

SUSTAINABLE FOREST GOVERNANCE IN BANGLADESH: EXAMINING THE ROLE OF THE FOREST ACT

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Submitted in fulfilment of the requirements for the degree of
Master of Philosophy

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[2022]

Abstract

Forests play a vital role in preserving the environment and the socio-economic development of a country. Therefore, sustainable forest governance is crucial to keep the forests and their services available to meet present and future generations' needs. Law plays a significant role in sustainable forest governance. The forests in Bangladesh have been governed by different laws and institutions since the British rule in this region. In particular, the *Forest Act 1927* forms the fundamental legal framework for forest governance in this country. However, forests are being destroyed continuously in Bangladesh. One main reason for this situation is the lack of good forest governance due to laws and governing institutions' weak roles. My primary focus in this study is to examine the role of the *Forest Act 1927* in promoting sustainable forest governance in Bangladesh. I applied a doctrinal method to evaluate the Forest Act's contribution to the protection, restoration, sustainable use, and sustainable management of forests in Bangladesh. These are the standards set by Goal 15 of the United Nations Sustainable Development Goals (SDGs) for governing forest resources. These standards, which are already incorporated in various international legal instruments, create governance priorities for the states to sustainably manage their forests. Bangladesh has taken several initiatives to develop its forest legal regime for attaining sustainability in the forestry sector. I argue that the *Forest Act 1927* is not adequate for ensuring sustainable forest governance in Bangladesh. Although the Act has some significant provisions regulating the protection, restoration, sustainable use, and sustainable management of forests, several defects, and deficiencies impact sustainable forest governance.

Keywords: Bangladesh, Forest Act 1927, Forest Protection, Restoration, Sustainable Development Goal 15, Sustainable Forest Governance, Sustainable Management, Sustainable Use of Forest.

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List of Abbreviations

BELA	Bangladesh Environmental Lawyers Association
CHTS	Chittagong Hill Tracts
FAO	Food and Agriculture Organization
HCD	High Court Division
NGOs	Non-government Organizations
NTFPs	Non-Timber Forest Products
PIL	Public Interest Litigation
SAT	State Acquisition and Tenancy
SDGs	Sustainable Development Goals
SFMC	Social Forestry Management Committee
UN	United Nations
UNGA	United Nations General Assembly

Statement of Original Authorship

This thesis's literary work has not been previously submitted to meet the requirements for completing any award at this or any other educational institution. The thesis does not contain any previously published material written by another person except where due reference has been provided, to the best of my knowledge and belief.

Signature: QUT Verified Signature

Date: 28 January 2022

Acknowledgements

I would like to express gratitude to my thesis supervisor Associate Professor Saiful Karim for his continuous support in my Master of Philosophy study. His patience, motivation, and guidance helped me in every stage of my research project and writing this thesis. I could not have gotten a better supervisor and mentor for my MPhil program.

I would also like to thank my co-supervisors, Professor Afshin Akhtar-Khavari and Dr. Evan Hamman for their insightful comments, encouragement, and immense help in every aspect of my research and thesis writing.

I would like to acknowledge the Department of Foreign Affairs and Trade (DFAT), Australian Government for funding this two-year master's program under Australia Awards Scholarship. Special gratitude goes to the Law and Justice Division, Ministry of Law, Justice and Parliamentary Affairs, Government of the People's Republic of Bangladesh, and the honourable Supreme Court of Bangladesh for allowing me to pursue this program.

I must thank my husband, and two daughters Sarah and Sabah. I could not have done this without their encouragement. Furthermore, thanks to my mother, Nilufar Yasmin and my two brothers Dr. Arifur Rahman and Oarisur Rahman, who have provided me with continuous support throughout my study. They are an integral part of this accomplishment.

Besides, I should thank Dr. Fairlie McIlwraith for providing her copyediting and proofreading services following the guidelines incorporated in the university-endorsed national 'Guidelines for editing research theses'.

Chapter 1: Introduction

1.1 BACKGROUND OF THE STUDY

Forests cover approximately one-third of the global land area and provide a wide range of vital ecosystem services for human welfare and sustainable development.¹ They are also the primary provider of habitat for diverse plants and animals.² On a global scale, forests are essential for carbon storage, greenhouse gas containment, and climate change mitigation.³ Bangladesh is a sub-tropical country in South Asia, where forests contribute to climate change mitigation through carbon sequestration and offer economic, environmental, and socio-cultural benefits.⁴ Though the forestry sector contributes nearly 3% of its gross domestic product (GDP) and 2% of the labour force,⁵ forest resources provide vital support in combating poverty for the communities living in and around the forests.⁶ Despite forests in Bangladesh providing numerous ecological and economic benefits, particularly to rural communities, the forestry sector suffers greatly from weak governance.⁷

¹ Pia Katila et al, 'Forest tenure and the Sustainable Development Goals—A critical view' (2020) 120 *Forest Policy and Economics* 102294, 102294. See also, David Ellison et al, 'Trees, forests and water: Cool insights for a hot world' (2017) 43 *Global Environmental Change* 51, 52.

² Raf Aerts and Olivier Honnay, 'Forest restoration, biodiversity and ecosystem functioning' (2011) 11(1) *BMC Ecology* 29, 29.

³ Michael Jenkins and Brian Schaap, *Forest Ecosystem Services* (Background paper, United Nations Forum on Forests, April 2018) 2.

⁴ See MM Abdullah-Al-Mamun et al, 'Ecosystem services assessment using a valuation framework for the Bangladesh Sundarbans: livelihood contribution and degradation analysis' (2017) 28(1) *Journal of Forestry Research* 1; Man Yong Shin, Md Danesh Miah and Kyeong Hak Lee, 'Potential contribution of the forestry sector in Bangladesh to carbon sequestration' (2007) 82(2) *Journal of Environmental Management* 260; Md Shams Uddin et al, 'Economic valuation of provisioning and cultural services of a protected mangrove ecosystem: a case study on Sundarbans Reserve Forest, Bangladesh' (2013) 5 *Ecosystem Services* 88.

⁵ LM Rahman, *Bangladesh national conservation strategy: forest resources* (IUCN and Bangladesh Forest Department: Dhaka, Bangladesh, 2016).

⁶ Abu Nasar Mohammad Abdullah et al, 'Economic dependence on mangrove forest resources for livelihoods in the Sundarbans, Bangladesh' (2016) 64 *Forest Policy and Economics* 15, 15. See also, Sharif Ahmed Mukul et al, 'Role of non-timber forest products in sustaining forest-based livelihoods and rural households' resilience capacity in and around protected area: a Bangladesh study' (2016) 59(4) *Journal of Environmental Planning and Management* 628; Md Danesh Miah et al, 'Contribution of forests to the livelihood of the Chakma community in the Chittagong Hill Tracts of Bangladesh' (2012) 17(6) *Journal of Forest Research* 449.

⁷ See Md Habibur Rahman and Md Danesh Miah, 'Are protected forests of Bangladesh prepared for the implementation of REDD+? A forest governance analysis from Rema-Kalenga Wildlife Sanctuary' (2017) 4(2) *Environments* 43; SR Biswas and JK Choudhury, 'Forests and forest management practices in Bangladesh: the question of sustainability' (2007) 9(2) *International Forestry Review* 627, 637-38; MS Iftekhar and MR Islam, 'Degeneration of Bangladesh's Sundarbans mangroves: a management issue' (2004) 6(2) *International Forestry Review* 123.

There are contradictions among sources regarding the actual forest coverage of Bangladesh. According to the Forest Department, for example, the forest area in Bangladesh is around 2.6 million hectares, which corresponds to 17.5% of the country's surface.⁸ The Global Forest Resources Assessment by Food and Agriculture Organization (FAO) stated that the total area of forest is 1.43 million hectares accounting for only 11% of the total land area.⁹ This makes a per capita forest area of less than 0.015 hectare, which is significantly lower than the world average of 0.60 hectare.¹⁰ However, FAO subsequently reports in 2020 that the total area of forests in the country is 1.883 million hectares.¹¹ The forests in Bangladesh cover three primary vegetation types in three different ecosystems: hill forests, plain land Sal (*Shorea robusta*) forests, and mangrove forests.¹² The Sundarbans, a Ramsar and World Heritage site, is regarded as the largest single block of tidal halophytic mangrove forest globally, lying mainly in Bangladesh (roughly 60%), with the remaining part in India.¹³ Due to their unique geophysical location and diverse ecosystems, Bangladesh's natural forests are considered one of the richest and biologically varied forest resources.¹⁴

Bangladesh experienced a long history of governing forests under different laws, regulations, and policies since British rule in the Indian sub-continent. However, the fundamental law for the governance of forests in Bangladesh is the *Forest Act 1927* (the Act). In fact, it is a legislation enacted by the (then) British ruler for the consolidation of law concerning forests, leviable duty on timber and other forest produce, and the transit of forest produce.¹⁵ However, the Act was amended several times (the last in 2000) to include legal mechanisms for the governance of 'social forestry'.¹⁶ Under the Act, Bangladesh also framed the *Social Forestry Rules 2004*, which was later amended in 2010 and in 2011. Furthermore, other legal instruments were created to

⁸ Forest Department, 'Government of the People's Republic of Bangladesh Forest Investment Programme' (Forest Department, Ministry of Environment and Forests, 2017) <https://www.climateinvestmentfunds.org/sites/cif_enc/files/fip_final-bangladesh_final_9nov2017_0.pdf>.

⁹ FAO, *Global Forest Resources Assessment 2015: Desk Reference* (Food and Agriculture Organization of the United Nations: Rome, Italy, 2015) 3 <www.fao.org/publications>.

¹⁰ Dr Abu Syed, 'Sustainable forest resource management' *The Daily Star* (27 February 2017) <<https://www.thedailystar.net/environment-and-climate-action/sustainable-forest-resource-management-1367131>> accessed 4 November 2020.

¹¹ FAO, *Global Forest Resources Assessment 2020: Main Report* (Food and Agriculture Organization of the United Nations: Rome, 2020) 136 <<http://www.fao.org/3/ca9825en/ca9825en.pdf>>.

¹² Sharif A Mukul, Shekhar R Biswas and AZM Manzoor Rashid, 'Biodiversity in Bangladesh' in T Pullaiah (ed), *Global Biodiversity, Volume 1: Selected Countries in Asia* (Apple Academic Press, 2018) 93.

¹³ Saiful Karim, 'Proposed REDD+ project for the Sundarbans: Legal and institutional issues' (2013) 1 *International Journal of Rural Law and Policy* 1, 1.

¹⁴ MASA Khan et al, 'Distribution and status of forests in the tropics: Bangladesh perspective' (2007) 44(2) *Proceedings-Pakistan Academy of Sciences* 145, 145.

¹⁵ The *Forest Act 1927*, preamble.

¹⁶ *Ibid* s 28A.

govern certain special categories of forests.¹⁷ The country also has other sector-wise laws that have implications for forest governance.¹⁸ Moreover, Bangladesh signed or ratified major international conventions that were relevant to conservation of forest resources.¹⁹ The *National Forest Policy 1979*²⁰ and the *National Forest Policy 1994*²¹ were also adopted by Bangladesh to guide forest governance. Though the Bangladesh Constitution of 1972 embraced no specific provision dealing directly with forest protection, it incorporated a provision in 2011 to protect and improve the environment and natural resources, including forests and wildlife.²²

Law plays a crucial role in sustainable governance of forest resources.²³ Domestic forest law also shapes the institutions that govern resources' use and management. In Bangladesh, the Forest Department,²⁴ is the custodian of government forests and the principal institution for protection, management, and development of forests.²⁵ One of the main activities of the department is to enforce the relevant laws and regulations for protecting and managing the forest resources.²⁶ It also investigates cases and assists in prosecutions in the Forest Court.²⁷

¹⁷ For instance, The *Private Forest Ordinance 1959* was promulgated for the conservation of those forests and waste lands that are not the property of the government. Another special law, the *Attia Forest (Protection) Ordinance 1982* was also arranged for governing the Attia forests situated in Dhaka and the Tangail district.

¹⁸ For instance, the *Wildlife (Conservation and Security) Act 2012* was adopted 'for the conservation and safety of biodiversity, forest and wildlife of the country'. See also, the *Wildlife (Conservation and Security) Act 2012*, Preamble, para 1.

¹⁹ See Khalid Md Bahauddin, 'Environmental System Management and Governance Needs in Developing Countries' (2014) 34(2) *Environment, Systems and Decisions* 342, 344-345. Major conventions implicating legal protection of forests that Bangladesh signed or ratified are: Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973; Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972; International Plant Protection Convention, 1951; Convention on Biological Diversity, 1992; UN Framework Convention on Climate Change, 1992; International Convention to Combat Desertification, 1994 and Convention on Wetlands, 1971.

²⁰ *National Forest Policy 1979* (Ministry of Agriculture, Government of People's Republic of Bangladesh 1979).

²¹ *National Forest Policy 1994* (Ministry of Environment and Forest, Government of People's Republic of Bangladesh 1994).

²² For more, see the *Constitution of the People's Republic of Bangladesh* art 18A.

²³ Lawrence C Christy et al, *Forest Law and Sustainable Development: Addressing Contemporary Challenges through Legal Reform* (The World Bank, 2007) 7.

²⁴ The Forest Department was initially established in 1864, for the purpose of demarcating and preserving natural forests and collecting revenue from timber production when the British Government held power over the Indian Sub-Continent. Before the partition of India in 1947, the Bangladesh forestry was under the control of the Bengal Forest Department and the Assam Forest Department. After the end of British rule, Pakistan inherited the department and, since succession, Bangladesh has had it. See also, Forest Department, 'Short History of Forest Management' (Forest Department, Ministry of Environment, Forest and Climate Change, Government of the People's Republic of Bangladesh, 9 August 2015), < <http://www.bforest.gov.bd/site/page/652474bd-a9c0-4bfb-88f9-c235653f1b17/->> accessed 18 June 2019.

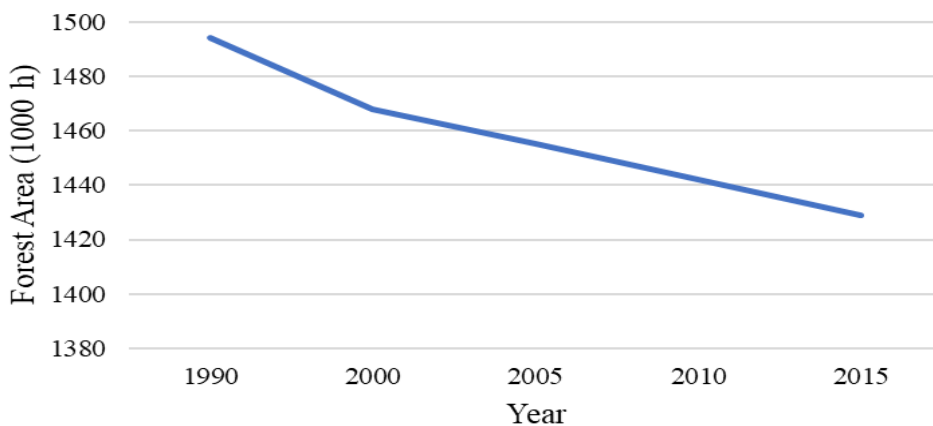
²⁵ Forest Department, 'Activities' (Forest Department, Ministry of Environment, Forest and Climate Change, Government of the People's Republic of Bangladesh, 17 December 2020), <<http://www.bforest.gov.bd/site/page/f130144e-978a-4931-b7d0-959dc93eef1/->> accessed 19 December 2020.

²⁶ Ibid.

²⁷ The *Forest Act 1927* ss 67A, 69A.

Despite the above legal and institutional arrangements, Bangladesh’s forest resources are not protected adequately and, as a result, they are increasingly depleting.²⁸ The FAO found that between 1990 and 2015, Bangladesh lost approximately 2600 hectares of primary forest every year and consequently, the country was left with 1.43 million hectares of the forest area in 2015 while it was 1.49 million hectares in 1990.²⁹

Figure 1: Amount of forest areas in Bangladesh during the period of 1990 to 2015 ³⁰
(Source: FAO, 2015)



The above evidence indicates that forest governance in Bangladesh is not successful in promoting sustainability. One key reason for the lack of sustainable forest governance is that the forest laws and institutions were developed mainly for economic gain. The *Forest Act 1927* itself was designed mainly for revenue generation, not to conserve the forests or biodiversity.³¹ In this regard, it ignores the interest of future generations.³² Several studies indicate that the forests in Bangladesh are in a critical situation due to the weakness of the forest protection laws and policies, leading to illegal logging and commercial exploitation of forest resources.³³ Besides, the

²⁸ See Golam Rasul, ‘Political ecology of the degradation of forest commons in the Chittagong Hill Tracts of Bangladesh’ (2007) 34(2) *Environmental Conservation* 153; Md Sayed Iftekhar, ‘Forestry in Bangladesh: An Overview’ (2006) 104(3) *Journal of Forestry* 148; MS Iftekhar and AKF Hoque, ‘Causes of Forest Encroachment: An Analysis of Bangladesh’ (2005) 62(1-2) *GeoJournal* 95; Md Abdus Salam, Toshikuni Noguchi and Masao Koike, ‘The causes of forest cover loss in the hill forests in Bangladesh’ (1999) 47(4) *GeoJournal* 539.

²⁹ Rahman and Miah (n 7) 46.

³⁰ For the data about the area of forest land in Bangladesh as used in the graph, see (n 9) 9.

³¹ S Rizwana Hasan, ‘Conservative Forest Act cannot conserve forests’ *The Daily Star* (7 June 2008) <<http://www.thedailystar.net/law/2008/06/01/index.htm>> accessed 11 June 2019.

³² M Farooque, ‘Regulatory Framework and Some Examples of Environmental Contamination in Bangladesh’ in BELA (ed), *Selected Writings of Mohiuddin Farooque* (Dhaka: BELA, 2004) 20.

³³ See SA Mukul et al, ‘Comparing the Effectiveness of Forest Law Enforcement and Economic Incentives to Prevent Illegal Logging in Bangladesh’ (2014) 16(3) *International Forestry Review* 363; S Roy, MS Islam and MM Islam, ‘Underlying causes of deforestation and its effects on the environment of Madhupur Sal Forest, Bangladesh’ (2014)

forest laws are outdated and severely lack the appreciation for progressive and dynamic management concepts.³⁴ As a result, the management of forests under the Forest Act continue to experience significant challenges.³⁵

The governance challenges are multifaceted, affecting individuals, communities, and nations.³⁶ The loss of forest ecosystems has reduced the country's forest resources capital and negatively impacts environmental issues associated with climate change, which also adversely affects the lives of forest-dependent people.³⁷ In this situation, it is essential to preserve the forests and govern them sustainably to secure the livelihoods of the forest-dependent communities and conserve and safeguard biological diversity.³⁸ Accordingly, Bangladesh is required to respond to the global call for sustainable governance of its forest resources across the country.³⁹

Protecting and conserving forests is a significant issue in sustainable development under the international law regime. In September 2015, the United Nations General Assembly (UNGA), adopted the new development agenda: *Transforming Our World: The 2030 Agenda for*

27 *Bangladesh Journal of Environmental Science* 162, 169; Nur Muhammed, Masao Koike, and Farhana Haque, 'Forest policy and sustainable forest management in Bangladesh: an analysis from national and international perspectives' (2008) 36(2) *New Forests* 201; ATM Jahangir Alam and Shahriar Rahman, 'An Integrated Approach Enabling Inter-sectoral Policies and Legislations for Sustainable Management of Natural Forests of Bangladesh' (Paper presented at First Bangladesh Forestry Congress 2011, Dhaka, Bangladesh 19-21 April, 2011).

³⁴ Noor Mohammad, 'Empirical Findings on the Forest Law and Policy in Bangladesh' (2013) 2(2) *Agriculture, Forestry and Fisheries* 49, 49.

³⁵ See Anjan Kumer Dev Roy, Khorshed Alam and Jeff Gow, 'Sustainability Through an Alternative Property-Rights Regime for Bangladesh's Mangrove Forest' (2013) 103 (3) *Geographical Review* 372; M Jashimuddin and M Inoue, 'Community forestry for sustainable forest management: Experiences from Bangladesh and policy recommendations' (2012) 11 *Formath* 133; Biswas and Choudhury (n 7) 637-38; Gopal B Thapa and Golam Rasul, 'Implications of changing national policies on land use in the Chittagong Hill Tracts of Bangladesh' (2006) 81(4) *Journal of Environmental Management* 441; Tapan Kumar Nath, Mohammed Jashimuddin and Makoto Inoue, *Community-Based Forest Management (CBFM) in Bangladesh* (Springer International Publishing Switzerland, 2016); Mohiuddin Farooque, *Law and Custom on Forests in Bangladesh: Issues and Remedies* (Bangladesh Environmental Lawyers Association, Dhaka, 1997); AZM Manzoor Rashid, Sharif Ahmed Mukul and Donna Craig, 'Journey Towards Better Governance: Status and Prospects of Collaborative Management in the Protected Areas of Bangladesh' (Paper presented at First Bangladesh Forestry Congress 2011, Dhaka, Bangladesh 19-21 April, 2011; Sushmita S Preetha, 'Is the Forest Department to be a landlord without any responsibilities?' (Interview with Syeda Rizwana Hasan), *The Daily Star* (7 June 2016) < [https://www.thedailystar.net/op-ed/-the-forest-department-be-landlord-without-any-responsibilities"-1235341](https://www.thedailystar.net/op-ed/-the-forest-department-be-landlord-without-any-responsibilities)>, accessed 11 June 2019.

³⁶ Clark C Gibson, Margaret A McKean and Elinor Ostrom, 'Explaining deforestation: the role of local institutions' in *People and Forests: Communities, Institutions, and Governance* (The MIT press, 2000) 1.

³⁷ Iftexhar (n 28) 151-52. See also Ahsan Uddin Ahmed, Neaz Ahmed Siddiqi and Rawshan Ali Choudhuri, 'Vulnerability of forest ecosystems of Bangladesh to climate change' in S Huq et al (eds), *Vulnerability and adaptation to climate change for Bangladesh* (Springer, 1999) 93.

³⁸ Golam Rabbani, 'Environmental Governance in Bangladesh: Policy Dynamics, Present State and Challenges' in Sacchidananda Mukherjee and Debashis Chakraborty (eds), *Environmental Challenges and Governance: Diverse Perspectives from Asia* (Routledge, 2015) 33. See also, Asit K Biswas, 'Forest management, environment and development in South Asia' (1992) 1(2) *Contemporary South Asia* 249, 249.

³⁹ See Bulbul Ahmed, 'Environmental governance and sustainable development in Bangladesh: millennium development goals and sustainable development goals' (2019) 41(4) *Asia Pacific Journal of Public Administration* 237.

Sustainable Development and its 17 Sustainable Development Goals (SDGs),⁴⁰ which are an intrinsic part of the efforts towards establishing sustainability.⁴¹ Guided by several international legal instruments, the SDGs are considered more comprehensive and inclusive than similar previous United Nations (UN) documents.⁴² They have provided the platform for a necessary shift in governance strategies.⁴³ In particular, SDG 15 makes forest governance a universal goal by calling the UN member states to protect, restore, and sustainably use their forest resources along with sustainably managing them. As a part of global forest governance arrangements, SDG 15 can be used as an important tool to implement sustainable governance.⁴⁴ SDG 15 is consistent with the commitments made in previous international environmental conventions and agreements.⁴⁵ It is now well documented that strengthening sustainable forest governance at the national level offers an opportunity to progress towards meeting the SDG 15 as well as other SDGs by 2030.⁴⁶ For this purpose, governments need legal and institutional frameworks that prioritise and commit to policies that advance the SDG 15 along with other SDGs.⁴⁷ By doing so, UN member states will be able to address the growing environmental concerns and attain sustainable development goals by 2030.⁴⁸ As a part of the global community, Bangladesh has also committed to prioritising and fulfilling SDGs,⁴⁹ including the SDG 15 for sustainable forest

⁴⁰ For more, see United Nations General Assembly, *transforming our world: The 2030 agenda for sustainable development* <http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E> accessed 23 December 2019.

⁴¹ Casey Stevens and Norichika Kanie, 'The transformative potential of the sustainable development goals (SDGs)' (2016) 16 *International Environmental Agreements: Politics, Law and Economics* 393, 394.

⁴² Mark Stafford-Smith et al, 'Integration: the key to implementing the Sustainable Development Goals' (2017)12(6) *Sustainability Science* 911, 912.

⁴³ Anita Breuer, Hannah Janetschek and Daniele Malerba, 'Translating sustainable development goal (SDG) interdependencies into policy advice' (2019) 11(7) *Sustainability* 2092, 2092.

⁴⁴ Osamu Saito et al, 'Sustainability science and implementing the sustainable development goals' (2017) 12(6) *Sustainability Science* 907, 907. See also, Norichika Kanie and Frank Biermann (eds), *Governing through goals: Sustainable development goals as governance innovation* (The MIT Press, 2017) 2.

⁴⁵ Jeffrey Sayer et al, 'SDG 15: life on land—The Central role of forests in sustainable development' in Pia Katila et al (eds), *Sustainable development goals: their impacts on forests and people* (Cambridge University Press, 2019) 482. See also, Rakhyun E Kim, 'The nexus between international law and the sustainable development goals' (2016) 25(1) *Review of European, Comparative & International Environmental Law* 15, 15.

⁴⁶ Wil de Jong et al, 'Community Forestry and the Sustainable Development Goals: A Two-Way Street' (2018) 9 *Forests* 331, 331.

⁴⁷ Evodius Waziri Rutta, 'Towards sustainable forest management in Tanzania: analysis of the effectiveness of the national forest policy and its implications for the forests and people of United Republic of Tanzania: a case study of Rufiji District, Southern Tanzania' (PhD diss., Memorial University of Newfoundland, 2018) 41 <<https://research.library.mun.ca/13514/1/thesis.pdf>>.

⁴⁸ Ibid, 40. See also, PAGE, *Integrated Planning & Sustainable Development: Challenges and Opportunities* (2016) <https://www.undp.org/content/dam/undp/library/Sustainable%20Development/PAGE_Integrated_Planning_and_SD_SynthesisReport.pdf>, accessed 25 December 2019.

⁴⁹ Sujit Kumar Datta and Huq Rabbany, 'Sustainable development goals and Bangladesh: The role of parliament' (2016) 6(7) *International Journal of Development Research* 8599, 8599.

governance. Though Bangladesh has achieved some progress,⁵⁰ it is still a long way from achieving the goals. The country is trying to develop its forest legal regime to attain sustainability in the forestry sector. Therefore, a detailed assessment of the Forest Act's contribution to promoting sustainable forest governance is warranted.

Several research projects have been carried out on forest protection in Bangladesh from a natural science and social science perspective,⁵¹ but no comprehensive and systematic study, relating to sustainable forest governance under the Forest Act, has been undertaken in Bangladesh from the legal perspective. Hence, I examine the Act's role in sustainable forest governance in Bangladesh in view of SDG 15, applying a doctrinal method. I argue that the Act cannot effectively promote sustainable forest governance in Bangladesh as targeted in SDG 15. Thus, it needs to be changed—consistent with the principles and norms of sustainable development. To make this law effective, I propose that, in addition to the economic benefits from the forests, the environmental and social conditions of the nation should be considered in forest governance. The Act further needs to be reformed to balance the rights and interests of the government against those who are dependent on forest resources being protected, restored, and managed. I also suggest strengthening the Act to promote public participation in forest governance.

1.2 RATIONALE OF THE STUDY

Since the adoption of SDGs, UN member countries, including Bangladesh, have taken initiatives for improving their legal frameworks to be in line with their commitments to meet the global

⁵⁰ Bangladesh has already taken the initiative to align SDGs in the seventh Five-Year Plan 2016–20 (FYP) of Bangladesh's government. See also, Md Ershadul Karim and Fowzul Azim, 'B. Bangladesh' in *Yearbook of International Environmental Law* (Oxford University Press, 2016) 351; Sazzad Alam, 'Sustainable Development and Environmental Protection in Bangladesh: Challenges and Opportunities' (2018) 3(2) *BiLD Law Journal* 37, 46.

⁵¹ For example, MSH Chowdhury et al, 'Community attitudes toward forest conservation programs through collaborative protected area management in Bangladesh' (2014) 16(6) *Environment, Development and Sustainability* 1235; Mohammed Jashimuddin and Makoto Inoue, 'Management of village common forests in the Chittagong Hill Tracts of Bangladesh: Historical background and current issues in terms of sustainability' (2012) 2(3) *Open Journal of Forestry* 121; Iftekhar and Hoque (n 28) 95; Sourovi Zaman et al, 'Reckoning participatory forest management in Bangladesh: Study from its implementation perspective' (2011) 3(3) *Journal of Agricultural Science* 233; SA Mukul et al, 'Protected areas of Bangladesh: current status and efficacy for biodiversity conservation' (2008) 45(2) *Proceedings of the Pakistan Academy of Sciences* 59; Biswas and Choudhury (n 7) 627; MS Iftekhar and MR Islam, 'Managing Mangroves in Bangladesh: A Strategy Analysis' (2004) 10 (1) *Journal of Coastal Conservation* 139; Ishtiaq Uddin Ahmed et al, *First Bangladesh Forestry Congress 2011: Compendium of Abstracts* (Forest Department, Ministry of Environment and Forest, Government of the People's Republic of Bangladesh, Dhaka, 19-21 April 2011).

goals.⁵² However, the contribution of national law in sustainable forest governance has received limited attention from academics and policymakers.⁵³ Similarly, sustainable forest governance was not considered extensively by the legislators and the citizens in Bangladesh.⁵⁴ Besides, in most of the developing countries, the theoretical literature on effective forest governance also falls short of clarifying the practical issues, such as the role of forest law and the inherent weakness of the law in governing the resources.⁵⁵

I have included the relevant research findings in the literature review (section 1.6), detailing various approaches and issues in sustainable forest governance. However, the research findings do not cover the issues relating to the contribution of the Forest Act in the protection, restoration, and sustainable use of forests in Bangladesh. They did not focus on the management approach underlying this Act in sustainable forest governance in the country. Considering that every member country of the UN should try to achieve the SDGs as soon as possible, the weaknesses in forest legislation may become a significant barrier to fulfilling these goals, especially the SDG 15.⁵⁶ Hence this study analyses the role of the Forest Act in Bangladesh, a UN member state, in promoting sustainable forest governance as indicated in SDG 15. Thereby, my study fills the gaps in the legal research about sustainable forest governance in Bangladesh. In other words, it contributes to the current literature regarding the role of forest law in enhancing sustainable forest governance in Bangladesh.

Furthermore, research regarding sustainable forest governance from the perspective of international law has not been sufficiently undertaken.⁵⁷ Forest governance by goal setting, as exemplified by the SDG 15, is new and unique in the research field across the globe.⁵⁸ My study discusses the role of the Forest Act in promoting in Bangladesh the SDG 15 which is a piece of

⁵² Food and Agriculture Organization of the United Nations, 'FAO AND THE SDGs: Indicators: Measuring up to the 2030 Agenda for Sustainable Development' (FAO, 2017), < <http://www.fao.org/3/a-i6919e.pdf> >.

⁵³ Rutta (n 47) 40-41. ".....there are a number of legal and policy issues that are so far missing, only dealt with sporadically, or only regulated in a few countries", Volker Kohler and Franz Schmithüsen, 'Comparative analysis of forest laws in twelve Sub-Saharan African countries' (2004) 37 *FAO Legal Papers Online*, 1, 3< <http://www.fao.org/3/bb070e/bb070e.pdf>>.

⁵⁴ Ahmed et al (n 51) foreword.

⁵⁵ See Elizabeth JZ Robinson, Ajay M Kumar & Heidi J Albers, 'Protecting Developing Countries' Forests: Enforcement in Theory and Practice' (2010) 2(1) *Journal of Natural Resources Policy Research* 25-38.

⁵⁶ Jong et al (n 46) 331.

