MYANMAR

Country Profile and Context

AFoCO

Asian Forest Cooperation Organization

Contents

Abbreviations and Acronyms

AFoCO	Asian Forest Cooperation Organization
ASEAN	Association of Southeast Asian Nations
CBD	Convention on Biological Diversity
CF	Community Forestry
CFDRC	Central Forestry Development Training Center
CFE	Community Forest Based Enterprise
CFI	Community Forestry Instructions
CFUG	Community Forest User Group
CLMV	Cambodia, Laos, Myanmar, Vietnam
FD	Forest Department
FRA	Forest Resource Assessment
FRI	Forest Research Institute
FRL	Forest Reference Level
GoM	Government of Myanmar
MCCP	Myanmar Climate Change Policy
MCCS	Myanmar Climate Change Strategy
MFS	Myanmar Forest School
MIP	Ministry of Immigration and Population
MONREC	Ministry of Natural Resources and Environmental Conservation
MSDP	Myanmar Sustainable Development Plan
MTE	Myanmar Timber Enterprise
NAPA	National Adaptation Programme of Action
NFMP	National Forest Master Plan
NFMS	National Forest Monitoring System
NBSAP	National Biodiversity Strategy and Action Plan
NDC	Nationally Determined Contribution
NLUP	National Land Use Policy
PA	Protected Area
PPF	Protected Public Forest
PFE	Permanent Forest Estate
REDD	Reducing Emissions from Deforestation and Forest Degradation
RETC	Regional Education and Training Center
RF	Reserved Forest
SDG	Sustainable Development Goals
UNCCD	United Nations Convention to Combat Desertification
UFES	University of Forestry and Environmental Science
UNFCCC	United Nations Framework Convention on Climate Change

1. Introduction

The Republic of the Union of Myanmar is one of the biodiversity richness countries in the world possessing various types of forest, and diverse biological resources. About 42.19 % of the country's area is still covered by forest resources that are accounting for 28.5 million hectares of the country area. Myanmar's forests play an important role in contributing to the nation's economy and supporting the socio-economic and well-being of the local people.

The Government of Myanmar is fully committed to several international agreements to mitigate climate change, protect, restore, manage and utilize Myanmar's rich biodiversity in a sustainable way. Myanmar also made many significant changes and initiatives including policy development, increase funding for conservation and restoration of the country's natural resources. Currently, Myanmar is implementing two national funded programs, Myanmar Reforestation and Rehabilitation Programme-MRRP (2017-2028 to 2026-2027) and Re-establishing Natural Habitats Programme (2019-2020 to 2028-2029). Implementing such programs will support the country's sustainable development of the socio-economic status of the community, climate change mitigation, disaster risk reduction and highlight the on-time participation of Myanmar in UN Decade on Ecosystem Restoration 2021-2030.

However, Myanmar is still facing challenges in forestry and biodiversity sectors, particularly in research, technical and funding support. Myanmar is accelerating its efforts in environmental conservation for long-term sustainability and restoration of biodiversity and ecosystems through improved coordination among various stakeholders and encouraging community-related activities.

This document provides a general overview of Myanmar including the geographic profile, administrative set up, population, socio-economic situation, climatic condition, and biodiversity. The document also highlights the state of the forest in the country, its policy priorities and strategies, forest products, and trade. The gaps and challenges encountered in forest conservation are also highlighted. Overall, the document intends to provide baseline information to assist in the designing of the cooperation framework under AFoCO and the information contained in this document has been gathered mainly through desk-based research and review of available national statistics, national laws, and policies, technical reports, and other secondary data sources. Should there be significant changes in national forest policy or context, they will be reflected accordingly.

2. Country Overview

2.1. Geographic Profile

The Republic of the Union of Myanmar is a Majority-Buddhist nation in Southeast Asia, and home to more than 135 different ethnic groups, each with its history, culture, and language. The total territory of Myanmar is 676,577 km^2, the largest landmass in mainland Southeast Asia and the second-largest country among ASEAN member states, after Indonesia. Myanmar's territory lies between latitudes 9°32'N and 28°31'N and longitudes 92°10'E and 101°11'E and shares borders with the Kingdom of Thailand to the south and southeast, Lao People's Democratic Republic to the east, the People's Republic of China to the northeast and north, Republic of India and People's Republic of Bangladesh to northwest, and coastline on the Bay of Bengal and the Andaman Sea to the southwest and south respectively. The position of Myanmar is along with the Indian and Eurasian Plants and attaches to the Himalayas range in the southeast. The country is divided into three main agro-ecological zones, being the central dry zone, the coastal, and the hilly zone. The highest point in the country is Hkakabo Razi Mountain, at 5,881 meters above sea level, located in the northern end of the country. People of Myanmar settle down mostly in the lowland regions along the Ayeyarwady River, the highest densities are found in the Ayeyarwady delta, between Yangon and Hinthada[1]. Over 70% of the population are living in rural areas where forest resources are their basic need for livelihood[2].
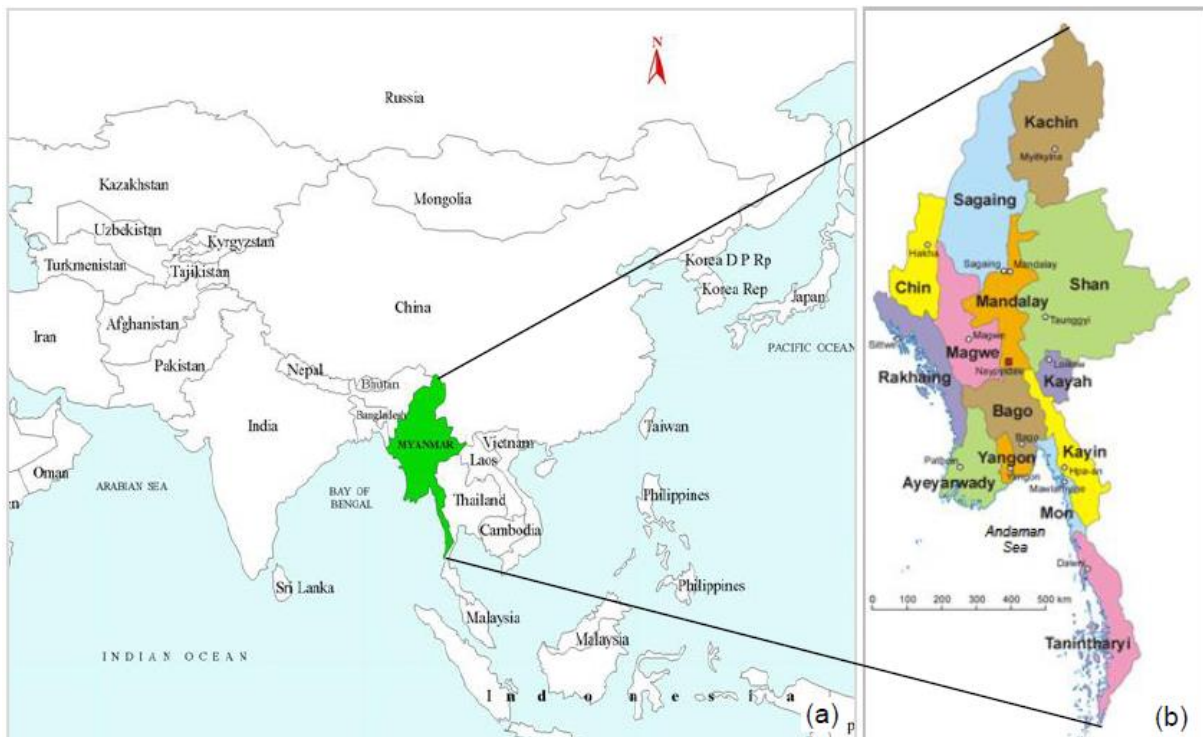

Figure 1: Map of Myanmar (source: NAPA, 2012)

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[1] https://www.britannica.com/place/Myanmar/Demographic-trends (accessed on 1 December 2020)
[2] Forestry in Myanmar, 2020

Table 1: Summary of the Country Profile

Official name (ISO 3166 code)	The Republic of the Union of Myanmar (MM)
Capital	Nay Pyi Taw
Population	55.48 million (2022)[3]
Language	Myanmar
Currency (ISO 4217 code)	Myanmar Kyat (MMK)
Land Area	676,577 km^2
Forest Area	28,543,890 ha (2020)[4]
GDP (PPP)	5123.8 USD (2020)[5]
Gini	30.7 (2017)[5]
HDI	0.583 (2019)[6]
DAC-ODA Recipients	Least Developed Country[7]
Time zone	UTC +06:30
Calling code	+95

2.2. Government and Administration

The government of Myanmar, as defined by the Constitution of the Republic of the Union of Myanmar (2008), functions as a parliamentary republic. In this type of government, the heads of the Cabinet are responsible for carrying out the laws set forth by Parliament. In 2008, Myanmar established a new Constitution and created a new form of government, which is divided into three branches: legislative, executive, and judicial. The legislative branch of the government is divided between the national level and the local and regional levels. At the national level, the legislative branch is carried out by the Assembly of the Union (like Parliament), which is divided into two houses: The House of Nationalities and the House of Representatives. The executive branch is headed by the President of the country. The President is based on the political party with majority power in the Assembly of the Union. The judicial branch of Myanmar remains heavily influenced by the British colonial-era laws and systems. The judicial system here does not, however, guarantee the citizens a public trial and it is not an independent branch of government. The highest level of this branch is the Supreme Court, which is headed by one Chief Justice and an Attorney General.

