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Project title: Ridge to Reef: Integrated Protected Area Land and Seascape Management in Tanintharyi		
Country: Myanmar	Implementing Partner: UNDP Lead National Ministry: Ministry of Natural Resources and Environmental Conservation Responsible Parties: Forestry Department (FD), Department of Fisheries (DoF), Smithsonian Institution (SI), Fauna and Flora International (FFI)	Management Arrangements : Direct Implementation Modality (DIM)
UNDAF/Country Programme Outcome: Reduced vulnerability to natural disasters and climate change, improved environmental and natural resource management, and promotion of energy conservation through access to affordable and renewable energy, particularly in off-grid local communities		
UNDP Strategic Plan Output: 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.		
UNDP Social and Environmental Screening Category: Moderate Risk	UNDP Gender Marker: 1	
Atlas Project ID/Award ID number: 00089107	Atlas Output ID/Project ID number: 00095489	
UNDP-GEF PIMS ID number: 5427	GEF ID number: 6992	
Planned start date: Oct. 2017	Planned end date: Sept. 2023 Duration – 72 months	
LPAC date: 1 st June 2017		
<p>Brief project description: This project focuses on the conservation and sustainable use of the marine, coastal and terrestrial resources of Tanintharyi Region, the southernmost region of Myanmar. The region is of outstanding significance for biodiversity conservation - approximately 20% of Myanmar's Key Biodiversity Areas (KBAs) are in Tanintharyi, grouped under the Tanintharyi Range and Tanintharyi Marine Corridors. The region includes the largest areas of lowland wet evergreen forest remaining in the Indo-Myanmar Hotspot, some of the largest blocks of mangrove forest in mainland SE Asia, and some 800 islands and diverse marine ecosystems of the Myeik Archipelago in the Andaman Sea Marine Ecoregion. The project embraces all of these ecosystems, through connected land and seascapes that cover key portions of the Tanintharyi Range, Auckland Bay mangroves and coastal waters, and marine ecosystems from Thayawthatangyi Island group in the north to Langann Islands in the south. It will demonstrate community based natural resource management, participatory conservation area management and integrated land use planning and management in line with a ridge to reef approach that connects terrestrial, coastal and marine resource management.</p> <p>The project intervention comes at a time when Myanmar is in a state of dynamic political, social and economic change, following a half-century of isolation and civil war. Economic liberalization and re-connections with the global community are already resulting in substantial foreign investment, rapid economic growth and social</p>		

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changes. However, these changes are also resulting in rapidly increasing pressures on the country's natural resources and biodiversity, and the high value natural resources of Tanintharyi Region are especially vulnerable. There are ongoing threats of deforestation from oil palm plantation development together with illegal logging, forest encroachment, industrial development and highly unsustainable fishing practices. The national government has acknowledged the risks and opportunities of future development for biodiversity conservation in its National Biodiversity Strategy and Action Plan and has prioritized this GEF intervention in Tanintharyi.

The GEF Alternative aims to achieve sustainable, inclusive and equitable development through sustainable management of Tanintharyi's natural capital and safeguarding its globally significant biodiversity and ecosystems. This will be achieved through removal of the following key barriers: (i) under-representation of KBAs in the PA system and systemic incapacity for integrated land and seascape management (ILSM); (ii) weak institutional and staff capacity for management of PAs, buffer zones and corridors; and (iii) insufficient capacity for generating and applying biodiversity information and knowledge. The results will contribute towards the accomplishment of the **Project Objective: to secure the long-term protection of Key Biodiversity Areas through integrated planning and management of the protected area land/seascape in Tanintharyi** through the following outcomes: 1: Land and seascapes rich in biodiversity in Tanintharyi are connected and their planning and management are integrated; 2: Strengthened management and threat reduction in target proposed PAs, smallholder zones and corridors; 3: Prototype National Biodiversity Survey framework and geospatial platform operational within Tanintharyi Regional Government; and 4: Enhanced knowledge management, monitoring and evaluation support biodiversity conservation in Tanintharyi.

FINANCING PLAN

GEF Trust Fund or LDCF or SCCF or other vertical fund	USD 5,250,000
(1) Total Budget administered by UNDP	USD 5,250,000
PARALLEL CO-FINANCING (all other co-financing that is not cash co-financing administered by UNDP)	
UNDP	USD 6,613,000
National Government (MoNREC)	USD 3,000,000
Regional Government	USD 3,000,000
CSO (Fauna and Flora International)	USD 2,425,116
Bilateral Assistance (Smithsonian Institute)	USD 1,500,000
(2) Total co-financing	USD 16,538,116
(3) Grand-Total Project Financing (1)+(2)	USD 21,788,116

SIGNATURES

Agreed by (Government)	Signature:  Name and Title: U Tun Tun Naing Permanent Secretary Ministry of Planning and Finance	Date/Month/Year: 8/12/2017
Agreed by (UNDP)	Signature:  Name and Title: Mr. Peter Batchelor UNDP Country Director	Date/Month/Year: 11/12/17

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ACRONYMS AND ABBREVIATIONS

BANCA	Biodiversity and Nature Conservation Association
BOBLME	Bay of Bengal Large Marine Ecosystem Project
CFDTC	Central Forest Department Training Centers (under TRDD)
DoF	Department of Fisheries (Ministry of Livestock and Fisheries)
ECCDI	Ecosystem Conservation & Community Development Initiative
ECD	Environmental Conservation Department (MONREC)
EcoDev	Economically Progressive Ecosystem Development
DRA	Dawei Research Association
FD	Forest Department (MONREC)
FFI	Fauna & Flora International
FOW	Friends of Wildlife
FRI	Forest Research Institute
FTI	Fisheries Training Institute
GEF	Global Environment Facility