⁵⁷ Rowena Maguire, *Global forest governance: Legal concepts and policy trends* (Edward Elgar Publishing, 2013) 3; See also Andreas Schober et al, 'Identifying sustainable forest management research narratives: a text mining approach' (2018) 37(6) *Journal of Sustainable Forestry* 537, 537; Rowena Maguire, 'Deforestation, REDD and international law' in Shawkat Alam et al (eds), *Routledge Handbook of International Environmental Law* (Routledge, 2013) 697-716.

⁵⁸ Frank Biermann, Norichika Kanie, and Rakhyun E Kim 'Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals' (2017) 26-27 *Current Opinion in Environmental Sustainability* 26, 26.

international law. This study will accordingly add additional knowledge about the role of law in sustainable forest governance in consistence with international law, especially the SDG 15.

1.3 RESEARCH QUESTIONS

In the study, I examine the role of the *Forest Act 1927* in promoting sustainable forest governance in Bangladesh. The investigation mainly involves two questions:

1. To what extent does the *Forest Act 1927* contribute to protection, restoration, and sustainable use of forests in Bangladesh?
2. How can the management approach in the *Forest Act 1927* be made better for sustainable forest governance?

1.4 RESEARCH OBJECTIVES

The objectives of the study were to:

1. evaluate the *Forest Act 1927* in sustainable forest governance, especially in protection, restoration, sustainable use, and sustainable management of forests in Bangladesh
2. explore the deficiencies in the Forest Act for governing the forest resources sustainably
3. evaluate whether the Forest Act is consistent with SDG 15
4. provide some tentative recommendations for how the Forest Act might be improved to align with SDG 15 more closely.

1.5 SIGNIFICANCE OF THE STUDY

Scholars have argued that sustainable forest governance largely depends on the effective protection of forests under the strong legal and institutional architecture of Bangladesh.⁵⁹ If the regulatory bodies under the Act cannot govern forests efficiently, the effectiveness of the existing

⁵⁹ See Mohammad Jashimuddin, 'Forest Conservation in Bangladesh: Legal Measures and Policy Support in Relation to Landscapes and Land Use Issues' (Conference Paper, the International Law Conference on Conservation of Forests, Wildlife and Ecology, Kerela, India, 2012); Ainun Nishat, 'Natural Resource Management in Bangladesh: Existing Policy Regime and Institutional Framework' (Policy Dialogue No. 11, UNDP, Dhaka, 2007).

legal framework may be called into question. The ‘good governance’ in the forest sector can also be affected. A critical analysis of the Forest Act in this study identifies the nature and gaps of the law for ensuring sustainable forest governance. In addition, the approaches the study considers in sustainable forest governance under SDG 15 also provide a good baseline for the evaluation of the Forest Act to meet international goals for sustainable development.

This study will help the policymakers to design necessary legal and policy reforms in forest governance strategies. It will also help Bangladesh's government to advance legal actions to enhance sustainable forest governance and maximise its contribution to meeting the SDG 15. In the broader sense, my study will promote the rule of law, justice, and good governance in the forest protection regime of Bangladesh.

Even though this study is conducted from Bangladesh's perspective, it has the potential to provide insight for other developing and underdeveloped countries that are also trying to implement sustainable forest governance through national forestry legislation. If these countries across the globe are informed of the latest knowledge and insights regarding sustainable forest governance, the SDG 15 will get more attention and reflection in the countries’ policy making and legislation, leading to its wider implementation. The collective implementation of the SDG 15 is believed to be the way forward to addressing the challenge of sustainably ensuring human well-being, environmental protection, and economic prosperity.⁶⁰

1.6 LITERATURE REVIEW

The research findings on forest governance, sustainable forest governance, and the role of law in sustainable forest governance are explored here. These concepts are not isolated; they are related to each other, and this is evident in my inquiry into the sustainable forest governance system in Bangladesh.

1.6.1 Forest governance

The concept of ‘forest governance’ has obtained significant attention from researchers and policy makers throughout the world due to its substantial effects in sustaining the remaining forest at

⁶⁰ Prajal Pradhan et al, ‘A systematic study of Sustainable Development Goal (SDG) interactions’ (2017) 5(11) *Earth's Future* 1169, 1177.

the local, national, and global levels.⁶¹ Forest governance has been discussed in several pieces of literature of different academic disciplines. However, the concept of forest governance does not have a universally recognised definition; instead, this term has been used to define the underlying rules and practices that regulate the decision-making processes about forests.⁶² Forest governance may also be recognised as the various processes of forest management coinciding at different levels executed by a diverse group of state and non-state actors through a variety of legal arrangements.⁶³ Therefore, it is not restricted to government institutions' activities relating to forests alone. Instead, it involves all activities incorporating public and private actors following the rules and regulations established by both the statutory and customary laws.⁶⁴ The purpose of these activities is to guide, control, and manage societal activities in the sustainable use and conservation of forest resources.⁶⁵ Therefore, forest governance includes ideas, interests, and values of the multiple actors at different broad scales, extended from local to global.⁶⁶ It also refers to new ways of governing forests that go beyond and above the confinements of the state.⁶⁷

Studies regarding forest governance include many disciplines and approaches, complicating efforts to identify and synthesise the information.⁶⁸ In fact, various conditions are consistently associated and intertwined with sustainable forest governance across various social and ecological settings.⁶⁹ The concept 'forest governance' refers to specific approaches of forest governance, such as policy networks regarding forest protection and restoration, market-based mechanisms (e.g. certification schemes, payment for ecosystem services), the decentralisation of forest administration, management approaches (e.g. participatory forest management, and

⁶¹ See Stephanie Mansourian, 'Understanding the relationship between governance and forest landscape restoration' (2016) 14(3) *Conservation and Society* 267; Ewald Rametsteiner, 'Governance Concepts and their application in forest policy initiatives from global to local levels' (2009) 8(2) *Small-scale Forestry* 143.

⁶² Emma Doherty and Heike Schroeder, 'Forest tenure and multi-level governance in avoiding deforestation under REDD+' (2011) 11(4) *Global Environmental Politics* 66, 69.

⁶³ Ernesto Roessing Neto, 'REDD+ as a tool of global forest governance' (2015) 50(1) *The International Spectator* 60, 73.

⁶⁴ Shankar Adhikar and Himlal Baral, 'Governing forest ecosystem services for sustainable environmental governance: A review' (2018) 5(5) *Environments* 53, 53. See also, Thomas Greiber and Simone Schiele, *Governance of Ecosystems Services: Lessons Learned from Cameroon, China, Costa Rica and Ecuador* (IUCN, 2011) 79.

⁶⁵ Josiah Z Katani and Innocent H Babili, 'Exploring forest governance in Tanzania' in *Forest-people interfaces*, (Wageningen Academic Publishers, 2012) 259, 261.

⁶⁶ Maria Carmen Lemos and Arun Agrawal, 'Environmental Governance' (2006) 31 *Annual Review of Environment and Resources* 297, 297.

⁶⁷ Bas Arts and Ingrid Visseren-Hamdkers, 'Forest governance: a state of the art review' in Bas Arts et al (eds), *Forest-people interfaces* (Wageningen Academic Publishers, 2012) 241.

⁶⁸ Catherine M Tucker, 'Learning on governance in forest ecosystems: Lessons from recent research' (2010) 4(2) *International Journal of the Commons* 687, 688.

⁶⁹ Arun Agrawal, Ashwini Chhatre and Rebecca Hardin, 'Changing governance of the world's forests' (2008) 320 (5882) *Science* 1460, 1460.

public–private partnerships) and corporate social responsibility.⁷⁰ To implement these approaches, coordinated and organised actions involving governmental and non-governmental institutions at various levels seem warranted.

The concept of forest governance has often been inter-changeably used with the issue of forest management in the literature relating to forest protection.⁷¹ In this thesis, forest governance refers to the various measures, strategies, or approaches for governing the forest resources under the domestic legal framework to meet the international goals for sustainable development.

1.6.2 Sustainable forest governance: SDG 15

Forestry has been related to the term ‘sustainability’ since the early 18th century.⁷² The establishment of international forest governance arrangements happened in the late 1980s and early 1990s, a period of accelerating globalisation of trade coupled with a global environmental movement and concern from the scientific community over the continuous depletion of tropical forests.⁷³ International forest governance became a crucial part of global sustainability due to the 1987 Brundtland Report on Sustainable Development presented to the World Commission. This report explains sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.⁷⁴ Since then, a number of arrangements for international forest governance emerged to foster protecting and managing forests sustainably.⁷⁵ Forests are also at the centre of the SDGs, and Goal 15 is

⁷⁰ See Bas Arts et al (eds), *Forest People Interfaces: understanding community forestry and biocultural diversity* (Springer Science & Business Media, 2012); Bas Arts et al, ‘A Practiced Based approach to forest Governance’ (2014) 49 *Forest Policy and Economics* 4.

⁷¹ See Agrawal, Chhatre and Hardin (n 69) 1460; Tucker (n 68) 687; Lars H Gulbrandsen, ‘Overlapping public and private governance: Can forest certification fill the gaps in the global forest regime?’ (2004) 4(2) *Global Environmental Politics* 75; Constance L McDermott, ‘REDDuced: From sustainability to legality to units of carbon—The search for common interests in international forest governance’ (2014) 35 *Environmental Science & Policy* 12; Anke Fischer et al, ‘Sustainable governance of natural resources and institutional change—an analytical framework’ (2007) 27(2) *Public Administration and Development: The International Journal of Management Research and Practice* 123; Vijai Shanker Singh, Deep Narayan Pandey, and Neha Pandey Prakash, ‘What determines the success of joint forest management? Science-based lessons on sustainable governance of forests in India’ (2011) 56(1) *Resources, Conservation and Recycling* 126.

⁷² Saxonian mountain captain HC Von Carlowitz, in 1713, used the term ‘sustainability’ in the book ‘*Sylvicultura Oeconomica*’, regarding forest management. He also mentioned how forest regulation had been used as an essential element in governance of forest resources. See also, Schober et al (n 57) 537; Kenneth G. MacDicken et al, ‘Global progress toward sustainable forest management’ (2015) 352 *Forest Ecology and Management* 47, 48.

⁷³ David Humphreys, *Logjam: Deforestation and the crisis of global governance* (Routledge, 2012) Foreword, xi.

⁷⁴ For details, see H Gregersen, H El Lakany and J Blaser, ‘Forests for sustainable development: A process approach to forest sector contributions to the UN 2030 Agenda for Sustainable Development’ (2017) 19(1) *International Forestry Review* 10; Gro Hariem Brundtland, ‘World commission on environment and development’ (1985) 14(1) *Environmental Policy and Law* 26.

⁷⁵ Metodi Sotirov et al, ‘International Forest Governance and Policy: Institutional Architecture and Pathways of Influence in Global Sustainability’ (2020) 12(17) *Sustainability* 7010. See also, Yurdi Yasmi et al, *Forestry policies,*

especially crucial for forest governance.⁷⁶ Accordingly, this study focuses on the issues relating to sustainable forest governance in Bangladesh.

The study assumes that sustainable forest governance can be explained in view of SDG 15. Goal 15 is precisely recognised in the category Life on Land that requires to ‘protect, restore and promote of sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss’.⁷⁷ Target 15.1 incorporates forests among the terrestrial ecosystems and their services, whose conservation, restoration, and sustainable use need to be ensured by 2020 in line with obligations under international agreements.⁷⁸ This target thus provides an objective for the entire goal. Target 15.2 is committed to promoting and implementing the sustainable management of all kinds of forests by preventing deforestation, re-establishing degraded forests, and largely intensifying afforestation and reforestation processes globally by 2020.⁷⁹ Therefore, as a strategy of forest governance, SDG 15 endorses the protection, restoration, and sustainable use of forests resources along with their sustainable management as priority areas essential for sustainable development.⁸⁰ Thus, SDG 15 involves the following four approaches in sustainable forest governance:

- (1) Protection approach
- (2) Restoration approach
- (3) Sustainable use of forests
- (4) Sustainable management of forests

In my study, I use the above four forest governance approaches as the basis for analysing the contribution of the *Forest Act 1927* in the protection, restoration, sustainable use, and sustainable management of forests in Bangladesh. The above governance approaches are not recent additions in the global forest governance regime. In fact, the contents of 17 SDGs (including Goal 15) are

legislation and institutions in Asia and the Pacific: trends and emerging needs for 2020 (Asia-Pacific Forestry Sector Outlook Study II, Working Paper Series, Working Paper No. APFSOS II/WP/2010/34, FAO Regional Office for Asia and the Pacific, Bangkok, Thailand, 2010) 1.

⁷⁶ Pia Katila et al (eds), *Sustainable Development Goals* (Cambridge University Press, 2019) xxvii.

⁷⁷ For details, see United Nations, *Transforming Our World: The 2030 Agenda for Sustainable Development*. (Report No. A/RES/70/1, 2015) <<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>> accessed 11 November 2019.

⁷⁸ Target 15.1 requires by 2020 to ‘ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and dry lands, in line with obligations under international agreements’.

⁷⁹ Target 15.2 requires by 2020 to ‘promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally’.

⁸⁰ Sayer et al (n 45) 482. See also, Katila et al (n 76) xxvii.

guided by several international legal instruments;⁸¹ notably, the UN Charter,⁸² the Universal Declaration of Human Rights 1948,⁸³ and the Rio Declaration on Environment and Development 1992⁸⁴. While the sustainable development principles are not legally binding instruments for the global communities to manage, conserve and sustainably develop the forests,⁸⁵ sustainable development can work as a framework for governance at the national level.⁸⁶ SDG 15 also has been made consistent with the commitments already established through previous international conventions, such as the Convention on Biological Diversity (CBD) 1992, the United Nations Framework Convention on Climate Change 1992, the UN Convention to Combat Desertification 1994, and the Convention on International Trade in Endangered Species 1973.⁸⁷ Therefore, SDG 15 involves a broader scope in forest governance and its ambition is also highly appreciated.⁸⁸

Since the 18th century, the governance efforts in different parts of the world have used ‘legal protection’ as an approach for conserving and using the forests and associated biodiversity to ensure sustainable governance practices.⁸⁹ Forest protection and biodiversity conservation sometimes got more emphasis than other considerations, to the detriment of people who rely on the forests for economic benefits, cultural survival, or earning a livelihood.⁹⁰ Adequate protection of forest resources continues to be a part of the global level's sustainable development regime.⁹¹ However, the importance of implementing the rights of the forest dependant people via the rule of law to achieve sustainable development is now considered a significant goal of this governance approach.⁹² The current principles and policies designed for environmental protection do not ignore the efforts for restoring ecosystems and their services. Accordingly, a protection approach

⁸¹ The Future We Want (UNGA Resolution A/RES/66/288, 11 September 2012), at paragraphs 10-12.

⁸² Charter of the United Nations (San Francisco, 26 June 1945; in force 24 October 1945).

⁸³ Universal Declaration of Human Rights (UNGA Resolution A/RES/ 3/217A, 10 December 1948).

⁸⁴ Rio Declaration on Environment and Development (UN Doc. A/ CONF.151/26/Rev.1 (Vol. I), 14 June 1992).

⁸⁵ See UN General Assembly, ‘Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests: note / by the Secretary-General of the Conference’, *UNGA, A/Conf*, vol. 151, p. 26. 2006 <<http://www.un-documents.net/for-prin.htm>>.

⁸⁶ See John C Dernbach, ‘Sustainable Development as a Framework for National Governance’ (1998) 49 (1) *Case Western Reserve Law Review* 1.

⁸⁷ Sayer et al (n 45) 482; Kim (n 45) 26. For more details about forestry related international instruments, see Anja Eikermann, *Forests in International Law: Is There Really a Need for an International Forest Convention?* (Springer, 2015).

⁸⁸ Rupert J Baumgartner, ‘Sustainable Development Goals and the Forest Sector-- A complex Relationship’ (2019)10(2) *Forests* 152, 152.

⁸⁹ Inger Elisabeth Maren and Lila Nath Sharma, ‘Managing biodiversity: Impacts of legal protection in mountain forests of the Himalayas’ (2018) 9(8) *Forests* 476, 476.

⁹⁰ See Stephan Schwartzman, Daniel Nepstad, and Adriana Moreira, ‘Arguing tropical forest conservation: People versus parks’ (2000) 14(5) *Conservation Biology* 1370–1374.

⁹¹ Department of Economic and Social Affairs (DESA), United Nations, ‘Forests’ (Sustainable Development Knowledge Platform) < <https://sustainabledevelopment.un.org/topics/forests> >.

⁹² Joleen Timko et al, ‘A policy nexus approach to forests and the SDGs: tradeoffs and synergies’ (2018) 34(7) *Current Opinion in Environmental Sustainability* 7, 9-10.

needs to be effectively complemented by restoration as a legitimate environmental governance strategy, which will support broader conservation goals.⁹³ The SDG 15 is an excellent example that seeks to restore the degraded forests. In addition to the protection and restoration of forests, the sustainable use of its resources in a limited scale is a basic criterion for sustainable development.⁹⁴

Another dominant feature of forest governance is the management approach.⁹⁵ An emerging consensus has evolved that forest management is one of the most significant factors for a successful forest governance method.⁹⁶ However, forest management has long been a top-down and state-control approach, coercively shifting the access and uses of forest resources from commons to commodities.⁹⁷ Consequently, the practitioners and policymakers have been expressing concerns regarding the harmful impacts of traditional top-down forest management approaches.⁹⁸ They are trying to shift the focus to sustainable management, where communities play active roles in all governance activities.⁹⁹ Goal 15 of the SDGs also focuses on the sustainable management of forests that is targeted to protect and restore terrestrial ecosystems, and sustainable use of its resources.¹⁰⁰ In South Asia, the search for a sustainable forest management strategy has increasingly considered the participatory forest management approach.¹⁰¹

⁹³ Afshin Akhtar-Khavari and Anastasia Telesetsky, 'From protection to restoration: a challenge for environmental governance' in Douglas Fisher (eds), *Research Handbook on Fundamental Concepts of Environmental Law*. (Edward Elgar Publishing, 2016) 74.

⁹⁴ Erling Holden, Kristin Linnerud and David Banister, 'The imperatives of sustainable development' (2017) 25(3) *Sustainable Development* 213, 213.

⁹⁵ While forest governance refers to the system in which multiple actors at multiple levels 'negotiate, make and enforce binding decisions about the management, use and conservation of forest resources', forest management means 'the process of planning and implementing practices for the stewardship and use of forests to meet specific environmental, economic, social and cultural objectives', See Ewald Rametsteiner and Cesar Saboga 'Forest Governance' (Food and Agriculture Organisation of the United Nations, Forest Department, 2018) <<http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-governance/basic-knowledge/en/?>>; 'Natural Forest Management' (Food and Agriculture Organisation of the United Nations, 4 November 2020) <<http://www.fao.org/forestry/sfm/85084/en/>>.

⁹⁶ See Anne M Larson and Elena Petkova, 'An introduction to forest governance, people and REDD+ in Latin America: obstacles and opportunities' (2011) 2(1) *Forests* 86; Agrawal, Chhatre, and Hardin (n 69) 1460; Thomas Dietz, Elinor Ostrom, and Paul C Stern, 'The struggle to govern the commons' (2003) 302(5652) *Science* 1907; Sabella Mariangeles, 'Roots for Good Forest Outcomes: An Analytical Framework for Governance Reforms' (Working paper, Report No. 49572-GLB, World Bank, 2009).

⁹⁷ See Mark Poffenberger (ed), *Communities and Forest Management in South Asia* (IUCN, 2000).

⁹⁸ Wolfram H Dressler, Melanie H McDermott and Carsten Schusser, 'The Politics of Community Forestry in a Global Age- A Critical Analysis' (2015) 58 *Forest policy and economics* 1,1.

⁹⁹ See Maurizio Farhan Ferrari, 'Rediscovering community conserved areas in South-east Asia: peoples' initiative to reverse biodiversity loss' (2006) 16(1) *PARKS* 43; Arun Agrawal and Elinor Ostrom 'Collective action, property rights, and decentralization in resource use in India and Nepal' (2001) 29(4) *Politics & Society* 485.

¹⁰⁰ Sayer et al (n 45) 482.

¹⁰¹ Bharat K Pokharel et al, 'Community forestry: Conserving forests, sustaining livelihoods and strengthening democracy' (2007) 6(2) *Journal of Forest and Livelihood* 8, 8.

The governance approaches relating to the protection, restoration, and sustainable use of forests and forest management are linked to various other concepts of environmental law—such as, intergenerational equity, applying the precautionary principle, social justice, economic incentive, principle of integration, and ecological viability—that continue to play a variety of complex roles in sustainable governance of forest resources.¹⁰²

1.6.3 Role of law in sustainable forest governance

The law has a significant role in the governance of natural resources.¹⁰³ The role of law in governance can be presented in terms of the objectives of law or its functions. Law is one of the social institutions that aims to shape human behaviour and provides the authority, foundations, and legitimacy of governance and the means to govern.¹⁰⁴ In other words, the law facilitates other aspects of governance.¹⁰⁵ Law regulates human behaviour and specifies each stakeholder's rights, roles, and responsibilities in various stages of the governing process.¹⁰⁶ Legal rules and principles also address social security, education, unemployment, property rights, and regulating the natural system.¹⁰⁷

Traditionally, in forest governance, legal frameworks (including laws, regulations, policies, standards, and codes of conduct) were enacted to provide legitimacy to specific forest governance measures.¹⁰⁸ Forest law was initially made to ensure the continuous supply of timber.¹⁰⁹ Perhaps, the forestry sector is such a sector, where 'conservation' found a pivotal place in the earliest legislation and policies. However, in the Indian sub-continent, this sector has been experiencing the worst destruction in conservation history.¹¹⁰ The law that has been purported to conserve

¹⁰² See Brian J Preston, 'The role of the judiciary in promoting sustainable development: The experience of Asia and the Pacific' (2005) 9(2& 3) *Asia Pacific Journal of Environmental Law* 109; Gazi Saiful Hasan and Sheikh Ashrafur Rahaman, 'Principles of international environmental law: Application in national laws of Bangladesh' in B C Nirmal and Rajnish Kumar Singh (eds), *Contemporary Issues in International Law* (Springer, 2018) 103; Larson and Petkova (n 96) 86; Agrawal, Chhatre and Hardin (n 69) 1462; Doherty and Schroeder (n 62) 70.

¹⁰³ Alex Wang, 'The Role of Law in Environmental Protection in China: Recent Developments' (2006-2007) 8 *Vermont Journal of Environmental Law* 196, 196. See also, Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law, and the Environment* (Oxford University Press, 3rd ed, 2008) 593.

¹⁰⁴ Louis J Kotzé, *Global environmental governance: Law and regulation for the 21st century* (Edward Elgar Publishing, 2012) 157.

¹⁰⁵ *Ibid* 177.

¹⁰⁶ James Evans, *Environmental governance* (Routledge, 2012) 48. See also, Alan Hunt and Gary Wickham, *Foucault, and law: Towards a sociology of law as governance* (Pluto Press, 1994) 114.

¹⁰⁷ J Ebbesson, 'The rule of law in governance of complex social-ecological changes' (2010) 20(3) *Global Environmental Change* 414, 415.

¹⁰⁸ Maren and Sharma (n 89) 476.

¹⁰⁹ Anjan Kumer Dev Roy, Khorshed Alam and Jeff Gow, 'A review of the role of property rights and forest policies in the management of the Sundarbans Mangrove Forest in Bangladesh' (2012) 15 *Forest Policy and Economics* 46, 48.

¹¹⁰ Farooque (n 35) 303.

forests, has been a primary factor in making it vulnerable. Therefore, laws and policies governing forest resources need to adhere to globally accepted principles, and the diversity of socio-political, economic and ecological contexts to promote peace, justice and equity among people and resources.¹¹¹ Now, the forest governing law must consider environmental sustainability and socio-cultural sustainability, and economic sustainability.¹¹² Also, comprehensive and coherent rules—regarding the rights of forest users and equitable distribution of benefits, the precise role of the governing agencies in forest regulation, and governance arrangements for appropriate use of forests and their sustainable management—have been mentioned as critical for promoting sustainable forest governance.¹¹³ Special attention is required towards disadvantaged, ignored, and marginalised forest-dependent populations.¹¹⁴

Environmental law has become a specialised field of law, through which hundreds of national regulations in many countries have been created in the last fifty years.¹¹⁵ However, many of the sectorial legislation, such as forest laws, have failed to provide adequate environmental protection and could not create conditions that promote sustainable governance of common-pool resources.¹¹⁶ One of the key reasons may be that 'law' alone does not provide the necessary criteria for change of forest governance.¹¹⁷ Nevertheless, the legislation says specifically that other forest governance arrangements—such as, regulations, economic instrument, local knowledge, information and education, research and development, international conventions, treaties, and institutional and organisational reforms—can contribute to governing of a country's forest resources.¹¹⁸

¹¹¹ Christy et al (n 23) 2-3.

¹¹² Donna Craig and Michael I Jeffery, 'Global Environmental Governance and the United Nations in the 21st Century' in Debashree Mukherjee (ed), *Environmental Governance-Concepts, Relevance and Lessons* (The Icfai University Press, 2008) 17.

¹¹³ See Agrawal, Chhatre and Hardin (n 69) 1462; Larson and Petkova (n 96) 86; FAO, 'Forest Governance' <<http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-governance/basic-knowledge/en/?type=111> > .

¹¹⁴ Nicholas Ngepah, 'A review of theories and evidence of inclusive growth: an economic perspective for Africa' (2017) 24 *Current Opinion in Environmental Sustainability* 52, 52.

¹¹⁵ Ebbesson (n 107) 414.

¹¹⁶ Elinor Ostrom, 'Self-governance and Forest Resources' in Parth J Shah and Vidisha Maitra (eds), *Terracotta Reader: A Market Approach to the Environment* (Academic Foundation, 2005) 131–154.

¹¹⁷ Maguire (n 57) 83.

¹¹⁸ See Verina Ingram, Mirjam Ros-Tonen, and Ton Dietz, 'A fine mess: Bricolaged forest governance in Cameroon' (2015) 9(1) *International Journal of the Commons* 41; Rosemary Lyster, 'REDD+, transparency, participation and resource rights: the role of law' (2011) 14(2) *Environmental Science & Policy* 118,119; Stephen Dovers and Robin Connor, 'Institutional and Policy Change for Sustainability' in *Environmental Law for Sustainability: A Reader* (Hart Publishing, 2006) 21, 29; Agrawal and Ostrom (n 99) 490-91.

Several studies indicated that international cooperation regarding technological development, financing, and capacity building to implement sustainable development goals is also essential in promoting sustainable forest governance.¹¹⁹ The critical variables of a governance framework include several non-state actors like non-government organisations (NGOs), civil society organizations, businesses, environmental lawyers, research groups, local governments and informal or traditional governance institutions that have increasingly become more involved in forest governance.¹²⁰ Appropriate and communicative actions, involving politicians, experts, scientists, and local people, are essential. Their expertise and knowledge in the governing processes need to be applied for sustainable governance of natural resources.¹²¹ Besides, judicial institutions can help in sustainable forest governance by providing the aggrieved bodies with appropriate judicial remedies under the concerned Acts in the wake of rapid deforestation and environmental degradation.¹²²

To summarise, the arrangements for implementing sustainable forest governance are complex and involve several instruments (including policy, legislation, regulations, standards, and codes of conduct) and other institutional arrangements. Every component of the governance system, from legislation and policy to all the actors' attitudes and behaviour, needs due adherence and coherence.¹²³ If one component is absent or malfunctioning, it can frustrate the whole governance approach towards sustainable development.

¹¹⁹ See Gillian Bloomfield et al, 'Capacity building to advance the United Nations sustainable development goals: An overview of tools and approaches related to sustainable land management' (2018) 37(2) *Journal of Sustainable Forestry* 157; Mark Elder, Magnus Bengtsson, and Lewis Akenji, 'An optimistic analysis of the means of implementation for sustainable development goals: Thinking about goals as means' (2016) 8(9) *Sustainability* 962; Frances Seymour and Elizabeth Forwand, 'Governing sustainable forest management in the new climate regime' (2010) 1(6) *Wiley Interdisciplinary Reviews: Climate Change* 803.

¹²⁰ See Tucker (n 68) 687; Md Saiful Karim and Okechukwu Benjamin Vincents and Mia Mahmudur Rahim, 'Legal Activism for Ensuring Environmental Justice' (2012) 7(1) *Asian Journal of Comparative Law* 1; Lyster (n 118) 118; Unna Chokkalingam et al, 'Local participation, livelihood needs, and institutional arrangements: three keys to sustainable rehabilitation of degraded tropical forest lands' in Nigel Dudley, Stephanie Mansourian and Daniel Vallauri (eds), *Forest restoration in landscapes: beyond planting trees* (Springer, 2005) 405.

¹²¹ Stephan Rist et al, 'Moving from sustainable management to sustainable governance of natural resources: The role of social learning processes in rural India, Bolivia and Mali' (2007) 23(1) *Journal of Rural Studies* 23, 23.

¹²² See Lennon Banks Haas, 'Saving the Trees One Constitutional Provision at a Time: Judicial Activism and Deforestation in India' (2013) 40 *Georgia Journal of International and Comparative Law* 751; Preston (n 102) 109; Armin Rosencranz and Sharachchandra Lele, 'Supreme Court and India's Forest' (2008) 43(5) *Economic and Political Weekly* 11.

¹²³ Farooque (n 35) 303.

1.7 RESEARCH METHOD

In my study, I applied the doctrinal method in answering the research questions. Doctrinal method, also known as a legal analytical method, is a process of ‘synthesis of rules, principles, norms, interpretative guidelines and values, which explains, makes coherent or justifies a segment of the law as part of a larger system of law’; a legal researcher uses it as the vital tool for identifying, analysing and synthesising the letter and spirit of any particular law.¹²⁴ In doctrinal study, the researcher first requires to ‘locate’ the relevant statutory laws and rules and judicial decisions.¹²⁵ It also involves the study of legal institutions and can suggest the creation of new legal rules or frameworks through ‘legal reasoning or rational deduction’.¹²⁶

Doctrinal or legal analytical method can be used in examining the laws and legal institutions relating to forest governance. Such analytical method particularly inductive approach may apply in investigating the problem relating to forest law compliance.¹²⁷ Similarly, global forest governance and policy trends can be examined through legal analysis of the issues relating to forest law concepts, legal institutions, and regulatory implementation.¹²⁸ The doctrinal method may further be used to enquire into the role of judicial institution ‘in developing the concept of conservation of forest resources’.¹²⁹ Accordingly, I analysed in my study the legal rules and concepts pertaining to the role of the Forest Act in governing the forest resources sustainably. The research question required me to understand the legal context of forest governance under the *Forest Act 1927* in Bangladesh. The study involved a comprehensive examination of the Act, particularly, how the Act's provisions and rules accommodate the approaches underlying the SDG 15.

In this study, my focus is on examining the role of the *Forest Act 1927* in facilitating sustainable forest governance in Bangladesh, given the SDG 15. Domestic legislations and the regulatory framework of a nation become a critical part of the international legal regime as they are the tools

¹²⁴ Terry C Hutchinson, ‘Doctrinal Research: Researching the Jury’ in Dawn Watkins and Mandy Burton (eds), *Research Methods in Law* (Routledge, 2013) 7, 9.

¹²⁵ Terry C Hutchinson and Duncan Nigel ‘Defining and Describing What We Do: Doctrinal Legal Research’ (2012) 17 *Deakin Law Review* 83, 110.

¹²⁶ S N Jain, ‘Doctrinal and Non-doctrinal Legal Research’ (1975) 17 *Journal of the Indian Law Institute* 516, 516.

¹²⁷ See Sabaheta Ramcilovic-Suominen and Graham Epstein, ‘Towards an analytical framework for forest law compliance’ (2012) 14(3) *International Forestry Review* 326-336.

¹²⁸ See Maguire (n 57); Rowena Maguire, ‘The international regulation of sustainable forest management: doctrinal concepts, governing institutions and implementation’ (PhD diss., Queensland University of Technology, 2010) <https://eprints.qut.edu.au/41688/1/Rowena_Maguire_Thesis.pdf>.

