forest Department. In addition, about 40,000 local people illegally made their settlements and have been practicing agriculture in the MSF area after the independence of Bangladesh in 1971. However, the ethnic people were treated as the original inhabitants of the Sal forests who lived in the MSF area more than 200 years ago [17,18]. Thus, the Sal forests land-use categories are complex, and different types of land concession and grabbing cases have been occurring together. This study will consider all cases which have negatively affected the daily living conditions of the ethnic minorities to the MSF area to be land concession.

Ethnic minorities, particularly the Garo and Koch people, were living in harmony with the MSF since time immemorial [9,17,19]. Ethnic people have used forestland and practiced shifting cultivation in the Sal forests since before the British colonial time, and they also paid taxes to the landlord (locally called Zamindar) nominated by the British Governor. For this, the ethnic people enjoyed their formal land rights over Sal forests and were living in peace and harmony. Immediately after the British colonial period, the government abolished the landlord systems and acquired all natural forestland as the property of the state in 1950. However, the ethnic minorities' forest access and land rights have not been considered, instead all of the government regimes tried to evict them from forest without paying any attention to their traditional land rights [17,20]. In addition, massive Sal forestland concessions and traditional forest policies of the state had severely affected the living condition of the ethnic minorities [15,21]. Therefore, it is apparent that forestland concession and land rights have been

strongly correlated with the livelihood of the ethnic minorities. On the other hand, the Bangladesh FD has initiated many donor-driven development projects in the Sal forests area, but none of them have successfully resolved the land rights issues and systemically addressed the livelihood of the ethnic people [10,15]. Thus, the Sal forestland concession by the state and non-state entities, and land rights issues have an immense impact on the livelihood of ethnic people, which needs to be properly assessed. Therefore, the objectives of this study were to assess the impacts of Sal forestland concession and land rights on the livelihood development of the ethnic minority living in the MSF area of Bangladesh.

2. Materials and Methods

2.1. Conceptual and Theoretical Frameworks

The concept of land concession is not new, but it has been in use since the 1700s from a wide range of natural resource utilization perspectives, which refer to the formal legal arrangement of land for specific demarcated uses [1,22]. Concession refers not only formal legal acts which allow the demarcation of spatial units for the utilization and management of natural resources, but also to social processes [22]. Concession may be defined or viewed as a way to deliver the services of public and collective interest through the association of private investment and public regulation [23]. Forestland concession refers to a contract, license, or permit granted to a company or an individual to extract forestland and resources commercially from a defined area of the forest within a certain time [1]. The notion of forestland refers to an area of land covered by trees, which might be used for other purposes like resource extraction, hunting, ecotourism, and farming [3]. In another way, forestland concession processes award land user rights to individuals or companies who assume the risk and responsibility of forestland resource exploitation and/or management [1]. Therefore, forestland concession would need a negotiated agreement or contract between the individual/company and the government that gives the individual/company the right to operate their business within the government's jurisdiction, subject to definite conditions. So, forestland concession is simply one form of allocating land user rights in the designated forests areas. There are a number of variations in the user rights and responsibilities among the concessions. Therefore, the concession is simply the granting of rights between two entities, which is governed by some set terms in a bilateral contract or agreement.

Simultaneously, the forestland concession confers the holder a certain set of rights. The land owner, particularly the government, should state the rights to the holder clearly. There were significant variations among the countries in the way in which they transfer the land user rights to the concession people/companies. In the case of the Sal forests of Bangladesh, the FD transferred short-term (12 years) or sometimes long-term (30 to 40 years) land user rights to the government, semi-government, and non-government concession companies/people. If the companies/people maintain the agreement criteria properly, then the FD may extend the short-term land user rights to long-term rights. The land holder's rights are somewhat restricted, for example, the right holder cannot sell or transfer the land to other people/companies, and their gaining rights may be cancelled anytime with a prior notice. All parties to the concession contract have some common responsibilities for the conservation and development of forest resources and the concession holder should follow the local, national, and international laws. On the other hand, it is apparent that the forestland concession has significant impacts on the livelihood of the local people who use these forests for their daily living. In his article, Scoones [24] defines livelihood as something which "comprises the capabilities, assets (including both material and social resources), and activities required for means of living. A livelihood is sustainable when it can cope with and recover from stress and shock, maintain or enhance its capabilities and assets, while not undermining the natural resource base". However, livelihood may be defined in different dimensions and many scientists have adopted the livelihood concept and applied it to their own requirements and circumstances [25–27]. The livelihood approach also provides a multidisciplinary view on poverty, as poverty is not only caused by economic constraint but also involves social, cultural, political, and economic aspects [28]. In the livelihood approach, people's livelihood greatly depends on

the opportunity to access assets or capitals [28–30]. These capitals are the bases or the building blocks of the people’s livelihood which scientists [28,31,32] explain as—human capitals (skills, knowledge, capacity, labor, good health), physical capital (infrastructure, transport, shelter, communications), social capital (relationships of trust and reciprocity, networks, membership of groups), financial capital (monetary resources, savings, credit, remittances), and natural capital (land, forest, water, wildlife, biodiversity). Therefore, this study mainly focused on the development of the five livelihood capitals of the ethnic people due to the land concession and land rights aspect of the MSF of Bangladesh.

2.2. Study Area

The majority of the Bangladesh Sal forests are situated in the central part of the country, which consists of the Dhaka, Mymensingh, Tangail, and Gazipur districts [10,15,33]. The present study is located at the MSF, which is situated in the districts of Tangail and Mymensingh, along with almost 46% of the other Bangladesh Sal forests [15,21] (Figure 1). Geographically, it is located at 23°50′ to 24°50′ north latitude and 89°54′ to 90°50′ east longitude, and the soil belongs to the bio-ecological zone of the Madhupur Sal Tract. The total land surface area of the MSF is 45,565.2 acres [34]. The major portion of the MSF is located at the northeastern part of the Tangail Forest Division, and a small portion is located along the boundary with the Mymensingh Forest Division (593 acres) [15,16,34]. However, a number of Garo (about 95%) and Koch (about 5%) ethnic people also live in the MSF area [15]. This study randomly selected 120 ethnic people from the seven villages which are situated inside the MSF area (Figure 1) and treated as forest-dependent people. However, a number of ethnic people also live in villages surrounding the Madhupur Sal forest area and their dependency on the Sal forest is lower than that of people living inside the forestland. These seven villages cover almost the entire Sal forests area and the socioeconomic conditions of the ethnic minorities were more or less similar. The villages are Gaira, Telki, Chunia, Pargacha, Beduria, Jangulia, and Magantinagar. These villages were also facing similar land related problems, with a number of land disputes and concession occurring since the independence of Bangladesh in 1971.