GIS	Geographical Information System
HCSF	High Carbon Stock Forest
HCVF	High Conservation Value Forest
Oikos	Instituto Oikos
IUCN	International Union for Conservation of Nature
KBI	Key Biodiversity Area
KNU	Karen National Union
KWCI	Karen Wildlife Conservation Initiative
LMMA	Locally Managed Marine Area
M&E	Monitoring and Evaluation
MERN	Mangroves and Environmental Rehabilitation-Conservation Network
METT	Management Effectiveness Tracking Tool
MFF	Mangroves for the Future
MFS	Myanmar Forestry School (under TRDD)
MIMU	Myanmar Information Management Unit
MLF	Ministry of Livestock and Fisheries
MoALI	Ministry of Agriculture, Livestock and Irrigation
MoNREC	Ministry of Natural Resources and Environmental Conservation (formerly the Ministry of Environmental Conservation and Forestry MOECF)
MOST	Ministry of Science and Technology
MSAM	Marine Science Association Myanmar
MU	Myeik University
NP	National Park
NWCD	Nature and Wildlife Conservation Division (Forestry Department)
PA	Protected Area
PB	Project Board (a.k.a. Project Steering Committee)
PFE	Permanent Forest Estate
PIF	Project Identification Form
PMBC	Phuket Marine Biological Centre, Thailand
PMU	Project Management Unit
PNP	Proposed National Park
PPG	Project Preparation Grant
RF	Reserved Forest
RP	Responsible Party
RS	Remote Sensing
SDG	Sustainable Development Goal
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SMART targets)	Specific, measurable, achievable, relevant, time-bound (relating to indicators and targets)
SMART	Spatial Monitoring Assessment and Reporting Tool (relating to PA patrolling system)
SEAFDEC	Southeast Asian Fisheries Development Center
SI	Smithsonian Institution
TRDD	Training and Research Development Division (Forestry Department)
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UoF	University of Forestry at Yezin
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

II. DEVELOPMENT CHALLENGE

This project aims to address the negative impacts of unsustainable sector-led development practices on biodiversity-rich forested landscapes in Tanintharyi Region of Myanmar, as well as on associated biodiverse and highly productive coastal and marine ecosystems, while taking into account climate change adaptation needs and inclusive and equitable social and economic development for dependent communities, thereby contributing towards poverty alleviation, food security and sustainable agriculture and gender equality. The project intervention comes at a time when Myanmar is in a state of dynamic political, social and economic change, following a half-century of isolation and civil war. Economic liberalization and the re-alignment of connections with the global community are already resulting in substantial foreign investment, rapid economic growth and social changes. However, these changes are also resulting in rapidly increasing pressures on the country's natural resources and biodiversity, and the rich terrestrial and marine natural resources of Tanintharyi are especially vulnerable to such pressures. The national government has recognized the risks and opportunities of future development for biodiversity conservation in its National Biodiversity Strategy and Action Plan (2015-2020)¹, following on from the Myanmar Biodiversity Conservation Investment Vision².

Tanintharyi Region is a relatively undeveloped area with high biodiversity and endemism whose natural capital provides invaluable ecosystem services underpinning the regional economy and socio-economic security. The region is of outstanding significance for biodiversity conservation - approximately 20% of Myanmar's Key Biodiversity Areas (KBAs) in Tanintharyi (**Figure 1**), classified under the Tanintharyi Range and Tanintharyi Marine priority conservation corridors (**Figure 2**). The region includes the largest areas of lowland wet evergreen forest remaining in the Indo-Myanmar (Indo-Burma) Hotspot, some of the largest contiguous blocks of mangrove forest in mainland SE Asia, and some 800 islands and diverse marine ecosystems of the Myeik Archipelago in the Andaman Sea Marine Ecoregion. These ecosystems support outstanding biodiversity including flagship species such as tiger (EN³), Asian elephant (EN), Asian tapir (VU), Sunda pangolin (CR), Gurney's pitta (EN) - a species endemic to the Tanintharyi Region, plain-pouched hornbill (VU), as well migratory waterbird concentrations and diverse coral reef and seagrass communities. The region has great potential for long-term conservation of large landscape species (e.g. tiger, Asian elephant, Asian tapir, gaur and hornbills) through transboundary protected areas (PAs) within biodiversity conservation landscapes along the border with western and peninsular Thailand, linking with the Western Forest Complex and Kaeng Krachan National Park. However, the immediate threats of deforestation from oil palm plantation development, together with illegal logging, forest encroachment, industrial development and unsustainable fishing practices, require urgent action to seize this fleeting opportunity to conserve biodiversity and safeguard the region's ecological and socio-economic security. The current pattern of economic development benefits individual companies at the expense of forgone development opportunities that would accrue benefits to the state and provide the basis for the prosperity of community based natural resource management, as natural capital (i.e. forest and fishery resources) and environmental quality (through land clearance) are eroded.

Threats to Biodiversity

Threats to biodiversity have been systematically reviewed at the national level in 2005⁴ and later in 2012⁵. These remain largely relevant and those of greatest impact on the Tanintharyi landscapes and

¹ Forest Department 2015. National Biodiversity Strategy and Action Plan (2015-2020). Ministry of Forestry and Environmental Conservation, Republic of the Union of Myanmar, Nay Pyi Taw.