¹²⁹ Madhuri Parikh, ‘The Forest Conservation in India and the Role of Indian Supreme Court: A Critical Analysis’ (2013) 13(4) *IOSR Journal of Humanities & Social Science* 55, 55.

for complying with international legal obligations.¹³⁰ Similar to many other countries in the world, Bangladesh seeks to attain the SDG 15 along with other SDGs through appropriate policies, legislation, structures, and forest governance processes.¹³¹ The Bangladeshi Government has taken various legislative strategies and mechanisms to attain sustainable forest governance across the nation. I identify the governance approaches that should be considered systematically in assessing the Forest Act's adequacy to meet the SDG 15. I also present feasible options for addressing the challenges that could improve the effectiveness of the Act as a foundation for establishing sustainable forest governance.

I used primary materials including legislation, regulations, decisions of the courts, government notifications, policy documents and government annual reports. I also utilised secondary materials including scholarly articles and books, theses, research reports, newspapers and other relevant documents related to the Forest Act and forest governance in Bangladesh. The relevant scholarly papers on India and Pakistan's jurisdiction were also used because of their historical, legal, social, and cultural affinity. Again, relevant research items from other Commonwealth jurisdictions, such as Australia, the United Kingdom, and the United States, were used as Bangladesh also follows the common law traditions. As well, I applied additional non-legal evidence and data from other studies when they were found to provide highly relevant support for my argument.¹³²

1.8 BRIEF SYNOPSIS OF CHAPTERS

The thesis is divided into five chapters. Chapter 1 introduces the study context, its objectives, significance, research questions, forest governance approaches in view of SDG 15, and the method used in this study. Chapters 2 to 5 focus on relevant issues and concepts sequentially to address the research questions and fulfill the objectives of the study.

Chapter 2 provides a synopsis of the historical background of sustainable forest governance in Bangladesh. This chapter takes a step back and looks at Bangladesh's forest governance through the lens of history. Four distinct periods have been discussed with a focus on the development of

¹³⁰ Jake Rice and Lori Ridgeway, 'Conservation of Biodiversity and Fisheries Management' in R. Quentin Grafton et al (eds), *Marine Fisheries Conservation and Management* (Oxford University Press, 2010) 143.

¹³¹ Ahmed (n 39) 237.

¹³² On the use of non-legal data in doctrinal legal research see, Terry Hutchinson, 'The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law' (2015) 8(3) *Erasmus Law Review* 130, 130.

the legal framework of forest governance. Contemporary forest laws and policies are the outcomes of past legacies. To understand Bangladesh's current forest governance, it is essential to inquire into the historical processes and forces that impacted on forest management.

After setting out the history and emerging trends of forest governance in Bangladesh, I discussed three of the four governance approaches underlying SDG 15—protection, restoration, and sustainable use of forest— to answer the first research question. Accordingly, in chapter 3, I analysed the Act in terms of protection, restoration, and sustainable use to understand its role in promoting sustainable forest governance.

Chapter 4 discusses the management approach under the Act in sustainable forest governance to answer the second research question. Specifically, as an appropriate governance approach in managing the forest sustainably in Bangladesh, participatory forest management has been discussed. Different forms of participatory management under the Act were critically reviewed to determine their efficacy in accommodating sustainable forest management. The review also showed the direction a participatory management approach could take in promoting sustainable forest governance in Bangladesh.

Chapter 5 is the concluding chapter of the thesis, and it presents the summary of study findings on the key issues and the outcomes of the research questions. Some recommendations are also proposed to strengthen the Act in playing a significant role in promoting sustainable forest governance in Bangladesh.

Chapter 2: Sustainable forest governance in Bangladesh: historical perspective

2.1 INTRODUCTION

Bangladesh evolved as an independent country through a long political and administrative reforms extending for several centuries.¹³³ As a part of the Indian sub-continent, Bangladesh was under Britain's rule from 1760 to 1947.¹³⁴ When the British rulers left the Indian sub-continent, Bangladesh turned into a part of Pakistan and remained so until it became an independent nation in 1971.¹³⁵ Consequently, the forests of Bangladesh experienced various governance regimes throughout different reigns.¹³⁶ Forest laws and their institutional framework were introduced and developed in the Indian sub-continent by the British in the 19th century.¹³⁷ Until 1947, India, Pakistan, and Bangladesh had the same legislative history for the governance of forests. The history of forest governance in Bangladesh includes when Bangladesh was part of Pakistan, and then after 1971 when it gained independence. To reasonably understand Bangladesh's current forest governance regime, one must look at its ecological history. Since laws and policies adopted during different politico-administrative periods directly affect the present trends in forest governance.¹³⁸ This historical analysis of forest governance may also inform the government agencies and the policy makers about the background to the development of forest laws and their role in governing the forest resources.

In this chapter, I analyse forest governance in Bangladesh from a historical perspective, focusing on the development of the legal framework of forestry. The analysis is categorised into four distinct periods: (1) pre-colonial period (before 1757 AD), (2) British regime (1757–1947 AD), (3) Pakistan period (1947–1971 AD), and (4) post-independence period (after 1971 AD). After describing the pre-colonial era, I discuss the British colonial regime by describing the East India

¹³³ Rasul (n 28) 155. See also Willem Van Schendel, *A history of Bangladesh* (Cambridge University Press, 2020).

¹³⁴ Jona Razzaque, *Public interest environmental litigation in India, Pakistan, and Bangladesh* (Kluwer Law International BV, 2004) 3-4.

¹³⁵ See Kamal Hossain, *Bangladesh: Quest for freedom and justice* (Oxford University Press, 2013).

¹³⁶ SK Sarker, JC Deb, and MA Halim, 'A diagnosis of existing logging bans in Bangladesh' (2011) 13(4) *International Forestry Review* 461, 463.

¹³⁷ Farooque (n 35) 20.

¹³⁸ Rasul (n 28) 155.

Company period (1757–1857AD) and the British Government period (1857–1947 AD). Thereafter, I describe the features of forest governance in the Pakistan regime. Finally, I describe the trends in forest governance in the post-independence period of Bangladesh.

2.2 FOREST GOVERNANCE IN PRE-COLONIAL PERIOD (BEFORE 1757 AD)

In ancient times, India, Burma (now Myanmar), and Ceylon (now Sri Lanka) were densely covered with jungles because that part of the world was situated within the monsoon belt, endowed with seasonal rains and tropical heat.¹³⁹ During that period, Bengal, Assam, and the eastern part of Bihar had a large land area covered with dense forests.¹⁴⁰ However, the history of forest governance in the Indian sub-continent before British colonialism is not well documented. The Indian epic histories, such as the 'Mahabharata' and the 'Ramayana', and several mythologies, depicted forests as an integral part of ancient civilisations in India.¹⁴¹ People used to perceive the forests as a gift from God, and everybody had free access to most of their products.¹⁴² The interactions between nature and population were such that the forest dwellers had minimal demands for forest produce.¹⁴³ People took a thoughtful approach to the forests and their use. They practiced a localised, informal, and culturally determined resource-use pattern, which ensured a balance between local people's demands and sustainability of production.¹⁴⁴ They were also considerate of the protection and conservation of natural resources, which were also developed according to their practical experiences.¹⁴⁵ Thus, the sustainability of forest resources was, therefore, unaffected by the forest-dependent people.¹⁴⁶ Several studies mentioned the existence of mainly unexploited forests in most parts of this sub-continent during that period.¹⁴⁷

¹³⁹ Iftekhar and Islam (n 7) 126. See also, Burjor Avari, *India: The Ancient Past: A History of the Indian Subcontinent from C. 7000 BCE to CE 1200* (Routledge, 2016).

¹⁴⁰ Farooque (n 35) 2.

¹⁴¹ Somnath Ghosal, 'Pre-colonial and colonial forest culture in the Presidency of Bengal' (2011) 5(1) *Human Geographies--Journal of Studies & Research in Human Geography* 107,107.

¹⁴² B Mohan Kumar, 'Forestry in ancient India: some literary evidence on productive and protective aspects' (2008) 12(4) *Asian Agri-History* 299, 303.

¹⁴³ Mohammad Ali, M. Alamgir Kabir, and ATM Rafiqul Hoque, 'People's attitude and use of forestland: Co-evolution of forest administration in Bangladesh' (2006) 5(2) *Small-scale Forest Economics, Management and Policy* 271, 275.

¹⁴⁴ Niaz Ahmed Khan, *A political economy of forest resource use: Case studies of social forestry in Bangladesh* (Routledge, 2018) 24.

¹⁴⁵ Ghosal (n 141) 108.

¹⁴⁶ Velayutham Saravanan, 'Economic exploitation of forest resources in south India during the pre-Forest Act colonial era, 1793-1882' (2008) 10(1) *International Forestry Review* 65, 70.

¹⁴⁷ For example, see Jawad Ali et al, 'The Road to Deforestation: An Assessment of Forest Loss and Its Causes in Basha Valley, Northern Pakistan' (2005) 15(4) *Global Environmental Change* 370, 371; Udo Schikhoff, 'Himalayan

When Aryans migrated and settled in the Indian sub-continent in about 2000 BC,¹⁴⁸ the population started to increase, which warranted more liveable lands. Besides human habitation, people started cutting the forests for agricultural and pastoral activities.¹⁴⁹ However, the Aryans left no evidence of forest management; major changes came about with the intrusion of rulers from outside India.¹⁵⁰

Before the start of British rule in the Indian sub-continent, the regions' forests were controlled and managed by several empires.¹⁵¹ The *Mauryan* empire (321–226 BC) was named after the *Mauryan* dynasty, was one of these ancient empires. An organised form of forest management could be traced back to the *Maurya* period when the forests were put under the direct supervision of the state.¹⁵² Several rules were also framed for the protection of forest resources.¹⁵³ The *Mauryas* introduced the first recorded forest department, the Department of Forest Products, for the governance of forests and their products.¹⁵⁴ A *Kupyadhyaksha* (superintendent) with duties of a conservator, was the head of the Department.¹⁵⁵ Under his supervision, the forest officers were responsible for taking initiatives to protect and increase forest lands and forest products.¹⁵⁶

At that period, the forests of India were put under different forest divisions, each of which covered vast areas: *Prachya-vana*, *Dasarnaka-vana*, *Karusha-vana*, *Kalesa-vana*, *Vamana-vana*, *Aparantaka-vana*, *Panchanda-vana*, *Saurashtra-vana*, *Angireya-vana*, and *Kalingaka-vana*.¹⁵⁷ Among these forest divisions, *Angireya-vana* was the name of the forests of ancient Bengal.¹⁵⁸ The *Vangala* (East Bengal) and the *Ganda* (Gaur), which were mentioned in the description of that forest region, are thought to have been forest lands situated in the north and

Forest-Cover Changes in Historical Perspective: A Case Study in the Kaghan Valley, Northern Pakistan' (1995) 15(1) *Mountain Research and Development* 3, 9; RP Tucker, 'The Historical Context of Social Forestry in the Kumaon Himalayas' (1984) 18 (3) *The Journal of Developing Areas* 341, 343.

¹⁴⁸ See Ghosal (n 141) 108.

¹⁴⁹ Iftexhar and Islam (n 7) 127.

¹⁵⁰ A Ghosh, 'Forest Policy in India' in *Indian Forestry, a Perspective* (Indus Publishing Company, 1993) 70.

¹⁵¹ Romila Thapar, 'The Mauryan empire in early India' (2006) 79(205) *Historical Research* 287, 287.

¹⁵² Md Millat-e-Mustafa, *A Review of Forest Policy Trends in Bangladesh: Bangladesh Forest Policy Trends* (Policy Trend Report, 2002) 114, 116.

¹⁵³ The first effort of codification of the rules on different aspects of forest governance was initiated by Kautilya, Prime Minister of Chandragupta Maurya. Kautilya's *Arthashastra* was the first documented piece of legislation on the protection of environment anywhere in the world. As early as 300 BC, he realised the significance of environment protection and formulated rules to protect forests and animals. See Balakrishnan Muniapan, 'Kautilya's Arthashastra and perspectives on organizational management' (2008) 4(1) *Asian Social Science* 30.

¹⁵⁴ Iftexhar and Islam (n 7) 127.

¹⁵⁵ Millat-e-Mustafa (n 152) 116.

¹⁵⁶ See Ajay Singh Rawat, 'Indian Wildlife through the Ages', in AS Rawat (ed), *History of Forestry in India*, (New Delhi, Indus Publishing Company, 1991).

¹⁵⁷ Farooque (n 35) 2.

¹⁵⁸ Rajarshi Das Gupta and Rajib Shaw, 'Changing perspectives of mangrove management in India—an analytical overview' (2013) 80 *Ocean & Coastal Management* 107, 111.

the south of Bengal, including the Sundarbans.¹⁵⁹ There were mainly three types of forests during the *Maurya* period: (1) reserve forests for the recreational use of the king, (2) forests donated to the Brahmanas, and (3) forests open for the public.¹⁶⁰ For the protection of forest resources, the *Mauryas* had a legal policy of punishing the forest offenders according to the severity of the offence.¹⁶¹ Therefore, the protection of forests was officially a Mauryan government policy.¹⁶²

After the demise of the *Maurya* empire, the Indian sub-continent was ruled by several monarchs, including *Kushans, Guptas and Pals*.¹⁶³ Among them, the *Guptas* (AD 320–415) introduced new rules and regulations regarding forest use and improved the forest governance system.¹⁶⁴ As, forests were one of the primary sources of state revenue during the *Gupta* period, forest revenue collectors, called *Gaulmikias*, were appointed in addition to the regular forest administrators.¹⁶⁵ The famous Chinese traveller Hiuen Tsang¹⁶⁶ mentioned that at the end of the Gupta Period (7th century AD), India's territory was prorated into several states that were each under the rule of several different kings. They were busy fighting with one another for the expansion of their kingdoms; therefore, no policies for the protection of forests and forest products were developed.¹⁶⁷

During the *Mughal*¹⁶⁸ era (1526–1757), the sub-continent was again unified, and the segregated states were brought under central control. Those states were governed as Suba or federal states, including Bengal Suba.¹⁶⁹ During this era, agricultural land reclamation started at a fast pace to earn a substantial revenue.¹⁷⁰ In many areas, the local *Zaminders*¹⁷¹ pushed a large number of

¹⁵⁹ Farooque (n 35) 2.

¹⁶⁰ Shashi Kant, 'The evolution of forest regimes in India and China' in Matti Palo, Jussi Uusivuori and Gerardo Mery (eds), *World Forests, Markets and Policies* (Springer, 2001) 342.

¹⁶¹ For example, the subjects who were caught for molesting, trapping, or killing birds, fish, and animals that would not hunt other living creatures or animals were liable to the fine of 26 silver coins. That fine would have been doubled for killing deer or similar wild animals. See also, Millat-e-Mustafa (n 152) 116.

¹⁶² See Aloka Parasher-Sen, 'Of Tribes, hunters and barbarians: Forest dwellers in the Mauryan period' (1998) 14(2) *Studies in History* 173, 186-189.

¹⁶³ Millat-e-Mustafa (n 152) 116.

¹⁶⁴ Iftexhar and Islam (n 7) 127.

¹⁶⁵ Ram Prakash, 'Forest management and evolution of the colonial forest policy in India (1860–1930)' (2015) 4(4) *International Journal of Advanced Research in Management and Social Sciences* 91, 95.

¹⁶⁶ Hiuen Tsang visited India during 629-645 A.D. He recorded detailed memories for each of the places he visited.

¹⁶⁷ Ghosal (n 141) 109.

¹⁶⁸ See John F. Richards, *The Mughal Empire* (Cambridge University Press, 1995), Vol. 5.

¹⁶⁹ Millat-e-Mustafa (n 152) 116.

¹⁷⁰ See Mohammad (n 34) 50; Biswas and Choudhury (n 7) 634.

¹⁷¹ Under the Mughals, the Zamindars were the intermediate rent collectors for the emperor without perpetual tenure over the land under his authority. The British East India Company entered Bengal as Zamindar of the Mughal Emperor by purchasing Zamindari of three villages. See also, Farooque (n 35) 34.

farmers into forests, hills and mountains where they cultivated rice.¹⁷² The *Mughals* used forest lands as reserves for sports, gardening, and avenue planting.¹⁷³ Part of the forests was also used as reserved areas to ensure a suitable hunting environment for the *Mughal* emperors. As such, people in the community were informed through gazette notifications.¹⁷⁴ Overall, during the *Mughal* period, the rulers of the Indian sub-continent had an aesthetic and utilisation approach towards the governance of forestry, without considering conservation perspectives.¹⁷⁵ The ending of the *Mughal* period led to the rule by Bengal *Nawabs*¹⁷⁶ comprising a series of independent rulers, and, subsequently, the British Empire's arrival.¹⁷⁷ The real passage of power from the Mughals to the British came after the Battle of Plassey in 1757. In that battle, Siraj-ud-Daulah, the last independent ruler of Bengal, lost to the British Army.

2.3 FOREST GOVERNANCE UNDER BRITISH REGIME (1757–1947 AD)

At the end of Mughal Empire, the Indian sub-continent came under British rule. The British regime could be categorised into two distinct phases — the East India Company period (1757 to 1857 AD) and the British Government period (1858 to 1947 AD). This regime, by adopting many legal and institutional measures, brought a substantial change in the history of forest governance of the Indian sub-continent.¹⁷⁸

2.3.1 East India Company period (1757–1857 AD)

The British ruled over India, including Bengal, by establishing the East India Company¹⁷⁹. The Company's main goal was to strengthen their rule throughout the subcontinent, to take control of the resources, including the forests,¹⁸⁰ and to increase the revenue from forest resources.¹⁸¹ The

¹⁷² Richard M Eaton, 'Human settlement and colonization in the Sundarbans, 1200–1750' (1990) 7(2) *Agriculture and Human Values* 6, 6.

¹⁷³ Prakash (n 165) 96.

¹⁷⁴ Muhammed, Koike and Haque (n 33) 208.

¹⁷⁵ Ghosal (n 141) 108.

¹⁷⁶ The Provincial Governor of the Mughal Empire.

¹⁷⁷ MSH Chowdhury, M Koike, and N Muhammed, 'Embracing collaborative protected area management for conservation: an analysis of the development of the forest policy of Bangladesh' (2009) 11(3) *International Forestry Review* 359, 362.

¹⁷⁸ Roy, Alam, and Gow (n 109) 48.

¹⁷⁹ In 1600 AD, Queen Elizabeth I endowed the Company's founders (a group of British merchants) with the rights of monopoly trading between the United Kingdom and Asia. Thomas Roe, the ambassador of the company, negotiated an agreement with Jehangir, a Moghul emperor in 1618. See also, Nick Robins, 'The corporation that changed the world: how the East India Company shaped the modern multinational' (2012) 43 (1) *Asian Affairs* 12, 13.

¹⁸⁰ Chowdhury, Koike, and Muhammed (n 177) 360.

¹⁸¹ Ghosal (n 141) 110.

governance strategy under the East India Company rule was to extract an optimum economic return from forest resources.¹⁸² For that purpose, the Company introduced certain strict rules and regulations that resulted in an era of plundering land resources, especially forests.¹⁸³ Among them, the *Permanent Settlement Regulations 1793*¹⁸⁴ was a type of regulation introduced in Bengal, after which a vast amount of forest lands were settled by the *Zamindars*.¹⁸⁵ The greatest priority under the Company's rule was agricultural expansion to extract the optimum economic revenue. Thus, the *Permanent Settlement Regulation 1793* was used as an incentive for investment in land.¹⁸⁶ Around the mid-19th century, the land settlement process was started.¹⁸⁷ By an enactment, the British rulers managed to acquire land in the name of the crown.¹⁸⁸ The first legislation, *Bengal Regulation Act I of 1824*¹⁸⁹ was enacted, which led to the *Land Acquisition Act 1894*.¹⁹⁰ However, the legal framework provided by the East India Company to manage forests was not aimed at forest conservation, rather, it was aimed at securing the uninterrupted supply of forest goods for commercial purposes.¹⁹¹

In the middle of the 19th century, forests throughout the Indian sub-continent were exploited on a huge scale under rule of the East India Company.¹⁹² At that time, substantial pressure was placed on Indian forest resources, as timber was used for building large ships for the Royal Navy, constructing railway tracks, fire-wood, making furniture, and earning revenue by exporting it to

¹⁸² Syeda Rizwana Hasan, 'Application and Reform Needs of the Environmental Laws in Bangladesh' (2005) 9(1&2) *Bangladesh Journal of Law* 85, 88.

¹⁸³ Iftexhar Iqbal, 'Towards an environmental History of Colonial East Bengal: Paradigms and Praxis' (2006) 50 (1-2) *Journal of the Asiatic Society of Bangladesh (Hum.)* 1, 18.

¹⁸⁴ This Act established an institutional system on most of the land resources, including forests permanently settled with intermediaries, called Zamindars. This Act was based on the payment of a perpetually fixed annual rent payable before the sunset of a predetermined day of the year. If the zamindar failed to meet the obligation, the land could be put up for auction and sold to another person. See T Hussain, *Land Rights in Bangladesh-Problems of Management* (Dhaka University Press, 1995) 17; Ranajit Guha, *A rule of property for Bengal: An essay on the idea of permanent settlement* (Orient Blackswan, 1982).

¹⁸⁵ Erica Mukherjee, 'The Impermanent Settlement: Bengal's Riparian Landscape, 1793–1846' (2020) 36(1) *South Asian Studies* 20, 20.

¹⁸⁶ Ram A Sharma, 'Co-management of protected areas in South Asia with special reference to Bangladesh' (2011) 21(1) *Asia-Pacific Journal of Rural Development* 1, 3.

¹⁸⁷ Babar Shahbaz, Tanvir Ali and Abid Qaiyum Suleri, 'A Critical analysis of Forest Policies of Pakistan: Implications for Sustainable Livelihoods' (2007) 12 (4) *Mitigation and Adaptation Strategies for Global Change* 441, 443.

¹⁸⁸ Lubna Hasan, 'An anatomy of state failures in forest management in Pakistan' (2007) 46 (4) *The Pakistan Development Review* 1189, 1194.

¹⁸⁹ The Act regulates primarily the private lands and properties in the entire Bengal province and enabled the government to acquire it 'for construction of roads, canals, or other public purposes.' See Pallav Karmakar, 'Politics of development: Land acquisition and economic development in India' (2017) 5(2) *Journal of Land and Rural Studies* 164, 166.

¹⁹⁰ The *Land Acquisition Act 1894* was repealed by the *Acquisition and Requisition of Immovable Property Ordinance 1982*. Later it was replaced by the *Acquisition and Requisition of Immovable Property Act 2017*.

¹⁹¹ Saravanan (n 146) 65.

¹⁹² A Koli, 'Community forest management addressing social vulnerability of forest communities in Bangladesh' (2013) 15(3) *International Forestry Review* 336, 339.

Britain and to other parts of the world.¹⁹³ Besides, forests were cleared to an increasing extent for agricultural land, and the forest-use rights of local communities were largely transferred to cultivators.¹⁹⁴ This unplanned and massive use of forest resources continued throughout the Company's rule, ignoring forests' importance for conservation of biodiversity, and as a means to implement sustainable development goals.¹⁹⁵

However, consciousness about forest resources among the British rulers in India took place when their primary focus turned towards maximising the revenue.¹⁹⁶ Around 1850, a commission mandated by the British Government prepared a report on Indian forest resources, which mentioned that local people's mismanagement was the critical factor for the massive and rapid destruction of forests.¹⁹⁷ Further, a group of scientists met at Edinburgh to draft a memorandum, which later formed the basis for the organisation of forest conservancy in India.¹⁹⁸ Moreover, on 3 August 1855, Lord Dalhousie¹⁹⁹ issued a detailed memorandum of the (colonial) Government of India called the *Charter of Indian Forestry*.²⁰⁰ It was proclaimed as a plan for forest conservancy under which local people no longer had the right to enter the forests to use timber or other forest products.²⁰¹

2.3.2 The British Government period (1858–1947 AD)

From 1858, the British Crown took over the responsibilities for the administration of India under the *Government of India Act 1858*.²⁰² Before 1865, most of the provinces of India²⁰³ with substantial forest lands had their respective rules for governance. However, those rules did not receive legislative enactment from the British Government or the Government of India.²⁰⁴

¹⁹³ Roy, Alam, and Gow (n 109) 48. See also, Saravanan (n 146) 67.

¹⁹⁴ Poffenberger (n 97) 16-17.

¹⁹⁵ Chowdhury, Koike and Muhammed (n 177) 364.

¹⁹⁶ See Gregory Allen Barton, *Empire forestry and the origins of environmentalism* (Cambridge University Press, 2002).

¹⁹⁷ S Shyamsunder and S Parameshwarappa, 'Forestry in India -The forester's view' (1987) 16 (6) *Ambio* 332, 333.

¹⁹⁸ *Ibid.*

¹⁹⁹ From 1848 to 1856 Lord Dalhousie held the post of Governor General of India.

²⁰⁰ Gregory Barton, 'Keepers of the Jungle: environmental management in British India, 1855-1900' (2000) 62(3) *The Historian*, 557, 564. See also, Jashimuddin (n 59) 16.

²⁰¹ Gregory Barton, 'Empire forestry and the origins of environmentalism' (2001) 27(4) *Journal of Historical Geography* 529, 531.

²⁰² An Act passed by the Parliament of the United Kingdom on August 2, 1858, which initiated the end to the rule of the East India Company. The rule of the British Government in India was then passed to the British Crown.

²⁰³ British India comprises eight provinces: Assam, Bengal, Bombay, Burma, Central Provinces, Madras, Punjab and United Province.

²⁰⁴ The facts surrounding the forests in India were not uniform, nor were the physical qualities and quantities. Initially it was very difficult to think of one forest law for the whole Indian subcontinent, as the circumstances did not necessitate such juridical uniformity. See also, Farooque (n 35) 20.

Evolution of the Forest Acts and forest governance

In the later period of the 19th century, the procurement of timber for railway sleepers became an essential consideration.²⁰⁵ Eventually, it was realised that the protection and conservation of forests were necessary to ensure a continuous flow of revenue in the future.²⁰⁶ To oversee further developments, a German botanist, Dr Dietrich Brandis, was appointed as the first Inspector General of Forest (Chief Forest Officer) to the Government of India.²⁰⁷ Brandis's inspection report about the conservation of forests in the Bengal province set the pace for setting up the administrative structure to govern the forests in India in a systematic manner.²⁰⁸ It started with the creation of a Forest Department in 1864 and the appointment of Dr TM Anderson as the Conservator of Forests for the Bengal province.²⁰⁹ For the effective functioning of the Forest Department, legislative backing was needed.²¹⁰ Therefore, the Government of India enacted its first forest legislation in 1865.²¹¹ The *Indian Forest Act 1865* was the first attempt by the British Government to regulate the collection and use of forest resources by the local people under a legally binding instrument.²¹² The main purpose of the 1865 Act was to establish state-property rights, including the right to cut down timber and use it for imperialistic pursuits.²¹³ However, the *Indian Forest Act 1865* was later thought to be inadequate.²¹⁴ Consequently, a much more repressive Act, the *Indian Forest Act 1878*, replaced the 1865 Act.

The *Indian Forest Act 1878* was an elaborate piece of legislation at that time for the governance of forest resources.²¹⁵ The most significant features of the 1878 Act were providing the classification of forests (after the *Maurya Empire*) and the process of settlement of rights in those forests.²¹⁶ Under the Act, forests were classified into three categories: (1) reserved forest, (2)

²⁰⁵ Mahesh Rangarajan, 'Imperial agendas and India's forests: The early history of Indian forestry, 1800-1878' (1994) 31(2) *The Indian Economic & Social History Review* 147, 162.

²⁰⁶ Kant (n 160) 343.

²⁰⁷ Rangarajan (n 205) 162.

²⁰⁸ Manoranjan Ghosh and Somnath Ghosal, 'Historical Geography of Forestry and Forest Culture in Sub-Himalayan West Bengal, 1757-2015' (2019) 6(5) *Space and Culture, India* 215, 218.

²⁰⁹ See Chowdhury, Koike, and Muhammed (n 177) 362; Millat-e- Mustafa (n 152) 116.

²¹⁰ Public administration in Britain and its colonies adhered to the 'Rule of Law' principle, - 'which held that statute law should be the basis of all administrative functions'. See also, Donald M. Schug, 'The Bureaucratisation of Forest Management in India' (2000) 6(2) *Environment and History* 229, 232.

²¹¹ The Act was called Act VII of 1865 or the *Government Forest Act 1865*.

²¹² Shyamsunder and Parameshwarappa (n 197) 334.

²¹³ Ramachandra Guha, 'An Early Environmental Debate: The Making of the 1878 Act' (1990) 27(1) *Indian Economic and Social History Review* 65, 66.

²¹⁴ Ramachandra Guha, 'Forestry in British and Post-British India: An Historical Analysis' (1983)18 (45 & 46) *Economic and Political Weekly 1940*, 1940-41.

²¹⁵ Prakash (n 165) 97.

²¹⁶ Arnab Kumar Hazra, 'History of Conflict over Forests in India: A Market Based Resolution' (Working Paper Series, Julian L Simon Centre for Policy Research, Liberty Institute, 2002) 27.

protected forest, and (3) village forest.²¹⁷ This classification was based on the extent of the government's statutory control,²¹⁸ emphasising commercial forest management.²¹⁹ The state's ownership or control over forest land was also supported by the doctrine of 'eminent domain' that refers to acquiring private land for public purpose and this doctrine was included in the *Land Acquisition Act 1894*.²²⁰ The doctrine not only legitimates the state to acquire land for public purpose but also creates an assumption that the state has absolute power and control over all lands including forest lands within its territory. Accordingly, by exercising its power of eminent domain, the state can compulsorily conserve various species and covert forest lands such as declaring a particular land as a forest, a park, or a sanctuary. However, it is still an un-answered question of how far the state can exercise the power of eminent domain in abruptly deciding to acquire lands or covert forest lands in the name of conservation paying no heed to the displacement or concerns of the local communities. As Usha writes:

“That there is an overlap in the identity of conservationists, and those challenging mass displacement and the taking away of land and resources from communities, is significant to a debate on eminent domain. It would seem that what is in question is not whether any power in the nature of eminent domain should exist, for conservation, especially, offers scenarios where the exercise of the state's authority becomes imperative. The question, instead, is about the extent and scope of the state's power. How is it to be exercised so that it does not slide down the steep slope of descent into absolute power? What is the state in relation to land, resources and territory? The question that hangs in the air – is the state a super landlord, an owner-without-boundaries, a trustee, or whatever else may characterise it – is still to find an answer.”²²¹

Some provisions also existed under the *Indian Forest Act 1878* for regulating the private forests. For protecting the various types of forest, certain activities were declared as 'forest offences' and

²¹⁷ For details see Guha (n 213) 78-79.

²¹⁸ Subhasis Biswas, 'Forestry Research in India (1861-2005): Historic Evolution with a Case Study' (2014) 49(1) *Indian Journal of History of Science* 81, 82.

²¹⁹ Bijayashree Satpathy, 'Where are Tribals in Their Development? A Century of Indian Forest Legislations' (2015) 11(1) *International Journal of Rural Management* 60, 64.

²²⁰ Usha Ramanathan, 'On eminent domain and sovereignty', 613 Seminar (September 2010) 71 <<http://www.ielrc.org/Content/a1005.pdf>>.

²²¹ See *ibid*.

were made punishable by imprisonment and fines.²²² Overall, the 1878 Act provided the model for the Forest Acts of most of the Commonwealth countries.²²³

However, several amendments²²⁴ were introduced to the 1878 Act and a new piece of legislation was necessary to consolidate the laws relating to forests and to thereby remove all kinds of ambiguities.²²⁵ As a result, the *Indian Forest Act 1927* was shortly promulgated as Act XVI of 1927. Very few changes were introduced in the *Indian Forest Act 1927*, which consisted mainly of a redrafting of the *Forest Act of 1878* and its amendments.²²⁶ The division of forests including reserved forests, protected forests, and village forests was kept as it was in the *Indian Forest Act 1878*.²²⁷ The 1927 Act was later amended in 1930 and in 1933. Before independence from British rule, the 1927 Forest Act was the last enactment that was still in force in Bangladesh.