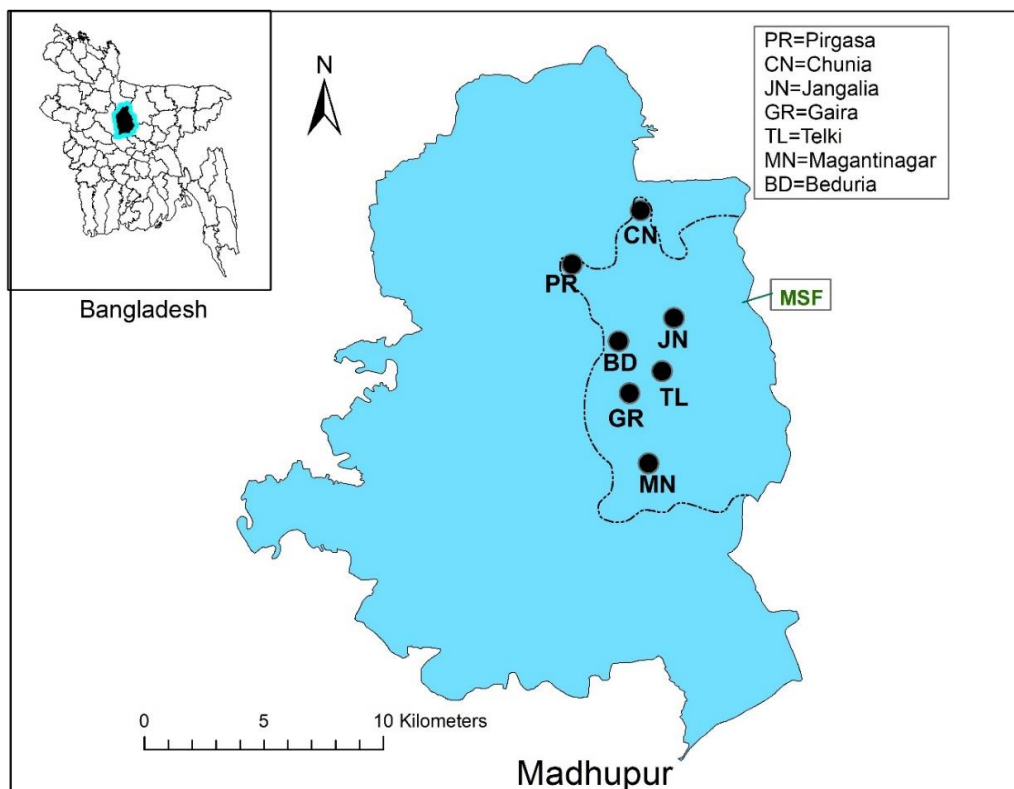


Figure 1. Study villages located in the Madhupur Sal Forest (MSF) area of Bangladesh.

2.3. Descriptions of the MSF

The Sal forests are distributed over the relatively dry central and northwest region of Bangladesh. The existing condition of the MSF cover varies along a gradient from open, heavily used, and degraded scrub to relatively dense Sal coppice re-growth and scattered trees [35]. Although all areas have been subjected to some degree of use and the large wildlife species (e.g., tiger, leopard, elephant, sloth bear, spotted deer, etc.) have been extirpated, it is notable that an important variety of plants still remains [35]. The dominant species (more than 80%) of this forest is the commercially profitable Sal (*Shorea robusta*) tree, and the estimated woody plant diversity is 176 species, 73 of which are trees [35,36]. Bird diversity has been estimated to be 140 species, mammal diversity as 19 species, reptile diversity as 19 species, and amphibian diversity as 4 species [35,36]. This Sal forest is administratively under the control of the Bangladesh Forest Department (Tangail and Mymensingh Forest Division), and a total of 57 government officials—including two ACF (Assistant Conservator of Forest), five Range Officers (RO) heading range offices, 12 Beat offices headed by BO (Beat Officers, the lowest administrative unit of Forest Department), 29 FG (Forest Guards), and nine office assistants—manage this park [37,38]. The ethnic people are mainly living in the Tangail portion of the MSF area.

2.4. Data Collection and Analysis

Multiplicities of data are used in this whole research process to gather information about the local context and to identify the impacts of land concession on ethnic people's daily living conditions. Both primary and secondary data were collected. For primary data collection, the study used ethnic household interviews with a semi-structure questionnaire, focus group discussions, interviews with each of the ethnic villages head-men (called Nokma), participant observation, and interviews with the Forest Department staff. For secondary data, the study used Forest Department baseline data, reports and publications, documents about ethnic people, reports and documents from ethnic organizations (called Joyenshahi), reliable online reports, books, articles, etc. For face to face interviews, the study selected 120 forest-dependent ethnic people (118 were Garo and only two were Koch) randomly from the seven villages of the study area. At least 15 people from each village were ensured by the research team. During the interview process, each respondent was asked about their five livelihood capitals development by means of the questionnaire developed by the research team. The study also conducted seven focus group discussions in the common place of each village, where the ethnic people usually gather to pass time and socialize. For the focus group discussions, discussion topics were selected and developed beforehand by the research team. We also observed that in focus group discussions, the respondents provided some unanimous decisions relating to the forestland concession and land rights issues of the Sal forests. These common discussions helped us to avoid personal perspectives and made it easy to represent the common ethnic issues with a detailed history. The semi-structured questionnaire mainly focused on the basic socioeconomic information of the respondents, their dependency on and history about Sal forests, the time that relocation or land loss occurred, and how it affected their family in the economic, human, social, physical, and ecological perspectives, and their social relationships and conflicts with other stakeholders, particularly the FD. The data collection phases were carried out during February–March and June–July of 2018, with the help of Japanese and Bangladeshi researchers.

3. Results

3.1. Land Concession in the MSF

As the study discussed earlier, any type of contract, license, or permit for an institution/person in order to use the forestland and resources within a specific time is considered to be forestland concession. The MSF land is owned by the government, according to the 1950 Act, and the FD made different land concession contracts/agreements with some government, semi-government, and non-government companies over time. According to the FD records, the rubber plantation was

started in 1986 with a huge (14,993.6 acres) area of the MSF land (Table 1). The FD also launched the social forestry program in 1989 with an area of 9643.4 acres of Sal forestland. These two plantation programs were targeted to improve the income and livelihood of the local people, however, only social forestry has partly fulfilled these objectives [15,18,39]. Furthermore, in the early 1980s the FD also gave forestland to the Bangladesh Air Force (BAF) for military exercises, the Bangladesh Agriculture Development Corporation (BADC), and the Bangladesh Forest Research Institute (BFRI) (Table 1). There was no clear evidence relating to forest management and the establishment of these government and semi-government institutes in the Sal forests area (Gain 2002). Initially, the BFRI received 400 acres of Sal forestland, but in the early 2000s the FD reduced this to 200 acres of land, as part of tree plantation program.