² Wildlife Conservation Society 2013. Myanmar Biodiversity Conservation Investment Vision. Wildlife Conservation Society, Yangon, Myanmar.

³ IUCN Red List categories: CR – Critically Endangered, EN – Endangered, VU – Vulnerable. <http://www.iucnredlist.org/>

⁴ Tordoff, A. W., Eames, J. C., Eberhardt, K., Baltzer, M. C., Davidson, P., Leimgruber, P., Uga & Aung Than 2005. *Myanmar Investment Opportunities in Biodiversity Conservation*, Birdlife International, Yangon, Myanmar.

seascapes covered by the project are summarized below and in **Annex 22**. Further details can be found in the baseline reports (**Annexes 16 & 17**) and, in the case of site-specific threats, landscape profiles (**Annex 12**) developed for this project.

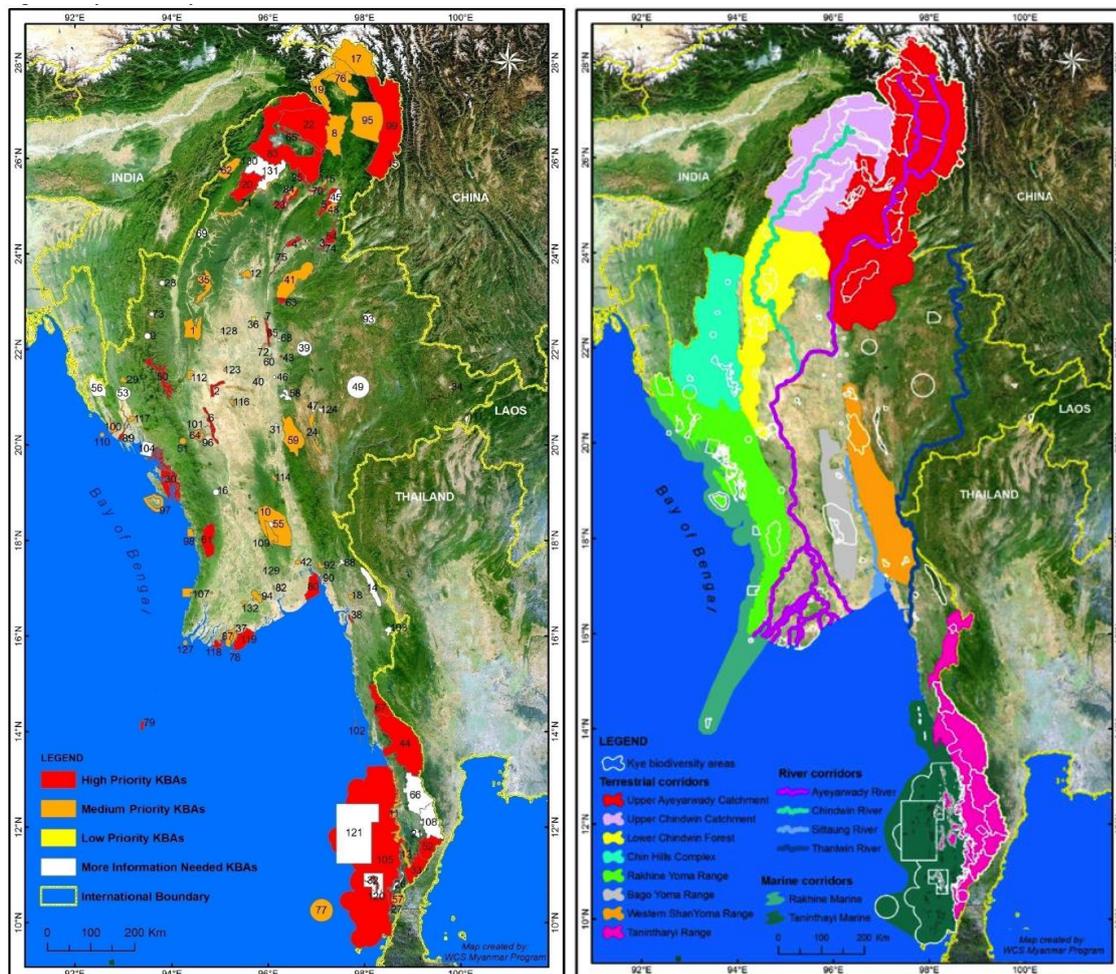


Figure 1 (left). Myanmar's Key Biodiversity Areas. Figure 2 (right). Myanmar's Conservation Corridors (source: Myanmar Biodiversity Investment Vision (WCS 2013))

Plantation development: The outstanding biodiversity of the Tanintharyi region is under increasingly severe and immediate threat from land conversion to oil palm and rubber plantations. Already, some 50 plantation licences have been issued in the region amidst a trend of increasing interest in the development of this sector. According to a 2015 Forest Trends report⁶, forest clearing for the expansion of commercial agriculture is now the leading cause of degradation. While this process has been occurring for decades, the current rate of forest conversion for plantations is unprecedented. Concessions were issued for 16 km² of oil palm and rubber plantations within the Permanent Forest Estate (PFE) in 2013-2014. In addition, the vast majority of existing oil palm estates are not certified by the Round Table on Sustainable Palm Oil (RSPO), pay little or no attention to RSPO environmental and social guidelines and consequently have major impacts on biodiversity and environmental quality. An underlying cause for the palm oil concession development is the past Government policy aiming at rapid expansion of the evolving oil palm industry in Tanintharyi region. It also imposed upon the industry, not only social, environmental and implications, but also the basis for an unsustainable and enduring poor performance of the industry.