Myanmar is divided into seven States and Regions, formerly called States and Divisions. Regions are predominantly Myanmar (that is, mainly inhabited by the dominant ethnic group). States, in essence, are home to particular ethnic minorities. The administrative states and regions are further subdivided into districts, which are further subdivided into townships, wards, and villages.

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[3] Department of Population, Myanmar 2022, https://www.dop.gov.mm/en, Accessed February 2022

[4] FAO, FRA 2020

[5] World Bank, 2020

[6] UNDP, Human Development Report, 2020. http://hdr.undp.org/sites/default/files/Country-Profiles/MMR.pdf

[7] DAC List of ODA Recipients, effective for reporting on 2018, 2019 and 2020 flows

2.3. People and Population

According to the 2019 intercensal survey, more than 70% of Myanmar's population lived in rural areas. Yangon Region has the highest population with around 7.8 million people (15.3%), followed by Mandalay Region with around 6.2 million (12.1%), Ayeyarwady Region with approximately 6.1 million (12.0%), and Shan State with around 5.3 million (10.5%). The states and regions with the least population are Kayah (also known as Karenni) (0.6%), Chin (1.0%) States, Nay Pyi Taw (2.3%), and Taninthayi (2.8%)[8] Regions.

2.4. Sociocultural Context

The majority ethnicity in Myanmar, making up approximately two-thirds of the population. The 2014 census, the first in three decades, put the population at 51.5 million, but accurate numbers are elusive; the government categorizes people into ethnic designations based on geography, not all of which were counted in the most recent census. The country is divided into seven regions, mostly inhabited by Myanmar, and seven states, each named after one of the minority ethnic categories: Kachin, Kayah (also known as Karenni), Karen, Chin, Mon, Rakhine, and Shan[9].

Though Myanmar had long difficulties in fostering human resources through quality education due to political instability and isolation over the years of military rule, since 2015, the government has prioritized the reform of the education sector to improve education quality. In Myanmar, education is compulsory and free until fourth grade. Myanmar's adult literacy rate at the Union Level is around 89.1%[10]. Enrolment rates at primary school are very high, estimated at 91.7% in 2019, but drop rapidly at secondary and tertiary levels of education, with enrolment rates of 72.9% and 10.5% at secondary and post-secondary levels respectively[11].

2.5. Economic Situation

Myanmar is a lower-middle-income country with significant economic potential. The countries with which it shares its borders (Bangladesh, India, China, Laos, and Thailand) are home to approximately 40 % of the world's population; it is located near key maritime trade routes and has significant natural resources. In 2020, Myanmar's gross domestic product (GDP) per capita was forecasted at USD 1,354.4. Myanmar's Industry sector accounts for around 34.7% of Gross Value Added (GVA), followed by the agricultural sector (26.3% of GVA) and the services and other activities (23.6% GVA)[12].

Myanmar has a high workforce participation rate, about 76% of the male population aged 15 years and over were economically active compared to only 53 percent of their counterparts. The

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[8] Department of Population. 2020. The 2019 Inter-censal Synopsis Report. Ministry of Labour, Immigration and Population, The Republic of the Union of Myanmar.

[9] "Ethnic Nationalities of Burma," Oxford Burma Alliance, http://www.oxfordburmaalliance.org/ethnic-groups.html, accessed March 14, 2016.

[10] Same as 8

[11] Same as 8

[12] UN Data- https://data.un.org/en/iso/mm.html, Accessed on December 2021.

proportions of males in the labor force were much higher than that of females for all age groups. The unemployment rate among persons aged 15 years and over was 2.7 % at the national level. Among employed persons aged 15 years and over, almost half (45%) were employed as own-account workers, 27.7 percent were employees who worked in the private sector, and about 4 percent were employed as civil servants. It is worth noting that about 13 % were working without any pay in a household or family business[13].

2.6. Climate and Biodiversity

Myanmar has a tropical monsoon climate with three seasons – hot (March-April), rainy (May-October), and cold (November-February). Possessing a great variety of topography, availability of temperature and precipitation is ranging throughout the parts of the country. The central part of Myanmar has the average highest temperature about 43.3° C while the northern part has about 36.1° C and the average temperature on the Shan Plateau in the eastern part is in the range of 29.4° C and 35° C. The highest annual rainfall is received in the southern and Rakhine coastal regions in the range of 2,500– 5,500 mm while the central zone receives the lowest rainfall with approx. 500-1,000 mm per year but the mountainous regions in the north and eastern part are cooler with the precipitation ranging from 1,000-2,000 mm per year[14].

Myanmar possesses a diverse species of flora and fauna and habitats with a wide variety of wildlife originating from north, south, and southeast Asia, as well as lush forests and extensive river networks flowing from the northern Himalayan mountains southwards to the mangrove river deltas and the Bay of Bengal. It boasts the highest proportion of forest cover in mainland Southeast Asia with as much as 80% of the world's teak reserves and the most biodiversity in the Indo-Pacific region. Moreover, Myanmar is home to many rare species. According to the NBSAP, over 11,800 plant species, 260 mammal species, 1,100 birds' species, 290 reptile species, 120 terrestrial and aquatic species and 38 seaweed species are being recorded[15]. Myanmar also possesses 52 endemic species including 1 mammal species, 29 reptile species, 6 terrestrial and aquatic species, 8 bird species and 8 plant species[16].

In Myanmar, ecosystems and their biodiversity are being protected by designated protected areas. As of February 2022, 55 protected areas, 6.42% of the country's area have been designated[16]. Among them, 8 protected areas are designated as ASEAN Heritage Parks, 4 protected areas are designated as Ramsar Sites, 2 protected areas are designated as Man and Biosphere Reserve.

Myanmar also completed National Ecosystem Assessment with the funding support of the Global Environment Facility (GEF) to identify the key areas for effective conservation planning and reduce the risk of current and future fragmentation of Myanmar's natural ecosystems.

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[13] Department of Population. 2020. The 2019 Inter-censal Synopsis Report. Ministry of Labour, Immigration and Population, The Republic of the Union of Myanmar.

[14] Ministry of Natural Resources and Environmental Conservation (MONREC). 2012. Myanmar National Adaptation Programme of Action (NAPA) to Climate Change.

[15] National Biodiversity Strategy and Action Plan (2015-2020)

[16] Nature and Wildlife Conservation Division, Forest Department, Myanmar

According to the assessment, using the IUCN Red List of Ecosystem categories and criteria, 64 ecosystem types were identified, and among them, 29 were assigned as threatened status. This assessment also shows that one-third of Myanmar's land area contains threatened ecosystems and enhancement of conservation efforts is needed [17]. Myanmar's assessment of National Red List of Threatened Species was drafted by the cooperation of local and international experts and draft assessment is under the review process[18].

Despite low levels of industrialization and population density, however, Myanmar's rich natural environment - and particularly its large areas of natural forest and wetland habitat, are under threat by human activities and climate change. Myanmar's rate of deforestation is one of the highest in the world: FAO statistics indicate that the area of forested land has dropped from 58% in 1990 to 47% in 2010, while 431 species of animals and plants are under threat according to the IUCN Red List[19]. Contributing factors to this deterioration of the ecosystem include the degradation of forests, poor agricultural practices, illegal poaching, improper mining practices, weakness in law enforcement, lack of conservation awareness, international demand for Myanmar's resources for energy use, and agricultural commodity exports.

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[17] Myanmar National Ecosystem Assessment, Threatened ecosystems of Myanmar 2020 version
[18] IUCN News , Assessed on February 2022
[19] IUCN Red List Statistics, https://www.iucnredlist.org/statistics

3. Major Trends and Issues in Forest and Forestry

3.1.State of Forest

3.1.1. Land Use and Forest Cover

Myanmar is a country among ASEAN member states possessing the highest forest cover. The rate of forest cover was estimated at 42.19% covering 28.5 million ha (FAO, 2020). The extent of forest cover and classification is shown in (Table 2). The forests in Myanmar have distributed over three main climatically distinct regions – tropical, subtropical, and temperate – which are diverse, varying from the sub-alpine, dry forest, and moist deciduous forests, tropical rain forests to mangrove forests. In the country, there are six major forest types such as (1) mangrove forest including tidal forest beach dune forest and swamp forest, (2) tropical evergreen forest, (3) deciduous forest including mixed deciduous forest, and deciduous and dipterocarp forest (4) dry forest, (5) hill and temperate evergreen forest, and (6) scrub and grassland.