Forest policy of British Government

The first formal forest policy in India during the British period was articulated in 1894 due to the political intervention of the British Government.²²⁸ The spirit of the *Forest Act 1878* was reflected in that forest policy.²²⁹ Agriculture got priority over forestry in this policy.²³⁰ The *Indian Forest Act 1927* was enacted based on the policy of 1894. Several forest-related rules, such as transit rules and forest manuals, were framed after this policy.²³¹ However, nothing was changed regarding the forest dwellers' rights. The fundamental purpose of the management of public forests was still to maximise revenue by restricting the rights and privileges of the local people.²³² Therefore, despite the introduction of formal management, the overall health of forests was not improved.²³³ The forest policy of 1894 remained valid until the end of the British period.

²²² Sharad Kulkarni, 'Forest legislation and tribals: comments on forest policy resolution' (1987) 22(50) *Economic and Political Weekly* 2143, 2143.

²²³ Farooque (n 35) 21.

²²⁴ The Act of 1878 was amended in 1890, 1901, 1911, 1914, 1918, and 1919.

²²⁵ Hazra (n 216) 27.

²²⁶ The small changes made in the s 30 (b) as the permission to enclose portions of the protected forest and suspended rights therein for a maximum period of 30 years which was 20 years fixed in the *Forest Act of 1878*. Also, in the section 79, public involvement to prevent and contain forest fires and to assist forest or police officers in controlling forest offences were made more extensive and clarified. See Farooque (n 35) 21.

²²⁷ Kulkarni (n 222) 2143.

²²⁸ Millat-e- Mustafa (n 152) 116.

²²⁹ Shahbaz, Ali, and Suleri (n 187) 443.

²³⁰ Chowdhury, Koike, and Muhammed (n 177) 364.

²³¹ Mahbulul Alam, 'Evolution of Forest Policies in Bangladesh: A Critical Review' 2009 2(2) *International Journal of Social Forestry* 149, 156.

²³² Shahbaz, Ali and Suleri (n 187) 443.

²³³ Muhammed, Koike and Haque (n 33) 208.

Overall, the forest policy and laws enacted during the British regime provided total control by the government over the resources. The forests that had been considered common-property resources in the pre-colonial regime came under the government's authority and control through these enactments. In fact, the colonial forest laws were aimed at the exploitation of forest resources for commercial uses, which caused a negative impact on both the environment and on the forest-dependent people.²³⁴

2.4 FOREST GOVERNANCE DURING THE PAKISTAN PERIOD (1947–1971 AD)

Since the partition of India and Pakistan, the colonial forest law, policy, and its institutional arrangements with necessary ‘adaptation’²³⁵ continued as the foundation of their respective forest legal systems. However, very little change had been made in the forest legal regime to regulate the contemporary affairs of that period.²³⁶

2.4.1 Evolution of sub-ordinate legislation under the Forest Act

The government of Pakistan renamed the *Indian Forest Act 1927* the *Forest Act 1927*, which was later amended in 1949 and 1962. However, to further elaborate the substantive provisions of the Act and to implement its purported objectives, several sub-ordinate legislations evolved under the Act.²³⁷ The following table shows the sub-ordinate legislations framed under the Act during the Pakistan period:

Table 1: Sub-ordinate legislation under the *Forest Act 1927*

Category of issues	Name of sub-ordinate legislation	Salient features
Rules regarding the protection of forest resources	<i>Sylhet Forest (Protection from Fire) Rules, 1954</i>	The Rules applied to: i) reserved forests within the meaning of the 1927 Act ii) both vested and controlled forests defined by the Private Forest Acts of 1949 and 1959 iii) other forests that the government owned or in which the government has proprietary rights to the whole or part of the forest produce that the government is entitled to receive.

²³⁴ Rasul (n 28) 153.

²³⁵ On adapting the new laws with the previous laws, see *The Pakistan (Adaptation of Existing Pakistan Laws) Order 1947 s 2*. See also Borhan Uddin Khan and Quazi Mahfujul Hoque Supan, *Encyclopedic compendium of the laws of Bangladesh, volume I* (Bangladesh Legal Aid and Services Trust, 2002).

²³⁶ Millat-e- Mustafa (n 152) 119.

²³⁷ Farooque (n 35) 24-27.

	<i>Rules for the Preservation of Trees and Timbers Belonging to the Government in the District of Chittagong, 1955</i>	The Rules prohibited the clearance or destruction of jungle by burning away vegetation for farming (locally known as <i>jumming</i>) in lands belonging to government; and the cutting of Garjan trees (<i>dipterocarpus spp.</i>) that were the property of government.
	<i>The Chittagong and Chittagong Hill Tracts Reserved Forests Fire Protection Rules, 1958</i>	The Rules prohibited all activities using fire in certain areas close to a reserved forest, citing safety purposes.
	<i>Rules on Hunting Shooting and Fishing, 1959</i>	The Rules were framed to regulate shooting, hunting, fishing, poisoning of water-sources and setting up of traps inside the reserved and protected forests in Bangladesh.
	<i>Prohibition and Rules Effecting Protected Forest in Sundarbans, 1959</i>	The Rules were framed to prohibit the clearing of vegetation for cultivation and included penalties for violating the prohibition.
Rules relating to transit of timber and other forest produces	<i>Sylhet Forest Transit Rules, 1951</i>	The Rules were made applicable to the Sylhet district for regulating the transit of all timber or other forest produce by land or water.
	<i>Dinajpur and Rangpur Forest Transit Rules, 1954</i>	The Rules were framed for regulating the transit of timber or other forest produce moving into, from, or within the districts of Dinajpur and Rangpur by land or water.
	<i>Forest Transit Rules of Chittagong and Comilla Districts, 1959</i>	The Rules were framed for regulating the transit of all timber or other forest produce by land or water moving from, into, or within the districts of Chittagong and Comilla.
	<i>Dhaka Forest Transit Rules, 1959</i>	The Rules applied in respect of all forest produce moving from or into all types of government management forests and privately owned forests using any route and manner.
	<i>Mymensingh Forest Transit Rules, 1959</i>	The Rules were made applicable to all forest produce moving within the district of Mymensingh.
	<i>Rules for the Control of Transit of Timbers and Other Forest Produce and for the Measurement and Registration of Boats Used for Transit in Sunderbans Forest Division, 1959</i>	The Rules were made to control the transit of timber and other forest produce in the Sunderbans Forest Division, and for the measurement of boats for ascertaining maundage of boat capacity for registration purposes.
	<i>The General Forest Transit Rules, 1960</i>	The Rules were framed to regulate, with some exceptions, the movements of timber from one district to another by river, road, or rail.

Rules for performing Forest	<i>Rules Regarding Powers of Forest Officers under the Forest Act, 1959</i>	The Rules assigned powers to forest officers to exercise at various levels under the <i>Forest Act 1927</i> .
Department's function under the Forest Act	<i>Rules for the Execution of Contracts by Officers of Forest Department 1960</i>	The Rules regulated the execution of contracts, policies, and other instruments regarding the administration of forests.
	<i>Rules for Administration of Lands along Works, Housing and Settlement (Communication and Buildings) Department Roads Passing through the Forest 1960</i>	Forest Department would take control of the administration of all roadside lands within reserved, protected, controlled, vested, and acquired forests as a component of such forests.

2.4.2 Emergence of laws governing the private forests

Initially, private forests were regulated by chapter V of the 1878 and 1927 Forest Acts regarding the 'control over forests and lands not being the property of government'. The *Indian Forest Act 1927* also provided rules for forest governance when forests were joint properties of the government and other persons.²³⁸ The provisions of the 1927 Forest Act with regard to the management of private forests were very important in protecting the environment and maintaining the balance of the ecosystem. However, the Act did not mention the possible government restrictions or government involvement in protecting the private forests, unless requested by their owners.²³⁹ As the process of independence approached in the Indian sub-continent, it was felt necessary to impose state control over private forests for the benefit of all.²⁴⁰ Therefore, to govern the privately-owned forests, the *Bengal Private Forest Act 1949* was enacted. It was later modified and enacted as the *Private Forests Ordinance 1959* after repealing the earlier laws regarding private forests and sections 35–38 contained in chapter V of the 1927 Forest Act. This Ordinance aims 'to provide for the conservation of private forests and for the afforestation in certain cases of waste lands in Bangladesh'.²⁴¹ For its effective functioning, several subordinate legislations were framed under the *Private Forests Ordinance 1959*.²⁴²

²³⁸ See the *Indian Forest Act 1927* s 80.

²³⁹ *Ibid* ss 35-38.

²⁴⁰ Farooque (n 35) 29.

²⁴¹ The *Private Forests Ordinance 1959* preamble.

²⁴² These include *Rules on Powers of Forest Officers 1959*; *Rules to Regulate Hunting Shooting and Fishing within Controlled and Vested Forests 1959*; *Private Forest Management Rules 1959*; *Vested Forests Costs and Profits Rules 1959*; *Private Forests Fire Protection Rules 1959*.

Another milestone during the Pakistan period was the enactment of the *State Acquisition and Tenancy (SAT) Act 1950*. With the operation of the Act, the *Zamindari* system, introduced by the Mughal emperor and continued during the British colonial period, was abolished.²⁴³ The SAT Act redefined the law related to tenancies and made provisions for acquiring the ‘interests of rent-receivers and other interests in land’ by the state.²⁴⁴ In fact, the SAT Act was enacted to regulate private forests under government ownership.²⁴⁵ After the enactment of the SAT Act, many private forest lands started to be managed by the Forest Department as ‘reserved forest’ through an order made by the then Board of Revenue.²⁴⁶ The Act also allowed the retention of the agricultural lands and homesteads to a certain extent, but did not allow a tenant to retain any land consisting of a forest.²⁴⁷ For this provision, many people illegally cleared their forests to prevent the government from claiming their land.²⁴⁸

2.4.3 Formulation of forest policies

While the Forest Policy of 1894 had been formulated for management of forests in Indian sub-continent, a review of the policy was necessary to cope up with the new situations. Therefore, the Government of Pakistan introduced its first forest policy in 1955, focusing on increasing the forest areas in the unused government lands.²⁴⁹ Indeed, the government’s intention was to consolidate its power about management of forests by this policy and to utilise them for industrial purposes.²⁵⁰ As a consequence, extraction of forest resources, particularly bamboo and soft wood trees, increased dramatically during this period. However, these resources were not extracted due to their low economic value.²⁵¹ Under this policy, there was rarely any involvement of forest-dependent communities in the governing process.²⁵² In 1962, the Government of Pakistan introduced another forest policy.²⁵³ It had five focal points: forestry, farm forestry, range management, watershed management, and soil conservation.²⁵⁴ Some fundamental aspects of

²⁴³ Hasan (n 182) 88.

²⁴⁴ The *State Acquisition and Tenancy Act 1950* s 3.

²⁴⁵ Md Abdul Alim, ‘Land Management in Bangladesh with Reference to Khas Land: Need for Reform’ (2009) 14(2) *Drake Journal of Agricultural Law* 245, 251.

²⁴⁶ Biswas and Choudhury (n 7) 635.

²⁴⁷ The *State Acquisition and Tenancy Act 1950* ss 20(2), 20(2a).

²⁴⁸ Jashimuddin (n 59) 19.

²⁴⁹ Alam (n 231) 157.

²⁵⁰ Shene Mitchell, ‘Falling far from the Tree: How Forestry Practices in Bangladesh Leave Women Behind’ (2011) 24(1) *Georgetown International Environmental Law Review* 93, 95. see also, Muhammed, Koike and Haque (n 33) 209.

²⁵¹ Rasul (n 28) 159.

²⁵² Roy, Alam, and Gow (n 109) 48.

²⁵³ See Shahbaz, Ali and Suleri (n 187) 444-45.

²⁵⁴ Millat-e-Mustafa (n 152) 118.

the 1962 forest policy were exhaustive forest management for revenue-earning purposes, development of plantations in the state-owned wastelands, and conservation of soil in the forests and private lands.²⁵⁵ However, the demands and rights of the local people continued to be ignored conventionally in the policy.²⁵⁶

Regarding forest management, the Pakistani Government continued following the British policy of exploiting forest resources and started the industrial use of forest produce.²⁵⁷ This period also depicted an ever-widening social, economic, and political clash between the people of East Pakistan (now Bangladesh) and the ruling government of central Pakistan. The then Pakistani Government was trying to enforce colonial rule on these people mainly for economic and political interests and accordingly, the government's interest in Bangladesh forestry was primarily for earning revenue, not for protecting or conserving.²⁵⁸

2.5 FOREST GOVERNANCE DURING POST-INDEPENDENCE PERIOD (AFTER 1971 AD)

Bangladesh emerged as an independent state from Pakistan in 1971 through a series of violent events. Its social and political conditions made it a fragile new nation with many resources, including forests, and endless challenges. After gaining independence, Bangladesh adopted the *Forest Act 1927* under the *Bangladesh (Adaptation of Existing Laws) Order 1972*.²⁵⁹ It is still in force with some modifications as the legislative basis for governing the forest resources. The country's Constitution—along with forest legislations, sub-ordinate legislations and ordinances, and judicial decisions—constitutes the legal framework of the national forest governance.

2.5.1 Incorporating forest issues in the Bangladesh Constitution

The Constitution of the People's Republic of Bangladesh, adopted on 4th November 1972, is the primary legal document of Bangladesh. However, it had no formal statement about the rights to

²⁵⁵ Shahbaz, Ali and Suleri (n 187) 445.

²⁵⁶ Aijaz A Nizamani and AA Shah, *A review of forest policy trends for community participation in Pakistan* (Policy Trend Report, 2004) 28, 28.

²⁵⁷ Rasul (n 28) 158.

²⁵⁸ Dewan Muhammad Humayun Kabir and Jakir Hossain, *Resuscitating the Sundarbans: Customary Use of Biodiversity & Traditional Cultural Practices in Bangladesh* (Unnayan Onneshan — The Innovators, 2008).

²⁵⁹ *Bangladesh (Adaptation of Existing Laws) Order 1972* (President's Order No. 48 of 1972) provides that the laws in force before 26th March 1971, are to remain active in Bangladesh until amended or repealed by a competent legislative body.

a healthy and clean environment through the Stockholm Declaration that introduced the ‘first formal recognition of the right to a healthy environment’²⁶⁰ in the same year. Nevertheless, in 2011, it was amended to incorporate a ‘fundamental principle of state policy’²⁶¹ intended for the ‘protection and improvement of environment and biodiversity.’²⁶² The new principle, contained in article 18A of Bangladesh Constitution, mentioned protecting natural resources, including the forests for future generations. This idea was in line with the notion of sustainable development. So, through the 15th amendment of the Constitution in 2011, this country had been guided to take sustainable development measures to protect forest resources, so that future generations can have adequate resources to continue the social and economic development process. Though this constitutional principle had a significant policy, jurisprudential and interpretative value, it had no enforceability before the Court of Law.²⁶³

2.5.2 Case laws pertaining to forest governance

Like India and Pakistan, forest governance in Bangladesh has been influenced to some extent by case laws. The judiciaries of these countries took leadership in formulating and imposing protection of the environmental components, including forests.²⁶⁴ However, comparing to the case laws from Indian courts, Bangladeshi courts produced little case laws touching upon various aspects of the forest laws and governance.²⁶⁵ Yet, the Bangladesh Supreme Court adopted a pragmatic approach in protecting the natural resources through reading environmental rights within the ‘right to life’ clauses in the Constitution.²⁶⁶ Although the right to the environment was not included as an enforceable right in the Constitution, the Bangladesh Supreme Court began to innovatively consider the environmental issues, especially in Public Interest Litigation (PIL).²⁶⁷

²⁶⁰ David R Boyd, ‘The Constitutional Right to a Healthy Environment’ (2012) 54(4) *Environment: Science and Policy for Sustainable Development* 3, 4.

²⁶¹ The Bangladesh Constitution incorporates a set of fundamental principles of state policy that are not judicially enforceable; however, they can be used in state governance, making laws and the legal interpretation to the constitution and other laws of the country, see art. 8(2), the *Constitution of the People’s Republic of Bangladesh*.

²⁶² *The Constitution (15th Amendment) Act 2011* s 12.

²⁶³ Constitution of the Peoples’ Republic of Bangladesh, art 8(2) mentions, ‘[t]he principles set out in this Part shall be fundamental to the governance of Bangladesh, shall be applied by the State in the making of laws, shall be a guide to the interpretation of the Constitution and of the other laws of Bangladesh, and shall form the basis of the work of the State and of its citizens, but shall not be judicially enforceable’.

²⁶⁴ Michael H. Fisher, *An Environmental History of India: From Earliest Times to the Twenty-First Century* (Cambridge University Press, 2018) 195. For the perspective of Bangladesh, see Hasan (n 182) 87.

²⁶⁵ See S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016); S Rizwana Hasan and Taslima Islam, *Judicial Decisions on Environment in South Asia (Up-to 2000)* (BELA, 2005); S Rizwana Hasan, Bahreen Khan and Afruza Shiuly, *Judicial Decisions on Environment in South Asia (2001-2004)* (BELA, 2006).

²⁶⁶ For ‘right to life’ clause, see the *Constitution of the People’s Republic of Bangladesh* art 31 and 32.

²⁶⁷ For details, see Razzaque (n 134).

In *Dr Mohiuddin Farooque v Bangladesh and Others*,²⁶⁸ the Appellate Division, the Apex Court liberally interpreted the concept ‘aggrieved persons’ as contained in Article 102 of the Bangladesh Constitution and declared that the Bangladesh Environmental Lawyers’ Association (BELA), an NGO, has the *locus standi* to file litigation on behalf of the public to protect and preserve the environmental resources such as wetlands and forests. Due to the expansion of the scope of *locus standi* in litigating for the infringement of public or community rights, the aggrieved persons or the members of the civil society and voluntary organisations got constitutional entitlement to seek legal and juridical protection of ecological resources including forests.

Accordingly, several PIL were filed at the High Court Division (HCD) to conserve forest resources, which mostly resulted in various pragmatic decisions and directives for protecting the forests. Also, in some cases other than PIL, the Supreme Court provided decisions relating to the governance of the forest resources. In *BELA v Bangladesh*, the HCD decided that the coastal forest land could not be leased out for making shipbreaking yards and such lease would breach government notifications and memos.²⁶⁹ The government notifications that are issued following the relevant forest legislations usually have the priority to administrative proceedings about the allocation of land. The Supreme Court held in a case²⁷⁰ that the government notifications to constitute the suit land as protected forest in 1934 and subsequently as reserved forest in 1955, which the courts below did not consider, must take precedence over the subsequent settlement proceedings relating to Bhawal Court of Wards Estate. Not only the settlement proceedings of administrative nature, but also the judicial proceedings under the forest laws which were not decided finally may become inoperative if any government notification is issued for creating a special kind of forest under any new law. The Court accordingly declared in *Bangladesh v Abdul Baset Mia*,²⁷¹ that a government notification issued under the *Forest Act 1927* for constituting reserved forest after the promulgation of the *Attia Forest (Protection) Ordinance 1982* could not be challenged, and accordingly, all judgments, decrees, and orders in respect of Attia Forest did not have the force and all suits, appeals and other legal proceedings to challenge the formation of Attia Reserved Forest should abate. Again, it cannot be stated that a suit already decided by a Court against the Government being the Forest Department shall not stand abated under section

²⁶⁸ *Dr Mohiuddin Farooque v Bangladesh and Others* (1997) 49 DLR (AD) 1 [FAP-20 Case].

²⁶⁹ *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 54

²⁷⁰ *Bangladesh v Abdul Rahman* (2009) 61 DLR (AD) 129, 131.

²⁷¹ *Bangladesh v Abdul Baset Mia* (1986) 6 BLD (AD) 62.

4 of the Ordinance of 1982 taking the plea that no appeal was preferred yet against the Court's decision.²⁷² The government is virtually the final authority to create a forest and if the plaintiffs could not prove their settlement about the disputed land and refrained from challenging the government notification issued under section 4 of the Forest Act, cannot claim that there was no final notification issued under section 20 of the Forest Act.²⁷³ However, although the government can regulate the floating of timbers and other forest products in transit by land or water and can formulate rules to control their transit, the government does not have the right to use or any proprietorship on the channels of water created in the private lands.²⁷⁴ The government, on the other hand, becomes the owner of the drifted timbers coming through the river waters from any country like India and the Forest Department being a government agency do not need to pay any custom duties or taxes on such drifted timber.²⁷⁵

Bangladesh Supreme Court in deciding several other cases has provided the order of restoration to ensure remedy for damages resulting from the infringement use of the Forest Act and other laws that have a bearing on forest governance. Restorative order was passed in a case in which the Court directed the respondents to allow the owners of the brickfields and sawmills one month to remove their entire establishments situated within the prohibited area of the reserved forest.²⁷⁶ The Court also passed an order to ensure preventing the violation of forest laws for preserving and protecting the forest resources. The Court accordingly directed the government agencies to ascertain if any brickfield or sawmill was continuing its activities within the prohibited area of the reserved forest, violating the *Brick Burning (Control) Act 1989*.²⁷⁷

The forest laws have a significant role in sustainable forest governance and thus, the Supreme Court of Bangladesh helped in effective forest governance through its decisions, orders, and directives in reference to the legal disputes involving the stakeholders' rights and interests and thereby, promoted the protection, conservation, and restoration of the forest resources sustainably in Bangladesh.

²⁷² See *The Province of East Pakistan (Now Bangladesh) v S. A Khan and Ors* (1988) 40 DLR (AD) 202, 204 para. 9.

²⁷³ *Abu Musa and Others v Secretary, Ministry of Forest* (1996)1 MLR (AD) 355, 357-358. The same case was also reported in (1997) 17 BLD (AD) 91; (1997) 2 BLC (AD) 56.

²⁷⁴ *Sakera Begum v The Province of East Pakistan and Other* (1964) 16 DLR 358, 360.

²⁷⁵ *M.A Khaleque v Government of Bangladesh* (1980) 32 DLR (HCD) 243, 245.

²⁷⁶ *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 213.

²⁷⁷ *Ibid.*

2.5.3 The concept of social forestry in forest governance

The first National Forest Policy of Bangladesh was formulated in 1979, reasserting state control over forests. This policy did not address the involvement of local communities in augmenting forest resources, which was necessary under the changing socio-economic scenario.²⁷⁸ Therefore, following the Rio Summit, a new policy, the *National Forest Policy 1994* was adopted that was in line with the demands of the time. The *National Forestry Policy 1994* made a significant departure from the previous forest policy by promoting the concept of social forestry in forest governance.²⁷⁹

Initially, the *Forest Act 1927* was amended following the basic features of protection and exploitation and did not pay adequate attention to the collaborative aspects of forest governance.²⁸⁰ For example, to strengthen forest protection under the Act, the degree of punishment was increased greatly in most cases through an amendment of the Act in 1990.²⁸¹ This amendment facilitated the traditional forest protection approach, instead of largely accommodating the concepts of public participation in forest governance activities.²⁸² However, it was later realised that the incorporation of severe punishments for violation of the Act alone would not enhance forest protection. Later, with some amendments in 2000, the Act incorporated provisions of the social forestry program by inserting a new section, 28A, keeping the scope of public participation in forest governance.²⁸³ Section 28A (4) and 28A (5) of the Act provide the opportunity to make rules for establishing a standard for social forestry agreements and programs. Under this provision, the government adopted *Social Forestry Rules 2004*. These Rules were amended later in 2010 and 2011 to define local communities and forest villagers, and to explain the selection criteria relating to agreement duration, beneficiaries, and benefit-sharing.

2.5.4 Regulating the wildlife protection and biodiversity conservation

The forests in Bangladesh are rich in wildlife and biological diversity. The *Forest Act 1927* provides provision for conferring powers to the government to regulate hunting, shooting, and fishing within forests.²⁸⁴ However, these provisions of the Act were not enough for preserving the wildlife as they require special attention. Therefore, after independence, Bangladesh adopted

²⁷⁸ Millat-e-Mustafa (n 152) 119-20.

²⁷⁹ Chowdhury, Koike, and Muhammed (n 177) 366.

²⁸⁰ Alam (n 231) 149.

²⁸¹ See the *Forest (Amendment) Act 1990* (Act No. VIII of 1990), ss 3, 4, 12, 16, 17, 20, 23, 24, 25.

²⁸² Biswas and Chowdhury (n 7) 634.

²⁸³ The *Forest (Amendment) Act 2000* s 6.

²⁸⁴ The *Forest Act 1927* s 32(J).

the *Bangladesh Wildlife (Preservation) Order 1973* to protect, conserve and manage the wildlife and ecosystem, which was later amended and renamed as the *Bangladesh Wildlife (Preservation) (Amendment) Act 1974*. Later it was replaced by the *Wildlife (Conservation and Security) Act 2012*, which was developed with a broader aim of conserving the biodiversity, forests, and wildlife of the country.²⁸⁵ Provisions for imprisonment and monetary fines were introduced for violating or abetting or instigating this law.²⁸⁶ To prevent the killing of wild animals—including tiger, elephant, cheetah, lam cheetah, sambar deer, hoolock, crocodile, whale or dolphin, gharial, and birds—specific penal provisions were included in the Act.²⁸⁷

Establishing protected areas was one of the vital global strategies aimed at reversing loss of tropical forests and biodiversity.²⁸⁸ The *Wildlife (Conservation and Security) Act 2012* also made the scope for the declaration of various types of protected areas to manage wildlife and to protect their habitats.²⁸⁹ It includes the formal definitions of the different types of protected areas, such as eco-parks, national parks, safari parks, botanical gardens, wildlife sanctuaries, and community conservation areas.²⁹⁰ With regard to the exercise of power under section 52 of the Act, several rules have also been framed for the better preservation and safety of forests and wildlife of the country.²⁹¹

Another important legislation, the *Bangladesh Biodiversity Act 2017*, was enacted to ensure ‘conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the use of biological resources and related knowledge’.²⁹² Through adopting this Act, the country has virtually fulfilled one of its constitutional obligations to protect and safeguard the natural resources, including forests, for the present and future citizens.²⁹³ The international obligation arising from Bangladesh’s accession to the Convention on Biological Diversity 1992 has also influenced it in passing this Act.²⁹⁴ Under this Act, the government can proclaim an area as an ‘ecologically critical area’ to protect or conserve that

²⁸⁵ The *Wildlife (Conservation and Security) Act 2012*, preamble.

²⁸⁶ *Ibid*, ss 34–41.

²⁸⁷ *Ibid*, ss 6, 7, 8.

²⁸⁸ Jonas Geldmann et al, ‘Effectiveness of terrestrial protected areas in reducing habitat loss and population declines’ (2013) 161 *Biological Conservation* 230, 230.

²⁸⁹ The *Wildlife (Conservation and Security) Act 2012* ss 13–23.

²⁹⁰ *Ibid* s 2(43).

²⁹¹ These include: *Protected Area Management Rules 2017*, *Deer & Elephant Rearing Rules 2017*, *Crocodile Rearing Rules 2019*.

²⁹² Md Saiful Karim, ‘The Biodiversity Act 2017: A Concise Overview’ in Abdullah Al Faruque and M. Jashim Ali Chowdhury (eds), *New Dimensions of Law: Analysis of Selected Laws of Bangladesh* (Higher Education Quality Enhancement Project, Faculty of Law, University of Chittagong, 2017) 95, 97.

²⁹³ The *Constitution of the People’s Republic of Bangladesh* art 18A.

²⁹⁴ *Ibid*, Preamble, para 3.

area's biological diversity. The government can also declare an area as a 'heritage site' for implementing proper management after consulting local people.²⁹⁵

2.5.5 Co-management of forest protected areas

Involving forest-dependent communities in all aspects of governing the protected areas by considering their livelihoods is a globally accepted approach.²⁹⁶ Therefore, several international conservation agencies have developed and promoted various people-oriented approaches to improve the governance of protected areas; co-management is a common strategy of these strategies, with historical roots and recent manifestations.²⁹⁷ This pluralist approach to managing natural resources incorporates a variety of partners in various roles. Generally, this approach aims at 'environmental conservation, sustainable use of natural resources, and equitable distribution of resource-related benefits and responsibilities'.²⁹⁸ Co-management has been recognized as a potential way forward in conservation management that can solve several problems in the existing conservation practices.²⁹⁹ In Bangladesh, co-management approach has been adopted in the forest-protected areas to meet the conservation goals of the country and the livelihood needs of forest-dependent communities.³⁰⁰

During the 1960s, under the provision of the *Forest Act 1927*, forests, or parts of forests, were declared as protected areas in Bangladesh.³⁰¹ Subsequently, the comprehensive legislative instrument of the *Bangladesh Wildlife (Preservation) Order 1973* fortified this strategy by declaring forests as national parks, wildlife sanctuaries and game reserves.³⁰² Various regulatory provisions of biodiversity conservation articulated in the *Wildlife (Conservation and Security) Act 2012* opened up new opportunities to manage wildlife and forests through active community

²⁹⁵ The *Bangladesh Biodiversity Act 2017* s 32.

²⁹⁶ Caroline Ward, Lindsay C Stringer, and George Holmes, 'Protected area co-management and perceived livelihood impacts' (2018) 228 *Journal of Environmental Management* 1, 1. See also, Sharma (n 186) 1.

²⁹⁷ Mukul et al (n 51) 65.

²⁹⁸ Grazia Borrini-Feyerabend et al, *Co-management of Natural Resources: Organising, Negotiating and Learning by Doing* (GTZ and IUCN, 2000) 7.

²⁹⁹ Abdus Subhan Mollick et al, 'Assessing Good Governance in Protected Areas (PA) Co-management: A Case Study of the Sundarbans Mangrove Forests of Bangladesh' (2021) *Journal of Sustainable Forestry* 1, 2. See also, Sarah A Casson, 'Socially-Just and Scientifically-Sound: Re-Examining Co-Management of Protected Areas' (2015) 1(2) *IK: Other Ways of Knowing* 32, 33.

³⁰⁰ AZM Manzoor Rashid et al, 'Forest protected area governance in Bangladesh: a focus on the legal and policy framework' (2013) 11(4) *Chinese Journal of Population Resources and Environment* 345, 346. See also, Mohammed Jashimuddin, Kazi Nazrul Islam, and Tapan Kumar Nath, 'Local Level Forest Governance and Conservation Outcomes in a Co-managed Protected Area of Bangladesh' (2021) *Journal of Sustainable Forestry* 1-17.

³⁰¹ MSH Chowdhury et al, 'Community attitudes toward forest conservation programs through collaborative protected area management in Bangladesh' (2014) 16(6) *Environment, development, and sustainability* 1235, 1238.

³⁰² Chowdhury, Koike, and Muhammed (n 177) 359.

engagement.³⁰³ The *Wildlife (Conservation and Security) Act 2012* sanctions under section 21 the co-management of natural resources within declared sanctuaries. This process is to ensure the effective participation of local communities to utilize resources and aims for their protection and sustainable management. The Act establishes this co-management of forest resources by the Forest Department, forest dwellers, and local communities.³⁰⁴ This Act also authorizes the formation of co-management committees for the governance of protected areas.³⁰⁵ The government is also authorised to develop a co-management council and co-management committee in each protected area to conserve biodiversity and manage sustainable ecosystems.³⁰⁶

2.5.6 Governing special category of forests

There is no single system of law governing the rights, duties, and authorities over all the forests of the country. Besides the *Forest Act 1927*, Bangladesh adopted certain other laws³⁰⁷ to reflect its commitment to protecting different types of forests and forest resources at the domestic level.³⁰⁸ The *Attia forest (Protection) Ordinance 1982* was a good example of this type of legislation. It was introduced to regulate a section of the plainland forest in Dhaka and Tangail districts, which, for a long time, had been suffering from significant legal and institutional ambiguities and conflicts.³⁰⁹ It was both a land acquisition law without substantive compensations and a law to revive the reserved forests. The Ordinance had successfully removed all pending suits and helped make the constitution of the reserved forest of Bangladesh, notified in 1927 and 1928, precise and unquestionable.