⁵ Wildlife Conservation Society 2013. Myanmar Biodiversity Conservation Investment Vision, Wildlife Conservation Society, Yangon, Myanmar

⁶ Woods, K. 2015. Agro-Timber Conversion in Myanmar: The next driver of deforestation. Forest Trends, Washington D.C.

Over-exploitation of forest resources: Unsustainable and/or illegal logging and illegal wildlife trade also pose major threats to biodiversity. Forest products are over exploited particularly through resource extraction quotas sold to local businesses that often overlap with PA boundaries and can be politically sensitive to enforce. Much of the deforestation in Tanintharyi is, however, linked to land conversion for plantations. In mangrove areas, cutting of mangrove trees for charcoal making is the main threat to the forests at present, the charcoal being sold to Yangon and Thailand. Domestic charcoal consumption is around 130,000 cu.ton for Myeik District and 75,000 cu.ton for Kawthoung District annually. In response, the Tanintharyi regional government has banned charcoal production across the whole region, although it is unclear whether this includes domestic consumption.

Urban and industrial development: The Dawei Development Corridor Project is a major strategic initiative, connecting countries of the Greater Mekong Subregion (GMS) Southern Corridor via shipping routes from Dawei to India. It includes associated infrastructure development such as Dawei Deep Sea Port and Industrial Estate covering an area of 250 km², including many industries. These will be linked to Thailand by a 160 km highway across the Tanintharyi Mountain Range. There is substantial concern over social and environmental impacts in Dawei expressed by local CSOs. No EIA or SEA have yet been made available. Concerns over the road corridor include fragmentation of the Tanintharyi Range Corridor, soil erosion in the mountainous interior, and impacts on water quality. Development of the deep sea port is also likely to impact coastal habitats and water quality.

Soil erosion, sedimentation and pollution: Erosion resulting from land clearance, logging and plantation operations in the watershed increases sediment loading of rivers draining the catchment areas. However, there is almost no published information on such environmental impacts in Tanintharyi, and the water quality of the Myeik Archipelago showed no indications of related pollution during assessments under the BOBLME Programme.^{7,8} Terrestrial and marine pollution threats are on a sharp increase from extractive industries (e.g. offshore oil and gas production, and onshore copper, gold, tin, zinc and coal mining, etc.), aquaculture (e.g. shrimp farming) and construction in coastal areas such as seaport development. More than 50 mining companies have applied for a government license to explore for tin, tungsten, lead, coal and gold reserves in the Tanintharyi while currently, ten firms are licensed to carrying out mining and prospecting operations in the area.⁹

Over-exploitation of fisheries: Fishing rights are sold by auction, often resulting in commercial over-harvesting while at the same time impacting the subsistence needs of local communities. The decline of fishery resources is a major concern for the government, as local fishermen are reporting drastic reductions in their catches. This has led to a recent decision by the government to halve the off-shore fishing season from 90 to 45 days. Continued widespread illegal fishing by foreign vessels with modern equipment has seriously depleted fishery resources and represents massive leakage of national revenue. The critically weak capacity of the Department of Fisheries for monitoring and enforcing marine fisheries laws and its weak coordination and influence with other enforcement agencies are key contributing factors.

Climate Change and Vulnerability: According to the IPCC's Fifth Assessment Report (AR5)¹⁰, across South East Asia, temperature has been increasing at a rate of 0.14°C to 0.20°C per decade since the 1960s,

⁷ http://www.boblme.org/documentRepository/Nat_Myanmar.pdf

⁸ http://www.boblme.org/documentRepository/Theme_%20Land%20Based%20Pollution%20-%20%20Urusla%20Kaly.pdf

⁹ <http://www.irrawaddy.com/news/burma/dawei-village-sue-thai-mining-firm-environmental-impacts.html>

¹⁰ IPCC, 2014: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 688.

coupled with a rising number of hot days and warm nights, and a decline in cooler weather. Annual total wet-day rainfall has increased by 22 mm per decade, while rainfall from extreme rain days has increased by 10 mm per decade, but climate variability and trends differ vastly across the region and between seasons. Future increases in precipitation extremes related to the monsoon are *very likely* in Southeast Asia. The ocean in subtropical and tropical regions will warm in all IPCC AR5 scenarios and will show the strongest warming signal at the surface.

The implications of climate change for biodiversity conservation planning in Myanmar have been reviewed by Rao et al (2013)¹¹, with key points as follows. High temperatures and droughts are expected to be the norm, and are likely to be associated with more frequent forest fires in certain regions. Given experiences elsewhere in SE Asia, it is likely that forest fire frequency will increase in Tanintharyi region associated with increasing pressures for land clearance for plantations, exacerbated by dry periods linked to periodic El Nino conditions. Conversely, an increase in rainfall during the monsoon season is likely to cause flooding events that could affect livelihoods, transport, and homes. Prevailing and anticipated climatological changes have both direct impacts on biodiversity or exacerbate the impacts of current threats such as deforestation on biodiversity. Low-lying coastal areas in Tanintharyi region are expected to be vulnerable to intense rainfall, impacts of sea level rise, cyclones, high winds and storm surges, affecting mangroves and other coastal habitats and communities. Climate change poses major new challenges to biodiversity conservation as species will be exposed to changes at a rate and magnitude seldom previously experienced, with direct consequences for ecosystem assemblage and the services they provide to humanity^{12,13}. In the case of Tanintharyi's outstanding coastal ecosystems, in the nearer term, sea level rise and increased water temperatures will accelerate beach and coastal erosion and cause degradation of estuarine communities, mangroves and coral reefs with ultimate impacts on water supply and fisheries productivity¹⁴. IPCC AR5 states with high confidence that continuation of current trends in sea-surface temperatures and ocean acidification would result in large declines in coral-dominated reefs by mid-21st century.