> *Box 1: Definition of Forests in Myanmar is consistent with the forest definition defined by FAO: "land spanning more than 0.5 ha with trees higher than five meters and a canopy cover of more than 10 percent or trees able to reach these thresholds in situ."*

Table 2 Forest Cover and Classification in Myanmar 2020

1) Extent of Forest Cover

Categories	Area (million ha)	Percentage
Closed Forest	12.26	18.12%
Open Forest	16.28	24.07%
Total Area Covered by Forest	28.54	**42.19%**

(Source: FD, 2020)

2) Classification of area

Categories	Area (million ha)	Percentage
Forest (Closed forest and Open forest)	28.54	42.19%
Mangrove	0.33	0.49%
Other wooded lands	18.8	27.79%
Other lands	18.01	26.62%
Water Body	1.97	2.91%
Total area	**67.65**	**100%**

(Source: FD, 2020, and FAO 2020- Myanmar Country Report)
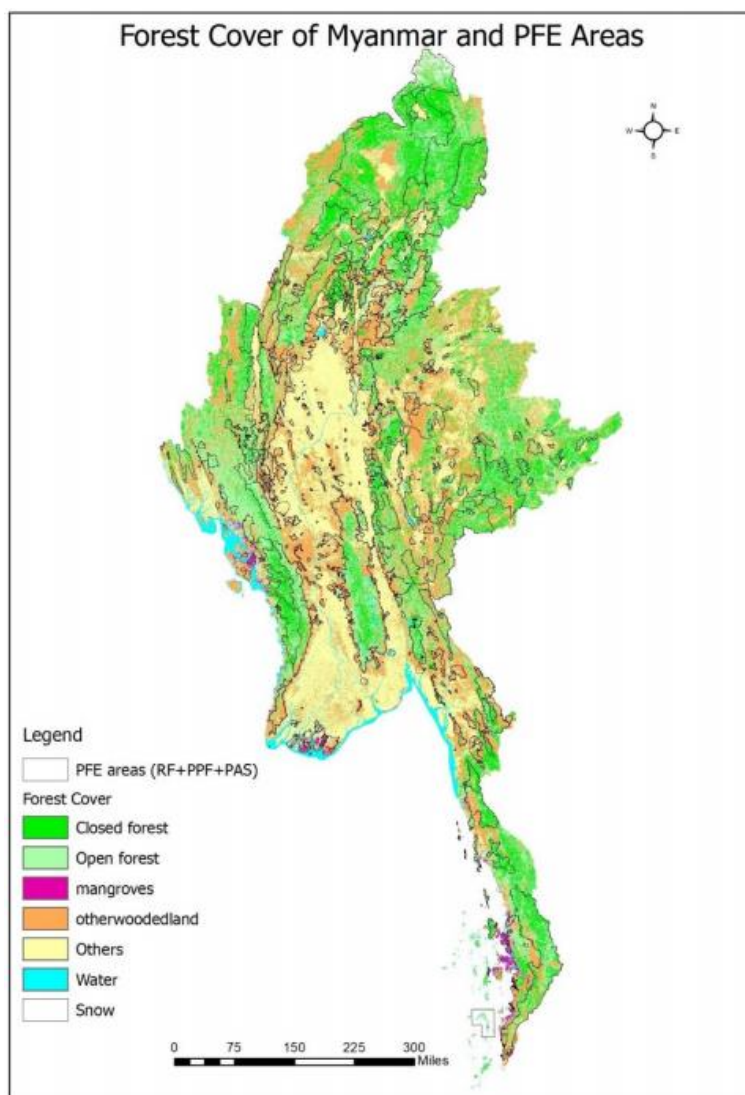
Figure 1: Land use / forest cover of Myanmar 2015
(Source: FRL of Myanmar, 2018)

Table 3: Area and Forest Types in Myanmar

Forest Types	Area (ha)	% of Forest Area
Mangrove Forest	325,259	1.12
Tropical Evergreen Forest	5,024,093	17.30
Mixed Deciduous Forest	11,093,662	38.20
Dry Forest	2,904,100	10.00
Deciduous Dipterocarp	1,237,147	4.26
Hill and Temperate Evergreen	7,817,837	26.92
Shrub and Grass Land	638,902	2.20
Total Forest Area	**29,041,000**	**100.00**

(Source: FD, 2020)

3.1.2. Forest Use Categories

In line with the Forest Law (2018) which was amended and replaced on Forest Law 1995, forests in Myanmar are called Permanent Forest Estate (PFE) classified into two categories – Reserved Forest (RF) and Protected Public Forest (PPF). FD also designates Protected Areas (PA) to preserve diverse ecosystems and species richness of Myanmar[20]. The PFEs are under the administration of the Forest Department of the Ministry of Natural Resources and Environmental Conservation. Outside the jurisdiction of FD, there are also other types of forest land overseen by other ministries and laws. Defined by Forest Law 2018, land at the disposal of the Government are other lands except for land in which a government department, organization, or any person has acquired the right of cultivation, right of possession, right of use, and occupancy, beneficial enjoyment, heritable right or transferable right under any existing law.

According to the data from FD, the areas of PFEs and PAs across the country in 2021 are covered at a rate of 25.61% and 6.42% of the total land areas respectively (Table 4). According to National Forest Master Plan 2002-2031, the government sets a target to reach 30% of RF and PPF and 10% of PAs by 2030.

Table 4: Current status of RF, PPF, and PA system in Myanmar

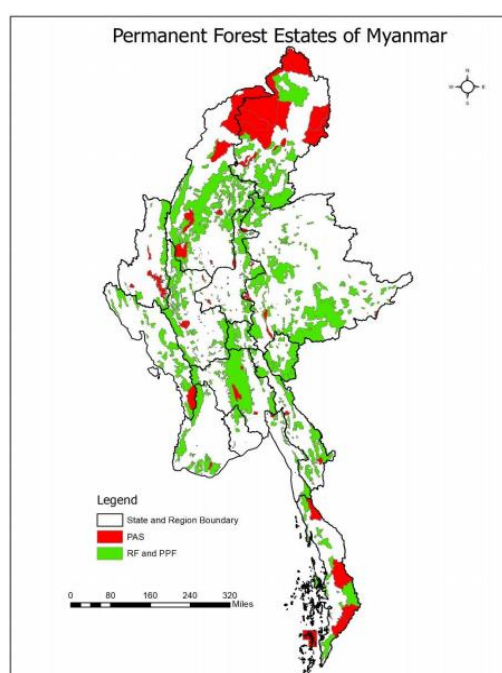| Legal Classification	Area (ha)	Percentage
Reserved Forest	12,017,240.5	17.77
Protected Public Forest	5,309,201.5	7.84
Protected Area	4,121,496.3	6.09

(Source: FD, 2021)

Figure 2: Distribution of RF, PPF, and PAs in Myanmar (source: FRL of Myanmar, 2018)

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[20] Forestry in Myanmar 2020

3.1.3. Main Drivers of Forest Changes

The rate of forest cover in Myanmar in 2015 was 42.92% (FAO, 2015), and 42.19% in 2020 that covers 28.5 million ha of the total country area (FAO, 2020). According to FRA 2020, the deforestation rate in Myanmar was 0.6% annually from 2005 to 2020 (Figure 3).
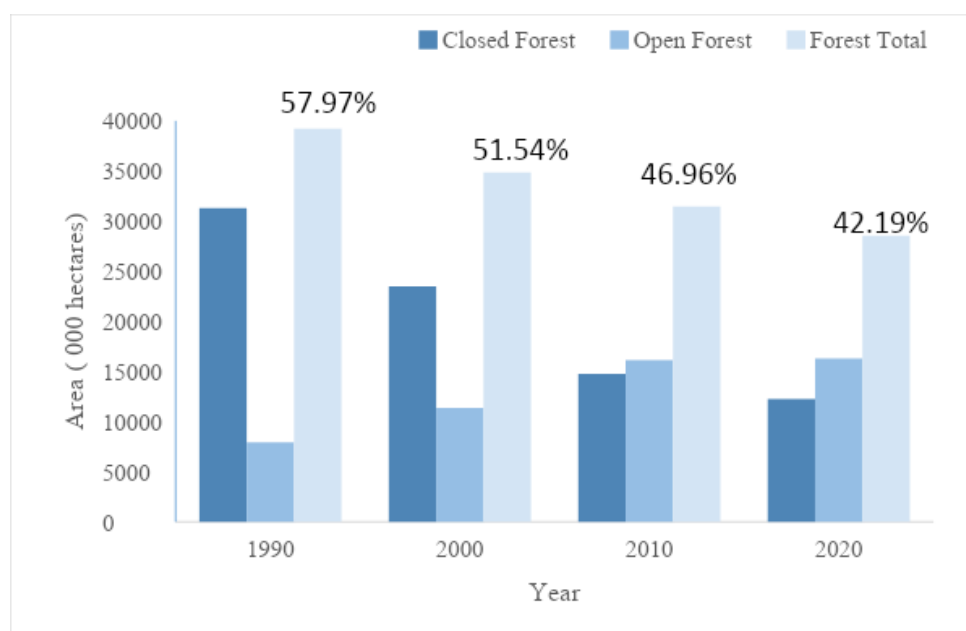