Table 1. Different land-use categories of the MSF.

Total Forest Area (Acre)	Protected Forest Area (Acre)	Other Forest Area (33,494 Acre)					Agri. & Others
		Social Forestry	Rubber Plantation	BAF	BADC	BFRI	
45,565.2	11,760.2	9643.4	14,993.6	320.0	30.0	200.0	8307.0

Note: BAF = Bangladesh Air Force; BADC = Bangladesh Agriculture Development Corporation; BFRI = Bangladesh Forest Research Institute.

Moreover, the Government of Bangladesh established the Madhupur National Park with an area of 20,837.2, which is situated in the Tangail (20,244.2 acres) and Mymensingh (593 acre) districts [32]. The main objective of the national park was to protect the forest resources and conserve the biodiversity of the Sal forests. However, the national park only consists of 5555.1 acres of protected forests and almost 15,282.1 acres underwent concession by the social forestry, agriculture, and illegal settlements of local people [34]. Besides these legal concession areas, there were a number of non-ethnic people (making homes and agriculture land) and some institutes (e.g., educational and religious institutes, political party offices, orphanage houses, clubs, nurseries, NGOs, etc.) were involved in the illegal concession of 8307 acres of MSF land (Local Forest Department Record, 2018) (Table 2). In the literature review, it was evident that about 40,000 people had made their illegal settlement in the MSF area since 1971 [10,19,39,40]. Officially, about 73.5% of the MSF land had been converted to different commercial purposes, and Alam et al. [33] mentioned that only 10% of Sal forests cover remained up to 2008. Therefore, the land concession scenario gave us an alarming situation, and the study found out that the Sal forest cover has rapidly reduced.

3.2. Land Rights of the Sal Forest Dependent People

Each and every community of people, including ethnic minorities, is supposed to have socio-economic as well as cultural rights on land. In Bangladesh, the ethnic minorities and their rights on land have been overlooked since 1950. It is evident that the ethnic people have a very long history of residing in the MSF area [17,40]. The concepts of land ownership and people's rights over land came into being in the Indian sub-continent during the Mughal Empire, by about the early 1600s [40,41]. Before that time, the land was the common property of the community and belonged to the settlers of the community who cultivated the land for production. The producer of the land would pay one-fourth or one-third of their products to the head of the clan/community, which gave the producer/family the right to cultivate the land in their possession. After the Mughal Empire came the British colonial period. In 1793, the Governor General of British India declared the Permanent Settlement Act, and under the process of this, the Landlord (locally called Zamindar) gained ownership rights to the land (in their specific territory) within the active control of the British Government. The literature revealed that the Zamindar collected tax from the ethnic people of the MSF area and gave them formal receipts which acted as the land user rights [15,17,40,41], and later, the Zamindar gave the major portion of the tax to the British Governor. The ethnic people enjoyed

the formal land rights systems from the Zamindar, and collected forest resources and managed the Sal forests in peace and harmony. In 1927, the British government made the first Forest Policy for the Indian-subcontinent, in which the forest conservation concept was highlighted but the ethnic people's land rights over Sal forests did not change. However, after the British colonial period, the Government of Pakistan made the 1950 Land Acquisition Act and abolished the Zamindar system of land titling, acquiring all the natural forestland as the property of the state. The ethnic minorities who already used the Sal forestland did not accept the Land Acquisition Act. Therefore, this act initiated the formal land rights conflicts between the two entities, and still the government denied the ethnic people's land rights in the MSF area. Furthermore, in 1962 (Pakistan) and 1982 (Bangladesh), the governments declared a major portion of the MSF as the National Park, which clearly denied the ethnic communities land rights over the protected Sal forests area (Table 2).

Table 2. Timeline of different rights of ethnic minorities over the Madhupur Sal forest.

Issues	Rights in Different Phases		
	Before 1950	1951 to 1982	After 1982
Need permission to enter the Sal forests	+	+ / 0	-
Collection of timber for own consumption	+	+ / 0	-
Collection of firewood and NTFPs for own consumption	+	+	-
Use of lowland for agriculture/ Jhum cultivation	+	+	-
Grazing	+	+	-
Transfer/changes of land ownership	+	-	-
Using own traditional knowledge on Sal forest management	+	-	-

Note: + = have full rights, 0 = No right but the government overlooked or did not ban the ethnic people's rights, - = Banned; NTFPs = Non-Timber Forest Products.

3.3. Forest Policies and Legal Frameworks Related to the MSF

Bangladesh became independent in 1971, and the formation of forests policies and management began from the British colonial period. Prior to 1947, the Sal forests were considered the private property of the Zamindar (Landlord) [41,42]. The Sal forest policy and management were formally documented in 1927 [33] at the time of the first Forest Policy for the Indian sub-continent, introduced by the British. The idea of forest conservation initiated from the first forest policy, and during this time Sal forests were treated as a good income/revenue source for the Zamindar. After making the EBSATC (East Bengal State Acquisition and Tenancy Act) in 1950 (Table 3), the Government of Pakistan made a preliminary survey of the MSF and declared it to be a protected forest under the control of the FD.

Table 3. Major trends of Bangladesh forest policies and management [8,15,33,43–45].

Year	Core Elements of Forest Policy and Management	Management Authority
1917	First forest policy and management plan for the Sal forests was introduced by the British Governor General in the Indian sub-continent	British Governor
1950	Formation of the EBSATC, which abolished the Zamindar system; with the power of this act all natural forests came under the control of the FD. This act was the main basis to establish the Madhupur National Park (MNP) in the MSF area.	Government of Pakistan
1962	Establishment of the MNP for conservation, education, and recreation under the control of the Pakistan Govt.	East Pakistan Forest Dept.
1972	All types of resource collection from Sal forests were banned in this year due to severe degradation and deforestation	Bangladesh Forest Dept.

Table 3. Cont.