Indirect Pressures on Biodiversity (Root Causes)

The root causes of these threats include unplanned fast economic growth, population increase, poverty, poor governance, and lack of awareness of biodiversity values and related policies. Refugees returning from Thailand and internally displaced persons will bring additional pressures, especially if resettled in environmentally sensitive areas without guidance and support for sustainable livelihood practices.¹⁵

Economic growth: Myanmar is undergoing a rapid political and economic transition that presents both opportunities and threats to biodiversity. The ADB¹⁶ concluded that "Myanmar's current growth pattern is placing huge pressure on its environment and, if continued, will certainly be unsustainable given the country's continued population increase, expected rapid industrialization, increased consumption of and

¹¹Rao M, Saw H, Platt SG, Tizard R, Poole C, Than Myint, Watson JEM. 2013. Biodiversity Conservation in a Changing Climate: A Review of Threats and Implications for Conservation Planning in Myanmar. *AMBIO* 2013, 42:789–804. DOI 10.1007/s13280-013-0423-5.

¹²Foden, W.B., G.M. Mace, J.-C. Vie´, A. Angulo, S.H.M. Butchart, L.DeVantier, H.T. Dublin, A. Gutsche, et al. 2009. Species susceptibility to climate change impacts. In *Wildlife in a changing world: An analysis of the 2008 IUCN Red List of Threatened Species*, ed. J.C. Vie´, C.H. Taylor, and S.N. Stuart. Gland, Switzerland: IUCN.

¹³Watson, J.E.M., M. Cross, E. Rowland, L.N. Joseph, M. Rao, and A.Seimon. 2011a. Planning for species conservation in a time of climate change. *Climate Change: Research and technology for climate change adaptation and mitigation* 3: 379–402. <http://www.intechopen.com/articles/show/title/planning-for-speciesconservation-in-a-time-of-climate-change>.

¹⁴Grantham, H.S., E. McLeod, A. Brooks, S.D. Jupiter, J. Hardcastle, A.J. Richardson, E.S. Poloczanska, T. Hills, N. Mieszkowska, C.J. Klein, and J.E.M. Watson. 2011. Ecosystem-based adaptation in marine ecosystems of tropical Oceania in response to climate change. *Pacific Conservation Biology* 17: 241–258.

¹⁵UNHCR estimates a total of about 400,000 individuals were still internally displaced in the rural areas of 36 townships in South-East Myanmar in Kayin, Kayah, South and East Shan and Mon States, and Bago and Tanintharyi Regions. (2008-2012, South East Myanmar: A Report on Village Profiles 2008-2012)

¹⁶ADB 2012. Myanmar: Interim Country Partnership Strategy 2012-2014. Country Planning Documents.

demand for natural resources for food production and trade, and increased energy consumption". In the Tanintharyi Region, major strategic economic developments, such as the Dawei Development Corridor, the rapid expansion of commercial plantations and increase in coastal development exemplify this concern.

Population increase: While population increase is not identified as a top priority driver of threats to biodiversity in the Myanmar Biodiversity Investment Vision (WCS 2013), it is relevant in the Tanintharyi context, as growth in the regional population can be expected to be significant with greater social liberation and accompanying the prospect of rapid economic growth. Inevitably such population growth will exert increasing pressures on the region's natural resource base, especially where it involves the settlement of returning refugees and IDPs in new areas. See **Annex 15** for more details on local population characteristics.

Poverty: Poverty levels are at an estimated 26% of the population. Poverty is twice as high in rural areas where 70% of the population lives. The remote border areas, mainly populated by Myanmar's minority ethnic groups, and areas emerging from conflict are particularly poor. Access to electricity is limited to only 26 percent of the population and firewood (including mangrove charcoal) is a major source of energy for the population¹⁷. This situation is exacerbated in Tanintharyi by returning refugees from camps along the Thai border and the need to find land for resettlement of IDPs.

Lack of awareness and integration of biodiversity values into regional planning: The lack of understanding of the economic, social and political values of Natural Capital and the ecosystem services it provides to society is a major factor in its erosion for short-term gains in regional and national economic planning. This lack of understanding is a weakness of both the public and within the government. For example, one recent study¹⁸ estimated that the value of Myanmar's overall forest ecosystem services is over \$7 billion USD. Of this, 85%, or around \$6 billion USD – comes from forest ecosystem services such as forest carbon sequestration, watershed protection services, insect pollination, tourism, and mangrove protection of coastlines and fish nurseries. Thus, investment in forest conservation is expected to deliver significant net returns, estimated at around \$39 billion USD over the next twenty years, or a net present value of \$10 billion USD. A wider lack of awareness of environmental issues and understanding of government policies on the environment was seen as the most frequent root cause of biodiversity loss during the national analysis in 2012¹⁹.

Failure or absence of good governance mechanisms: While the forest management system is well established in Myanmar, it has been abused in the recent past with massive profits benefiting small elites, while negatively impacting the forestry sector. The result has included: systematic 'revenue-target' driven over-extraction of timber resulting in forest degradation and loss; expansion of agriculture and 'land grab' agri-business concessions destroying forests; and insecure land and tree tenure for local people, marginalising civil society and undermining incentives to conserve, protect and plant trees, and to collaborate with the Forest Department²⁰.