Figure 3: Rate of forest cover change between 1990 and 2020

(Source: Forest Department, Myanmar, 2020 and FAO 2020)

According to the analysis of drivers of forest change under the REDD+ Readiness scheme, the drivers of deforestation are distinguished into direct and indirect drivers[21]. The main direct drivers of deforestation within the country are clearing forest land for both small- and large-scale agriculture, mining activity, and infrastructure development. Indirect drivers of deforestation include institutional setup, overlapping and conflicting mandates among different relevant management committees, weak law enforcement, forest tenure issues, poverty and lack of alternative livelihoods, increasing demand for natural resources from the growing middle class, and lack of scientific proof to convince policymakers on forest ecosystem service and investment.

Table 5: Direct drivers of deforestation in Myanmar

Driver	Impact Areas	Location	Trend
Rice	ca. 7 million hectares significantly affecting mangroves	Ayeyarwady delta, central dry zone), Yangon deltaic and Rakhine coastal areas	Myanmar Rice Sector Development Strategy foresees 7.7 million hectares under rice by 2030.

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[21] http://www.myanmar-redd.org/wp-content/uploads/2018/02/Myanmar-Drivers-Report-final.pdf (accessed on 2 December 2020)

Corn	530,000 hectares Replacing mainly other annual crops, but also some deforestation	Shan State about 52% of total production. The Ayeyarwady (delta regions), Magwe, and Sagaing regions make up the balance	As the livestock sector is growing (also beyond Myanmar), demand for feedstock will continue to increase. Corn production will grow by at least 6%. More deforestation should be expected.
Pulses and beans	4.3 million ha Normally grown immediately after the harvest of the main rice paddy crop in the delta region; effects on forests negligible	Mainly in the central dry zone, but are also found in the delta, hilly, and coastal zones	Stable with increases depending on demand from India
Aquaculture	Areal extent not known 1.6% of mangrove deforestation between 2,000 and 2012 could be; attributes to aquaculture Mangroves are also affected by fuelwood cutting for shrimp drying	Ayeyarwady delta	n/a
Rubber	652,105 ha Deforestation in the north and along new infrastructure corridors in the south	Mon, Taninthayi, and the Kayin States account for 68% of rubber area, Shan, Bago, and the Kachin States account for 24% of rubber area	Improvements in productivity and increasing interest and investments by Malaysian and Thai companies may lead to an expansion of the area under rubber and further deforestation.
Oil palm	Around 400,000 ha Deforestation of pristine forests	Only Taninthayi	In the short to the medium-term expansion of oil palm plantations will slow down.
Shifting cultivation	6-7 million ha 15,000 ha natural forests are destroyed every day	Upland areas	Shifting cultivation area decreased since 2000; expected to decrease further if conflicts can be resolved
Mining	46,000 ha Inconclusive information on the effect on forests	Kachin State, Sagaing, and Mandalay Regions	Due to investment risks, the area affected by mining is not expected to grow significantly in the short term
Hydropower	139, 400 ha (existing and under construction) 252,300 ha planned	Ayeyarwady, Sittaung and Thanlwin Basin	Increasing energy demand in Myanmar and neighboring countries and the interest of donors and

	Figures include facility development and necessary infrastructure Hydropower development has overwhelmingly occurred within forest reserves		the private sector to provide finance for expansion will lead to further deforestation.
Road and transportation networks	n/a	Across the country, but new developments particularly connecting to neighboring countries.	Road networks will expand and have direct and indirect impacts on forests, especially in border areas.

(Source: MONREC, REDD+ Myanmar, UN-REDD Programme, 2017)

3.2. Forest Policy Direction and Strategies

3.2.1. Forest Legislations

The Government of Myanmar enacted the Forestry Law in 1992, which replaced the Myanmar Forest Act 1902, and highlighted the constitution of reserved forest and declaration of protected public forest, management of forest land, the establishment of forest plantation, administration of forest produce, and protection of forest crimes over the country. In 2018, the Forestry Law 1992 was amended by providing stronger measures and regulations to conserve the country's fast-dwindling forests. The new law comprises nine basic principles and 58 sections under 13 chapters. It is also a recognition of local and indigenous people's rights and participation in forest management.

In Myanmar, there are Forest Rules promulgated to implement the provisions of the adopted forestry law. The Forest Rules 1995 elaborates the regulatory framework in the Forestry Law 1995 by providing concrete procedures to oversee the forest resource across the nation. The forest rules of the new forest law 2019 are being drafted (Forest Trends, 2019).

Other forest-related legislations in Myanmar are:

- Conservation of Biodiversity and Protected Areas Law 2018 (replaced Protection of Wildlife and Protected Areas Law 1994)
- Conservation of Biodiversity and Protected Areas Rules (under development and revised on Protection of Wildlife and Protected Areas Rules 2002)
- Environmental Conservation Law 2012 (replaced Environmental Conservation Law 2002)
- Environmental conservation rules 2014
- National Environmental Policy 2019
- National Wetland Policy and Strategic Actions 2019
- Myanmar Climate Change Policy 2019
- National Land Use Policy 2016
- Community Forestry Instructions 2019 (Replaces Community Forestry Instructions 1995, and 2016)

- Myanmar Timber Enterprise (MTE) extraction manual 1948
- State timber board act 1950
- Standing orders for extraction staff of MTE 1970
- Logging rules 1936
- National code of forest harvesting practices 2000

3.2.2. Institutional Settings for National Forest Management

Ministry of Natural Resources and Environmental Conservation (MONREC) is a government body, formed in 2016, responsible for two main affairs – forestry/environmental affairs and mining affairs. There are 14 specialized subsidiary bodies under MONREC, of which seven of each are under the two main affairs. Figure 4 shows the management structure under MONREC. The Union Minister Office of Forestry/Environmental Affairs is the head of forest agencies in Myanmar which takes a leading role in the coordination of six specialized institutes namely Forest Department (FD), Dry Zone Greening Department (DZGD), Myanmar Timber Enterprise (MTE), Environmental Conservation Department (ECD), Survey Department (SD) and the University of Forestry and Environmental Science (UFES).
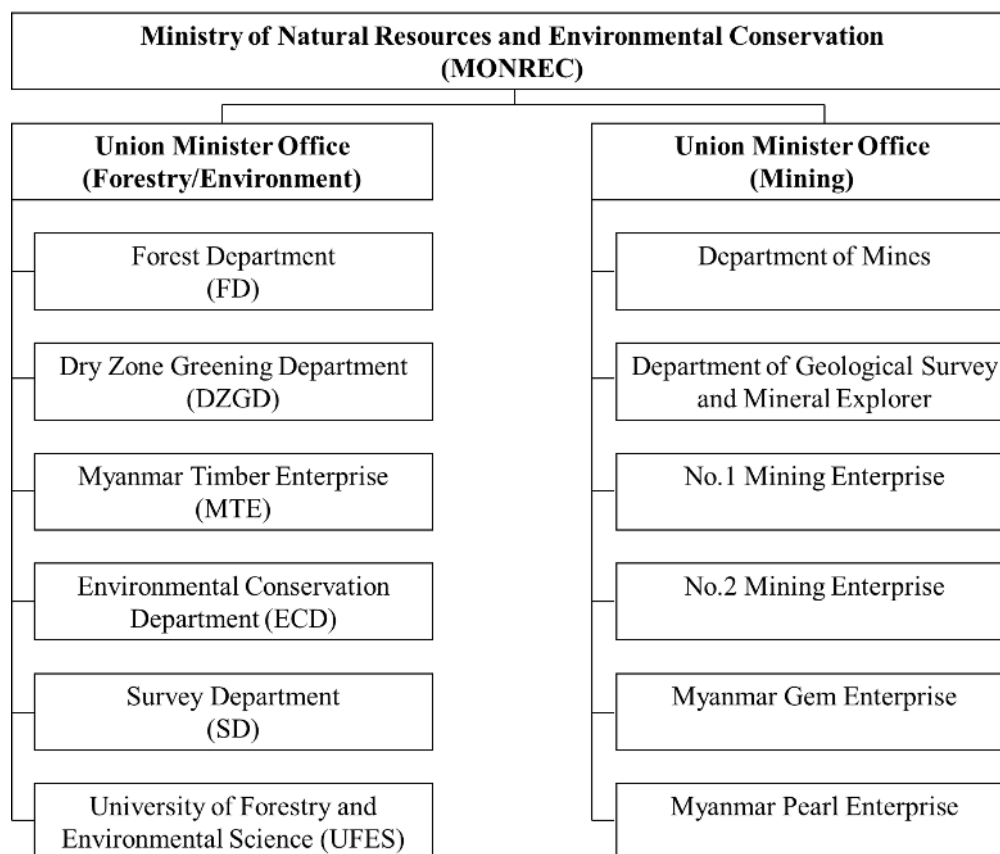