2.5.7 Rules relating to transit of forest produce

Under the authority of the *Forest Act 1927*, specific rules were framed for governing the forest resources effectively. Likewise, the *Chittagong Hill Tract Transit Rules 1973* was promulgated to regulate and control the transit of forest resources (mainly timber) through land or waterways

³⁰³ Chowdhury et al (n 51) 1235. See also, Rashid et al (n 300) 347.

³⁰⁴ The *Wildlife (Conservation and Security) Act 2012* s 21(1).

³⁰⁵ Ibid s 21(2).

³⁰⁶ Nath, Jashimuddin and Inoue (n 35) 56.

³⁰⁷ ‘Law’ means ‘any Act, ordinance, order rule, regulation, bye-law, notification or other legal instrument, and any custom or usage, having the force of law in Bangladesh’. See, the *Constitution of the People’s Republic of Bangladesh* art 152(1).

³⁰⁸ Jashimuddin (n 59). See also Forest Department, Government of the People’s Republic Bangladesh, ‘Act’ <<http://www.bforest.gov.bd/site/page/d29b7c88-0992-402f-84f1-66c64c78373e/Acts>> accessed on 5 January 2020.

³⁰⁹ The Ordinance was promulgated by the Chief Martial Law Administrator who assumed all powers by himself through self-proclaimed Martial Law Proclamation on 24 March 1982 suspending the Constitution of Bangladesh. It has been learnt that earlier elected governments or parliaments refused to pass the law which had been pending for some time. See also, Farooque (n 35) 24.

within, into, or from the districts of Chittagong Hill Tracts (CHTs) and to control sawpits and timber depots in those areas. For regulating the transit of forest produce in other areas of the country (except in the Sundarbans Reserve Forests and the CHTs), the *Forest Produce Transit (Control) Rules 2011* were formulated to exercise the powers under section 41 in conjunction with section 76 of the *Forest Act 1927*.³¹⁰ These rules repealed certain previous forest transit rules, such as, the *Sylhet Forest Transit Rules 1951*, *Dinajpur and Rangpur Forest Transit Rules 1954*, *Dhaka Forest Transit Rules 1959*, *Mymensingh Forest Transit Rules 1959*, *Chittagong, Cox's Bazar and Comilla Forest Transit Rules 1959*, and *East Pakistan General Forest Transit Rules 1960*.³¹¹ They provide the public and private forest owners with greater scope to transport and mobilise their produce.³¹² Further, to regulate the establishment and operation of sawmills in the reserved forests, protected forests or other public forests, the *Sawmills (License) Rules 2012* were made in an exercise of power granted by section 41 of the Forest Act.³¹³ These rules repealed the earlier *Sawmill (License) Rules 1998* in this regard.³¹⁴

Besides these enactments, the existing forest governing system in Bangladesh depends on several general Codes and Acts, such as the *Penal Code 1860*, the *Evidence Act 1872*, the *Limitation Act 1877*, the *Specific Relief Act 1877*, the *Code of Criminal Procedure 1898*, and the *Code of Civil Procedure 1908* for the rules and principles of litigation, investigation, adjudication, and adoption of other legal measures to control the behaviour of individuals and institutions.

2.6 CONCLUSION

The early historical background of forestry in the Indian sub-continent reveals that the local people and villagers used forests for subsistence living. They did not think of any commercial exploitation of forests. The situation changed dramatically when the British rulers got control of the forest lands. The exploitation of the forests followed the process of governance driven by commercial use. However, the British Government later realised the significance of forest preservation and introduced a legal framework for governance of the forest resources by setting up the Forest Department and enacting forest laws in the 19th century. Some might argue that the British Government enacted the forest-related legislation to preserve and protect the future

³¹⁰ The *Forest Produce Transit (Control) Rules 2011* r 1(2).

³¹¹ *Ibid* r 18.

³¹² *Ibid* r 4, 6.

³¹³ The *Sawmills (License) Rules 2012* r 7.

³¹⁴ *Ibid* r 14.

forests. However, others might claim that they only tried to increase revenue from forest resources.³¹⁵ Nevertheless, the ‘scientific’ forest policy and legislation by the British rulers became useful to control large amounts of timber felling. After the Indian sub-continent split in 1947, the Pakistan Government often followed the British forest policy and legislations. Since the emergence of Bangladesh, certain measures were taken to develop legal framework for forest governance but how they considered different aspects of sustainable forest governance should be discussed. Currently, Bangladesh is actively involved in the global environment conservation process and preparing to implement the SDGs (including Goal 15). In the next two chapters (chapters 3 and 4), I inquire into how far the *Forest Act 1927* is prepared to contribute to the protection, restoration, sustainable use of forests and sustainably managing Bangladesh’s forests. This investigation may also be treated as a test case in discovering the significant deficiencies in the Forest Act in promoting sustainable forest governance in line with the SDG relating to forests.

³¹⁵ Ghosal (n 141) 115. See also Saravanan (n 146) 66.

Chapter 3: Sustainable forest governance in Bangladesh: protection, restoration, and sustainable use of forests

3.1 INTRODUCTION

Like most developing nations, Bangladesh is faced with the ominous challenge of improving its economic conditions. However, protection, and sustainable use of its natural resources, including forests, are also a major concern. As discussed in chapter 2, people used to be very conservative in exploiting forest resources for commercial purposes in ancient times due to their social beliefs and practices. However, the capitalist market economy emerged over time, and people became focused on socio-economic progress. Previous governments also were involved in exploiting the forest resources to fulfil their economic ambitions.³¹⁶ As these resources are the fundamental components of the environment, there is an urgent need to conserve and use them properly. The SDG 15 also addresses forest governance by calling for their protection, sustainable use, restoration, and the sustainable management of forests, which needs to be ensured by 2020.³¹⁷ Therefore, I examine the contribution of the *Forest Act 1927* in protection, restoration, and sustainable use of forests and in sustainable management of forests in Bangladesh.

I examine three forest governance approaches: protection, restoration, and sustainable use of forests. For this purpose, the *Forest Act 1927* will be analysed in terms of protection, restoration, and sustainable use of forests. While analysing the protection approach, I explain ecological considerations in the legal regime, recognition of customary rights, precautionary measures in forest protection, forest officers' power, and prosecution of forest offences. Then I demonstrate the restoration approach in sustainable forest governance by examining the afforestation initiatives through social forestry programs. Finally, I discuss the concept of sustainable use of forests by showing ecological, economic, and social welfare considerations in the Act. I also show the place the principle of intergenerational equity has in the forest protection law.

³¹⁶ Roy, Alam, and Gow (n 109) 49. See also M Ali and AR Hoque, 'Shifting regime shifted policy—interplay of interests in sustainability discourses of forest land use' (2008) 14(2) *Mitigation and Adaptation Strategies for Global Change* 121, 121.

³¹⁷ Sayer et al (n 45) 482.

3.2 PROTECTION APPROACH IN SUSTAINABLE FOREST GOVERNANCE

After the industrial revolution, urbanisation, commercial interests, and local demands have resulted in the rapid utilisation of natural resources and the destruction of vegetation throughout the world.³¹⁸ Therefore, the protection of forests has become an issue of national concern and global importance. The SDGs endorsed by the UNGA, especially Goal 15, prioritises the protection of forests among other terrestrial ecosystems that are fundamental for sustainable development.³¹⁹ SDG 15 recognises that the adequate protection of forest resources provides an effective basis for ensuring sustainable forest governance more generally. The protection approach in forest governance suggests the management of forest resources should be underpinned by eliminating natural disturbances and reducing harvesting by humans.³²⁰ In such a case, laws have a crucial role in protecting forests, among other terrestrial ecosystems, by controlling and guiding human behaviour in conflicting situations.³²¹ Therefore, the protection approach in forest governance implies the practice of protecting forests and their resources with legal and other enforceable measures. It requires the implementation of strict rules of conduct for humans who may access forests and their resources for earning a livelihood, cultural survival, or any other activities.³²² However, relevant laws and policies also need to incorporate provisions for safeguarding the rights of the local people to their livelihood, intending to achieve sustainability by reversing the trend of massive deforestation.³²³ Before going into a discussion about the protection approach in sustainable forest governance in Bangladesh, I would like to demonstrate the concepts and issues relating to this approach in the figure below:

³¹⁸ Singh Ahuti, 'Industrial growth and environmental degradation' (2015) 1(5) *International Education and Research Journal* 5, 5. See also, Yasmi et al (n 75) Foreword (i).

³¹⁹ Timko et al (n 92) 7.

³²⁰ Stephen J Colombo et al, 'Forest protection and forest harvest as strategies for ecological sustainability and climate change mitigation' (2012) 281 *Forest Ecology and Management* 140, 140.

³²¹ Wang (n 103) 196.

³²² Stephan Schwartzman, Daniel Nepstad, and Adriana Moreira, 'Arguing tropical forest conservation: People versus parks' (2000) 14(5) *Conservation Biology* 1370, 1370. See also, Maren and Sharma (n 89) 476.

³²³ Roy, Alam, and Gow (n 109) 46.

Figure 2 : Protection approach in sustainable forest governance



3.2.1 Protection of forests and ecological consideration under the Forest Act

As noted in chapter 2, the British rulers established a mode of forest governance that initiated government control over forests.³²⁴ The Forest Act further strengthened this control by introducing the classification of forests as reserved forests,³²⁵ protected forests,³²⁶ and village forests,³²⁷ and by imposing their administrative responsibilities on the Forest Department, a government agency.³²⁸ To protect the forest resources certain activities are prohibited in the reserved forests and protected forests. Several punishable provisions also exist under the Act to

³²⁴ Meenakshi Gogoi, 'The Nexus between Sovereignty and 'Eminent Domain' under the Land Acquisition Act, 1894, and the Land Act, 2013' (2018) 48(2) *Social Change* 173, 176.

³²⁵ Section 3 of the *Forest Act 1927* states that the 'Government may constitute any forestland or wasteland or any land suitable for afforestation which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest-produce of which the Government is entitled, a reserved forest in the manner hereinafter provided.'

³²⁶ Section 29 (1) of the *Forest Act 1927* states that the 'Government may, by notification in the official Gazette, declare the provisions of this Chapter applicable to any forestland or wasteland which is not included in a reserved forest, but which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce to which the Government is entitled.'

³²⁷ Section 28 (1) of the *Forest Act 1927* mentions that the 'Government may assign to any village-community, the rights of Government to or over any land which has been constituted a reserved forest, and may cancel such assignment. All forests so assigned shall be called village-forests.'

³²⁸ Rasul (n 28) 153.

prevent its violation.³²⁹ However, in the Act, a noticeable feature is the absence of any definition of forest and it is described as ‘whatever the government notifies’.³³⁰ Also, forest land, wasteland, and forest rights are not defined nor are they in section 2 of the Act dealing with the definitions nor in chapter II, which includes provisions governing the constitution of reserved forests.

As the Forest Act was a product of the British colonial regime, it reflects the exploitative intentions of the feudal society of that time.³³¹ The Act acknowledged in the preamble that it was formulated ‘to consolidate the law relating to forests, the transit of forest produce and the duty leviable on timber and other forest-produce’.³³² Therefore, the philosophy of this legislation was based on the colonial legacy with the purpose of revenue generation, not conserving the forest resources.³³³ The Act did not delineate forests as an ecological catchment or a natural habitat for vegetation. Moreover, no mention was made of the importance of conservation of forests; rather, the Act was designed to impose the state’s control over forests under the ‘premise of conservation’.³³⁴ Ecological and environmental interests were never considered as a part of its design.³³⁵

Environmental initiatives at the international and domestic level were evident long before protecting the environment and forests became a concern in Bangladesh. The United Nations Conference on Human Environment that took place in 1972 in Stockholm initiated global environmental consciousness. Consequently, the Constitution of India, the neighbouring country to Bangladesh, was amended in 1976 to incorporate environmental safeguards. The *Forest (Conservation) Act 1980* was also enacted to remove the discrepancies of the *Indian Forest Act 1927* regarding forest conservation and other related matters.³³⁶ Besides, relying on the ‘public trust doctrine’ the Indian Supreme Court stepped up to take a significant role in protecting forest resources and tried to implement the concept of sustainable development.³³⁷ The engagement of the Indian Court with the issue of forest conservation began with the case *TN Godavarman*

³²⁹ The *Forest Act 1927* ss 26, 33.

³³⁰ Ibid s 4. See also Gogoi (n 324) 176.

³³¹ Parikh (n 129) 56.

³³² The *Forest Act 1927* preamble.

³³³ See Hasan (n 31).

³³⁴ Lubna Hasan, ‘Analysing Institutional set-up of forest Management in Pakistan’ (Research Paper 182, Pakistan Institute of Development Economics, 2001) 21.

³³⁵ Parikh (n 129) 56. See also, Ashutosh Ranjan Srivastava and Nilakshi Barman, ‘Forest Laws in India - Policy and Assessment’ (2019)5(2) *International Journal of Legal Developments and Allied Issues* 151,152.

³³⁶ The *Forest (Conservation) Act 1980*, preamble. See also Sharad Kulkarni ‘Proposed Forest Act: An Assessment’ (1994) 29(30) *Economic and Political Weekly* 1909, 1909.

³³⁷ Parikh (n 129) 58.

Thirumalkpad v Union of India & Ors,³³⁸ which is also known as the *forest conservation case*.³³⁹ In this case, the Court clarified certain provisions (including a comprehensive interpretation of the term ‘forest’) of the *Forest Conservation Act 1980* and issued extensive directives for its effective implementation.³⁴⁰ The case decisions by the Indian Supreme Court can influence forest governance in Bangladesh as the country’s Supreme Court frequently refers to Indian case decisions because the legal systems in Bangladesh and India are largely similar.

In Bangladesh, several judicial decisions also came into existence regarding the conservation and protection of different forests and their resources. In the case of *BELA v Bangladesh*, the High Court Division decided that the coastal forest land could not be leased out for installing shipbreaking yards that violated the government notifications and memos in this regard.³⁴¹ In another case, the court directed the relevant government agencies to ascertain if any brickfield or sawmill was continuing its activities within the prohibited area of the reserved forest, violating the concerned legislation.³⁴² Bangladesh now has the constitutional and international obligation to comply with environmental protection. Despite the global movement towards sustainable development, the Forest Act in Bangladesh has had minimal changes. The Act has not yet been amended to emphasise ecological considerations in the protection of the forests. At the time of enactment, revenue generation rather than protection was the underlying aim.³⁴³ Still today, the aim of the law and the governance remains the same.³⁴⁴ To date, the Act does not provide any definition of conservation and does not reflect the policy of ecological protection.³⁴⁵

3.2.2 Recognition of customary rights

Before the inception of British rule in the Indian sub-continent, forests like other natural resources were treated as common property and were available to the local people for their use.³⁴⁶ Legally, ownership rights lay with the local rulers; however, they never intervened even if the local people exceeded their usufruct rights to some extent.³⁴⁷ After the colonisation of the sub-continent, the

³³⁸ *TN Godavarman Thirumalkpad v Union of India & Ors* (1997) 2 SCC 267.

³³⁹ R. Dutta, *Supreme Court on Forest Conservation* (Universal Law Publishing, 2005) 3.

³⁴⁰ *Ibid* 1-3. See also Shyam Divan and Armin Rosencranz, *Environmental law, and policy in India* (Oxford University Press, 2001).

³⁴¹ *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 54.

³⁴² *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 213.

³⁴³ Shyamsunder and Parameshwarappa (n 197) 332.

³⁴⁴ Jashimuddin and Inoue (n 35) 139.

³⁴⁵ Iftekhar (n 28) 148.

³⁴⁶ Hasan (n 334) 15.

³⁴⁷ Hasan (n 188) 1194.

then administrators had a preconception that the local people's mismanagement was destroying Indian forests.³⁴⁸ To address the issue, the assertion of state monopoly rights on forest resources and the exclusion of local communities were the highlights of the principles of forest governance at that time.³⁴⁹

Under the Forest Act, no person can claim a right of private property in forest land only because he or she is domiciled there, or his or her ancestors used to live there for centuries. Also, those people cannot claim rights over forest products. A careful assessment of section 3 of the Act revealed that the Act appeared to assume that the shared land that the forest and the people cohabited was government property, and that the latter was ipso facto entitled to the forest produce.³⁵⁰ The assumption was that forest dwellers, who were accustomed to cutting wood and grazing cattle in the forest lands did not have the right by way of prescription as they utilised the forest resources without having any license or grant; therefore, these customary rights were only 'privileges'.³⁵¹ This assumption, on which the Act is based, seems faulty and unfair for the forest dwellers.

The settlement procedure of the rights of the forest dwellers, delineated in chapter II (sections 3–20) of the Forest Act, further strengthens this argument. To accomplish this goal, a Forest Settlement-officer is appointed under section 4 of the Act, who is authorised to ask people to come forward with their claims of the right to use forest resources. After that, the officer shall document those claims and inquire into their validity through meticulous investigation.³⁵² He or she shall then decide whether to admit the claims or reject those in whole or part. If the claims admitted (in whole or part) are related to forest produce, and not related to forest land, the Forest Settlement-officer shall record the extent of it.³⁵³ He or she may also alter the limits of the proposed forest.³⁵⁴ If the admitted claims are (in whole or part) regarding forest land, the Forest Settlement-officer can either exclude such land from the limits of the proposed forest or eliminate the rights by paying compensation or transferring it to another block or part of the forest.³⁵⁵ By

³⁴⁸ David Edmunds and Eva Wollenberg, 'Historical Perspectives on Forest Policy Change in Asia: An Introduction' (2001) 6(2) *Environmental History* 190, 192.

³⁴⁹ P Leelakrishnan, NS Chandrasekharan and KN Chandrasekharan Pillai, 'Forest and Tribal People: Law and Practice' (1985)9 *Cochin University Law Review* 259, 263. See also, Rasul (n 28) 153.

³⁵⁰ Hazra (n 216) 27.

³⁵¹ Kartik Sivaramakrishnan, 'Colonialism and forestry in India: imagining the past in present politics' (1995) 37(1) *Comparative Studies in Society and History* 3, 14.

³⁵² *The Forest Act 1927* s 7.

³⁵³ *Ibid*, ss 12, 14.

³⁵⁴ *Ibid* s 15.

³⁵⁵ *Ibid* s 11.

the time the claims are settled, local people have lost all their rights in the reserved forest.³⁵⁶ Throughout this settlement process, the Forest Settlement-officer has tremendous flexibility and authority.³⁵⁷ Besides, the recognition of rights of local people is conditional, depending on the permission of the forest officials under the existing forest legal system.³⁵⁸ These rights, however, if granted, as a privilege can be extended at the discretion of the forest officials.³⁵⁹

However, recognition of customary land rights and rights through prescription was one of the critical features of the evolution of tenancy laws of Bangladesh.³⁶⁰ For example, according to the *Bengal Tenancy Act 1885*, the court had to consider local customs while deciding the matter of whether a tenant was a raiyat (having right to holding land for cultivation).³⁶¹ The Act further mentioned that if a person had the possession of raiyati land under lease or otherwise continuously for more than 12 years, he got the status of a settled raiyat with the right of occupancy.³⁶² These provisions demonstrated that customs and customary rights had been operational in regulating land tenure issues in Bengal. Besides, the SAT Act did not repeal the 1885 Act, and somewhat further dispossessed the tenurial rights to the legal occupants from the landlords.³⁶³ Further, the SAT Act recognises titles of different raiyats as well as declares various forms of usufructuary rights of the local communities against individual proprietorship.³⁶⁴ Another important provision in the SAT Act recognising the especial tenurial status of lands falling within the conventional domain of aborigines is section 97. The *Evidence Act 1872* also recognised custom in some instances.³⁶⁵ Under the *Limitation Act 1908*, rights exercised continuously for 60 years on any government property or for 20 years on private property, led to a prescriptive right.³⁶⁶ However, under the provisions of the *Limitation Act*, such rights cannot be acquired if a forest is declared as reserved forest under section 20 of the *Forest Act*.³⁶⁷ Although in Bangladesh rights accruing over forest land through adverse possession and

³⁵⁶ Hazra (n 216) 26.

³⁵⁷ Ramachandra Guha, 'Forestry in British and Post-British India: An Historical Analysis' (1983) 18(44) *Economic and Political Weekly* 1882, 1882.

³⁵⁸ Karim (n 13) 5.

³⁵⁹ Raja Devarsish Roy, 'Challenges for Juridical Pluralism and Customary Laws of Indigenous Peoples: The Case of the Chittagong Hill Tracts, Bangladesh' (2004) 21(1) *Arizona Journal of International and Comparative Law* 113, 158. See also, Oliver Springate-Baginski and Piers Blaikie (eds), *Forests people and power: The political ecology of reform in South Asia* (Routledge, 2013) 34.

³⁶⁰ Farooque (n 35) 78.

³⁶¹ The *Bengal Tenancy Act 1885* s 5(4) (a).

³⁶² *Ibid* ss 20, 21.

³⁶³ See for example, the *State Acquisition and Tenancy Act (SAT) 1950* ss 11, 20.

³⁶⁴ *Ibid*, ss 39(d), 151A.

³⁶⁵ The *Evidence Act 1872* ss 32, 48, 49.

³⁶⁶ The *Limitation Act 1908* s 26.

³⁶⁷ The *Forest Act 1927* s 23. See also, Farooque (n 35) 82; Karim (n 13) 5.

prescription are recognised by law, no right can be acquired under section 5 and 23 of the Forest Act.³⁶⁸ Besides, in common law countries, a long-standing principle of law is that if there is a conflict between two statutes, the latest prevails.³⁶⁹ Moreover, in the case of inconsistency, a special Act always prevails over the general Act. Therefore, the Forest Act does not give common ownership or occupancy rights to the forest dwellers, especially to the tribes living on the forest lands. Deprivation of traditional rights and restrictions on the livelihood activities of the tribal communities have resulted in increased unauthorised activities, including poaching, and logging in the forests, which consequently hinders the protection of forests in the country.³⁷⁰

However, these customary rights are capable enough of transforming into legal rights if these are considered judiciously. This is also in line with the legislative trends of environmental protection. Consequently, there has been growing realisation of the rights of people dependent on natural resources acquired from their immediate environments, leading to statutory recognition of their rights.³⁷¹ For example, the Indian forest legal system has already enacted the landmark *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006* acknowledging the historical mistakes perpetrated by the *Indian Forest Act 1927* excluding local people from accessing the forest.³⁷² It was aimed at restoring the rights of the forest dwellers to land and other forest resources that were denied to them under the 1927 Forest Act.³⁷³ On the other hand, forest dwellers' customary rights in Bangladesh have not yet gained much attention from juristic scholars and policymakers.³⁷⁴ A substantive law to determine and allocate the rights of the forest-dependent people has not yet been adopted in Bangladesh. Though the Forest Act needs to determine the forest rights of the various stakeholders, it fails to play an active role in balancing their forest rights and interests equitably. Even after the independence of Bangladesh,

³⁶⁸ Section 5 of the *Forest Act 1927* states that 'after the issue of a notification under section 4, no right shall be acquired in or over the land comprised in such notification, except by succession or under a grant or a written contract in writing made or entered into by or on behalf of the Government or some person in whom such right was vested when the notification was issued; and no fresh clearings for cultivation or for any other purpose shall be made in such land except accordance with such rules as may be made by the Government in this behalf.'

Section 23 of the *Forest Act 1927* states, 'no right of any description shall be acquired in or over a reserved forest except by succession or under a grant or a contract in writing made by or on behalf of the Government or some person in whom such right was vested when the notification under section 20 was issued.'

³⁶⁹ Quintin Johnstone, 'An Evaluation of the Rules of Statutory Interpretation' (1954-1955) 3 *University of Kansas Law Review* 1, 3.

³⁷⁰ Farooque (n 35) 200.

³⁷¹ Nupur Chowdhury, 'Sustainable Development as Environmental Justice' (2016) 51 (26 & 27) *Economic and Political Weekly* 84, 89.

³⁷² Ibid. See also Lavanya Rajamani and Shibani Ghosh, 'Public Participation in Indian Environmental Law' in Lila Katz Barrera-Hernández et al (eds), *Sharing the Costs and Benefits of Energy and Resource Activity: Legal Change and Impact on Communities* (Oxford University Press, 2016) 394, 405.

³⁷³ Debnarayan Sarker, 'The implementation of the forest rights act in India: critical issues' (2011) 31(2) *Economic Affairs* 25, 26.

³⁷⁴ Farooque (n 35) 190.

local communities have been regarded as a threat to forests.³⁷⁵ This existing exclusionist approach in governing the forests has exerted a negative effect on the resources.³⁷⁶ The current model of protection strategy with the concept of ‘fencing the forests’ under the Act has been found ineffective in forest protection.³⁷⁷

3.2.3 The precautionary principle in forest protection

The precautionary principle guides the protection and governance of natural resources where there is scientific uncertainty.³⁷⁸ The aim is to persuade the decision-makers to consider the negative consequences of their activities on the environment, including climate change, before there is intense adversity from those activities.³⁷⁹ This principle has had a major impact on environmental law and policy over recent decades.³⁸⁰ The integration of the precautionary principle into national legislations and practices can play a significant role in facilitating sustainable management of the country’s forests, among other natural resources.³⁸¹

The Forest Act has some provisions for taking precautionary measures to protect forest resources. The Act empowers the forest officer, police officer or any other authorised officer to prevent any act, omission or practice that may harm the forest resources.³⁸² If they reasonably suspect the possibility of a forest offence, they can adopt precautionary measures, such as the seizure of forest produce together with all tools, vehicles, vessels, or cattle used in committing such an offence.³⁸³ The forest officer may even arrest a suspected forest offender without orders from a magistrate or a warrant.³⁸⁴ While undertaking those duties, they are entitled to receive assistance from any forest beneficiaries, their employees, and other government employees.³⁸⁵ Besides, the

³⁷⁵ M Ali, ‘Scientific forestry and forest land use in Bangladesh: a discourse analysis of peoples attitudes’ (2002) 4(3) *International Forestry Review* 214, 214.

³⁷⁶ SA Mukul et al, ‘Local peoples’ response to co-management in protected areas: a case study from Satchari National Park, Bangladesh’ (2012) 21 *Forests, Trees and Livelihoods* 16, 18.

³⁷⁷ See Mukul et al (n 33) 372; Roy, Alam and Gow (n 109) 50.

³⁷⁸ See Sands, Philippe and Jacqueline Peel, *Principles of international environmental law* (Cambridge University Press, 2012).

³⁷⁹ Both the Stockholm Declaration of 1972 and the Rio Declaration of 1992 recognised the urgent need to safeguard the forest resources among other natural resources by adopting cost-effective measures to reduce environmental damage into the domestic legislation. See also, Jona Razzaque, ‘Access to Environmental Justice: Role of the Judiciary in Bangladesh’ (2000) 4 *Bangladesh Journal of Law* 1, 16.

³⁸⁰ Rosie Cooney, *The precautionary principle in biodiversity conservation and natural resource management: an issues paper for policymakers, researchers, and practitioners* (IUCN, 2004) 11.

³⁸¹ Shawkat Alam and Sheikh Noor Mohammad, ‘The Precautionary Principle in Biodiversity and Natural Resource Management: Institutional and Policy Challenges for a Sustainable Future’ (2018) 48 (3-4) *Environmental Policy and Law* 187, 188.

³⁸² The *Forest Act 1927* s 66.

³⁸³ *Ibid* s 52(1).

³⁸⁴ *Ibid* s 64(1).

³⁸⁵ *Ibid* s 79.

Act empowers the government to formulate rules to prohibit, restrict, or require authorisation for land clearing, pesticides use, and harvesting on steep slopes that may pose a threat to the property, or the productivity of the land.³⁸⁶ The government is also entitled to adopt rules for regulating the transit of timber or other produce and to prohibit the obstruction of rivers due to the movement of timber or other forest produce.³⁸⁷

Although the Forest Act refrains from explicitly mentioning the precautionary principle, it does empower the government to make relevant rules for adopting precautionary measures in forest governance. The Act does not incorporate any provision regarding risk assessment, risk management, and risk monitoring which are the fundamental elements of the precautionary principle.³⁸⁸ The significant impacts of climate change (harm to the ecosystem and human health) cannot be analysed well without aligning the components of the precautionary principle into the forestry legislation and practices. Considerable advancement has been made in recent legislations, such as the *Bangladesh Wildlife (Conservation and Security) Act 2012* and the *Bangladesh Biological Diversity Act 2017*, by incorporating some rules of precaution to maintain a balance between environmental protection and economic development.³⁸⁹ Although the Forest Act incorporated some precautionary measures for protecting forest resources during its enactment in 1927, there has not been any significant change in this regard.

3.2.4 Power of forest officer in forest protection

The forest law in Bangladesh is regulatory and punitive, aiming to prevent and punish the abuse of public forests.³⁹⁰ The Forest Act has been the primary tool in forest officers' hands to regulate the behaviour of people towards forests. The Act provides the notion that forest officers are required not only for improving the conditions of forests but also to act as police for the protection of forests.³⁹¹ Therefore, forest officers have been given ample power under the Act to handle forest offences. All offences under this Act are cognizable. Therefore, any forest officer or police officer (in some instances), has the authority to arrest any person who they have reasonable suspicion of or concern about being involved in any forest offence, without a warrant or orders

³⁸⁶ Ibid s 38C.

³⁸⁷ Ibid s 41(1).

³⁸⁸ See Alam and Mohammad (n 381) 189-90.

³⁸⁹ Ibid 193-94.

³⁹⁰ Md Abdur Rahman and Abdul Mannan, 'Challenge of Forest Law Enforcement in Bangladesh with Special Reference to Proposed Inani National Park' (Proceedings of the First Bangladesh Forestry Congress, 2011).

³⁹¹ Hasan (n 334) 21.

from a magistrate.³⁹² Every officer arresting people under this Act is also empowered to release them on bond with a condition to appear, if necessary, before the magistrate who has jurisdiction to try the case, or the police officer in charge of the nearest police station.³⁹³ There are provisions for the seizure of instruments used in committing the prohibited acts.³⁹⁴ The Act empowers all forest personnel from the rank of forest rangers and above to compound offences by accepting money (not fixed by law) as compensation for offences and releasing properties seized as liable to confiscation on payment of the value thereof.³⁹⁵ Under this provision, the offenders are entitled to get the offence compounded at the discretion of the forest officer. This provision also encourages officials to bypass the lengthy and laborious prosecution process favouring a more relaxed and quicker method of departmental composition.³⁹⁶ Besides, the government can invest forest officers with several other powers. These include³⁹⁷ the power of entry on any land to survey, demarcate, and make a map; capability to issue a search warrant; power to conduct an inquiry into forest offences and to receive and record evidence during the inquiry process; and, finally, the power of a civil court for compelling the attendance of witnesses and for presenting documents and other material objects.

It appears that enough opportunity is guaranteed to forest officers under the Forest Act to exercise discretion in protecting forest resources. However, the Forest Department lacks sufficient institutional and logistic facilities to protect the forest resources by exercising legal power and discretion.³⁹⁸ The department is now entrusted with multifaceted forest-governance duties relating to forest protection and exploitation, afforestation, and forest extension, planning, and training. The existing departmental infrastructure, vehicles, and equipment for monitoring and tracking illegal logging is also not adequately maintained.³⁹⁹ The Act also lacks some fundamental issues regarding jurisdictions, duties, accountabilities, and liabilities of the enforcing agencies. Basically, the Act lacks any specific provision related to the Forest Department; hence, it has been managing the forest resources without any distinct responsibilities under the Act.⁴⁰⁰

³⁹² The *Forest Act 1927* s 64.

³⁹³ *Ibid* s 65.

³⁹⁴ *Ibid* s 52 (1).

³⁹⁵ *Ibid* s 68.

³⁹⁶ Leelakrishnan, Chandrasekharan and Pillai (n 349) 264.

³⁹⁷ The *Forest Act 1927* s 72.

³⁹⁸ See Junaid K Choudhury and Md Abdullah Abraham Hossain, 'Bangladesh Forestry Outlook Study' (Working Paper No. APFSOS II/ WP/ 2011/ 33, Asia-Pacific Forestry Sector Outlook Study II, working paper series, FAO Regional Office for Asia and the Pacific, Bangkok, 2011) 20-21; Syed (n 10).