¹⁷ <http://www.mm.undp.org/content/myanmar/en/home/countryinfo.html>

¹⁸ Emerton, L. and Yan Ming Aung. (2013) The Economic Value of Forest Ecosystem Services in Myanmar and Options for Sustainable Financing. International Management Group, Yangon.

¹⁹ Wildlife Conservation Society 2013. Myanmar Biodiversity Conservation Investment Vision, Wildlife Conservation Society, Yangon, Myanmar

²⁰ Oliver Springate-Baginski, Thorsten Treue, Kyaw Htun. September 2015. *Beyond over-logging?* From military-era timber exploitation towards democratic and sustainable forest governance.

Baseline Activities

The baseline activities are described in **Annex 22**. See also **Annexes 15 and 16** (baseline reports on marine resources and seascapes, and terrestrial resources and landscapes respectively) for further information on baseline activities. The baseline includes:

- Collaborative work with MoNREC in support of a 10-year Strategic Framework for “Building the Foundation for Natural Resource Stewardship, for Sustainable, Inclusive and Equitable Development” for 2015-2025, led by GEGG, to accelerate capacity development for better stewardship of natural resources, directly implementing the capacity development needs identified under the National Biodiversity Strategy and Action Plan (NBSAP).
- With US\$ 3 million support from the International Tropical Timber Organisation (ITTO), MoNREC is working on the 4-year “Capacity Building for Strengthening Transboundary Biodiversity Conservation of the Tanintharyi Range in Myanmar” (2013-2016)²¹.
- 30-year Forest Master Plan (2001) to increase the Permanent Forest Estate to 30% PAs to 10% of the total country area. Furthermore, the Forest Master Plan encourages the registration of unclassified forests into community or private forests.
- Myanmar is a partner of the Global Tiger Initiative and was represented at the Global Tiger Summit in St. Petersburg in September 2010 by the then Minister of Forestry. It submitted a National Tiger Recovery Plan (NTRP), as part of the Global Tiger Recovery Plan in June 2010
- KfW, the German Development Bank, has launched the Integrated Tiger Habitat Conservation Programme Asia - together with IUCN in January 2014²². Under this programme, a new Tanintharyi Tiger Project was launched in May 2016²³ and will run for an initial three years with a budget of 1-1.5 million Euros, implemented by FFI and FD with support from other partners.
- The government is in the process of developing the National Land Use Policy. Related to this, MoNREC²⁴ started an initiative called One Map Myanmar Programme to harmonize the spatial planning data required for land use planning at the national and regional levels with technical assistance from the University of Bern and financed by Swiss Agency for Development and Cooperation (SDC) (CHF 1795203 for the first two years of 8 year initiative). Tanintharyi has been selected as a pilot region under the programme.
- CSO and governmental capacity development support to the country, including **Smithsonian Institution** support for studying the biodiversity and ecology of Myanmar, completed 50 research projects, 150 science publications, aided in the discovery of over 70 species new to science, and located and identified hundreds of critical species. **Fauna and Flora International (FFI)** supports a range of biodiversity conservation programmes in Myanmar, including an established marine and terrestrial programme in Tanintharyi. The **Wildlife Conservation Society (WCS)** supports strengthening the country’s capacity for conducting biological surveys, monitoring populations of key wildlife species, supporting establishment of protected area and management actions. WCS supported the Tanintharyi FD in development of the regional forestry plan, and has supported Tanintharyi NR. WCS is also the CSO implementing partner for the GEF-5 PA strengthening project. **World Wildlife Fund (WWF)** includes support for Tanintharyi region, in particular, integration of green economy principles and development of a capital strategy with focus on the Dawei Development Corridor in northern Tanintharyi. **Mangroves for the Future (MFF)** is a partnership-based initiative promoting investment in coastal ecosystems for sustainable development, working towards achieving the vision of a healthier, more prosperous and secure future for all coastal communities. Published in 2015, the National Strategy and Action plan (NSAP) is the product of a long collaborative. The current project will contribute towards many of the strategic actions in the

²¹ http://www.itto.int/council_committees/projects/

²² https://www.kfw-entwicklungsbank.de/PDF/Entwicklungsfinanzierung/L%C3%A4nder-und-Programme/Asien/Myanmar_Tiger_2016_EN.pdf; <https://www.iucn.org/theme/species/our-work/action-ground/integrated-tiger-habitat-conservation-programme>

²³ <http://www.fauna-flora.org/news/last-roar-for-tanintharyi-tigers/>

²⁴ During the process of Union Government restructuring in early 2016, the Ministry of Environmental Conservation and Forestry (MOECAF) was renamed as the Ministry of Natural Resources and Environmental Conservation (MoNREC).

NSAP. MFF Phase 3 2014-2018 has received initial funding of \$4 million from the Government of Norway. The MFF-Myanmar budget is \$106,500 for each year and \$75,000 for small grants allocation.

- Through its 2013-2015 programme, **UNDP** support extends to three areas: (i) Effective local governance for sustainable, inclusive community development; (ii) Climate change, environment and disaster risk reduction; and (iii) Democratic governance. UNDP supported initiatives include community-based reforestation and sustainable forest management, watershed management, development of community-based resource- and land-use planning systems, sustainable agricultural and livelihood development programmes and local conservation programmes. In addition, in November 2011, Myanmar became a **UN-REDD** Programme partner country and has developed the Myanmar REDD+ Readiness Roadmap. Based on the roadmap, with US\$4,788,250 funding, UN-REDD programme is providing targeted support for 4 years from 2015 to engage stakeholders and develop capacity to implement a participatory governance arrangement for REDD+. **UNDP/UNEP joint programme Poverty and Environment Initiative (PEI)** support the government in improving the quality of foreign direct investment in natural resource sectors by managing the social and environmental impacts. The current programme budget is US\$700,000 for 2014-2017. See **Annexes 15 and 16** (baseline reports on marine resources and seascapes, and terrestrial resources and landscapes respectively) for further information on baseline activities.