Figure 4: Organizational chart of MONREC (Source: FD, 2020)

Forest Department (FD) is a key national forest agency responsible to implement the Forestry Policy 1995. FD's main responsibility is to protect and conserve forest resources and biodiversity and implement sustainable management of forest resources of the country. The

Headquarters of FD is located in Nay Pyi Taw Capital City which comprises 11 divisions and administers 15 regional offices, 68 districts offices, and 321 township offices across the country (FD, 2020).
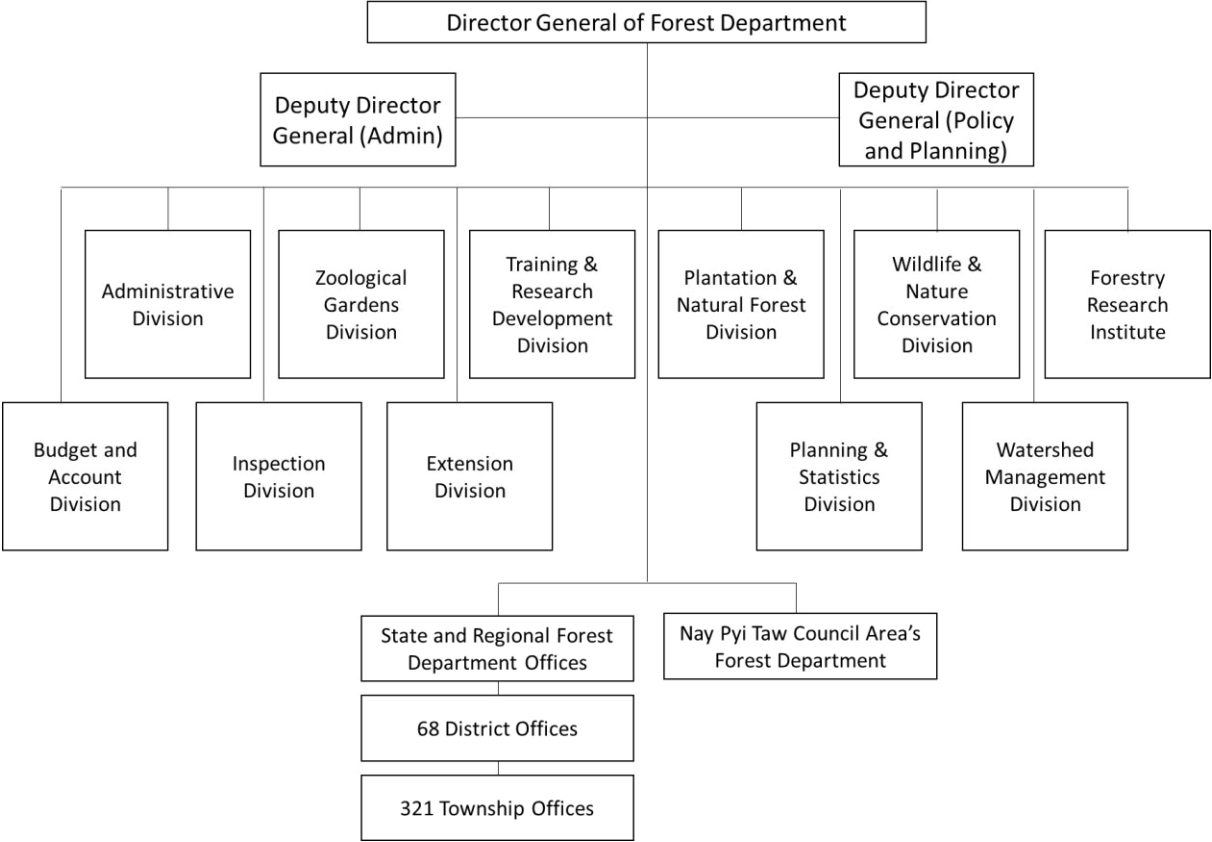

Figure 5: Organizational Structure of Forest Department of Myanmar

3.2.3. Forest Tenure and Governance

In line with **National Land Use Policy 2016 (NLUP)**, the Government of Myanmar recognizes and protects customary land tenure rights and procedures of the ethnic nationalities. The overarching objective of the NLUP is to implement, manage and carry out land use and tenure rights in the country systematically and successfully, including both urban and rural areas, and guide to the development and enact the National Land Law, including harmonization and implementation of the existing laws related to land, and issues to be decided by all relevant departments and organizations relating to land use and tenure rights.

In Myanmar, there are six land-related policies, six land-related rules, 13 land-related instructions/procedures, and 70 land-related laws (World Bank, 2020). Land Acquisition, Resettlement, and Rehabilitation Law were enacted in 2019 by the Union Parliament of Myanmar which replaced the colonial-era Land Acquisition Act 1894 as well as provided a legal framework for resettlement and rehabilitation for the first time in Myanmar.

The Community Forestry Program in Myanmar was started in 1995 by following the Community Forestry Instructions (CFI). The CFI 2019 was promulgated by the GoM, replacing the CFI 1995, to provide clear guidelines and procedures of Community Forestry (CF) within

the country context. CF can be established within forest-covered lands managed by the government including RF, PPF, and mangrove forests. Once CF is approved, CFUG can administer their CF initially for 30 years and can be extended upon request and the performance of the CFUG.

According to CFI 2019, there are seven steps to established community forestry in Myanmar, to wit:

1. CFUG shall be formed with households that are interested in CF;
2. the CFUG must be formed with direct beneficiaries whose livelihoods depend truly on the forest;
3. in the formation of the CFUGs facilitators must be consulted and the suggestion received;
4. each CFUG shall form a Management Committee (MC) consisting of a chairman, a secretary, a treasurer, and two members, with persons elected unanimously from among the CFUG members;
5. Gender equity shall be considered in the formation of the MC;
6. The number of the members of the MC can be increased a necessary; and
7. With the majority approval of the CFUG, the MC can change the list of the members of the CFUG.

The CFUG is allowed to harvest forest products as long as there is an adopted Management Plan from the FD. CFUG is responsible to prepare the management plan, by using the form annexed in the CFI 2019, in consultation with the facilitator including local forest agencies. Upon confirmation of the management plan, DFO will issue and provide Community Forestry Certificate to the CFUG. As of January 2022, there were 7016 CFUGs with 179,588 households across Myanmar established, of which 391,761.42 ha of CFs certified by the FD (FD, 2022). The National Forest Master Plan (NFMP) targets to reach 920,000 ha of CF by 2030.

Box 2: Community Forestry-related terms defined by the CFI 2019:

Community Forestry (CF) means all sustainable forest management and utilization activities, in which the local community itself is involved. This expression includes establishing new plantations and managing existing forests, creating employment and income opportunities from subsistence to commercial purposes, generating food, stabilizing the ecosystem, and improving the environmental condition.

Community Forest User Group (CFUG) or User Group means a group formed by households who have lived continuously for five years in or within 5 miles (8 km) from the periphery of the forest. The group, interested in forest operations, and truly dependent on the forest for their livelihoods, are the direct beneficiaries of the forest and conducts community forestry activities, the distance and settlement time may be relaxed, if the forest has been traditionally and customarily managed by the local community, or if the District Forest Officer justifies doing so based on local circumstances.

Community Forest based Enterprise (CFE) means harvesting wood and non-wood forest products, foods, and value-added products from the community forest, and trading them in

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the local and international markets by the standing laws, or business conducting local community-based tourism.