Year	Core Elements of Forest Policy and Management	Management Authority
1979	First Bangladesh Govt. National forest policy implemented, which mainly focused on forest resources conservation	Government of Bangladesh
1982	The Government of Bangladesh formally gazetted the MNP, which belongs to the Tangail and Mymensingh Forest Division	
1986	FD started the rubber plantation program in the degraded MSF area	Bangladesh Forest Dept.
1989	Initiated social forestry approaches in MSF area under the financial support of the Asian Development Bank (ADB)	
1992	Appearance of the Forestry Master Plan, that effectively addressed future management tasks of the Sal forests	
1994	Revised previous national forest policy to an updated new policy (latest one), which emphasized the production aspects of the protected area and conserved biodiversity as well	Government of Bangladesh
1997	Forestry Sector Project for 1997–2004 was launched. The main objective of this project was to facilitate co-management activities in the degraded area of the MSF	Bangladesh Forest Dept.
2004	Formation of National Social Forestry laws which were also executed in the MSF area	Government of Bangladesh
2009	A forest conservation and rehabilitation project was started for the poor ethnic and non-ethnic people in the MSF area. It has a target to rehabilitate 5000 households with the active participation of forest-dependent people.	Bangladesh Forest Dept.
2013	Rehabilitation project was extended to 2013 and it produced some community forest workers who protected and managed the Sal forests	

The land rights of ethnic people living in the MSF were totally ignored from the time of the Government of Pakistan; subsequently, the Government of Bangladesh continued the same forest policies and revised them couple of times (in 1979, 1994) (Table 4). After the independence of Bangladesh in 1971, a severe trend of deforestation was occurring, and the MSF was one of the leading examples of land concession. Accordingly, the FD initiated different management programs (for example, social forestry, rubber plantation), but none of them had any success with forest conservation and the development of local people's livelihoods [15,21,33,46]. In addition, these management programs initiated further conflicts with the ethnic minorities, and severe clashes were observed in 1996 and 2008 between the government and ethnic minorities [15,17]. A few management programs, such as the rehabilitation project in 2009 (Table 4), had initial success and conflict resolution momentum, but at the end of the project in 2013 the overall scenario was no different to before [10]. Therefore, the forest management regimes were not creating the win-win situation, and instead some initiatives, like rubber plantation and social forestry programs, had negatively affected the livelihood of ethnic people [17].

3.4. Impact on Ethnic Minorities' Livelihood

3.4.1. History of the Ethnic Minority

The systematic and chronological history of the Madhupur forest ethnic groups, particularly the Garo and Koch, was very difficult to find in literature. They originated from the Bodo group of the Tibeto-Burmese [17,47,48] people, and their mother language is different from Bengali (Bangladeshi mother language), although they can also speak Bengali. The literature also stated that the Garo and Koch are the original inhabitants of the MSF, and the Garo is one of the most well-known ethnic groups

in the Indian sub-continent. Garos are mostly known to the outside world for their matrilineal social organization, especially for their distinct kinship system [15,47,48]. An estimated 20,000 Garo and Koch have been living in the MSF for the last few centuries, and they are said to have lived there from time immemorial [17]. Of this number, the majority are Garos and a few of them are Koch; both tribes have had similar types of forest dependency. Previously they formed a continuous belt from the Northern part of Bangladesh to the Meghalaya state of India. The Garo, also called Mandi [49], and Koch would take the responsibility of managing and conserving the forest. Even during the British colonial period, jhum cultivation was allowed in the MSF area. After the British period, the same policy was carried out by the Zamindar (Landlord) towards Sal forest management, but they were more interested in collecting taxes than in the conservation of Sal forests. The ethnic minorities paid taxes to the Zamindar, who in turn gave the land user rights to the ethnic minority. In 1950, the government formulated the Land Acquisition Act, which abolished the Zamindar system [15,17,44]. As a result of this act, the natural Sal forests came under the control of the FD, and the formal conflicts began between the FD and ethnic communities. Day by day the situation became worse, and a Garo man (Buhen Norek) was killed on April 10, 1996 in a clash between the two entities [15]. During the time of interviews, the majority of the ethnic respondents said that they were born in the Sal forests and brought up here, and they even want to die here. Furthermore, they were so familiar with the forest life and could not survive if they were removed from the Sal forests. They also felt that the Land Acquisition Acts were unethical, and they planned to fight to the last to retain their traditional rights to Sal forestlands.

Table 4. Ethnic minority families facing land concession and losses of land.

Villages	Sample (<i>n</i> = 120)	Have You/Your Family Lost Forestland to a Concession?	
		Yes	No
Gaira	15	15	0
Telki	17	17	0
Chunia	15	15	0
Pirgacha	15 (2 Koch)	15	0
Beduria	18	18	0
Jangulia	20	20	0
Magantinagar	20	20	0
Total	120	100%	-

3.4.2. Respondent Profiles

This study selected 120 ethnic respondents for data collection. The mean age of the ethnic respondent, i.e., the head of the household, was 48.43, and the average size of the household was 6.29. The ethnic minorities' average household sizes were slightly higher than the national average of the country (4.06) [6]. In the case of the literacy rate, ethnic participants possessed a lower rate of primary and secondary level of education (by 20% and 10%, respectively), however, their children's primary education rate was nearly 96%. The average farm size of the ethnic households was 1.31 ha, which showed that the ethnic minorities were not landless people; the FD said that this land belonged to the Government of Bangladesh. The history revealed that more than 97% of ethnic people were involved in practicing shifting cultivation and the collection of forest resources, however, they had changed their professions mainly to agriculture (43.33%) (subsistence farming), day labor (30.83%), small businesses (4.17%), fuelwood collectors (7.50%), and other vulnerable professions. In the case of religion, the ethnic people had converted from their own religion (Shangsarek) to Christianity (80%) due to the ongoing activity of Christian missionaries in the MSF area. The distribution of their origin clearly showed that the ethnic minority had originated from the same village and district area (92.5%).

3.4.3. Livelihood

This study assessed the ethnic people's perception of the Madhupur forestland concession and its impact on their livelihoods. Initially, the study asked every respondent whether they had lost or faced any restriction on using their traditional forestland. Surprisingly, all respondents (100%) had lost their traditional forestland due to concession and also faced restriction by the FD (Table 4). This means that the land concession problem was common to all ethnic people living in the MSF area. According to the FD, the homestead area of the ethnic people also belongs to the government-owned Sal forestland.

This study also figured out four prominent time lines for describing the overall livelihood of the ethnic minorities during the focus group discussions. The concept of forest conservation came to this Indian sub-continent by the establishment of the Forest Department in 1862 by the British government [8]. After the British colonial period ended in 1947, the Government of Pakistan initiated the Land Acquisition Act in 1950. According to this Act, the MSF was declared to be a protected forest in 1962. However, the Act was not properly executed by the Government of Pakistan due to the huge protest by the ethnic people. Later, in 1982, the Government of Bangladesh declared a major portion of the MSF as a national park and started the Sal forestland concession. Therefore, the livelihood history of the ethnic people was clearly differentiated by the timelines mentioned in Table 5.