Although the baseline activities are significant, the threats to the globally significant biodiversity of Tanintharyi Region are on the increase and biodiversity is in decline. Key gaps in the baseline include the failure to deal with illegal and unsustainable inshore and offshore fishing practices, limited support towards the development of new protected areas embracing under-represented marine, coastal and terrestrial forest habitats, the need for capacity development of the regional government for assessing the environmental impacts of development policies, programmes and projects, and integrated natural resource management that takes account of economic valuation of ecosystem services and biodiversity. Overall, the support provided in the fields of biodiversity conservation and ecosystem management has generally been small scale and rather fragmented, focusing on addressing specific threats and issues. A more comprehensive approach that combines work to improve response to systemic issues at the national, provincial levels, and interventions on the ground level to apply systemic improvement is warranted in this recently opened country.

Long-term solution and barriers to achieving it: The long-term solution of the project is to achieve the sustainable development and ecological security of Tanintharyi's marine, coastal and terrestrial biodiversity through integrated planning, management and protection involving a wide range of stakeholders. This will be achieved through the emplacement of systemic and institutional capacity to generate, maintain and apply essential information and knowledge about its valuable biodiversity and ecosystems. The country will integrate PA management and financing into broader state and national level development and sector planning. It will employ integrated planning and management of the protected area land/seascapes, with integrated ridge to reef planning and management as principles, expanding the PA system and increasing connectivity of protected areas to conserve valuable biodiversity as stipulated in the 10-Year Strategic Framework and the NBSAP. Specifically, this project will rapidly establish a foundation of biodiversity knowledge for the terrestrial and marine ecosystems of the Tanintharyi Region, which can be directly applied to manage and secure the globally significant biodiversity of the Sundaic Subregion and Andaman Sea. However, there are a number of significant barriers to achieving this goal.

Barrier 1. Under-representation of important habitats in the PA system

The Sundaic Lowland Forest in the Tanintharyi Range Biodiversity Priority Corridor is not yet represented in the national PA system. Some KBAs in the Tanintharyi Region have been proposed as PAs (e.g. Proposed Lenya National Park and Extension comprising Lenya Reserved Forest, Ngawun Reserved Forest/ Ngawun extension), but have yet to be gazetted. Similarly, marine ecosystems are seriously under-represented in the PA network, accounting for only 0.31% of the total territorial water. The Myeik Archipelago and associated coastal ecosystems along the central Tanintharyi coast (Tanintharyi Marine

Corridor) are highly threatened by unsustainable fishing practices, but provide Myanmar's best opportunities to protect marine biodiversity and the whole range of marine ecosystems, including coral reefs, sea grass areas, mudflats and mangroves. Despite this, current development planning is done without consideration of KBA locations, distribution of endangered species, or considering the current or potential value of biodiversity and ecosystem services.

Barrier 2. Insufficient systemic capacity for integrated land and seascape planning and management

There is no existing system in terms of a policy, legal, regulatory and institutional framework for integrated land and seascape planning and management, and the current approach to land and seascape planning remains sectoral despite the globally significant terrestrial and marine biodiversity and its immense productivity and economic values, as reflected in the ILSM Capacity Development Scorecard in **Annex 12c**. While there is a National Environmental Conservation Committee (NECC) and Vacant, Fallow and Virgin lands Management Committee at Union Level, State/region level down to District, Township, Village tract and village levels, these aim to achieve harmony and balance between economic development and environmental conservation across multiple sectors via the coordination efforts of the committees, but do not foster a truly integrated multi-sectoral approach. There is no recognition of land-coast-sea connections in existing policies except for temporary ad hoc coordination committees led by concerned ministries on a case by case basis. The draft Land Use Policy includes a mandated body for land use, but not with the specific provision of ILSM. The General Administration Department is responsible to lead and coordinate inter-agency task forces under the regional government, but has only just started work under the new government, thus is in need of technical assistance from this project. Existing EIA procedures are weak and generally have little influence on the environmental and social impacts of development projects (eg oil palm plantation and industrial development), thus there are few checks and balances on sectoral led development. There is an absence of development planning and operationalization processes, lack of capacity to integrate biodiversity and ecosystem valuations into regional development planning, and limited capacities for landscape level planning including land permitting, assessment of land capability, and zoning of functions and allocation of land to different uses including conservation. The government agencies responsible for natural resource management and conservation generally focus on their own sectoral goals and programmes with very limited collaboration with other agencies.