3.2.4. Government Budget Allocation for Forest and Forestry Sector

Table 6: The national budget allocation in national forestry agency from 2012 to 2016 (million USD)

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
FD	1.18	1.11	0.88	0.91	2.47
DZGD	2.47	2.28	3.18	3.82	3.95

(Source: https://prais.unccd.int/sites/default/files/2018-10/Annex_1.pdf accessed on 4 Dec 2020)

3.2.5. Key National Forest Policies and Programs

Myanmar Forest Policy 1995

The Government of Myanmar (GoM) promulgated "Myanmar Forest Policy 1995" to prepare policy intervention needed to keep pace with the changing socio-economic environment and to ensure that the benefits from forests are available to posterity in perpetuity. The policy emphasizes the six imperative or the highest government priorities, namely protection, sustainability, basic needs, efficiency, participation, and public awareness. The policy document also identified a list of constraints in the forestry sector as below:

- Inadequate information and planning;
- Adhocism in land use and low productivity;
- Shifting cultivation;
- Inefficient wood processing and utilization of the resource;
- Inappropriate pricing policy;
- Inconsistent policies and policy conflicts;
- Inadequate budgetary resources; and
- Inadequate institutional framework.

To overcome the above issues, the policy recommended policy measures, strategies, and actions in the short-, medium- and long-term toward to accomplish the following related objectives:

- Land use,
- Protection and management,
- Forest regeneration and afforestation,
- Forest industry, marketing, and trade,
- Forest research,
- Forestry planning,
- Intersectoral coordination,
- Institutional strengthening,
- Budget and finance, and
- People's participation and public awareness.

National Forestry Master Plan 2002-2031

NFMP is a 30-year plan which covers a timeframe from 2002 to 2031. The NFMP aims to manage the forest resource on a sustainable basis by outlining the strategic directions for the sector and covers a range of issues, including conservation, restoration, protection, production, watershed management, law enforcement, and the promotion of fuelwood substitutes. The main targets of the Plan are to increase RF and PPF to 30% and PA to 10% of the country's area by 2030 as well as to establish 919,000 ha of CFs over the country. The NFMP provide a guiding framework to develop 10-year forest management plans, five-year action plan, and annual work plan developed by FD and implemented by respective regional, district, and township forestry offices.

Relevance Forestry Strategy

Myanmar has been involved in developing several strategies and programs for the purpose of achieving sustainable management of forest resources across the country. The following are the relevant forestry strategies in Myanmar:

- National Biodiversity Strategy and Action Plan 2015-2020
- Myanmar Reforestation and Rehabilitation Programme 2017-18 to 2026-2027
- Forestry Sector Comprehensive Development Plan (2011-2012 to 2030-2031)
- Re-establishing Natural Habitats Programme 2019-20 to 2028-29
- Forestry Sector Comprehensive Development Plan 2017-18 to 2026-27
- Mangrove Action Plan
- Inlay Lake Watershed Conservation Action Plan
- National Wetland Policy and Strategic Actions 2019
- National REDD+ Strategy
- National Environmental Policy 2019
- National Land Use Policy 2016
- Myanmar Climate Change Policy 2019

3.2.6. Forest Sector's Alignment to National Imperatives

Myanmar Sustainable Development Plan (MSDP) 2018-2030 is the master plan of the government for developing the country, and it provides an overall framework for coordination and cooperation across all ministries, states, and regions. The MSDP is structured by 3 Pillars, 5 Goals, 28 Strategies, and 251 Action Plans, which are also aligned with the SDGs. "Natural resource and the environment for posterity of the nation" is goal number five of the MSDP, elaborates into six strategies and 53 actions, focuses on the legal, institutional, and policy frameworks required to better protect and manage the natural environment and ecosystem, through strengthened conservation efforts, improved development, and infrastructure planning, and increased enforcement against illegal natural resource-related practices, pollution, and other harmful activities. The GoM recognizes the vital role of the natural resource to the nation and committed itself to the MSDP to cope with the existing environmental challenges within the country such as deforestation, mangrove loss, the illegal wildlife trade, and climate change.

3.2.7. International Engagement & Commitment to International/Regional Goals

Myanmar is a signatory country of the UNFCCC as part of the Rio Earth Summit in 1992. The GoM provided ratification instrument to UNFCCC in 1994, later on, ratified to the Kyoto Protocol on 13 August 2003. Most recently, Myanmar signed Paris Agreement on 22 April 2016 and ratified in on 13 August 2017. As a non-annex 1 party and the country is rich in biodiversity and forest resources, Myanmar receives high attention from international community in the forest sector in coping with climate change. Following the COP's decisions, Myanmar has involved and produced several commitments to the convention, by its nature, NAPA, REDD+, and NDC.

Myanmar also ratified the UN CBD on 23 February 1995. Under the convention framework, NBSAP was developed as the national guiding document to conserve, manage and use biodiversity for the economic, environmental, and social wellbeing of present and future generations of the country. Myanmar has updated its second NBSAP adopted by the CBD COP with a timeframe from 2015 to 2020. The revised NBSAP set 20 targets with 162 actions, associated with Aichi Biodiversity Targets, which organized under five strategic goals.

Additionally, Myanmar ratified the UNCCD on 01 February 1997. The NAP of Myanmar to UNCCD had been finalized since 2005.

3.3. Forestry and Forest Products

3.3.1. Forest Sector Production

According to the Myanmar Timber Chain of Custody document, there are five legal sources of timber in Myanmar, including natural production forest under State management, natural forest logging concessions, natural forest conversion, plantations, and community forests. Imported wood is limited, but it increasingly makes attention since it can reduce the pressure of domestic sources.

The majority of Myanmar's population still depends on forest resources as their primary energy. Up to 80% of households use wood fuel for cooking and heating (World Bank, 2019).

3.3.2. Forest Sector Trade

Myanmar Timber Enterprise (MTE) is a state-owned forest enterprise under MONREC that has the right to extract timber. MTE is responsible for transporting, processing, and trade of long and timber across the nation.

According to ITTO (2017), the industry of Myanmar produced about 4.4 million m3 of logs in 2015. The total export value of primary timber products accounted for about 400 million US dollars in 2015.
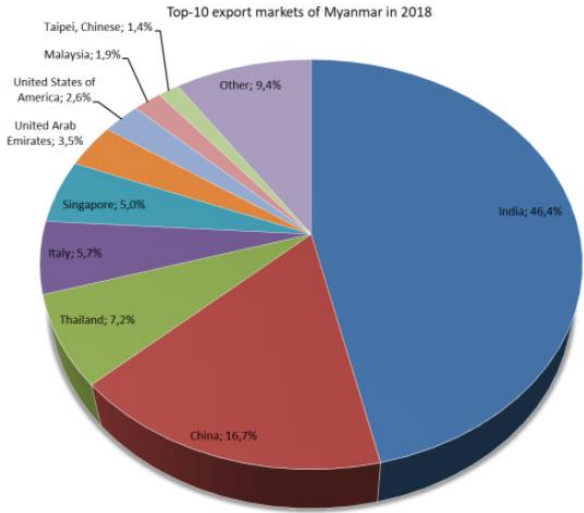
The exports of Myanmar's timber industry are dominated by the valuable Burmese teak (*Tectona grandis*), harvested from both natural and planted forests. Many other species include Pyinkado (*Xylia dolabriformis, X. kerri*), Padauk (*Pterocarpus macrocarpus*), Htauk kyant (*Terminalia tomentosa*), Rubber tree (*Hevea brasiliensis*), and Gmelina (*Gmelina arborea*).

In 2018, the biggest market for Myanmar to export its wood products was India and followed by China, sharing respectively 46.4%, and 16.7% of the total export wood product (Figure 6).

Table 7: Wood production export in 2007

	Production quantity (1,000m^3)	Imports quantity (1,000m^3)	Domestic consumption (1,000m^3)	Export quantity (1,000m^3)
Logs	4,360	0	4,321	39
Sawn wood	1,830	1	1,719	111
Veneer	225	10	49	186
Plywood	116	63	170	8

(Source: https://www.timbertradeportal.com/countries/myanmar/ accessed on 3 December 2020)

Source: ITC (2020) Main markets, in terms of export value, for the product '44 Wood and articles of wood, wood charcoal' exported by Myanmar in 2018

Figure 6: Top-10 export markets of Myanmar in 2018

3.3.3. Forest Sector Employment

In Myanmar, the employment to population ratio was 61.5 %, and this refers 61.5 % of the population who were in the working-age group (15+) were gainfully employed. But the remaining 38.5% were either unemployed or were out of the labor force. Of the major occupation categories, "Skilled Agricultural Forestry and Fishery Workers" employed the largest number of people with aged 15 years and over (about 41%), followed by "Service and Sales Workers" (18.4%), "Craft and Related Trade Workers" (13.7%), and "Elementary Occupations" (11.6%). The rest of the groups were relatively small and made up only about 15 percent of all persons employed[22]. As of February 2020, Under the Ministry of Natural Resources and Environmental Conservation (Forestry/ Environmental sector), a total of 25,243 civil servants have been employed comprising of 1,863 officers and 23,380 staff.