Table 5. Timeline of the living condition of the ethnic minorities in the MSF.

Timeline	Major Events and Trends
1862 to 1950 (Colonial period)	Economic
	<ul style="list-style-type: none"> ➤ Dependent on shifting cultivation and NTFPs collection from the Sal forests. ➤ Good yield of common grain crops in the low land area (called Baid *) of the Sal forests. ➤ Timber and firewood requirement was totally dependent on Sal forests. ➤ Collection of bush meat and wildlife from Sal forests. ➤ Farming land was available and sufficient for every family. ➤ Sal forests as income sources (e.g., selling timber, firewood, NTFP, and bush meat).
	Socio-cultural
	<ul style="list-style-type: none"> ➤ Free access to the whole forest for the ethnic people. ➤ Different medicinal herbs, shrubs, and trees were available for traditional treatments. ➤ Good traditional practices and spiritual ceremonies (e.g., Wangala program). ➤ Good solidarity and cooperation between the different tribes and communities. ➤ Use of traditional customs related to Sal forests by some tribes. ➤ Forestland as part of their spiritual practices and beliefs.
	Infrastructure and Tourism
	<ul style="list-style-type: none"> ➤ Poor road communication (made of mud) and it was very hard to move from one place to other; people relied on own feet for transportation and often local carts. ➤ There were no tourism activities, and outsiders (other than ethnic people) could not even enter the forests.
	Conflicts
	<ul style="list-style-type: none"> ➤ There were no conflicts among the villagers and people were living with utmost peace and harmony.
	Ecological
	<ul style="list-style-type: none"> ➤ The landscape was full of forests. ➤ Watershed/ local river water was pure with no pollution. ➤ Forests had diverse species richness and were full of wild animals, including tigers and bears. ➤ High rainfall and comfortable climate throughout the whole year.

Table 5. Cont.

Timeline	Major Events and Trends
1951 to 1962 (Postcolonial towards East Pakistan Period)	Economic
	<ul style="list-style-type: none"> ➤ Still the ethnic people were continuing with shifting cultivation and the yield of crops was good. ➤ A sufficient number of wildlife for hunting. ➤ A wide range of medicinal plants were available, and people were totally dependent on traditional treatments. ➤ NTFPs and resources collection continued, but sometimes had restrictions by the FD. ➤ People's livelihoods still depended on forest resources and deforestation had started.
	Socio-cultural
	<ul style="list-style-type: none"> ➤ Still practiced traditional culture and ritual festivals. ➤ Ethnic communities were wearing and practicing traditional dresses and maintaining proper customs.
	Infrastructure and Tourism
	<ul style="list-style-type: none"> ➤ Government started to build some roads and guest houses for communication. ➤ Some high officials often came to guest houses for recreation and tourism started on a small scale.
	Conflicts
	<ul style="list-style-type: none"> ➤ Formally conflicts started against the FD on the issues of land rights and free access to the forest. ➤ Relationship between the FD and local communities was getting worse.
	Ecological
	<ul style="list-style-type: none"> ➤ People started deforestation as they thought this forest was not their own. ➤ Theft and illegal logging had been initiated. ➤ The loss of biodiversity and species richness started, but the forest was still rich in biodiversity. ➤ The rainfall and climate were good.
1963 to 1982 (East Pakistan to Bangladesh Period)	Economic
	<ul style="list-style-type: none"> ➤ Restriction on shifting cultivation but it still continued on a small scale, somehow overlooked by FD staff. ➤ Loss of NTFPs and permission was needed to collect NTFPs from forests. ➤ Collection of timber and firewood was also restricted but small-scale firewood collection was going with the permission of the FD. ➤ A reduction in wild life and also a restriction on hunting. ➤ A reduction in medicinal plants and people were collecting them illegally. ➤ Dependency on the forest has reduced and people were searching for an alternative livelihood.
	Socio-cultural
	<ul style="list-style-type: none"> ➤ Some ethnic organizations and local and international NGOs started to work with ethnic people and their rights for land and forests. ➤ The ethnic people were still practicing local customs and ritual festivals. ➤ Non-ethnic people started to settle down in the Sal forests area and affected the ethnic culture and customs.
	Infrastructure and Tourism
	<ul style="list-style-type: none"> ➤ Many connecting roads and local FD offices with infrastructure were built by the government; tourism started but was not in full swing. ➤ Some guest houses with modern facilities were built and forests were fragmented by the feeder roads and people's movements.

Table 5. Cont.

Timeline	Major Events and Trends
1983 to Present (Bangladesh Period)	Conflicts
	<ul style="list-style-type: none"> ➤ Conflicts were increasing day by day with the FD staff and illegal activities were increasing. ➤ A formal protest by the ethnic group against the government was observed.
	Ecological
	<ul style="list-style-type: none"> ➤ The landscape was losing its beauty and species richness due to illegal logging by the local people and elites. ➤ Still the Sal forests had a number of valuable species remaining. ➤ Land concession had not started massively but severe deforestation was happening. ➤ Some species of wild animals were facing critical condition and started to go extinct.
	Economic
	<ul style="list-style-type: none"> ➤ Fee access to Sal forests and resource collection was totally stopped. ➤ Reduction in the available timber, firewood, and NTFPs from forests, severely affecting ethnic communities' livelihoods. ➤ Even hunting or grazing had also stopped. ➤ Ethnic people had fewer domestic animals and buffalo. ➤ Needed to work somewhere other than the forest area and work hard (e.g., day labor) to manage their food.
	Socio-culture
	<ul style="list-style-type: none"> ➤ Traditional medicine and treatment processes were lost; dependent on herbal and modern treatment systems. ➤ Most of their traditional culture and religious festivals had changed and been affected. ➤ NGOs and local organizations were also working to establish their land rights and human rights issues.
	Infrastructure and Tourism
	<ul style="list-style-type: none"> ➤ Well-developed road communication, infrastructure, brick houses, guest houses and frequently gasoline run vehicles moved through the forest area. ➤ Formal tourism started and ethnic local culture was severely affected.
Conflicts	
<ul style="list-style-type: none"> ➤ Formal clashes occurred between the local government and ethnic community and two ethnic people were killed in clashes in 1986 and 2008. 	
Ecological	
<ul style="list-style-type: none"> ➤ Forest and biodiversity has been severely affected and almost 73.5% of the forestland was converted to other commercial activities. ➤ Rubber plantation and the introduction of alien species (e.g., <i>Acacia</i> spp.) due to the social forestry plantation have severely affected the forest ecosystems. ➤ Watershed was converted to commercial rice cultivation and water pollution occurred. ➤ Rainfall and water were irregular compared to before. 	