³⁹⁹ Salam, Noguchi, and Koike (n 28) 547.

⁴⁰⁰ See Preetha (n 35).

3.2.5 Prosecution of forest offences

To protect and conserve the forest resources certain prohibited activities in forests are treated as forest offences.⁴⁰¹ The Forest Court, presided over by a Judicial Magistrate of First Class, tries these offences under the Forest Act.⁴⁰² Every charge brought against the offender under the Act necessitates two primary considerations:⁴⁰³

- a) that an offence has been committed by a person
- b) that the accused person is guilty of such an offence.

The case needs to be proved beyond reasonable doubt. One of the problems with the prosecution is that the offender cannot be detected in many cases because, due to the low probability of other people being in the forest to witness an offence, by the time the concerned forest officers reach the spot, the offender is gone without being identified.⁴⁰⁴ Another provision under the Forest Act is to compound the offences during the pre-trial stage, which in some instances undermines the initiatives of the forest officials to prosecute the offenders for their prohibited acts.⁴⁰⁵ Under this provision of the Act, a person engaged in illegal felling of trees can go scot-free only after paying the value of timber in addition to a compounding fee. Moreover, the *Forest Amendment Act 1990* greatly increased the degree of punishment in most cases.⁴⁰⁶

To avoid this harsh and unusual punishment system, the offenders may be interested in compounding offences rather than defending themselves in the trial stage. It has also provided more opportunities for malpractice, as the severing of punishment has changed different actors' position on under-dealing. Further, the *Forest Amendment Act 1990* not only provides for an unusually high degree of maximum punishment but also exceeds the penalty for the same offenses as provided under the rule (particularly the *Chittagong Hill Tract Transit Rules 1973*) issued under the Forest Act itself.⁴⁰⁷ Section 42 of the Act prescribes an imprisonment for a term that may extend from two months to three years for illegal cutting and smuggling of wood. The accused person is also liable to be fined, from BDT 2000 to BDT 10,000, for breaching the rules

⁴⁰¹ The *Forest Act 1927* ss 26, 32, 33, 63,70.

⁴⁰² *Ibid* s 67A.

⁴⁰³ Farooque (n 35) 95.

⁴⁰⁴ See Rahman and Mannan (n 390).

⁴⁰⁵ The *Forest Act 1927* s 68. See also Leelakrishnan, Chandrasekharan and Pillai (n 349) 264.

⁴⁰⁶ See the Act VIII of 1990.

⁴⁰⁷ MS Siddique, 'Contradiction in Law and Rule facilitates illegal sale of wood' *The Daily Star* (29 September 2020) < <https://www.thedailystar.net/law-our-rights/news/contradiction-law-and-rule-facilitates-illegal-sale-wood-1969405>>, accessed 12 November 2020.

made under section 41 of the same Act. However, the Rule of 1973 later reduced the jail term to six months and the penalty to BDT500 for illegal cutting and smuggling of wood. This contradiction between the Act and the rule, framed under the Act as advantageous to the offenders in the trial stage, facilitates the illegal sale of wood and illegal earnings in the long term.⁴⁰⁸

3.3 RESTORATION APPROACH AND SUSTAINABLE FOREST GOVERNANCE

Initially, the focus of forest governance was the protection of forest resources under the legal regime.⁴⁰⁹ However, forest lands have already been disappearing at an alarming rate across the world,⁴¹⁰ such as in Asia.⁴¹¹ Therefore, protection of forest resources is not only a challenge for now but also for the future. In the current situation, scientists, decision-makers, and the interested public have recognised the urgent need to restore forest ecosystems, which have suffered from decades of intensive logging, extensive road and architecture building, fire suppression, uncontrolled livestock grazing, reckless mining, and continuous invasions by foreign species and other destructive activities.⁴¹² The restoration approach offers a solution to deforestation and forest degradation problems.⁴¹³ Evidence has shown that the restoration approach is a vital tool to offset and, more importantly, reverse the global as well as national deforestation rates.⁴¹⁴ Restoration of the forest also helps in climate change mitigation and the adaptation process by supporting poor local people and protecting other natural resources, such as water and soil.⁴¹⁵

However, restoration, as a governance strategy is less known and recognised little in most of the environmental laws and policies.⁴¹⁶ Since the current international movement for ecological restoration, this approach has been an essential topic on the agenda of numerous international

⁴⁰⁸ Ibid.

⁴⁰⁹ See Maren and Sharma (n 89) 476.

⁴¹⁰ Michael Pregernig, 'Perceptions, Not Facts: How Forestry Professionals Decide on the Restoration of Degraded Forest Ecosystems' (2002) 45(1) *Journal of Environmental Planning and Management* 25, 25.

⁴¹¹ See Daniel R Richards and Daniel A Friess, 'Rates and drivers of mangrove deforestation in Southeast Asia, 2000–2012' (2016) 113(2) *Proceedings of the National Academy of Sciences* 344; David M Kummer, and BL Turner, 'The human causes of deforestation in Southeast Asia' (1994) 44(5) *Bioscience* 323.

⁴¹² Dominick A DellaSala et al, 'A citizen's call for ecological forest restoration: forest restoration principles and criteria' (2003) 21(1) *Ecological Restoration* 15.

⁴¹³ James Aronson and Sasha Alexander, 'Ecosystem restoration is now a global priority: time to roll up our sleeves' (2013) 21(3) *Restoration Ecology* 293, 293; See also, Manuel R Guariguata and Pedro HS Brancalion, 'Current Challenges and Perspectives for Governing Forest Restoration' (2014) 5 *Forests* 3022, 3022.

⁴¹⁴ H Eden W Cottee-Jones et al, 'The importance of Ficus (Moraceae) trees for tropical forest restoration' (2016) 48(3) *Biotropica* 413, 413.

⁴¹⁵ Mansourian (n 61) 267.

⁴¹⁶ Afshin Akhtar-Khavari and Benjamin J Richardson, 'Ecological restoration and the law: recovering nature's past for the future' (2017) 26(2) *Griffith Law Review* 147, 148.

fora over the last decade that addresses ‘climate, biodiversity, and sustainable development’.⁴¹⁷ The Conference of the Parties to the Convention on Biological Diversity in 2010 included two proposals, that is, Aichi Targets 14 and 15 intending to restore degraded forests on a global scale.⁴¹⁸ Other prominent mechanisms, such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation) nurtured under the United Nations Framework Convention on Climate Change (UNFCCC), are also encouraging national and international large-scale restoration efforts.⁴¹⁹ It has been found that the demand to launch ‘large-scale forest restoration’ should be initiated by several governing factors, such as traditional structures/customs promoting restorations, new land-use policies, and, to fulfil the requirements under international conventions—treaties and agreements.⁴²⁰ The Sustainable Development Goal 15 is an excellent example of a global political commitment that assists in initiating the restoration of degraded forests and increases afforestation and reforestation, which is essential for sustainable development. Target 15.1 aims to ensure the conservation and restoration of forests and their services by 2020, to fulfil the obligations under international agreements. This gives the impression that the international community has emphasised the restoration of the services that the natural resources can provide instead of restoration of ecosystems.⁴²¹ Evidence can be found in Target 15.2 that refers to restoring ‘degraded forests’.

Restoring degraded lands in forests is a multidisciplinary, multistage, and multi-sectorial function for good governance by consideration of stakeholders’ rights and duties and the mediation of their differences, thereby promoting restorative aims and the maintenance of forest resources.⁴²² Dudley et al mentioned the importance of moving beyond tree planting and restoring to a forest ecosystem objective, while considering biological and socio-economic issues and implementing the views of different stakeholders.⁴²³ This may be significant for restoration programs in the developing countries. Consequently, many developing countries in the world including Bangladesh undertook ‘community-based natural resources management’ in restoration

⁴¹⁷ See Anastasia Telesetsky, An Cliquet and Afshin Akhtar-Khavari, *Ecological restoration in international environmental law* (Routledge, 2016).

⁴¹⁸ James Aronson and Sasha Alexander, ‘Steering towards sustainability requires more ecological restoration’ (2013)11(2) *Natureza & Conservação* 127, 127.

⁴¹⁹ Alexander et al, ‘Opportunities and challenges for ecological restoration within REDD+’ (2011) 19(6) *Restoration Ecology* 683-689.

⁴²⁰ Mansourian (n 61) 272.

⁴²¹ Akhtar-Khavari and Telesetsky (n 93) 74.

⁴²² See Guariguata and Brancalion (n 413) 3022.

⁴²³ See Stephanie Mansourian and Daniel Vallauri (eds), *Forest restoration in landscapes: beyond planting trees* (Springer Science & Business Media, 2005).

programs.⁴²⁴ The restoration approach in sustainable forest governance may involve the issues as shown in the figure below:

Figure 3 : Restoration approach in sustainable forest governance



3.3.1 Restoration of forests through afforestation in Bangladesh

SDG 15 sets a target for state parties to restore degraded forests and to increase afforestation and reforestation.⁴²⁵ Several extensive and large-scale methods may be used to restore forests, including reforestation, afforestation, commercial plantations, large-scale sapling replanting, regeneration, and passive succession.⁴²⁶ Payment for environmental services is also considered to be a vital forest restoration initiative to ensure sustainable forest governance.⁴²⁷ One of the objectives of the Reed Land Integrated Social Forestry Project in Bangladesh was to ensure

⁴²⁴ MS Iftekhar and T Takama, ‘Perceptions of biodiversity, environmental services, and conservation of planted mangroves: a case study on Nijhum Dwip Island, Bangladesh’ (2008) 16(2) *Wetlands Ecology and Management* 119,120.

⁴²⁵ See (n 79).

⁴²⁶ See David Lamb, *Large-scale forest restoration* (Routledge, 2014); Kripal Singh et al, ‘Ecological restoration of degraded sodic lands through afforestation and cropping’ (2012) 43 *Ecological Engineering* 70; Rakan A Zahawi et al, ‘Testing applied nucleation as a strategy to facilitate tropical forest recovery’ (2013) 50(1) *Journal of Applied Ecology* 89.

⁴²⁷ Jona Razzaque, ‘Payments for Ecosystem Services in Sustainable Mangrove Forest Management in Bangladesh’ (2017) 6 (2) *Transnational Environmental Law* 309, 320.

restoring the biodiversity of the reed lands by systematic afforestation.⁴²⁸ Similarly, one of the eight foundations to restore degraded tropical hill forests is ‘reforestation through nursery and seed bank’.⁴²⁹

The *Forest Act 1927* authorises social forestry programs for afforestation, conservation or management of forests in section 28A.⁴³⁰ The Act confers power on the government under section 3 to reserve any land suitable for afforestation.⁴³¹ The afforestation program can be implemented on newly accreted lands.⁴³² Afforestation activities in these areas can be undertaken on a large scale by government and private agencies.⁴³³ Therefore, the government can undertake a participatory approach in afforestation. It will ensure local people’s participation and the non-state actors’ contribution such as NGOs in afforestation in the state-owned marginal lands, including roadsides, railway tracksides, and embankments.⁴³⁴

Women should be encouraged for increased participation in ‘homestead reforestation, rural tree farming, and participatory forestry’.⁴³⁵ People will also be encouraged to plant within the premises of public institutions and may even be provided with technical and other assistance.⁴³⁶ The government could further adopt special afforestation programs to control pollution in the cities. The municipalities and autonomous bodies are required to implement the programs through zoning and allotting lands for planting trees.⁴³⁷ Massive awareness building about afforestation, protection and use of forest resources and forest products will be undertaken both in governmental and private media.⁴³⁸

Afforestation through social forestry

The government may undertake afforestation activities through social forestry. With several amendments in 2000, the Forest Act included provisions for social forestry by involving the public in afforestation, conservation, and management of the forest. Under section 28A of the

⁴²⁸ See Mohammed Kamal Hossain, M Khairul Alam, and Md Danesh Miah, ‘Forest restoration and rehabilitation in Bangladesh’ (2008) 3 *Keep Asia Green* 21, 46.

⁴²⁹ Ainun Nishat and Shekhar R Biswas, ‘Community-Based Restoration of Degraded Tropical Hill Forests: Experiences from Krykhong Para, Chittagong Hill Tracts, Bangladesh’ (2005) 16 *Bulletin of the National Institute of Ecology* 1, 1.

⁴³⁰ The *Forest Act 1927* s 28A.

⁴³¹ For details see *ibid* s 3.

⁴³² *National Forest Policy 1994* cl 2.

⁴³³ *Ibid* cl 7.

⁴³⁴ *Ibid* cl 5.

⁴³⁵ *Ibid* cl 22.

⁴³⁶ *Ibid* cl 4.

⁴³⁷ *Ibid* cl 6.

⁴³⁸ *Ibid* cl 24.

Act, a social forestry program can be established on any government land or private land for the purposes of ‘afforestation, conservation or management’ through social forestry and the government can also allow social forestry for the ‘persons assisting the Government in management of the land’.⁴³⁹ The *Social Forestry Rules of 2004* (lastly amended in 2011) acknowledges this provision of the Act, and makes provision for participation by the local communities in afforestation programs in government-owned forest lands or lands assigned to the government for that purpose by written agreement. Involving the local communities in afforestation activities and sustainable management processes helps to restore the degraded forests.⁴⁴⁰

In Bangladesh, social forestry programs have resulted in a better life for the participants in the communities.⁴⁴¹ However, several projects have faced criticisms regarding a top-down policy approach and failure to incorporate the appropriate legal framework.⁴⁴² In conducting the social forestry program, the user groups’ members are responsible for tree plantations, their protection, and the management of forests.⁴⁴³ However, the Forest Department takes all major decisions, including afforestation and the harvesting and sale of forest products.⁴⁴⁴ Local people have limited usufruct rights to forests as an incentive. Nevertheless, the primary authority of management is vested in the department. Thus, the devolution of authority towards forest-user groups is minimal compared with that of the department.⁴⁴⁵ The ratio of benefit sharing among members of the user groups is also not praiseworthy under the *Social forestry Rules 2004*.⁴⁴⁶ Getting a lower share in net income may make the local communities not interested in afforestation initiatives through social forestry. These programs are also only conducted for a short period under the *Social Forestry Rules 2004*.⁴⁴⁷

⁴³⁹ See the *Forest Act 1927* s 28A.

⁴⁴⁰ S Bhusan, ‘Forest Restoration through Afforestation and Management Process by Social Participation: A Case Study of India’ (2016) 10(4) *Journal of Environmental Research and Development* 780,780.

⁴⁴¹ Jashimuddin and Inoue (n 35) 133.

⁴⁴² See Golam Rasul, Gopal B Thapa and Madhav B Karki, ‘Comparative Analysis of Evolution of Participatory Forest Management Institutions in South Asia’ (2011) 24(12) *Society & Natural Resources* 1322; Sabir Bin Muzaffar et al, ‘The Endangered Forests of Bangladesh: Why the Process of Implementation of the Convention on Biological Diversity is not working’ (2011) 20 *Biodiversity Conservation* 1587, 1592; Muhammed, Koike, and Haque (n 33) 201.

⁴⁴³ The *Social Forestry Rules 2004* r 18.

⁴⁴⁴ *Ibid* r 16.

⁴⁴⁵ Rasul, Thapa and Karki (n 442) 1326.

⁴⁴⁶ The *Social Forestry Rules 2004* r 20.

⁴⁴⁷ *Ibid* r 5.

To summarise, the scope for restoration measures through afforestation programs is present, however, limited, under the current legal framework.⁴⁴⁸ However, in India, several other legal procedures have been formulated for restorative governance—including afforestation, and reforestation—instead of relying completely on the 1927 Forest Act.⁴⁴⁹ The *Compensatory Afforestation Fund Act 2016* of India was made to establish funds and arrange monies for making several kinds of compensatory afforestation and to create authorities for administration of such funds and use of such monies “for undertaking artificial regeneration (plantations), assisted natural regeneration, protection of forests, forest related infrastructure development, Green India Programme, wildlife protection” and other associated activities and matters.⁴⁵⁰ The Act was passed to establish a permanent institutional mechanism for the transparent utilisation of funds gathered with the previous ad hoc Authority to carry out compensatory afforestation instead of diverting to other activities.⁴⁵¹ However, the preamble of the Act is beyond compensatory afforestation.⁴⁵² The Act has also approved a list of activities that can be carried out from the compensatory afforestation fund. Artificial regeneration (plantations) and assisted natural regeneration, forest resources' protection, infrastructure development, wildlife protection, and developing an independent continuous monitoring and evaluation are included in that list.⁴⁵³ Such development of laws for restoring forest resources is largely absent in Bangladesh. However, the HCD of Bangladesh, has provided the order of restoration in *BELA v Bangladesh case*⁴⁵⁴ to ensure remedy for damages resulting from the infringement use of the Forest Act and other laws that have bearing on forest governance. In this case, the respondents were directed to allow the owners of the brickfields and sawmills (situated within the prohibited area of the reserved forest) one month to remove their entire establishments. The direction can lead to restoring the occupied land to their original state. That order was provided to fulfill all the requirements of Section 4(5) of the *Brick Burning (Control) Act 1989* and under the Rule 8(1) of the *Sawmill (License) Rules 1998* developed as per section 41 of the *Forest Act 1927*.

⁴⁴⁸ Hossain, Alam, and Miah (n 428) 56.

⁴⁴⁹ NH Ravindranath, Rajiv Kumar Chaturvedi and Indu K Murthy, ‘Forest conservation, afforestation and reforestation in India: Implications for forest carbon stocks’ (2008) 95(2) *Current Science* 216, 219.

⁴⁵⁰ See the *Compensatory Afforestation Fund Act 2016* preamble. See also Madhury Parikh, ‘The evolution of the compensatory afforestation fund act: a critique’ (2018) 48(3/4) *Environmental Policy and Law* 216, 217.

⁴⁵¹ Bharat H Desai and Balraj K Sidhu, ‘Mapping Forest Governance: Reflections on Policy, Law and Institutional Framework’ (2017) 47 *Environmental Policy and Law* 34, 40.

⁴⁵² K B Saxena, ‘Compensatory afforestation fund act and rules: Deforestation, tribal displacement and an Alibi for legalised land grabbing’ (2019) 49(1) *Social Change* 23, 25.

⁴⁵³ Ibid 25-26. See also the *Compensatory Afforestation Fund Act 2016* preamble.

⁴⁵⁴ *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 213.

3.4 SUSTAINABLE USE OF FORESTS IN FOREST GOVERNANCE

The term 'sustainable use' has been one of the most ambiguous terms used in the conservation movement.⁴⁵⁵ However, it is useful to think about it as one aspect of sustainable development that has three main components: environmental, social, and financial sustainability.⁴⁵⁶ Like sustainable development, the concept of sustainable use is increasingly regarded as the desired goal in the governance of natural resources, including forests.⁴⁵⁷ Evidence has shown that 'sustainable use of forest' is an approach that plays an essential role in preventing desertification and biodiversity loss, reversing land degradation and conserving, and restoring terrestrial ecosystems, including forests.⁴⁵⁸ Consequently, sustainable use appears in the overall chapeau in the SDG 15.

The protection and development of forests are crucial to the existence of humans. From the ecological viewpoint, some areas of forests need to maintain their original natural condition. The government (in the name of scientific policy) and the forest dwellers (in the name of basic needs) should abstain from the practice of tree cutting and felling from such areas. For both parties, keeping the ecological balance is crucial for existence. However, commercial, and industrial demands for forest goods are increasing daily, and forest legislation cannot ignore such demands. The commercial value of forest resources is integral to the nation's economic development, which is also the cause of environmental degradation in the developing world.⁴⁵⁹ Therefore, the objectives of forestry legislation should be (a) protection of forests and maintaining ecological balance; (b) meeting the livelihood of the forest dwellers; and (c) the economic consideration of the country, such as revenue earning and supplying industrial raw materials.⁴⁶⁰ Before going into discussion about the approach of sustainable use of forests, I would like to demonstrate the concepts relating to the approach in the following figure:

⁴⁵⁵ MD Madhusudan and TR Shankar Raman, 'Conservation as if Biological Diversity Matters: Preservation versus Sustainable Use in India' (2003) 1(1) *Conservation and Society* 49, 52.

⁴⁵⁶ EJ Milner-Gulland and J Marcus Rowcliffe, *Conservation, and sustainable use: a handbook of techniques* (Oxford University Press, 2007) 4.

⁴⁵⁷ Becky J Brown et al, 'Global Sustainability: Toward Definition' (1987) 11(6) *Environmental Management* 713,713.

⁴⁵⁸ Latha Swamy et al, 'The future of tropical forests under the United Nations Sustainable Development Goals' (2018) 37(2) *Journal of Sustainable Forestry* 221, 237.

⁴⁵⁹ Ripon Bhattacharjee, 'Sustainable Timber Trade: Mechanism under Indian Forest Act, 1927' (2013) 4 (1) *Indian Journal of Law and Justice* 1, 1. see also, Robert Repetto and M Gillis (eds), *Public Policies and Misuse of Forest Resources* (Cambridge University Press, 1989) 1-2.

⁴⁶⁰ Sharad Kulkarni, 'Towards a Social Forest Policy' (1983) 18(6) *Economic and Political Weekly* 191, 194.

Figure 4 : The approach of sustainable use of forests in forest governance



3.4.1 The Forest Act and the consideration of ecological sustainability, economic interest, and social wellbeing in use of forest

In Bangladesh, the forest legislation is directed to address the over-consumption (for fuel wood or timber) and the exploitation of forests (because of illegal logging and land grabbing).⁴⁶¹ Therefore, the first step taken under the Forest Act is to regulate the use of forest resources by the forest-dependent people in the reserved forests, protected forests, and village forests. Reserved forests are the most commercially valuable and vulnerable to sustained exploitation. Therefore, certain activities have been declared forbidden in those areas as a punishable offence.⁴⁶² Occasionally, minimal access to these forests is granted.⁴⁶³ The forest officer keeps a record of the number of cattle entitled to graze and the quantity of timber and other forest products the claimants are entitled to take or receive.⁴⁶⁴ How much timber and other forest products are

⁴⁶¹ Mohammed M Rahman, M Motiur Rahman and Kazi S Islam, 'The causes of deterioration of Sundarban mangrove forest ecosystem of Bangladesh: conservation and sustainable management issues' (2010) 3(2) *Aquaculture, Aquarium, Conservation & Legislation* 77, 77. See also, Choudhury and Hossain (n 398).

⁴⁶² *The Forest Act 1927* s 26.

⁴⁶³ *Ibid* s 12.

⁴⁶⁴ *Ibid* s 14.

allowed to be sold or bartered are enlisted under section 14 of the Act.⁴⁶⁵ Moreover, the Act has included provisions for forest resources utilisation in a sustainable manner. Section 5 of the Act mentions that ‘no fresh clearings for cultivation or any other purpose’ are allowed in the reserved forest except clearing that follows the rules made by the government. These actions have been taken to preserve and maintain the reserved forests under the Act.⁴⁶⁶ Accordingly, in protected forests, the use of resources by residents is also controlled under the Act.⁴⁶⁷ The Act also designates some forests as village forests,⁴⁶⁸ to meet the needs of people residing in villages. This action has been aimed at keeping villagers away from commercially valuable reserved and protected forests. The Act was enacted to regulate the transit of forest produce and to control the duty imposable on timber and other forest products. Therefore, it incorporates the provisions in chapters VI and VII that deal with levying of the duty on timber, and other forest resources and control of the movement of timber and other forest produce in transit.⁴⁶⁹ Chapter VIII of the Act deals with the stranded timber and the collection of drift.⁴⁷⁰

However, a scrutiny of these provisions of the Forest Act shows that though there are several rules and regulations relating to timber transit and allied matters, the mechanism of sustainable timber trade under the Act is not sufficiently addressed.⁴⁷¹ The Act gives the government the absolute power of declaring by a notification that any forest or any part of it ceases to be a reserved forest.⁴⁷² The government is also empowered under the Act to make rules for using the forest lands for economic development.⁴⁷³ Any development project likely to affect the ecosystem needs to be permitted after environmental impact assessment by the Department of Environment.⁴⁷⁴ The Bangladesh Government initiated a commercial shrimp farming project to improve the national economy and, indeed, this goal was accomplished. However, the stepping up of shrimp farming posed harmful threats to the forest ecosystem; the entire Chakaria Mangrove was lost because of this activity.⁴⁷⁵ Although Bangladesh has been facing a rapid depletion of its forests, predominantly due to illegal logging and the change to non-forestry uses,

⁴⁶⁵ Ibid s 24(2).

⁴⁶⁶ Ibid ss 15, 22.

⁴⁶⁷ Ibid ss 30, 32, 33.

⁴⁶⁸ Ibid s 28.

⁴⁶⁹ Ibid ss 39-44.

⁴⁷⁰ Ibid ss 45-51.

⁴⁷¹ Bhattacharjee (n 459) 12.

⁴⁷² The *Forest Act 1927* s 27.

⁴⁷³ For details see ibid ss 32(a), 32(g).

⁴⁷⁴ See The *Environment Conservation Act 1995* s 12.

⁴⁷⁵ Asif Ishtiaque and Netra Chhetri, ‘Competing policies to protect mangrove forest: A case from Bangladesh’ (2016) 19 *Environmental Development* 75, 78.

the Act provides insufficient legal means to prevent or control those activities.⁴⁷⁶ In neighbouring India, the *Forest (Conservation) Act 1980* was passed to restrict the use of forest land for non-forest purposes and to prevent the de-reservation of forests that were reserved under the Act of 1927.⁴⁷⁷ An amendment was also made to the *Forest (Conservation) Act* in 1988, which brought in provisions to restrain clear felling of trees and to restrict the lease of forest lands to the private persons and industries, to strengthen the forest conservation efforts.⁴⁷⁸

The conservative approach under the Forest Act has some positive implications for forest protection; however, it does not address the concerns of forest dwellers, particularly their customary rights.⁴⁷⁹ The Act, to a limited extent, acknowledges the usage rights of the forest dwellers;⁴⁸⁰ however, the government has the discretion to grant these rights and to initiate contract conferring rights over forests.⁴⁸¹ Besides, there are no environmental criteria provided under the law that might guide and structure the discretion of the government in granting these rights. The Act also lacks adequate provisions to practice those rights sustainably.⁴⁸² By the amendment passed in 2000, the Act included provision in the social forestry program for public participation in its implementation. This process, therefore, has been proved successful in introducing social forestry in Bangladesh.⁴⁸³ Nevertheless, in practice, local people are not given sufficient opportunity to be effectively engaged in the forest governing process.⁴⁸⁴ Evidence has shown that to achieve sustainable forest governance in a country, government agencies need to avoid exclusionary approaches and work in coordination with the local communities—regarding resource extraction, use, and policymaking⁴⁸⁵—because the top-down approach is not practical for forest conservation.⁴⁸⁶

⁴⁷⁶ Iftekhar and Hoque (n 28) 95.

⁴⁷⁷ VRS Rawat and J. Kishwan, 'Forest conservation-based, climate change-mitigation approach for India' (2008) 10(2) *International Forestry Review* 269, 270.

⁴⁷⁸ Parikh (n 129) 56.

⁴⁷⁹ Roy (n 359) 158.

⁴⁸⁰ The *Forest Act 1927* ss 5, 9, 10, 12, 30, 32.

⁴⁸¹ *Ibid* s 23.

⁴⁸² Iftekhar and Islam (n 7) 131.

⁴⁸³ Nur Muhammed et al, 'Reckoning social forestry in Bangladesh: policy and plan versus implementation' (2005) 78(4) *Forestry* 373, 377.

⁴⁸⁴ See Nath, Jashimuddin and Inoue (n 35) 8; Rasul, Thapa and Karki (n 442) 1322; Zaman et al (n 51) 233; Saber Ahmed Chowdhury, 'Participation in Forestry: The Role of Bureaucrats in Ensuring Peoples Participation in the Social Forestry Policy of Bangladesh' (2005) 27(2) *Asian Affairs* 75, 77.

⁴⁸⁵ Anjan Kumar Dev Roy and Jeff Gow, 'Attitudes towards Current and Alternative Management of the Sundarbans Mangrove Forest, Bangladesh to Achieve Sustainability' (2015) 58(2) *Journal of Environmental Planning and Management* 213, 226.

⁴⁸⁶ Nath, Jashimuddin and Inoue (n 35) vii.

On the other hand, forest resource overuse depends on the forest dwellers' dependence on forest products for their livelihood. Inadequate resources and opportunities for the local communities may potentiate the over-reliance on forests, which can result in overuse.⁴⁸⁷ Goal 15, therefore, refers to sustainable livelihoods for local communities so that the poor forest-dependent people may avoid relying on forest resources for income.⁴⁸⁸ The major source of the forest dwellers, particularly tribal communities' livelihood, comes from the collection and sale of forest produce, such as leaves, roots, wild fruits. However, forest dwellers' reliance on these non-timber forest products (NTFPs) is practically ignored, and no provisions clearly address this issue under the Forest Act.⁴⁸⁹ Even the definition of forest produce has come from a financial perspective because, in the Act, it refers to only the forest products and plants that have economic value.⁴⁹⁰ However, researchers have identified that the sustainable extraction of non-wood forest products is the most economically competitive and readily available method of income generation for forest-dependent people and forest conservation.⁴⁹¹ The plantation and protection of only timber-producing and commercial trees in the natural forests cannot result in the ecological, social, and economic imperatives relating to the use of forests.⁴⁹²

3.4.2 Intergenerational equity principle in the Forest Act

The concept of 'sustainable use of forests' is closely associated with the principle of intergenerational equity.⁴⁹³ Several international and regional instruments have examined and adopted the inter-generational equity principle.⁴⁹⁴ The principle provides each generation the right to experience the planet in a condition that is not worse than the previous generation. From that perspective, the present generation also bears environmental and resource-conservation obligations.⁴⁹⁵ This implies that people must use natural resources such a way that secures the

⁴⁸⁷ Shawkat Alam and Md Saiful Karim, 'Linkages of Development and Environment: In Search of an Integrated Approach through Sustainable Development' (2011) 23 (3) *Georgetown International Environmental Law Review* 345, 345.

⁴⁸⁸ Joyeeta Gupta and Courtney Vegelin, 'Sustainable development goals and inclusive development' (2016) 16(3) *International Environmental Agreements: Politics, Law, and Economics* 433, 441.

⁴⁸⁹ Kulkarni (n 460) 195.

⁴⁹⁰ The *Forest Act 1927* s 2(4).

⁴⁹¹ Ajay Mahapatra and C Paul Mitchell, 'Sustainable development of non-timber forest products: implication for forest management in India' (1997) 94 (1-3) *Forest Ecology and Management* 15, 16.

⁴⁹² See Videh Upadhyay, 'Forests, People and Courts: Utilising Legal Space' (2001) 36(24) *Economic and Political Weekly* 2131-2133.

⁴⁹³ The principle of sustainable development is connected to some other concepts which are inter-related, such as, sustainable use of natural resources, intergenerational and intra-generational equity, principle of integration, and biological diversity. See also, Razzaque (n 379) 11.

⁴⁹⁴ *Ibid* 13.

⁴⁹⁵ Edith Brown Weiss, 'Our rights and obligations to future generations for the environment' (1990) 84(1) *American Journal of International Law* 198, 200. See also, Evan Hamman, Reece Walters, and Rowena Maguire,

preservation of resources for the betterment of present and future generations. Like other environmental resources, forests should not be regarded as the fruits of the labour of the present generation; these resources can be utilised only with appropriate consideration of the rights of future generations.⁴⁹⁶

At the time of its adoption, the Bangladesh Constitution had no formal provision about the rights and duties of the state or its citizens regarding forest resources. As discussed in chapter 2, it was amended in 2011 to include a ‘fundamental principle of state policy’ contained in the Article 18A.⁴⁹⁷ The principle mentions that the state shall ensure the protection and development of the environment and preserve the natural resources, forests, wetlands, biodiversity, and wildlife for the betterment of the present and future citizens.⁴⁹⁸ By incorporating this constitutional principle, the country has unambiguously acknowledged its obligation to abide by the principle of inter-generational equity in protecting the natural resources, including forests. This principle is not judicially enforceable. However, it may be used as a guiding tool in law-making, legal interpretation, and state governance.⁴⁹⁹ For example, this principle was used explicitly in the enactment of the *Wildlife (Conservation and Security) Act 2012* for the conservation and safety of the forest, biodiversity, and wildlife by replacing the existing law of the conservation and management of wildlife.⁵⁰⁰ Nevertheless, the *Forest Act 1927* has not yet been amended to keep it in line with the preservation of the forest resources for the wellbeing of the present and future citizens. However, this principle has been considered by the High Court Division of Bangladesh Supreme Court in the case *BELA v Bangladesh*⁵⁰¹ that deals with coastal forests. In that case, the Court observed that the government could engage mobile courts ‘to monitor and protect the coastal belt from all anti-environment activities, protect ecology and uphold the interests of all the generations to come’.⁵⁰²

‘Environmental Crime and Specialist Courts: The Case for a ‘One-Stop (Judicial) Shop’ in Queensland’ (2015) 27(1) *Current Issues in Criminal Justice* 59, 64.