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[22] Department of Population. 2020. The 2019 Inter-censal Synopsis Report. Ministry of Labour, Immigration and Population, The Republic of the Union of Myanmar.

3.4. Forest and Climate Change

3.4.1. Roles of Forest Sector in National Climate Change Policy (NDC, etc.)

Forest can provide significant ecosystem services such as the provisioning services (providing wood and non-wood forest products, fuelwood, etc.,), regulating services (carbon sequestration, flood mitigation, nutrient regulation, Water regulation, etc.,), cultural services (recreation, aesthetics, spiritual, etc.,), and supporting services (soil formation, nutrient cycling, etc.,). In Myanmar, the forestry sector contributes not only to the country's economy through the export of timber and non-timber forest products but also to the livelihood improvement of the rural communities.

With the aims of restoring approx. 1 million ha of degraded and deforested land within Permanent Forest Estate (PFE), Myanmar has implemented Myanmar Reforestation and Rehabilitation Programme (2017-18 to 2026-27) setting the target by each State/ Region including;

- o establishment of 148,627 ha of state-owned forest plantations
- o establishment of 115,427 ha of private plantations
- o encouraging and improving Assisted Natural Regeneration covering 331,392 ha in the Production Forests
- o conservation of 202,429 ha of remaining natural forests in Central Dry Zone
- o establishment of 311,875 ha of Community Forests
- o reservation of 1,610 square miles (6.195% of the country area) to fulfill the national target of 30% of PFE by Myanmar Forest Policy 1995
- o formulation of forest plantation policies and strategies

Myanmar is also attempting to benefit from the carbon market mechanism through the implementation of the REDD+ program that was initiated in 2012, and currently taking rapid steps in REDD+ Readiness Phase I activities and at the same time, initiating some pilot phase II activities as the phases are not mutually exclusive. The goal of the Myanmar REDD+ strategy is "*to contribute to the achievement of a climate-resilient, low carbon and sustainable development path of the country through transformational change in the land-use and forestry sector by reducing deforestation and forest degradation while enhancing livelihoods, sustainable growth, and development.*"

As a Party to the Paris Agreement (PA), Myanmar has developed its policy tools, action plans, and sectoral coordination mechanisms to take part in the global response to CC. In response to Climate Mitigation and Adaptation, Myanmar has taken steps to create a favorable policy and clear institutional framework that will mainstream climate change into all relevant short, medium, and long-term national development plans and policies. The key policy documents relating to CC such as Myanmar Climate Change Policy (MCCP) (2019), Myanmar Climate Change Strategy (MCCS) (2018-2030), and Myanmar Climate Change Master Plan (MCCMP) (2018-2030) were endorsed as well as the other supportive policy documents for the CC and Environmental actions were developed.

Myanmar Climate Change Policy (MCCP) provided long-term direction and guidance to tackle the impact of climate change across the nation. The policy recommendation in MCCP focuses,

among the six sectoral clusters, on "Healthy Ecosystem" where the forest sector is a crucial element for the enabling environment.

Following the mandate of MCCP, the GoM developed and promulgated Myanmar Climate Change Strategy 2018-2030 (MCCS) directing relevant ministries and stakeholders to implement within their respective and priority sectors.

3.4.2. Climate Change Adaptation and Disaster Risk Reduction in Forest Sector

Myanmar's National Adaptation Programme of Action (NAPA) to Climate Change was developed in 2012 elaborated priority projects of activity to respond to the ongoing and prospective impacts of climate change within the country. The Forest section is classified in the first priority level sector along with agriculture and early warning systems. NAPA initiates four priority projects under the forest sector with the proposed budget of USD 11.5 million. The four priority projects in forest sectors are:

- Building the resilience of degraded/sensitive forest areas to climate change impacts through reforestation (5 years, USD 3.5 million).
- Community-based reforestation for climate-resilient ecosystems and rural livelihoods in degraded watershed areas of the Central Dry Zone (3 years, USD 2.5 million).
- Community-based mangrove restoration for climate-resilient ecosystems and rural livelihoods in vulnerable and degraded coastal regions (3 years, USD 2.5 million).
- Enhancing the climate change resilience of rural livelihoods through community-based restoration at the Indawgyi and Inlay Lake watershed areas in the Northern Hilly Region (3 years, USD 2.5 million).

3.4.3. Global Partnership for Forest Protection

As an active member of the UNFCCC, Myanmar has been involved with the REDD+ scheme since 2012. For the preparation of the readiness phase, Myanmar has submitted its forest reference level (FRL) and first summary of safeguards information to UNFCCC respectively in 2018 and 2019. The analysis of the drivers of deforestation and forest degradation was completed in 2007 and the National REDD+ Strategy was already drafted, while National Forest Monitoring System (NFMS) has been designed with technical and financial support from development partners.

The GoM submitted its NDC to UNFCCC in August 2015 and updated it in 2020 committing to mitigate climate change within the country context. Sticking to the forest sector, the NDC of Myanmar emphasizes the implementation nationwide towards the target set in the 30-year NFMP to expand the area of PFE, consisting of RF and PPF to 30% and PAs to 10% of the national land area. In addition, the NDC has highlighted the plan for action in the forest management with the objectives:

- To decrease the rate of deforestation so that a significate mitigation contribution from the sector can continue to be realized;
- To prevent natural forest cover to maintain biodiversity and ecosystems in Myanmar
- To realize the co-benefits of the policy such as reducing soil erosion, thereby decreasing the risk of floods and landslides that may occur near rivers;

- To increase the resilience of mangroves and coastal communities which are at risk of flooding; and
- To increase capacity Sustainable Forest Management.

3.5. Human Resources and Institutional Capacities in Forest Sector

3.5.1. National Forest Administrative Capacity

According to FD, the MONREC employs 25,243 people working under forestry/environmental affairs. Among them, 1,863 people are employed as officers and 23,380 people are employed staff. MTE is an institute that employs the most staff, 58%, followed by FD, 31% of the employment in forestry/environmental affairs of MONREC (Table 7).

Table 8: Number of Employees in the National Forest Administrative Institute

No	Institutions	Officer	Staff	Total
1	Union Minister's office (Forestry/Environmental affairs)	40	79	**119**
2	Forest Department	497	7,416	**7,913**
3	Dry Zone Greening Department	108	1,193	**1,301**
4	Myanmar Timber Enterprise	792	13,788	**14,580**
5	Environmental Conservation Department	316	415	**731**
6	Survey Department	74	422	**496**
7	University of Forestry and Environmental Science	36	67	**103**
	Total	**1,863**	**23,380**	**25,243**

(Source: FD, 2020)

3.5.2. Research and Development[23]

Forest Research Institute (FRI) is a key national agency dealing with forest and forest-related research activities in Myanmar. The FRI was established in Yezin (Pyinmana), Zabuthiri Township, Nay Pyi Taw in 1978 under the supervision of FD. However, the forestry research was started in 1914, and a research division was formed in 1922 as part of the Forest Department. In 1952, a Forest Research and Training Circle was established, forerunner of FRI.

The research programmes that have been carried out by the FRI include sustainable forest management in natural teak forests, development of forest plantations, biodiversity conservation (mainly focus on flora of Myanmar), analysis of water quality and soil properties, tissue culture and biotechnology, reforestation/ afforestation in the central Dry Zone, efficient utilization of timber, development of the non-timber forest products and fuelwood resources development, wood energy conservation measures, development of social forestry and agroforestry research activities.

The institute employs 67 researchers mandated to provide technical information on all aspects of forestry and forest-based activities to increase the contribution of the forest and forest lands to the well-being of the nation. There are three divisions under the FRI, namely Administration and Finance Division, Forest Development Division, and Wood Utilization Division (FD, 2020).

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[23] Forest Department, Forestry in Myanmar, 2020.

Research facilities of FRI:

- Across the country, ten research stations were established where each of them is located in respective agro-ecological zones.
- There are 6 research laboratories in total at FRI namely 1) tissue culture lab especially for teak, rare and endangered orchid species, hybrid eucalypt species, 2) water quality lab, 3) soil lab, 4) wood utilization lab, 5) seed lab, and 6) biodiversity research lab under the project of FD- Chinese Academy of Sciences (CAS) collaboration.
- FRI also has an onsite research facility, and there are research experiment plots at each research station.
- Additionally, field-based research/projects related to community forestry, agroforestry research, and rural development have also been carried out. Currently, a total of 12 ongoing research programs/ activities are carried out by the research team of FRI.