* Baid= In between the two Sal forests patches there are some low-land areas where Sal trees cannot grow, making the area suitable for agricultural crops, which are called Baid.

From 1862 to 1950, the area was under British colonial rule (until 1947), and in this system, the Landlord collected taxes from the ethnic people. The livelihood of the ethnic people was totally dependent on the Sal forests and they enjoyed traditional land rights. The ethnic people applied indigenous knowledge and practiced shifting cultivation for their food production. After the 1950 Act, the situation changed and the ethnic people were afraid of losing their traditional forest access and

land rights. During this period, the forest was rich in biodiversity and provided plenty of food for the ethnic people. Road communication started to develop, and the concept of forest conservation and protection was prioritized by the government. All of the ethnic cultural festivals continued in harmony with the Sal forests but the land rights issue created formal conflicts between the state and ethnic people. From 1963 to 1982, the Sal forests underwent massive deforestation, and the illegal settlement of non-ethnic people was also vigorous. After the final gazette of the national park in 1982 and land concession, the formal clashes between the ethnic people and the FD were addressed. This period (after 1982) has seen the most marked changes in the ethnic communities' lifestyles. The ethnic people's rights to forest resources and land were totally removed, and thus, the livelihood of the ethnic people was shifted to other means, such as daily wage labor. Additionally, the Sal forest has been losing its biodiversity day by day and is close to extinction.

All of the respondents mentioned that the forestland concession has severely impacted their present living condition with regard to their livelihood. The study analyzed the development of the five livelihood assets of the ethnic people in the context of forestland concession, as the livelihood frameworks explained that the five livelihood assets/capitals are the main basis of their livelihood. In the human capital of livelihood, the study clearly observed that the literacy rate increased (Table 6), and the ethnic people mentioned it was due to the active involvements of some NGOs and the Christian missionary run school facilities in their locality. The FD offered some training facilities for the local people through social forestry projects, but in most of cases the beneficiaries were non-ethnic people. However, a small portion (21.67%) of ethnic people was getting benefits and had improved their skills on plantation programs (Table 6). The health care facilities and nutrition were improved due to government initiatives and the active involvement of Christian missionaries in the local area.

Table 6. Forestland concession and its impacts on the livelihood assets of the ethnic people.

Livelihood Capitals	Parameters	Values	People Perceptions (%) (Improved Due to LC)		
			Yes	Other Reason	No
Human	- Literacy rate (HH head)	41.67%	-	67.5	32.5
	- Children	93.33%	-	-	-
	- Forestry training offered by the FD or LC company for the HH head	21.67%	51.67	48.33	-
	- Available labor per family	1.75	65	13.33	21.67
	- Health care facilities (% received medical treatment)	65.83%	1.67	93.33	5
	- Nutritional status (i.e., availability of balanced food family/year)	9.5 month	-	5	95
Physical	- House structure	Mud walled and tin roof	-	5	95
	- Road infrastructure	Good, most are bitumen sealed	55.83	25.83	18.33
	- Livestock/family Small (Duck, Chicken)	-	-	-	-
	Large (Pig, Cow)	4.67	-	93.33	6.67
	- Small farm equipment (e.g., agricultural)	2.56	-	-	-
	- Bicycle/family for local transportation	Low	-	93.33	6.67
Financial	- Family total annual income (BDT)	0.67	2.5	85	12.5
	- Family total annual income (BDT)	296,660	1.67	60	38.33
	- Income from Sal forests (% total income)	9.67%	-	3.33	96.67
	- Employment status in LC company	1.67%	23.33	45	31.67
	- Involved in tourism activities	6.67%	65	32.5	2.5
	- Food sufficiency throughout the year	9.5 month	1.67	10	88.33
	- Easy loan/credit facilities	39.17%	-	88.33	11.67
- Annual expenditure (% of total income)	96.91%	-	-	-	

Table 6. Cont.

Livelihood Capitals	Parameters	Values	People Perceptions (%) (Improved Due to LC)		
			Yes	Other Reason	No
Social	- NGOs/GOs activities/involvement	23	56.67	43.33	-
	- Conflict with the FD and LC companies	Severe	100	-	-
	- Social relationship with community	Poor	98.33	1.67	-
	- Collective action (doing work together)	Good	0.83	96.67	0.83
Natural	- Access to Sal forests resources and land	Stopped	-	-	100
	- Tree species richness and diversity	Decreased	-	-	100
	- Number of household tree stock	16.28	65	21.67	13.33
	- Firewood dependency on Sal forests	85.83%	100	-	-
	- Wildlife availability in Sal forests	Severely decr.	-	-	100
	- Availability of traditional medicinal plants	Decreased	-	-	100

Note: LC = Land Concession, BDT = Bangladeshi Taka, HH = Household.

Regarding the physical capital, the ethnic people believed that due to land concession and tourism activities the road infrastructure improved, with most of the roads now having a bitumen seal (locally called 'Panka') structure (Table 6). House structure also improved—previously they used to live in mud-wall and son-grass roof structured houses, but due to the unavailability of son-grass they moved to tin roof houses. Small and large livestock increased due to the reduced dependency on Sal forests, hence, the massive land concession had forced them to improve their livestock assets. The financial capital argued that the ethnic people had improved their total income. Most of the people believed that the overall money inflation (i.e., wage labor payment increased) and agricultural products price increase had a direct impact on their household total income, however, their household income from Sal forests has severely declined and household expenditure has also increased significantly. A small portion of the ethnic people were also involved in tourism activities, but this poses a severe threat to their normal lifestyle. More frustrating results were found in the job/employment facilities of the land concession companies—only a few ethnic people were getting jobs in the companies, while the majority of the jobs were given to the non-ethnic people.

In the case of social capital, the study found that a severe conflict had arisen between the ethnic community and the FD or local government. The relationship was measured with a five-point Likert scale (where 2 denotes a strong positive relationship and −2 refers to a severely negative relationship) and the findings are presented in Figure 2. This figure also shows that ethnic people have a good relationship with the NGOs and foreign donors, while they had a negative relationship with the local elites.

The negative social relationship also created a collective action among the ethnic people. This means that they were much more united and did their common work together, which we call an improvement in collective action. Regarding the natural capital, all of the ethnic people unanimously said that there was a severe decline in forest tree and wildlife species due to the land concession (Table 6). They also said that the Sal forest was close to extinction and it will need immediate action from the government level.