⁴⁹⁶ Mannindar Monga, ‘Sustainable development A solution to environmental crisis: A review’ (2006) 1(2) *Current World Environment* 195, 195.

⁴⁹⁷ The *Constitution (15th Amendment) Act 2011* s 14.

⁴⁹⁸ The *Constitution of the Peoples’ Republic of Bangladesh* art 18A.

⁴⁹⁹ *Ibid* art 8(2).

⁵⁰⁰ The *Wildlife (Conservation and Security) Act 2012* preamble.

⁵⁰¹ *BELA v Bangladesh* reported in S Rizwana Hasan, *Judicial Decisions on Environment in South Asia (2005-2014)* (BELA, 2016) 54.

⁵⁰² *Ibid*, 61.

3.5 CONCLUSION

Before the Stockholm Declaration in 1972, most laws regarding natural resource management were formulated mainly for higher utilisation of resources with the aim of the utmost revenue generation⁵⁰³; the *Forest Act 1927* was not an exception. A scrutiny of the Act's provision shows that the scientific management of forests can be implemented under it. It cannot be denied that the British rulers introduced the concept of scientific management of forests in the Indian sub-continent, and their management practices were organised around this principle.⁵⁰⁴ However, their primary objective was to use this principle to pursue maximum sustainable yields.⁵⁰⁵ Forest governance in Bangladesh is still fixated more on generating revenues, ignoring the rights of local communities.⁵⁰⁶ In practice, the Act is not held to its main sustainable governance objective: 'Sound ecological, social, and economic governance'. I have discussed the three forest governance approaches underlying SDG 15—the protection, restoration, and sustainable use of forests—to assess the Act's contribution in promoting sustainable forest governance in Bangladesh. In the next chapter, I inquire into the management approach to sustainable forest governance under the Act.

⁵⁰³ Hasan (n 31).

⁵⁰⁴ Benjamin Weil, 'Conservation, exploitation, and cultural change in the Indian forest service, 1875-1927' (2006) 11(2) *Environmental History* 319, 320

⁵⁰⁵ In forestry, maximum sustainable yield can be obtained by maximising annual harvest while ensuring the rate of felling equals to the rate of replacement in each area. It is a euphemism for the industrial exploitation that is in practice, is environmentally destructive, and unsustainable in the long run. Becky J Brown et al, 'Global Sustainability: Toward Definition' (1987) 11(6) *Environmental Management* 713, 714.

⁵⁰⁶ Anjan Kumer Dev Roy and Khorshed Alam, 'Participatory Forest Management for the Sustainable Management of the Sundarbans Mangrove Forest' (2012) 8(5) *American Journal of Environmental Science* 549, 549.

Chapter 4: Management approach in sustainable forest governance

4.1 INTRODUCTION

Diverse benefits of forest resources have been reported in many studies.⁵⁰⁷ In Bangladesh, the forestry sector has a vital role in poverty eradication and sustaining livelihoods, especially for the people heavily dependent on forests.⁵⁰⁸ Diverse governance regimes shape the forestry sector of Bangladesh; however, they are still influenced by the colonial practices and have multiple dimensions.⁵⁰⁹ As the forests are significant for the livelihoods of citizens of developing countries, the global community has pledged to implement programs, agendas, and policies to protect, restore, and manage the natural forest and its resources. However, there is a great concern among practitioners, policymakers, and even general people that the traditional forest management approaches need to be reorganised towards sustainable management.⁵¹⁰ This process demands careful selection of an approach that moves the timber- and revenue-focused management towards being goods and services oriented. Sustainable forest management is now embedded in the concept of modern forestry.⁵¹¹ In line with this, SDG 15 also focuses on sustainable forest management along with the protection, restoration, and sustainable management of terrestrial ecosystems.⁵¹² In South Asia, sustainable forest management strategies have increasingly relied on the participatory approaches to forest management.⁵¹³ Similarly, in Bangladesh, participatory

⁵⁰⁷ See for example, Sayer et al (n 45) 482; Abdullah Al Faruque and Md Saiful Karim, 'Environmental Law of Bangladesh' in Nicholas A Robinson et al (eds), *Comparative Environmental law and Regulation* (Thomson Reuters, 2016) 7A; Baumgartner (n 88) 152; Abrar J Mohammed, Makoto Inoue, and Ganesh Shivakoti 'Moving forward in collaborative forest management: Role of external actors for sustainable Forest socio-ecological systems' (2017) 74 *Forest Policy and Economics* 13, 13; Biswas (n 38) 249.

⁵⁰⁸ Abdus Subhan Mollick et al, 'Evaluation of good governance in a participatory forestry program: A case study in Madhupur Sal forests of Bangladesh' (2018) 95 *Forest Policy and Economics* 123, 123. See also, Mohammad Samaun Safa, 'The effect of participatory forest management on the livelihood and poverty of settlers in a rehabilitation program of degraded forest in Bangladesh' (2004) 3(2) *Small-scale Forest Economics, Management and Policy* 223, 223.

⁵⁰⁹ Muhammed, Koike and Haque (n 33) 209-10. See also, Ali, Kabir and Hoque (n 143) 273.

⁵¹⁰ Nath, Jashimuddin and Inoue (n 35) 2.

⁵¹¹ Maurizio Farhan Ferrari, 'Rediscovering Community Conserved Areas in South-East Asia: People's Initiative to Reverse Biodiversity Loss' (2006) 16(1) *Parks* 43, 43.

⁵¹² Sayer et al (n 45) 482. See also, Reneema Hazarika and Robert Jandl, 'The Nexus between the Austrian Forestry Sector and the Sustainable Development Goals: A Review of the Interlinkages' (2019) 10(3) *Forests* 205, 206.

⁵¹³ Mark Poffenberger (n 97) 8.

forest management is considered an efficient approach for managing forest resources sustainably.⁵¹⁴

In this chapter, I illustrate the basic legal framework, under the *Forest Act 1927*, for participatory forest management as an appropriate and effective governance strategy to contribute to SDG 15. However, for the convenience of discussion, I first explain the global debate about forest management approaches and then the management approach underlying SDG 15. Thereafter, I detail the different forms of the participatory management approach in the Act and their effectiveness in fostering sustainable forest management. In so doing, I show the direction the participatory management approach should take to make it better and more effective in sustainable forest governance in Bangladesh.

4.2 FOREST MANAGEMENT APPROACHES AND GLOBAL DEBATE

Forest management has been subject to competing claims among environmentalists, timber industries, and local people depending on forest produce for their sustenance. To address these management-related challenges in a country, specific attention needs to be provided to the essential factors—such as a management strategy for sustainable forest governance.⁵¹⁵ Therefore, various forest-management models have been introduced in different countries of the world.⁵¹⁶ Some of those have already been recognised globally, including a centralised management approach; a co-management between government agency and forest-dependent communities. In his masterpiece *The Tragedy of the Commons*, published in 1968, Garrett Hardin focused attention on overpopulation leading to massive degradation or over exploitation of resources held in common, for example, parklands, oceans, forests.⁵¹⁷ He accepted theoretically

⁵¹⁴ See Nur Muhammed et al, 'Quantitative assessment of people-oriented forestry in Bangladesh: A case study in the Tangail forest division' (2008) 88(1) *Journal of Environmental Management* 83, 84; Md Abdus Salam and Toshikuni Noguchi, 'On Sustainable Development of Social Forestry in Bangladesh: Experiences from Sal (Shorea robusta) Forests' (2005) 7(2) *Environment, Development and Sustainability* 209, 211; KB Sajjadur Rasheed, 'Participatory forestry as a strategy for reforestation in Bangladesh (1995) 37 (1) *GeoJournal* 39, 39.

⁵¹⁵ Vijai Shanker Singh, Deep Narayan Pandey, and Neha Pandey Prakash, 'What determines the success of joint forest management? Science-based lessons on sustainable governance of forests in India' (2011) 56(1) *Resources, Conservation and Recycling* 126,126.

⁵¹⁶ Moeed Yusuf, 'Legal and Institutional Dynamics of Forest Management in Pakistan' (2009)5(1) *McGill International Journal of Sustainable Development Law and Policy* 45, 49. See also, Nath, Jashimuddin and Inoue (n 35) 18; Kishor Aryal, Hari Krishna Laudari, and HR Ojha, 'To what extent is Nepal's community forestry contributing to the sustainable development goals? An institutional interaction perspective' (2020) 27(1) *International Journal of Sustainable Development & World Ecology* 28, 28.

⁵¹⁷ David Feeny et al, 'The tragedy of the commons: twenty-two years later' (1990) 18(1) *Human Ecology* 1, 2. See also, Garrett Hardin, 'The tragedy of the commons' (1968) 162 *Science* 1243, 1243.

that forest users would not be able to self-organise to manage their resources, so forests, as a common property, should either be under government control or privatised for their proper management.⁵¹⁸ However, it has been revealed that these systems, which usually have excluded local people and ignored traditional forest institutions, have neither taken into account sustainable forest management nor justice concerns for the forest-dependent people.⁵¹⁹ Ostrom, therefore, challenged this conventional theory and argued that rather than government control or privatisation, the best approach would be to involve the users of forest resources in governance.⁵²⁰ Later, research in various disciplines and experiential knowledge has consistently demonstrated that *The Tragedy of the Commons* is not always existent.⁵²¹ Evidence from research in multiple disciplines has further proved that co-management is one of the forest governance approaches that can prevent further deforestation and facilitate forest sustenance.⁵²² Besides, people-oriented forest management has been regularly contributing to the improvement of economic status and social recognition for the rural poor people in developing countries.⁵²³ Therefore, the debate generated by the practitioners has focused on shifting the traditional top-down forest-management practices into an inclusive and participatory approach.⁵²⁴ Such suggestions and practices follow the same notion in the global literature on the subject, which aims to involve communities in forest management activities.⁵²⁵

⁵¹⁸ Garrett Hardin, 'The tragedy of the commons' (2009) 1(3) *Journal of Natural Resources Policy Research* 243, 243. See also, Elinor Ostrom et al, 'Revisiting the commons: local lessons, global challenges' (1999) 284 (5412) *Science* 278, 278.

⁵¹⁹ Md Abdullah Rana, Noguchi Toshikuni and Nur Muhammed, 'Impact of participatory forest management (PFM) on socio-economic development in Bangladesh: a case study in the Madhupur Sal Forest' (2007) 53(1) *Journal of Forest Economics* 46, 46. See also, Jefferson Fox et al, 'Legal frameworks for forest management in Asia: Case studies of community/state relations' (Paper No. 16, Occasional Papers of the Programme on Environment, 1993) ix.

⁵²⁰ Elinor Ostrom, *Governing the commons: The evolution of institutions for collective action* (Cambridge University Press, 1990) 415.

⁵²¹ Elinor Ostrom, 'A general framework for analyzing sustainability of social-ecological systems' (2009) 325 (5939) *Science* 419, 419; See also, Ostrom et al (n 518) 278.

⁵²² For example, see Abu Mustafa Kamal Uddin, 'Forest Management in Bangladesh: A Critical Analysis' (PhD diss., University of Dhaka, 2019) 16 <<http://repository.library.du.ac.bd:8080/handle/123456789/341>>; Sareth Nhem, Young Jin Lee and Sopheap Phin, 'Policy implications for community-managed forestry in Cambodia from experts' assessments and case studies of community forestry practice' (2018) 15 (11) *Journal of Mountain Science* 2531; Jack Baynes et al, 'Key factors which influence the success of community forestry in developing countries' (2015) 35 *Global Environmental Change* 226, 238; Marcus Colchester, 'Sustaining the forests: the community-based approach in south and south-east Asia' (1994) 25(1) *Development and Change* 69, 69; Poffenberger (n 97) 8.

⁵²³ See John EM Arnold, 'Forests and people: 25 years of community forestry' (Food and Agriculture Organization of the United Nations, Rome, 2001).

⁵²⁴ Yusuf (n 516) 47.

⁵²⁵ See Harisharan Luintel et al, 'The effect of the Nepal community forestry program on equity in benefit sharing' (2017) 26(3) *The Journal of Environment & Development* 297, 298; Rishi R, Bastakoti and Conny Davidsen, 'REDD+ and forest tenure security: concerns in Nepal's community forestry' (2014) 21(2) *International Journal of Sustainable Development & World Ecology* 168.

4.3 MANAGEMENT APPROACH IN SDG 15

SDG 15 deals with sustainable management of forests.⁵²⁶ This approach to forest management is significantly influenced by the principles and objectives of sustainable development. Therefore, various countries worldwide have adopted this salient theme in governing forest resources.⁵²⁷ However, sustainable forest management details, such as the definitions and determinants, are still unclear. For some people, the topic is debatable, and results are difficult to quantify and evaluate.⁵²⁸ While in his research paper, Wang described traditional forest management system as a recognised discipline; he, however, mentioned, sustainable forest management was trans disciplinary, less hierarchical, and more socially accountable, reflecting the involvement of a more extensive set of stakeholders than conventional forest management.⁵²⁹ However, Wiersum postulated, in his literature review entitled ‘200 years of sustainability in forestry: Lessons from history’ a broader aspect of sustainable forest management. He mentioned that ‘the original principle of sustained yield’ had been gradually widened to a broader principle of sustainable forest management that also encompassed social values.⁵³⁰ Regarding sustainable forest management, SDG 15 also emphasises the social benefits of forests to local people in addition to the economic and environmental benefits.⁵³¹

After adopting the SDGs, an emerging body of literature has been published on the relationships between the forestry sector and the SDGs.⁵³² Researchers and forestry professionals have been claiming that participatory management regimes offer a stable operational framework and a solid

⁵²⁶ Adams Ndala Baba, Mercy Inikpi Achoba and Edo Oga Ojoko, ‘Sustainable Land Use and Forest Management for Socioeconomic Growth and Development in Nigeria’ (2016) 2(3) *International Journal of Scientific Research in Science, Engineering and Technology* 572, 574.

⁵²⁷ Shashi Kant and R Albert Berry, ‘Sustainability, institutions, and forest management’ in Shashi Kant and R Albert Berry (eds), *Institutions, Sustainability, and Natural Resources* (Springer, 2005) 1. See also, Hiroji Isozaki, ‘Sustainable and participatory forest management: Legal and administrative supporting measures, and final recommendations’ in Makoto Inoue and Hiroji Isozaki (eds), *People and Forest—Policy and Local Reality in Southeast Asia, the Russian Far East, and Japan* (Springer, 2003) 74-75.

⁵²⁸ Wiktor L Adamowicz and Philip J Burton, ‘Sustainability and sustainable forest management’ in Philip J Burton et al (eds), *Towards sustainable management of the boreal forest* (NRC Research Press, 2003) 41.

⁵²⁹ Sen Wang, ‘One hundred faces of sustainable forest management’ (2004) 6(3-4) *Forest Policy and Economics* 205, 205.

⁵³⁰ K Freerk Wiersum, ‘200 years of sustainability in forestry: lessons from history’ (1995) 19 (3) *Environmental Management* 321, 321.

⁵³¹ See, UNGA Resolution A/RES/66/288, Resolution Adopted by the General Assembly on 27 July 2012; ‘The Future We Want’, UN Doc. A/RES/66/288, 11 Sept. 2012, para 246 (Rio+20 Declaration), paras 193-6.

⁵³² See Baumgartner (n 88) 152; Georg Gratzer and William S. Keeton, ‘Mountain forests and sustainable development: The potential for achieving the United Nations’ 2030 Agenda’ (2017) 37(3) *Mountain research and development* 246; Frances Seymour and Jonah Busch, *Why forests? Why now? The science, economics, and politics of tropical forests and climate change* (Brookings Institution Press, 2016) 15; EK Sadanandan Nambiar AO, ‘Forestry for rural development, poverty reduction and climate change mitigation: we can help more with wood’ (2015) 78(2) *Australian Forestry* 55.

institutional arrangement to achieve the SDGs, including the SDG 15.⁵³³ In the literature, the authors strongly argued for forest sustainability and stated that co-management between the government agency and the community is crucial to sustainable forest management.⁵³⁴ Despite the various geo-political and socio-economic contexts and the different types of environmental governance, the participatory management approach has been accepted and increasingly practiced in many developing countries to manage the diverse interests in forests.⁵³⁵ De Jong et al. assessed the role of participatory forestry regarding achieving the SDGs goals. They proposed a positive feedback model between participatory forestry and SDGs. The authors demonstrated that participatory forestry and SDGs would be mutually reinforcing for development.⁵³⁶ Participatory forest management has become an essential thrust in sustainable forest management in many South Asian countries, including Bangladesh, India, and Nepal.⁵³⁷ Therefore, various participatory approaches have emerged and been used in managing forests and their resources in different regions of the world.⁵³⁸ Among those—community forestry, social forestry, collaborative management, community-based forest management, joint forest management and decentralised forest management—are the most notable ones.⁵³⁹ Although public participation is a crucial element of all forms of participatory approaches, most of them lack active community participation, genuine devolution of power, accountability, and transparency. As a means of governance, there is also a lack of effective legal and policy arrangements. Evidence shows that an absence of a legal and policy framework can jeopardise the zest of community participation.⁵⁴⁰

⁵³³ Aryal, Laudari and Ojha (n 516) 29. See also, Tapan Kumar Nath, Mohammed Jashimuddin, and Makoto Inoue, 'Achieving sustainable development goals through participatory forest management: Examples from South-Eastern Bangladesh' (2020) 44(4) *Natural Resources Forum* 353, 353.

⁵³⁴ For example, see Roy, Alam, and Gow (n 109) 46; Charles BL Jumbe, and Arild Angelsen. 'Forest dependence and participation in CPR management: Empirical evidence from forest co-management in Malawi' (2007) 62(3-4) *Ecological Economics* 661; Frank Matose, 'Co-management options for reserved forests in Zimbabwe and beyond: policy implications of forest management strategies' (2006) 8(4) *Forest Policy and Economics* 363; Ryan Plummer and John Fitzgibbon 'Co-management of natural resources: a proposed framework' (2004) 33(6) *Environmental Management* 876.

⁵³⁵ See, Irmeli Mustalahti, 'Sustaining participatory forest management: case study analyses of forestry assistance from Tanzania, Mozambique, Laos and Vietnam' (2009) 8(1) *Small-scale Forestry* 109; Agrawal, Chhatre, and Hardin (n 69) 1460; Jesse C Ribot, Arun Agrawal and Anne M Larson, 'Recentralizing while decentralizing: how national governments reappropriate forest resources' (2006) 34 (11) *World Development* 1864.

⁵³⁶ Jong et al (n 46) 331.

⁵³⁷ See Nath, Jashimuddin and Inoue (n 35) 6; Rasul, Thapa and Karki (n 442) 1322; Rana, Toshikuni and Muhammed (n 519) 46.

⁵³⁸ Salam and Noguchi (n 514) 211.

⁵³⁹ Grazia Borrini-Feyerabend et al, *Sharing Power- A Global Guide to Collaborative Management of Natural Resources* (Routledge, 2013) 65. See also, Christy et al (n 23) 87-88.

⁵⁴⁰ See Agni Klintuni Boedihartono, 'Can community forests be compatible with biodiversity conservation in Indonesia?' (2017) 6(1) *Land* 21; Brian E Robinson, Margaret B Holland, and Lisa Naughton-Treves, 'Does secure land tenure save forests? A meta-analysis of the relationship between land tenure and tropical deforestation' (2014) 29 *Global Environmental Change* 281; Yonariza and Ganesh P Shivakoti, 'Decentralization and Co-Management of Protected Areas in Indonesia' (2008) 57 *Journal of Legal Pluralism* 141; Arun Agrawal and Clark C Gibson,

The sustainable management of forests may involve diverse issues that are shown in the following figure:

Figure 5 : Sustainable management approach in forest governance



4.4 PARTICIPATORY MANAGEMENT APPROACH IN THE FOREST ACT

The participatory management approach can be considered as an umbrella term in governing forest resources.⁵⁴¹ It is connected to the forestry activities involving local communities, government agencies and other stakeholders as active partners under a legal framework to improve the environment (including forests), and the socio-economic condition of the local poor.⁵⁴² The *Forest Act 1927* recognises the possibility of co-management both in public and private forests. The scope of participatory forest management activities involving public agencies (such as the Forest Department) and private individuals (including the forest-dependent people)

‘Enchantment and disenchantment: the role of community in natural resource conservation’ (1999) 27(4) *World Development* 629.

⁵⁴¹ Mary Hobley, *Participatory forestry: the process of change in India and Nepal* (Overseas Development Institute, 1996)

⁵⁴² Nur Muhammed, Farhana Haque and Masao Koike, ‘The role of participatory social forestry in the enhancement of the socio-economic condition of the rural poor: A case study of Dhaka Forest Division in Bangladesh’ (2009) 19(1) *Forests, Trees and Livelihoods* 47, 48.

can be examined from the following three angles: on public land, on the joint property of government and others, on public/private land.

4.4.1 On public land

As noted in chapter 3, the Forest Act deals primarily with the reserved forest and protected forest regimes.⁵⁴³ However, it does not preclude the co-existence of private rights and interests on or over a public forest declared a reserved forest or a protected forest. Before the constitution of reserved forests under section 20 of the Act, granting rights under a written contract was possible after notification had been issued under section 4 of the Act. This is clear from the provision of section 5 of the Act that puts a bar on accrual of new forest rights over land notified, except under a ‘contract in writing made or entered into by or on behalf of the Government or some person in whom such right was vested when the notification was issued’⁵⁴⁴. Therefore, contracts can be entered into to undertake participatory programs, granting necessary tenure and shares in benefits by the government. Once a public forest has been constituted as a reserved forest through a notification under section 20 of the Act, a new right can still be created through a grant or written contract made by the government.⁵⁴⁵ To make the functioning of participatory forestry efficacious, the government may, by notification, exclude areas of reserved forest ‘which shall cease to be so’.⁵⁴⁶

In a protected forest, the government may frame rules to regulate the granting of licences to the inhabitants in the vicinity of the protected forest ‘to take trees, timber or other forest-produce for their own use’⁵⁴⁷ or for ‘trade’.⁵⁴⁸ These licences, if granted under the rules framed, can be recognition of customary usufructuary rights or rights to forest produce. But it cannot be regarded as a suitable mechanism for participatory forestry because no clear mention is made about the duties of the licensees in such forest.⁵⁴⁹

Participatory management through community participation on reserved forest

In the Forest Act, the most important provision relevant to participatory forestry is stipulated in section 28, which provides for the scope of participatory forest management through community

⁵⁴³ Village forests are also reserved forests.

⁵⁴⁴ The *Forest Act 1927* s 5.

⁵⁴⁵ *Ibid* s 23.

⁵⁴⁶ *Ibid* s 27.

⁵⁴⁷ *Ibid* s 32(b).

⁵⁴⁸ *Ibid* s 32(c).

⁵⁴⁹ Farooque (n 35) 248.

participation in a reserved forest. As per section 28 of the Act the government can assign to the village communities some rights over the lands that are recognised as reserved forest. These types of forests assigned by the government to the villagers are called ‘village-forests’ under the Act. However, before creating a village-forest, the lands must be constituted as reserved forest under section 20 of the Act. Also, the words ‘any village community’ to whom the rights of the government may be assigned indicate that the rights can be assigned to any village community whether adjacent or within the forest or not. Another obvious conclusion is that the rights can be assigned to the village community in a collective sense and not to individual members of that community. Above all, section 28 of the Act is quite clear about assigning rights to ‘any village community’.

The government, by making rules, can regulate the management of village-forests and the terms and conditions to provide the assigned village community with timber, other forest produce or pasture.⁵⁵⁰ At the same time, the rules may prescribe the community responsibilities for the protection and improvement of such forestry.⁵⁵¹ It has been further declared that the rules made under section 28 of the Act shall prevail even if they appear to be inconsistent with the provisions on reserved forest provided in the Act.⁵⁵² A scrutiny of the provision of section 28 of the Act will show that it amply reflects the spirit and scope of the participatory forest management approach—although, only on the reserved forest.

4.4.2 On the joint property of government and others

In the Forest Act, the available provision most suited for participatory forestry is provided in section 80 that deals with ‘management of forest the joint property of Government and other people’. Although in section 80 of the Act the phrase ‘joint property’ has been used, in the body of the Act the focus has been on ‘joint interest’ of the parties on any forest land, or wasteland, or forest produce (either wholly or partially).⁵⁵³

Participatory management through joint forest management

Section 80 of the Forest Act authorises the government either to manage private property for the interest of the owner, or to assign interested persons to manage public property for the interests of all parties therein. The essential element in such an arrangement is that the government and

⁵⁵⁰ The *Forest Act 1927* s 28(2).

⁵⁵¹ *Ibid* s 28(2).

⁵⁵² *Ibid* s 28(3).

⁵⁵³ For details see *Ibid* s 80.

any person must be jointly interested. However, for better management under section 80 of the Act, the ‘joint interest’ is required to be more than mere benefit sharing. Further, under the Act, the interest must be expressed by ‘any person’. There is apparently no limitation as to whether the person should be a natural person, or a legal person, such as a cooperative or society registered as a legal person under the law.

For undertaking joint management on public land, the government must issue regulations to prescribe the details under which the management and interests are to be regulated.⁵⁵⁴ When the government takes up private property under this section, it may, through gazette notification, declare that any of the provisions regarding reserved forest and protected forest under the Act be applicable to such area.⁵⁵⁵

4.4.3 On public/ private land

The Act was initially amended to contain the inherent feature of exploiting forest produces and accordingly, little attention was there to promote the participatory strategy of forest management.⁵⁵⁶ By the amendments in 2000, the Act incorporated a set of provisions about social forestry programs on any government land or private land under a special agreement, keeping scope for public participation in its implementation.

Participatory management through social forestry programs

Section 28A, a new section, was inserted by the *Forest (Amendment) Act 2000*,⁵⁵⁷ which made scope for accommodating social forestry in the conventional approach.⁵⁵⁸ It also provides scope to adopt rules and programs for social forestry. Moreover, section 28A (4) and 28A (5) of the Act provide the opportunity to make rules for creating standards for social forestry agreements and developing new programs. Under this provision, the Government of Bangladesh has adopted the *Social Forestry Rules 2004*. These rules have been amended in 2010 and 2011. The amended rules incorporate definitions of the terms ‘forest villagers’ and ‘local communities.’⁵⁵⁹ By explaining the beneficiaries’ selection criteria and supporting equal rights and participation in forestry, these rules have opened the participatory process to women and other marginalised

⁵⁵⁴ Ibid s 80(1)(b).

⁵⁵⁵ Ibid s 80(2).

⁵⁵⁶ Alam (n 231) 153.

⁵⁵⁷ The *Forest (Amendment) Act 2000* s 6.

⁵⁵⁸ Section 28A (1) of the *Forest Act 1927* states, ‘On any land which is the property of the Government or over which the Government has the proprietary rights, and on any other land assigned to the Government by voluntary written agreement of the owner for the purpose of afforestation, conservation or management through social forestry, the Government may establish a social forestry programme under sub-section (2).’

⁵⁵⁹ The *Social Forestry Rules 2004* r 2.

populations.⁵⁶⁰ These rules have also facilitated the benefit-sharing process by amending the participatory-benefits sharing agreements.⁵⁶¹

4.5 EXISTING PARTICIPATORY MANAGEMENT APPROACH AS A MEANS OF FOSTERING SUSTAINABLE FOREST MANAGEMENT

The Government of Bangladesh has expressed significant concern regarding the use of forests and their sustainable management.⁵⁶² However, the successful implementation of sustainability in any country's forestry sector is an arduous task, as it necessitates incorporating social, economic, geographic, and cultural factors.⁵⁶³ Evidence shows that sustainable forest management depends largely on the contents of legislation governing forests and government-policy frameworks.⁵⁶⁴ In Bangladesh, like other developing countries, resource protection and poverty reduction are significant factors; however, legal and policy frameworks are also essential in achieving forest goals.⁵⁶⁵ Therefore, a critical analysis of the legal framework for participatory management under the Act is required to understand its feasibility in promoting sustainable forest management. Through this discussion, it will be possible to understand the management challenges under the existing legal framework for the participatory management approach, which in turn will be helpful to make the management approach better for sustainable forest governance.

4.5.1 Participatory management through community participation

The Forest Act has only one section (section 28) that deals with the village forests, which applies only to the reserved forest. However, further analysis of section 28 of the Act reveals that it provides sufficient flexibility for the Forest Department to implement community participation in the reserved forest. Under the Act, the Forest Department can frame detailed operational rules and regulations to provide secured tenure and participatory forest management with protection responsibilities.⁵⁶⁶ Once adopted, the bylaw can supersede the parent law due to its conflicting

⁵⁶⁰ Ibid r 6.

⁵⁶¹ Ibid r 20. See also, Jashimuddin and Inoue (n 35) 141.

⁵⁶² SR Biswas, 'Structure, Composition and diversity of tree species in Idgaon forest reserve of Cox's Bazar forest division, Bangladesh' (Forest Department, Govt. of the People's Republic of Bangladesh, Review paper, IFPSUU, 2001) 66.

⁵⁶³ Salam and Noguchi (n 514) 209.

⁵⁶⁴ AZM Manzoor Rashid, 'Legal framework for community participation in governance: the role of co-management in the forest protected areas management of Bangladesh' (PhD diss., University of Western Sydney, Australia, 2012) 130 <<https://www.proquest.com/docview/1937893628?pq-origsite=gscholar&fromopenview=true>>.

⁵⁶⁵ Alam (n 231) 149.

⁵⁶⁶ The *Forest Act 1927* s 28(2).

nature.⁵⁶⁷ Section 28(3) of the Act mentions that the rights of the local communities will be regarded as collective rights and responsibilities through the exercise of power. However, despite having the provision of participatory management through community participation in the Act, no village forest has been established.⁵⁶⁸ Unfortunately, under section 28 of the Act, no initiative has yet been taken by the government to formulate a rule to ensure active community participation.⁵⁶⁹

4.5.2 Participatory management through joint forest management in practice

Section 80 of the Forest Act mentions the participatory forestry approach through joint forest management. The section makes no limitation as to the ownership of the forest land or waste land whether private or public. Therefore, the bylaws or executive instructions (notified in the Official Gazette) formulated under section 80 of the Act will make land ownership secondary.⁵⁷⁰ This regulation will also apply to private and public lands. Although a community participation approach in Bangladesh's forestry sector has a long history, no such rules or bylaws under section 80(1)(b) of the Act have been framed to date. In the absence of a legal sanction, the whole practice may become a matter of will and discretion of certain people, which would not serve the purpose of such arrangements.⁵⁷¹ The Forest Department can violate any provision of the agreements without a penalty in such circumstances. Further, the scope of joint management under section 80 of the Act can be extended through appropriate amendment. The government may also apply section 80 in case of the lands on sides of roads and canals that are the property of the government or any other statutory or public body.

4.5.3 Prevailing social forestry programs in sustainable forest management

The traditional forestry programs have failed to protect forest resources sufficiently. The social forestry programs involving the local communities in plantation, maintenance, and management of forest resources are the innovative approaches to address forest degradation.⁵⁷² Social forestry plays a vital role in preparing the land and planting trees to develop forests. Moreover, protecting

⁵⁶⁷ Ibid s 28(3). See also, Fox et al (n 519) 46-47.