3.5.3. Forest Education and Training

University of Forestry and Environmental Science (UFES) is the only public university that provides degrees in forest and environmental science to students in Myanmar. The university was first established during the 1920s and followed a series of name changes – Yangon University from 1923, Institute of Agriculture from 1985, Institute of Forestry from 1996, University of Forestry from 2003, and current name from 10 October 2017 (FD, 2020). UFES, under supervision of the same Union Minister Office as FD (Figure 4), envisions to be a world-class university enabling research, education, and service institute, regarding forestry and environmental conservation[24]. There are two main faculties under the UFES namely, the Faculty of Forestry Science and the Faculty of Environmental Science (Table 6). The university offers bachelor and master degrees through two distinguished academic programs – undergraduate program for five years and postgraduate program for two years respectively.
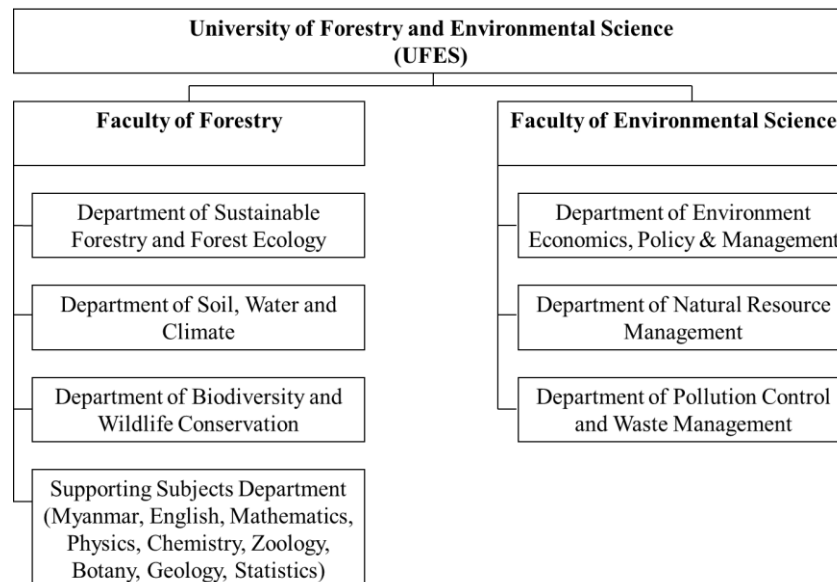

Figure 7: Academic Organizational Structure of UFES[25]

Other forest school and training centers in Myanmar:

- Myanmar Forest School (MFS), Pyin Oo Lwin, Mandalay Region;
- Central Forestry Development Training Center (CFDTC), Hmawbi Township Yangon Region, and sub-Training Center, Patheingyi Township, Mandalay Region;
- AFoCO Regional Education and Training Center (RETC), Hmawbi Township Yangon Region.

4. Challenges and Opportunities

4.1. Challenges

Natural resources sectors, such as forestry, agriculture, fisheries, and mining have played critical roles in the development and economic transformation of the country, and over the years their operations have become more intensive and extractive. Serious environmental problems have emerged as a result, including deforestation, accelerated loss of rich biological diversity, and increased pollution[26]. Although the country's main environmental policy statements[27] embrace the goals of harmony and balance between environmental protection and economic growth, Myanmar has yet to take broader steps to protect its natural resources. The lack of a comprehensive and coordinated environmental framework, enabling institutional and legal structures, expertise, and greater capacity for natural resource management and funding remain challenges. Myanmar is at critical crossroads. With many environmental assets, and industrial pressure only beginning to develop, it could effectively develop policies and regulations that ensure growth is sustainable and that key natural resources are conserved. At the same time, if appropriate action is not taken quickly, the future capacity of Myanmar's environment to sustain critical services will be diminished, threatening economic growth trajectories over longer periods[28].

The main challenges that have been encountered for the sustainable management of forest resources can be listed as follows:

- Poverty and heavy dependence on forest and resources;
- High rate of deforestation, often the causes related with other sectors (such as the agricultural sector, urbanization, and infrastructure development, mining);
- Lack of integration of forestry policies and planning into other sectoral policies as well as national development plans;
- Weak law enforcement and lack of effective coordination amongst the related Ministries/ Institutions for controlling the illegal logging;
- Limited awareness of the people on forest conservation and their weak cooperation;
- Limited value addition of forest products, and lack of market access;
- Limitations in financial, technology, and human resources;
- Changing Political Situations.

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[26] NCEA and UNEP, 2008

[27] 1994 Environmental Law and Agenda 21 Commitments

[28] ADB, 2015

4.1.1. Forest Protection and Restoration

Myanmar's new government might be contemplating on reforming the current rules and policies of the Ministry of Environmental Conservation and Forestry (MOECAF), especially the logging policies and the MTE (Myanmar Timber Enterprise). The reformation involves a possible ban on logging exports. The MOECAF carry on to gain substantial government support in wood processing of domestic industries in order to obtain greater value before export. This shows recognition in MOECAF and other timber traders of the significantly decreased amount of domestic timber supply.

4.1.2 Sustainable Forest Utilization

The 1992 Forest Law that has been implemented by the Myanmar Forest Policy to strengthen socio-economic development on a national level while maintaining ecological balance and the stability of the environment. This policy follows the policies on forestry and sustainable development on an international level. The Forest Policy encloses sustainable production which assures basic needs, and improves efficiency, along with the protection of biodiversity and forests.

In accordance with the policy, there is interest in gathering participants for an approach to forest management with prominence on participation in wildlife, plantations, and forestry.

The Forest Working Plans were updated in 1996 by the Forest Department, to incorporate numerous concepts for sustainable forest management. This not only focused on the production of timber, but other concepts such as the conservation of biodiversity, the socio-economic well-being of locals, and non-wood forest products as well.

The National Forestry Action Plan (NFAP), established in 2001, is composed of a variety of forest activities consisting of nature conservation and wildlife, to attain the goal of forest protection, forest degradation, and environmental conservation. The NFAP takes care of large forest activities, with a mandate to "protect and extend reserved forests and protected public forests (PPF); pursue sound programmes of forest development through regeneration and rehabilitation; effectively manage watersheds for the longevity of dams and water reservoirs; optimize extraction of teak and hardwood within the available means; extend forestry research; enforce effective law against illegal extraction of forest products; encourage increasing use of fuel-wood substitutes; export timber and value-added forest products and seek ways and means to export other NWFPs; and promote ecotourism to earn more foreign exchange" (FAO, 2009).

4.2. Opportunities

The major opportunities in the forestry sector include:

- Readiness of law and policies, strategic action plans to support the sustainable forest management;
- Export ban for any log or timber extracted incompliant with the sustainable manner;
- Government's attention for implementation of long-term programs focusing on forest restoration and biodiversity conservation by government's budget such as 10-years Myanmar

Reforestation and Rehabilitation Programme (2017-2018 to 2025-2026), and Re-establishing Natural Habitats Programme (2019-2020 to 2028-2029), etc.,

- ▪ International cooperation for formulating projects and programs in forestry sectors.

4.2.1. Global Partnership

India is Myanmar's most profitable trading partners when it comes to forest product exporting. Based on the ITTO Monthly Information Services (MIS), 80 percent of all the hardwood and teak from Myanmar is being shipped to India. China and Thailand have decreased the volume of timber imports from Myanmar, whereas the US and EU have not been notable direct importers due to numerous restrictions in place. Exports to Europe in 2007 were valued around US$90 million but dropped drastically in 2008 and 2009.

In 2007-2008, the value of Myanmar timber products in the market indicated a more notable role of European markets as follows:

- India (38%)
- Europe (22%)
- North America (10%)
- Thailand (9%)
- China (7%)
- Japan (3%)
- other (3%)
- Hong Kong (2%)
- Middle East (2%)
- Vietnam (1%)
- Pakistan (1%)
- Singapore (1%)
- Malaysia (1%)

There is also information that wood from Myanmar is being re-exported from Malaysia, Vietnam, China, and Thailand to the United States and European countries. Although it is strenuous to track and confirm this information, in the next couple of years, new technology is likely to be created soon which can reveal the precise geographical origin of the species of wood, which can help conclude this on-going debate.

4.2.2 Potentials

Population Growth: Can stimulate the expansion of agriculture, migration, innovation, and increase agricultural activity

Economic Transition: Myanmar is in the transitional period to a market-oriented economic system and industrialization. Successful transformation of industrial development is crucial, since raw materials like round logs cannot become valuable products like high quality wood-made items for decoration.

Maximum Benefits from Minimum Utilization: Profit needs to increase from the forest sector by producing more high-value products and the extraction of primary resources has to decline in trend.

Develop Strategies: Develop strategies in forestry resource to help balance out the ratio of supply and demand.

Formulate a National Land Use Policy: Needs to be implemented to allot the land area of Myanmar

Expansion of Forest: In order to eliminate poverty, Myanmar needs to expand the forest further to secure the maintenance of the growing stock.

Set Production Targets: Although producing progressively can be good, there is also concern in over-exploitation, therefore setting a target can help.

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