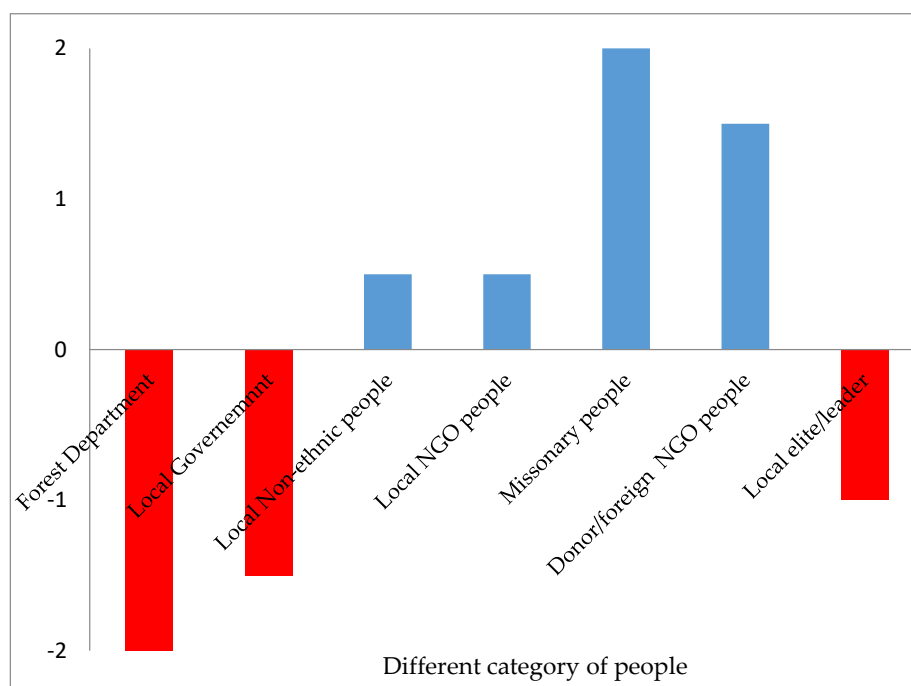


Figure 2. Social relationship of ethnic minorities with other people in the community.

3.4.4. Perception of Development Drivers

This study also tried to identify the perception of three important development drivers identified by the ethnic respondents on the socio-economic development and conservation aspects of the Sal forests. The majority of the Forest Department staff possessed a positive view on the conservation of Sal forests and getting donor funds/projects. They also prioritized the socio-economic development of the ethnic people, but did not allow them to access the forest resources or resolve the land-titling issues (Table 7). The FD also allowed the land concession entities, which have severely affected the livelihood and socio-economic development of the ethnic people living in the Sal forests since time immemorial. The FD staff also argued that land concession had contributed a great deal towards the infrastructure developments and job opportunities for the ethnic community.

Table 7. Perception of the main drivers towards the development and conservation of ethnic issues.

Drivers	Livelihood Development of the Ethnic People	Forest Conservation
Forest Department	<ul style="list-style-type: none"> - Empowerment, land rights, decision making, and control over forests—the FD did not desire or accept the devolution of power or the giving of land rights to ethnic people. - Livelihood improvement and poverty alleviation—the FD had less of a focus on these issues and do not desire the outcomes practically. 	<ul style="list-style-type: none"> -Improve forest biodiversity and ecosystem—the FD set this as their highest priority and did everything to get donor funds for forest conservation.
Donors and International NGOs	<ul style="list-style-type: none"> - Equity, justice, land rights, decision making process, control over projects—the donors want to have positive outcomes and give land rights to ethnic people, but have not pushed this with the FD. - Livelihood improvement and poverty alleviation—the donors had an emphasis on these issues and want positive outcomes. 	<ul style="list-style-type: none"> - Biodiversity and environmental protection, promotion of international agenda, scope for donor agencies—strictly followed these criteria and want strong positive outcomes.
Land Concession Company/people	<ul style="list-style-type: none"> - Local level decision making, negotiations, land rights, coalition—they want to negotiate with the FD and did not want land rights for ethnic people. - Livelihood improvement and poverty alleviation—their main focus was income generation and the did not want positive outcomes for these issues. 	<ul style="list-style-type: none"> - Biodiversity and environmental protection, scope on donor project and own agenda—they want positive outcomes only to get attention and the execution of own agenda.

Donors and development NGOs have been playing an important role in forest conservation and the socio-economic development of ethnic people. Christian missionaries and the Caritas NGO were working to resolve the land-titling issue and continuously supported the ethnic people to improve their livelihood status. Often the donors allocated funds for Sal forest conservation and development, but this study found out that the donor did not impose on the FD to execute the development aspects. On the contrary, the land concession company/people totally ignored the livelihood development of the ethnic people and instead mostly created job opportunities for the non-ethnic people. Their foremost intention was to form a liaison with the local FD and become involved in local decision making. However, they also did not possess any positive interest in improving the forest biodiversity and healthy forest conditions. Their main target was to gain the maximum income from the forest resources.

4. Discussion

Free access to Sal forests resources and the traditional forestland rights of ethnic people have faced challenges after the introduction of the Land Acquisition Act in 1950 by the postcolonial government. The ethnic community had been using the Sal forest resources and lands since time immemorial, and even the British Government allocated formal land rights to the ethnic community [17,50]. Therefore, the traditional land ownership pattern of the ethnic minority has never been recognized in an operational manner in Bangladesh [17,41]. In addition, the land concession companies/people and non-ethnic settlers have hugely violated the land rights of ethnic people through the forceful land grabbing of the ethnic community's traditional land [17,20,41]. In this process, the local government, political leaders, and elites have been supporting the non-ethnic settlers [15,17]. During the field study, it was reported that the non-ethnic people had illegally grabbed the ethnic people's land with assistance from the security forces. The ethnic respondents also mentioned that the settlers had taken control of their traditional land by formulating fake documents. The most important aspects of the status and dynamics of ethnic land rights in the MSF area were the forestland concession and leasing process. The land concession processes are directly attributable to the patronization of the FD, and subsequently a significant portion of the ethnic minority has been evicted from the Sal forestland. The ethnic minorities have been directly targeted by the FD since the 1980s in order to grab their traditional forestlands through rubber plantations and social forestry programs. A number of ethnic people were displaced and relocated due to the land concession by these plantation schemes, and almost 100% of respondents said that they faced forestland grabbing problems in the study area. Together with the land concession, the ethnic community had also faced the restriction of free access to the Sal forest resources, and these problems were also common in other parts of world [51–53]. Nevertheless, the traditional forest policy and management plan by the Government of Bangladesh has never addressed the issue of the traditional land rights of ethnic people [15,21,39]. Similarly, the government's bureaucratic discretion has shown negative effects on forest conditions and development in Nepal as well [54]