⁵⁶⁸ Sharaban Tahura Zaman and M Hafizul Islam Khan, 'National Legislative Responses to REDD+ and Community Safeguards, Co-Benefits and Community Participation in Bangladesh' (Public Participation and Climate Governance Working Paper Series: CISDL, GEM Initiative-Yale University and University of Lapland, 2014) 8. See also, Hasan (n 31).

⁵⁶⁹ See Preetha (n 35).

⁵⁷⁰ See the *Forest Act 1927* s 80(1)(b)

⁵⁷¹ Farooque (n 35) 293.

⁵⁷² Muhammed et al (n 514) 84; See also, Khan (n 144).

forest resources, biodiversity conservation, female empowerment, and poverty reduction are also important objectives of such programs.⁵⁷³

Decision-making authority and scope of community participation in social forestry program

Local people's involvement in the social forestry program enables them to become beneficiaries of forest management.⁵⁷⁴ The forest-dependent people have the most significant stake in management of forests due to their social, cultural, financial, and ecological reliance on the forests. Generally, the Forest Department representatives select the beneficiaries⁵⁷⁵ who are encouraged to elect nine members of the Social Forestry Management Committee (SFMC) to protect the plantations and manage the activities.⁵⁷⁶ An advisory committee is usually formed in each social forestry area to contribute ideas and to provide suggestions to the SFMC to perform its duties under the *Social Forestry Rules 2004*.⁵⁷⁷ However, the SFMC has not been given any decision-making authority.⁵⁷⁸ The department takes all significant decisions regarding social forestry, including forest protection, harvesting, sale of forest products, and reforestation,⁵⁷⁹ while the management committee provides assistance to the department in implementing their decisions.⁵⁸⁰ On the other hand, local communities only carry out the management activities in agreement with their directives.⁵⁸¹ Therefore, the decision-making authority is top-down in the existing legal framework for social forestry.⁵⁸² Also, the department reserves the right to cancel the social forestry agreement unilaterally if the communities are perceived as violating any condition set by the department.⁵⁸³ In fact, the power relations between the department and the community are unequal under the existing legal framework for social forestry that hinders people's active participation in every aspect of forest management.⁵⁸⁴ Several studies have

⁵⁷³ Forest Department, 'Social Forestry' (Forest Department, Ministry of Environment, Forest and Climate Change, Government of the People's Republic of Bangladesh, 1 January, 2019), <<http://www.bforest.gov.bd/site/page/665d37e7-ce3a-4117-af13-f8147d448e98/->>.

⁵⁷⁴ See the *Social Forestry Rules 2004* r 2.

⁵⁷⁵ *Ibid* r 6.

⁵⁷⁶ *Ibid* r 9.

⁵⁷⁷ *Ibid* r 14.

⁵⁷⁸ Zaman and Khan (n 568) 9.

⁵⁷⁹ The *Social Forestry Rules 2004* r 16.

⁵⁸⁰ *Ibid* r 11. See also, Niaz Ahmed Khan and Showkat Ara Begum, 'Participation in social forestry re-examined: A case-study from Bangladesh' (1997) 7(3) *Development in Practice* 260, 263.

⁵⁸¹ The *Social Forestry Rules 2004* r 18. See also, MA Salam and T Noguchi, 'Evaluating capacity development for participatory forest management in Bangladesh's Sal forests based on '4Rs' stakeholder analysis' (2005) 8 (8) *Forest Policy and Economics* 785, 785.

⁵⁸² Muhammed, Haque and Koike (n 542) 60.

⁵⁸³ The *Social Forestry Rules 2004* r 16(1).

⁵⁸⁴ Rasul, Thapa and Karki (n 442) 1331.

pointed out the influence of bureaucrats' role as a drawback for people's effective participation.⁵⁸⁵ Thus, the existing legal framework to facilitate community participation in social forestry in Bangladesh seems minimal and mostly instrumental.⁵⁸⁶ In several regional studies, this scenario has also been depicted.⁵⁸⁷

To summarise, the social forestry program in Bangladesh has created limited scope for people's participation and certainly has not put the participants in a better negotiating position, which in no way ameliorates forest governance by making it more accountable to local people.⁵⁸⁸ Hence, a consensus is emerging about the initiation and implementation of effective community participation.⁵⁸⁹

Forest and land tenure in the social forestry program

Proper rules and regulations are needed regarding land use and ownership for effective implementation of the social forestry program.⁵⁹⁰ Even the statutory acknowledgment of customary land ownership rights can inspire the local people to be involved in forestry.⁵⁹¹ However, there is a total lack of recognising indigenous peoples' customary land rights in the Forest Act.⁵⁹² On the contrary, the Act empowers the government to claim sole ownership over reserve forests and the ultimate power to manage collecting forest resources.⁵⁹³ There is no recognition of rights for the local people within the reserve forests under the Act.

The analysis of the legal framework for the social forestry program shows that the communities do not have to own the land for the allocation of the social forestry program.⁵⁹⁴ However, the available forest land for social forestry is identified solely by the Forest Department. There is no

⁵⁸⁵ Niaz Ahmed Khan and Barbara Harriss-White, 'The Ghost in the Machine: Deconstructing Forest Policy Discourse in Bangladesh' (2012) XLVII (17) *Economic & Political Weekly* 100, 106; Mukul et al (n 51) 59; Chowdhury (n 484) 77; Niaz Ahmed Khan, 'An Overview of Social Forestry in Bangladesh' (Forestry Sector Project, Government of Bangladesh, 2004).

⁵⁸⁶ Md Nazmus Sadath and Max Krott, 'Identifying policy change—Analytical program analysis: An example of two decades of forest policy in Bangladesh' (2012) 25 *Forest Policy and Economics* 93-99.

⁵⁸⁷ Bina Agarwal, 'Participatory Exclusions, Community Forestry and Gender: An Analysis for South Asia and a Conceptual Framework' (2001) 29(10) *World Development* 1623, 1624.

⁵⁸⁸ Hasan (n 31).

⁵⁸⁹ Agarwal (n 587) 1623.

⁵⁹⁰ Razzaque (n 427) 320.

⁵⁹¹ Niaz Ahmed Khan, 'Land tenurial dynamics and participatory forestry management in Bangladesh' (1998) 18(4) *Public Administration and Development: The International Journal of Management Research and Practice* 335, 335.

⁵⁹² Zaman and Khan (n 568) 9.

⁵⁹³ *The Forest Act 1927* s 3. See also, Salam and Noguchi (n 581) 785.

⁵⁹⁴ *Ibid* s 28A (2).

provision for considering community wishes, customs, traditions, and beliefs.⁵⁹⁵ The social forestry program's idea implies handing over certain rights to forest produce or rights to use the land to assist the government in managing forest land through written agreements.⁵⁹⁶ Evidence has shown that effective allocation of forest rights will benefit communities by reducing social conflicts and promoting environmental protection and awareness. However, a lack of a precise definition of right holders and classification of applicable rights and sanctions have affected the social forestry program's success in Bangladesh.⁵⁹⁷ Though the social forestry agreements are mentioned as a tool for forest tenure (rights to use the land or rights to the forest produce) security,⁵⁹⁸ these agreements are for a limited period. For example, in the Sal forest and natural forest case, the period is 20 years.⁵⁹⁹

To summarise, the forest-user groups have no independent public entities authorising them to use the forests sustainably. They are instead an extension of the Forest Department's implementation group involved in specific management activities.⁶⁰⁰

Benefit sharing in the social forestry program

The commitment of a share in income from the intermediate and final harvests of the forest lands is a powerful impetus for communities to protect and conserve forests over a long period. The share in net income from the forest produce reflects how community efforts in the management are valued. A higher share for communities is thus likely to result in better regeneration. The surplus may go to the government as the custodian of the land. In the social forestry program in Bangladesh, the user groups' members are responsible to take care of the management of forests;⁶⁰¹ although, they are provided with only 45% of the benefits accruing from woodlots or timber.⁶⁰² For the forests, except Sal forest and the natural forest, this profit sharing is different.⁶⁰³ The Forest Department gets half of the profits, and 10% is spent on the afforestation fund. The remaining 40% goes to the beneficiaries. However, for implementing sustained community participation, all social forestry programs need to share equally the economic benefits—accrued from forest products, including non-timber forest produce—with members of the forest-user

⁵⁹⁵ The *Social Forestry Rules 2004* r 3.

⁵⁹⁶ The *Forest Act 1927* s 28A (2)

⁵⁹⁷ Khan (n 591) 339.

⁵⁹⁸ The *Forest Act 1927* ss 28A (1), 28A (2).

⁵⁹⁹ The *Social Forestry Rules 2004* r 5(1).

⁶⁰⁰ Rasul, Thapa and Karki (n 442) 1331.

⁶⁰¹ The *Social Forestry Rules 2004* r 18.

⁶⁰² *Ibid* r 20(2) (Ka).

⁶⁰³ *Ibid* r 20(2) (Cha).

group.⁶⁰⁴ Granting communities an equal share in net income from the non-timber forest produce will serve a crucial purpose by providing short-term cash flows to local people to sustain community interest. The Forest Department has been experimenting with social forestry for more than two decades; however, these programs are continuing an ad hoc basis.⁶⁰⁵

Access to information by forest-dependent people

In any form of participatory management, the opportunity for community members to have access to information about decision-making forces and processes and all activities regarding the management is vital. By integrating the people's voice and their contributions in the decision-making process, the government can ensure good quality in resource management. Moreover, this process will also reduce social and economic inequalities in the forest-dependent population.⁶⁰⁶ This approach assumes that an informed and actively involved community increases the chance of sustainable forest management. The community must know how funds or benefits are used and shared in establishing trust between communities and the government agency. Such a mechanism can also reduce the risk of excessive influence by elites. However, in Bangladesh, information sharing among all stakeholders usually does not take place, and transparency in the government decision-making process is also absent.⁶⁰⁷

Accountability of the Forest Department in the social forestry program

The state acts as a trustee for conserving forest resources for the interest of present and future generations.⁶⁰⁸ However, the government agencies should be made accountable to the citizens for their every action. This is only possible if a system of accountability has been established. The Forest Act provides the details of the prohibited activities and penalties for violating those, to safeguard and protect the forests from misuse by the public. However, the law does not mention any penalties for the forest officials in case of violation. The Act is devoid of any provision relating to the Forest Department; it provides no mechanism for remedial actions if forest depletion happens due to its actions.⁶⁰⁹ The Act also does not include accountability of the department in the decision-making and management of forests.⁶¹⁰ Notably, there is no system

⁶⁰⁴ Rasul, Thapa and Karki (n 442) 1331.

⁶⁰⁵ Zaman and Khan (n 568) 9.

⁶⁰⁶ J Razzaque, 'Participatory Rights in Natural Resource Management: Role of Communities in South Asia', in J Ebbesson & P Okowa (eds), *Environmental Law and Justice in Context* (Cambridge University Press, 2009) 118.

⁶⁰⁷ Bahauddin (n 19) 350.

⁶⁰⁸ *The Constitution of the People's Republic of Bangladesh* art 18A. See also, Razzaque (n 379) 5.

⁶⁰⁹ G M Khattak, 'Strategy for the Sustainable Development of Forestry in NWFP' (IUCN, Peshawar, Pakistan, 1994) 21.

⁶¹⁰ Hasan (n 31).

mentioned in the Act to hold the forest officials accountable. Ironically, Section 74 of the Act mentions that no suit can be brought against any public servant for any actions that have been carried out in good faith.⁶¹¹ This lack of liability has provided the department with absolute power under the Act, which is thought to inspire corruption.⁶¹² Therefore, most of the time, the officials are concerned about addressing their own interests at the cost of neglecting the collective interest.⁶¹³

To sum up, the processes through which participatory forest management runs show an unequal relationship between government officers and local people. A scrutiny of the legal framework for participatory forest management under the Forest Act shows that the interests and investment of the government have been made secure in all forms of management. The government reserves the right to expropriate the community participant's share if the performance of services is below expectations.⁶¹⁴ Moreover, under the Act, all money paid by the government through any participatory form of arrangement made therein is liable to be retrieved as an 'arrear of land-revenue'.⁶¹⁵ Such dues are usually charged on the forest produce that the sharing community is entitled to receive.⁶¹⁶ In Bangladesh, the legal foundations of participatory forest management are highly centralised. Furthermore, the mechanisms for community forestry are fragile compared with those of other developing countries such as Nepal.⁶¹⁷ Therefore, in the *Forest Act 1927*, the minimal scope for participatory forest management is available.⁶¹⁸ That is why, under this legal framework, the participatory forestry programs have achieved some of the physical and commercial targets; however, they failed to meet the social target and other targets, including active community participation, equitable distribution of forest rights, benefits sharing, coordination in the planning, and consultation in the decision-making process.⁶¹⁹

⁶¹¹ According to section 73 of the *Forest Act 1927*, all forest officers are considered public servants.

⁶¹² Karim (n 13) 6.

⁶¹³ Hasan (n 334) 29.

⁶¹⁴ The *Forest Act 1927* s 81.

⁶¹⁵ Ibid s 82.

⁶¹⁶ Ibid s 83.

⁶¹⁷ Rasul, Thapa and Karki (n 442) 1322.

⁶¹⁸ See Roy and Alam (n 506) 550; Razzaque (n 427) 322; Farooque (n 35) 287.

⁶¹⁹ See Tapan Kumar Nath and Makoto Inoue, 'Impacts of participatory forestry on livelihoods of ethnic people: experience from Bangladesh' (2010) 23(11) *Society and Natural Resources* 1093; Jashimuddin and Inoue (n 35) 134; Khan (n 585).

4.6 CONCLUSION

The concept of participatory forest management is an appropriate and well-timed approach that can address sustainable development issues by incorporating the environmental, socio-cultural, and economic perspectives of a country such as Bangladesh.⁶²⁰ However, it necessitates a sound and accountable management process that conserves the forests and achieves sustainable governance. Although the Bangladesh Government has been gradually adopting legal frameworks for participatory forest management approaches, the Forest Act has perpetuated many of the original Act's flawed articles. The Forest Act still provides room for applying the conventional top-down and centralised management approach by the Forest Department.⁶²¹ The Act needs to be changed to reflect a bottom-up approach to make the existing legal framework for participatory management a better one. Legal arrangements for engaging regulated communities in forest governance are not enough; the public agencies or officers need to be sincere in promoting meaningful and effective community participation.

⁶²⁰ See Mukul et al (n 376) 27; Chowdhury, Koike, and Muhammed (n 177) 359.

⁶²¹ Roy and Alam (n 506) 554. See also, Sabir Bin Muzaffar et al, 'The Endangered Forests of Bangladesh: Why the Process of Implementation of the Convention on Biological Diversity is not working' (2011) 20 *Biodiversity Conservation* 1587, 1592.

Chapter 5: Major findings and conclusion

5.1 INTRODUCTION

As discussed in chapter 2, the history of forest governance in Bangladesh should be traced back to the ancient period and embraces different policies, laws, and regulations. However, the basic law governing forests in Bangladesh is the *Forest Act 1927* enacted by the British rulers. Upon gaining independence, Bangladesh tried to develop its forest legal regime, recognising the trans-border implications of global forest degradation. In particular, the Act was amended several times and, subsequently, the social forestry concept was introduced with some other legal developments to fulfil Bangladesh's commitments to protecting the forests at the domestic level.

My study focused on examining the role of the Forest Act in facilitating sustainable forest governance in Bangladesh because of the SDG 15. Even though the law is not a panacea for promoting sustainable forest governance at the national level, an appropriate legal framework has been suggested by scholars to implement the internationally agreed agendas, including the 2030 Agenda for Sustainable Development. Out of the 17 SDGs, Goal 15 incorporates several forest-governance approaches that were previously reflected, in various international conventions and agreements to promote sustainable development, although in a fragmented manner. These are the protection approach, the restoration approach, the sustainable use of forests, and the sustainable management approach. The forest-governance approaches endorsed by SDG 15 are essential for sustainable governance in the forestry sector. I undertook the above four governance approaches as the basis for reviewing the contribution of the Forest Act in the protection, restoration, sustainable use, and sustainable management of forests in Bangladesh. The Act, which is the umbrella forest law in Bangladesh, was analysed to identify the gaps, inconsistencies, and scope for improvement in promoting sustainable forest governance, given the SDG 15.

In this chapter, I present the major findings of my study. I make recommendations for amendments of the Forest Act to facilitate sustainable forest governance in Bangladesh. Then, I provide concluding remarks about the findings of the research questions detailed in chapters 3 and 4.

5.2 SUMMARY OF MAJOR FINDINGS AND OVERALL ARGUMENT

I found that the *Forest Act 1927* provides some means for protection, restoration, sustainable use, and management of forests resources. How far the Act can thereby contribute to promoting sustainable forest governance is discussed in this section.

5.2.1 The Forest Act's contribution in protection of forest

To examine the role of the Forest Act in the protection of forest resources, the protection approach was analysed in chapter 3 in terms of ecological considerations (section 3.2.1), recognition of customary rights (section 3.2.2), forest officers' power in forest protection (section 3.2.4) and prosecution of forest offences (section 3.2.5).

As noted in chapter 2, state control over forest resources was imposed through the promulgation of the Forest Act. To strengthen forest protection, the Act prohibits certain activities in the reserved forest and protected forest. The Act also has not overlooked the existence of certain usufruct rights of the forest-dependent people. But the rights settlement procedure under the Act involves a process where the recognition of rights of local communities is seen as a privilege, depending on the discretion of the Forest Settlement-officer. Although in Bangladesh customary land rights and rights through prescription are recognised by the tenancy laws, such as the *Bengal Tenancy Act 1885* and the *State Acquisition and Tenancy Act 1950*, no such right can be acquired under section 5 and 23 of the Forest Act (as discussed in section 3.2.2). The laws recognising rights through prescription apply to all tribal and non-tribal people living in or around a forest if the nature of their exercise or enjoyment of rights falls within the law's scope. These rights should not be considered inferior to other forms of rights. Thus, the provisions of the Act create conflicts with other laws of the country cause injustice to the forest dwellers, especially to the tribes living on the forest lands.

I also showed in chapter 3 that, for protecting the forest resources, the Forest Act empowers a forest officer to arrest a person without a warrant or orders from a magistrate if he or she deems that the person is committing an offence pertaining to forests. Further, the Act gives the forest officer power to release the arrested person on bond and compound their offenses by accepting money (not fixed by law) as compensation and then, on payment of the money, releasing any properties seized as liable for confiscation. These provisions of the Act appear that enough opportunity is guaranteed in the pre-trial stage to exercise discretion in dealing with these matters. This may create scope for corruption. Corruption and unfair practices in managing forest resources may affect the rights and interests of respective stakeholders and weaken the legal

processes and procedures for sustainable forest governance. However, the Act lacks some fundamental direction regarding jurisdictions, duties, and accountabilities of the Forest Department. The excessive powers of the forest officers make the effort of forest governance, to some extent, dependent on forest officers' responsible behaviour, leaving scope for malpractice. Lack of institutional accountability has emerged as a core problem in effective forest protection by the department in Bangladesh. Besides, the shortage of sufficient staff, logistics, and funds may have an adverse impact on forest governance in the country.

As part of the protection approach in forest governance strategy, the Forest Act provides prosecuting offenders for certain prohibited activities treated as forest offences. As noted in chapter 3, the Forest Department cannot make a significant number of arrests, which makes them unsuccessful in the prosecution of forest offences under the existing system. Another practice had been to release an offender after a strong warning by the department or compromise between an accused and the department during the pre-trial stage of a case, which facilitates the illegal logging and other prohibited activities. Moreover, the *Forest Amendment Act 1990* introduced a harsh and unusual punishment system, leading to offenders being interested in compounding offences rather than defending themselves in the trial stage before the court.

Finally, the sustainable governance regime emphasized consideration of sustainability principles in the development of the related laws; however, today, the aim of the Forest Act and the focus of governance is not protecting the forests from the perspective of sustainability, but for revenue generation. Bangladesh has now the constitutional obligation to comply with environmental protection norms; however, the Act has not yet been amended to emphasise the protection of the environment. The Act still carries the archaic preamble that aims to extract economic benefits from the forests.

5.2.2 Restoration approach in sustainable forest governance under the Forest Act

SDG 15 targets were restoring degraded forest by increasing afforestation and reforestation along with forest protection measures. In the discussion in chapter 3, I showed that the Act recognises restorative governance through afforestation initiatives; although, several other extensive and large-scale methods may be utilised to restore forests, including commercial plantations, large-scale sapling replanting, regeneration, and passive succession. Payment for environmental services is also considered to be a vital forest restoration initiative to ensure sustainable forest governance, which is not sufficiently recognised under the Act.

Under the Forest Act, afforestation can be done through a social forestry program. Social forestry prioritises the involvement of local people in afforestation initiatives. However, as noted in chapter 3, meaningful public participation in afforestation is limited in practice. Under the existing legal framework, the primary authority regarding afforestation initiatives is vested in the Forest Department, and it makes all major decisions, including decisions about the harvesting and sale of forest products. As an incentive, local people get limited usufruct rights to forests. In most of cases, the benefits are shared unequally, with the communities receiving less than the Forest Department. All this can promote disinterest among the forest-dependent people in becoming engaged with afforestation activities.

To summarise, initiating restoration measures lies in the limited scope of the Forest Act, which in turn affects sustainable forest governance. Even the existing scope for restoring the forests cannot be utilised fully due to various institutional problems requiring the reformation of the Act and developing a transparent and accountable forest governance system.

5.2.3 The Forest Act's contribution in sustainable use of forests

As discussed in chapter 3, the Forest Act has some provisions to regulate the use of forest resources in the reserved forests and protected forests. The Act allows selling of timber and other forest products in a limited amount. Further, rules made under the Act regulate the transit of timber and other forest produce. However, through these conservative provisions the Act may have some positive implications for forest use, although the Act does not explicitly address the concerns for sustainable use of forest in a comprehensive manner. The Act regulates the use of forest resources by the forest-dependent people; however, it authorises the government to declare any forest or any part of it not a reserved forest and to make rules to use the forest land for economic development without any environmental impact assessment. In other words, the Act cannot sufficiently prevent the government from the use of forest land for non-forestry purposes, unlike India's *Forest Conservation Act 1980*.

Besides, in Bangladesh, forest resources' protection and the sustainable use of forest resources entails consideration of the competing claims of and directing benefits to people depending on these resources for their livelihood. With this understanding, the approach of sustainable forest use in forest governance can necessarily be a factor in the reality that many people living near forests and dependant on them are among the most resource-poor sections of society. Therefore, the legal institutions need to recognise the relationship between the forest resources and the people sustaining them. The aim of the legal regime should be to utilise these resources equitably

for addressing the concerns of forest-dependent people about their livelihood while ensuring the sustainability of their use. However, the Act does not vigorously address the concerns of forest-dependent people. The forest-dependent people's customary use of forest resources is not regulated fairly by the forest governing agencies. Forest governance is still fixated more on generating revenue, ignoring the rights of local people, and undermining the contributions of non-timber forest products (NTFPs) to forest dependent people and forest sustainability.⁶²² Local people's dependence on NTFPs can help to meet not only their daily needs but also leads to economic and environmental sustainability is not recognised under the Act. It also does not recognise the principle of inter-generational equity in the use of forest resources. The Act has not yet been amended to keep it in line with preserving forest resources by balancing the interests of present and future generations.

5.2.4 Management approach under the Forest Act in sustainable forest governance

SDG 15 targets the implementation of sustainable management of forests, influenced by the principles and objectives of sustainable development. As discussed in chapter 4, participatory forest management is considered an efficient approach for managing forest resources sustainably in Bangladesh. The Forest Act recognises three forms of participatory management of forests: participatory management through community participation, joint forest management, and social forestry.

The Act grants sufficient latitude to the Forest Department to accommodate community participation in the management of reserved forests. The government, or the department on its behalf, can frame detailed operational bylaws and rules granting secured tenure and participatory management. However, the government has categorically failed to frame rules for village forests and not a single forest has been notified as such in the last 93 years of the law being in force (as discussed in section 4.5.1). Similarly, for undertaking joint forest management on public land, the government needs to issue regulations to prescribe the details in accordance with which the management and interests to be regulated. Although the community-participation approach in Bangladesh's forestry sector has a long history, no such rules or bylaws have been framed to date (as discussed in section 4.5.2). In the absence of specific rules, the whole practice may become a matter of will and discretion of certain people, which would not serve the purpose of legitimate forest management.

⁶²² See Roy and Alam (n 506) 549-555.

However, through an amendment in 2000, the Forest Act incorporated social forestry, keeping the scope of public participation in its implementation. Under the Act, the *Social Forestry Rules 2004* were also framed to supplement the provision of the Act. Both the Act (section 28A) and the *Social Forestry Rules 2004* can combinedly work in regulating sustainable management of forests, covering community participation, benefit-sharing, tenure rights, transparency and access to information, monitoring, and accountability. In chapter 4, scrutiny of the legal framework for participatory forest management through social forestry shows that the management process is highly centralised. Besides, the social forestry program has created limited scope for people's participation in management activities. Such a participation model may have some success in a developed and just society. However, in Bangladesh, the same contribution to sustainable forest management lacks an accountable Forest Department. The sharing of economic benefits in the social forestry program is not always equitable and, consequently, can frustrate the objective of governing the social forestry program. Therefore, under the Act, the interests and the government's investment are well secured at a cost to community participants.

Overall, the *Forest Act 1927* is not adequate for ensuring sustainable forest governance in Bangladesh. The Act has some substantive provisions regulating the protection, restoration, sustainable use, and sustainable management of the resources; but it suffers from several defects impacting on sustainable forest governance. Since the Act was enacted mainly for economic gains and with a command-and-control approach, it is often not consistent with the norms and principles of sustainability. While the Act was amended several times to cope with the trends of sustainable forest governance, it still bears the sentiment of protecting state interests, while often ignoring the customary rights and privileges of the local stakeholders, including forest-dependent people. While many provisions of the Act give excessive power and discretion to the forest officials, the Act does not incorporate the required principles to consider the relevant ecological, economic, and social considerations in forest governance.

5.3 RECOMMENDATIONS

The governing actors at the international, regional, and national level are committed to managing the forest resources sustainably, requiring changes in governing laws and underlying institutional settings at all levels.⁶²³ Therefore, at the national level, countries are striving to develop practical

⁶²³ Stephen Dovers and Robin Connor, 'Institutional and Policy Change for Sustainability' in *Environmental Law for Sustainability: A Reader* (Hart Publishing, 2006) 21.

legal frameworks to address the increasing pressures on forests, reflecting the growing realisation of the critical roles that forests play environmentally, economically, and socially. As discussed in chapter 2, after independence, Bangladesh's forest governance continued to mirror the laws and institutions of its predecessors. The *Forest Act 1927* has still retained a variety of flawed provisions of the original Act. It has adopted mostly a top-down approach in protection, restoration, and forest management (discussed in chapters 3 and 4), which cannot promote sustainable forest governance. There have been few changes to the Act over the years. In fact, for sustainable forest governance, the country is required to develop a strong legal framework. Therefore, for enhancing sustainable forest governance under the Forest Act, Bangladesh should consider the following recommendations:

- For effective forest protection under the Act and to remove ambiguity in forest regulation, the Act should include and define some concepts and terms: forest, forest land, forest right, protection, environment, sustainable use, restoration, sustainable management, and sustainable development. The preamble of the Act also needs to be changed to include environmental considerations in forest protection for promoting sustainable forest governance.
- The Act does not have any specific section on the Forest Department and its defined power, jurisdiction, and functions. Neither does the Act explicitly detail the rights and benefits of the forest-dependent people. The forest governing law is required to address these legal issues in a definite way to balance the rights, duties, and interests of governing agencies and forest-dependent people. Therefore, the Act needs to incorporate specific provisions governing jurisdictions, responsibilities, and accountability of the Forest Department officials. While the forest officers should be given sufficient powers to protect forest resources, the corruptive practices and power-misuse of the forest officials should be checked. The liable persons need to be made accountable under the Act. Besides, the Forest Department needs to be equipped with sufficient workforce and logistic support for strengthening the forest governance system.
- As discussed in chapters 3 and 4, forest dwellers' rights to live in and use forests have been neglected by the colonial and the post-colonial state agencies while enacting and implementing forest laws. Since, forests and local people are part of the same ecosystem, legislation that recklessly delinks this age-old relationship will be neither pragmatic nor sound. Therefore, a comprehensive law should be enacted to regulate the rights (including land rights), interests, and duties of forest-dependent people.

Considering human rights and equity principles, the law should secure the individual and community tenure on forests. India did it by enacting the landmark *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006*.

- Forest offences and wrongs need to be litigated regularly at the respective courts. Besides, a mobile court led by a judicial magistrate can be conducted to adjudicate the offences instantly, as judicial magistrates are conducting mobile courts in India to give instant judicial remedies. This measure would strengthen forest governance by balancing the Forest Department's competing interests, which are protecting and conserving the forest resources and the accused. It would promote forest justice under the Act and deterrence that can contribute to sustainable forest governance.
- The Forest Act should include sufficient provisions to take more restorative measures in addition to afforestation. The law can include reforestation, payment for eco-system services in which payment can be made under social forestry programs or other reforestation initiatives, and commercial plantation measures to strengthen restorative governance of forests. Since the Forest Policy 1994 gives importance to local people's participation, including women and the non-state actors especially the NGOs in afforestation programs, the Act should include clear provisions for regulating such programs to promote restoration of forest resources.
- For ensuring sustainable use of forests, the Act should not allow forest land allocation for non-forestry purposes. As discussed in chapter 3, India has adopted a separate law, the *Forest Conservation Act 1980* to promote sustainable forest land use by restricting the use of forest lands for non-forestry purposes. Bangladesh can do the same by including sufficient legal measures (including environmental impact assessment) in the Act to restrict the use of forest lands for non-forestry purposes.
- The Forest Act should incorporate the required provisions to provide economic incentives to the forest-dependent people. Mere command and control measures to control forest degradation may not produce effective governance output. Economic benefits from the government can divert the tendency of the forest-dependent people to adopt alternative income generating options. Besides, the existing benefits based on the NTFPs for the forest-dependent people should be regulated by precise rules, as discussed in chapter 3. The emphasis on local peoples' dependence on NTFPs to meet their daily needs may contribute to economic and social sustainability.

- Despite old legislation, the Forest Act has some strengths that could help achieve sustainable forest governance to some extent if those provisions were properly implemented. For example, as discussed in chapter 4, the government is authorised to frame regulations under sections 28 and 80 of the Act to govern participatory management through community participation and joint forest management, respectively. However, the government could not develop any regulation under sections 28 and 80 that can help sustainable forest governance. Local people could conveniently participate in forest management initiatives under those provisions of the Act. However, both the Act and the *Social Forestry Rules 2004* should include appropriate principles governing public participation equitably in forest management activities. Besides, equitable distribution of forest benefits should be ensured to enhance sustainable forest governance. Equity in the allocation of forest benefits encourages public support in governance and public participation in governance processes.
- To ensure the efficient working of the Forest Act for promoting sustainable forest governance, there should be integration of the concepts and norms of sustainability not only in the forest policy but also in other sectoral policies relating to land management, fisheries conservation, and biodiversity protection. This integration may guide the sectoral governing institutions to consider a sustainable approach in the protection and management of the land, fisheries, birds, and trees existing in forest areas.

5.4 CONCLUDING THOUGHTS

While the *Forest Act 1927* has retained certain strengths that can help play some role in sustainable forest governance in Bangladesh, a good number of amendments need to be made for its effective role. The Act needs to incorporate necessary legal provisions in response to globally accepted forest governance approaches and the prevailing reality and practicality. The Act should equitably regulate public participation in forest governance and develop the mechanism for making forest officials accountable for their functions. In short, the Act needs to include specific provisions for the various aspects of forest governance: the use of protective measures, use of forests, adoption of restorative initiatives, and the management of forest resources, considering the existing ecological, social, and economic factors. Clearly, comprehensive legal and

institutional reform is needed to develop a fair and rights-based legal policy for sustainable forest governance in Bangladesh.

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