Forestland concession has not contributed to poverty alleviation, rather it undermines viable, alternative approaches to rural livelihood development, and in most cases, local communities claim to have lost their historical lands [52]. The Sal forestland concession and restrictions on the use of forest resources have had an immense impact on the daily living conditions of the poor, forest-dependent people [15,17,21]. Thus, this study identified the possible impacts of land concession and rights on the livelihood asset developments of ethnic minorities living in the Sal forests area and also visualized their overall livelihood change over time in Table 5. The results clearly show that the livelihood options of ethnic minorities have shifted and been limited after the restriction of forest resources and massive land concession. Sal forests were the main source of family income and daily living for these ethnic minorities in the past [15,17,55]. However, the present livelihood development of the ethnic community in terms of the five livelihood capitals situation showed an awful scenario. The human capital is a factor of the amount and quality of labor available at a household level, which varies according to household size, skill, health conditions, etc. [31]. The results found that only 21.67% of ethnic people received training to improve their skills in the management of forest resources. Most of

the respondents believed that their literacy rate and health care systems had improved due to Christian missionary and NGO run free schools and hospital facilities in their locality. Siddique et al. [56] also mentioned that the local NGOs and government initiatives would improve the overall education status in the MSF area and all over Bangladesh. The physical capital evaluated that the road infrastructure in the MSF area had improved due to land concession activities, but other parameters such as household structure, livestock, and farm equipment improvements did not have any link with land concession. The respondent clearly mentioned that the land concession companies did not provide any subsidies or facilities to improve their physical capital. The financial capital showed that the ethnic people's incomes had shifted from Sal forest income to other sources, with the majority of their household income coming from day labor and agricultural activities. The financial capital refers to the financial resources that ethnic minorities use to achieve their livelihood objectives [31]. Surprisingly, the ethnic people were not getting any job opportunities (only 1.67%) from the land concession companies, instead the company employed the non-ethnic people. A small portion of the ethnic people were involved in tourism activities. The food sufficiency rate also declined, while previously they had not faced any food shortages throughout the whole year. There is much debate about what is exactly meant by the social capital. Scientists argue that the social capital refers to a network of mutual support that exists within and between households and communities, which people can utilize to achieve the outcomes [31,57,58]. This study revealed that the Sal forestland concession and land rights issues had created a severely negative relationship between the ethnic minorities and the FD. The World Bank (2003) [59] denoted that failure to integrate or resolve the resources and land tenure issues with the reality of local livelihood practices leads to conflicts. Nevertheless, a social network of connections has not been natural given, constituted once and for all by an initial act of institution or by social formation [60]. A socially constructed network also has a strong relationship with people's economic capital [60]. However, the social network development for the ethnic community was very weak and it has also created a negative attitude towards forest resources conservation. Department for International Development [31] in their report clearly mentioned that natural capital refers to natural stocks from which resources flow and from which services are derived for livelihoods. The natural capital of the ethnic minority showed that their free access to and collection of non-timber forest products were banned, which had negatively affected their natural capital and financial capital development. The respondents' perception towards the development of natural capital was very negative, and they believed that land concession had created severe negative impacts on the Sal forest's biodiversity and the living conditions of the forest-dependent people.

The development drivers have mainly attempted to improve forest conditions and biodiversity through different projects [61,62]. The Forest Department has preferred to improve the forest condition and species richness, and at the same time, they want to maintain the donor criteria in order to get more funds. The involvement of poor people in the management of forest resources in developing countries has been shown to be influenced by the world-wide environmental agenda and biodiversity conservation policies [62–64]. On the other hand, the land concession bodies had mainly focused on their commercial objectives on gaining more income from the forestland, and the goals of forest conservation or development have not been of any interest to them. However, this study argued that the companies also tried to liaise with the local FD and donors in order to influence their policy at a local level. For this, they offered some small projects for improving the livelihood conditions of the local people, but in most cases, the ultimate beneficiaries were the non-ethnic people. The livelihood conditions of the ethnic minorities and their land rights issues have clearly been overlooked and neglected by the FD and land concession companies. However, the international donor agencies have emphasized the ethnic land right issues through the central government and the execution of the donor suggestions have somehow been overlooked.

5. Conclusions

As a global concern for livelihood, poverty alleviation, and sustainable development has emerged over the past decades, criticism of forestland concession and its different negative aspects has also emerged. Forestland concession must be given due attention as it is crucial to the survival of poor people living in and around the forest areas, who have collected forest resources that constitute their livelihoods. The ethnic minorities living in the MSF area of Bangladesh have been using the forestland and resources to build their livelihood since time immemorial. Thus, the exclusion of the ethnic communities from their traditional land and the removal of their forest access rights have created more challenges for the state when rehabilitating them in the Sal forests area. This study has clearly demonstrated that the land concession and protection of Sal forests have negatively impacted the livelihood assets development of ethnic people, and as a consequence, their livelihood has shifted to non-securing jobs or poor income sources. At the same time, the severe land concession has declined forests species and the available resources for the daily living conditions of the ethnic minorities. This study also concluded that the forestland laws and legal arrangements of the state are not giving any room for the ethnic communities to get back their traditional land rights. These laws had initiated the formal conflicts between ethnic communities and the Forest Department in the MSF area. So, the key challenge of the MSF is to establish institutional cooperation based on the traditional rights of the ethnic minority. For this, the government would need to take the main initiatives. Furthermore, the government needs to establish a conflict resolution mechanism that simultaneously addresses the issues of land rights and livelihood development of the ethnic minority. Once the clear land rights and a legal arrangement have been set up, it will be possible to build ethnic minorities' livelihoods.

Author Contributions: Conceptualization, K.K.I.; Data curation, K.K.I. and K.H.; Formal analysis, K.K.I.; Funding acquisition, K.H.; Investigation, K.H.; Methodology, K.K.I. and K.H.; Supervision, K.H.; Validation, K.K.I. and K.H.; Writing—original draft, K.K.I.; Writing—review & editing, K.H.

Funding: The study would like to thank the Japan Society for the Promotion of Science (JSPS) for bearing the costs of the research (JSPS KAKENHI Grant Number 17F17904).

Acknowledgments: The study would like to thank Madhupur and Bhawal local Forest Department of Bangladesh and their logistic support during the data collection period. The authors would like to specially thank an ecological expert, a PhD student, and three MSc students of the Bangladesh Agricultural University for their support during data collection time.

Conflicts of Interest: The authors declare no conflict of interest.

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