Barrier 3. Weak institutional and individual capacity for management of PAs and buffer zones

There are four existing PAs in Tanintharyi Region; however, site and buffer zone management is extremely weak and ad-hoc. Only two of the PAs, Lampi Island and Tanintharyi Nature Reserve, have field staff presence on the site and limited park management infrastructure. These are the only PAs that have a management plan. Staff skills are also insufficient, particularly when it comes to law enforcement, habitat condition, species monitoring, park-neighbour relations, and landscape/seascape management. Conservation planning and management is generally perfunctory. There is no clear strategy for reducing threats coming in from outside PAs—be it encroachment or illegal activities within the PAs. In addition, there is a disconnect between PAs and local-level economic development and land use planning, resulting in increased pressure on biodiversity within the PAs and buffers, and increased degradation of natural habitats in the conservation priority corridors and around KBAs. Hundreds of thousands of refugee returnees, internally displaced persons, and poverty also exacerbate the threats to the biodiversity of the Tanintharyi Range, causing deforestation and increasing soil run-off and sedimentation. Large scale land use change through the development and subsequent replanting of plantations has even more dramatic effects on these processes, impacting soil fertility and productivity, and in turn reducing coastal water quality, impacting marine life and habitats such as seagrass beds and coral reefs. Thus there is a need for integrated management of terrestrial, coastal and marine resources supported by examples of integrated NRM approaches and models including how to design, implement and monitor NRM programs. Overall, capacity for management of terrestrial and marine PAs is low (see UNDP Capacity Development Scorecards for the regional Forest Department and Fisheries Department in **Annexes 12b & c** respectively).

Barrier 4. Insufficient capacity for generating and applying biodiversity information and knowledge

Although Myanmar has already conducted a participatory process for identifying biodiversity priorities, which is articulated in the National Biodiversity Strategy and Action Plan (NBSAP, 2014), the NBSAP lacks critical baseline data on the extent, location, condition and threats for many important ecosystems and species, including coral reef communities. There is an urgent need for a strategy for acquiring and distributing data, and building the institutional, technical, human, and infrastructural capacity needed to support on-going biodiversity monitoring and decision-making. With the recent opening of the country and the democratization process, pressure on land, forest and extractive resources has increased dramatically. Given this context, it is not surprising that the country's knowledge base on biodiversity and natural resources, and capacity for stewardship are particularly weak. The baseline scenario in terms of human resource base in the country is of concern and, in the case of biodiversity-related disciplines, this is highly limited. The capacity gap is particularly acute in botany, herpetology, entomology and marine biology. For example, there are only two qualified herpetologists, and the first marine diver in the entire country was trained and certified only in 2013. This capacity is urgently required to implement the NBSAP, and also for strengthening the PA landscape/seascape management in the priority biodiversity corridors and KBAs. A systematic assessment of the Tanintharyi ecosystems and their biodiversity is urgently needed to better inform PA expansion and management, and to integrate conservation strategies into development and sector planning.

A conceptual model illustrating the relationships between the threats, indirect factors (root causes), project targets and indicating intervention strategies is given in **Figure 3**. The relationship between the barriers and the project intervention logic is further illustrated in the theory of change diagram in **Figure 4** in the next section.

Alignment with national priorities

Overall, the project is consistent with National Environmental Policy (draft), National Climate Change Policy, Strategy and Action Plan (Draft), National Biodiversity Strategic Action Plan (NBSAP), and the national 30-year Forest Master Plan (2001) targets to increase the Permanent Forest Estate (constituted by reserved forests and public protected forests) to 30%, and PAs to 10% of the total country area.

The project will directly support implementation of the Myanmar National Biodiversity Strategy and Action Plan (MNBSAP)²⁵. Specifically, it directly supports implementation of actions in the MNBSAP contributing to the Aichi Targets as follows: Target 5: the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced; Target 8: reduction of pollution to levels that are not detrimental to ecosystem functions and biodiversity; Target 11: increasing the coverage and connectivity of the PA system in important regions with high biodiversity importance and significant ecosystem services and by increasing management effectiveness of the PA system in a way that is integrated into the wider landscapes; Target 12: preventing extinction of known threatened species; Target 14: restoring and safeguarding essential ecosystem services for securing health, livelihoods and well-being of people; and Target 15: enhancing ecosystem resilience and contribution of biodiversity to carbon stocks through conservation and restoration.

Significantly, the project will address critical gaps in the national protected area system for coastal mangroves (only 0.92% protected) and coastal rainforest ecosystems (0.44% protected) identified in the MNBSAP. It will also address the urgent need to establish more marine PAs in order to increase the area

²⁵ Forest Department 2015. National Biodiversity Strategy and Action Plan (2015-2020)

protected from the current 2.6% of Myanmar's EEZ and to provide protection to coastal ecosystems in the Myeik Archipelago.

The project area is recognised under MNBSAP as a top priority corridor containing 12 identified KBAs. In addition, the high priority conservation corridor identified for the project overlaps with one of the country's Tiger Conservation Landscapes (TCL). Project activities will also address all components of the *Myanmar National Tiger Recovery Plan* as submitted to the Global Tiger Initiative in June 2010. These activities include:

- Landscapes with appropriate extensions and corridors legally protected;
- Improved management especially concerning law enforcement in source landscapes;
- Monitoring on-going tiger population source landscapes; and
- Improved national and trans-boundary cooperation.

Furthermore, the country's National Action Programme (NAP) for UNCCD (2005) identifies deforestation as one of the primary causes of land degradation in Myanmar. Thus, it includes a number of actions related to sustainable forest management and integrated land use planning. The project contributes directly to Action Programme for Key Issue 6.2 calling for undertaking of an ecological survey, socioeconomic survey and consumption survey in order to have ecological and socioeconomic data relating to land degradation processes, and the establishment of an information management system. The project also contributes to implementation of Action Programme for Key Issue 6.3 Institutional Framework, which includes institutional capacity development planning and development of training curricula for forestry including specialised fields of forest economy, ecological, social, and wildlife and biological management to enhance capacity. Furthermore, the project provides direct support to the NAP programme: Integration of Environment and Development into decision-making under NAP, aims to integrate environment and development in the national development and planning process, and to strengthen institutional and legal structures, and participation in international programmes.

Contribution to the UN Sustainable Development Goals (SDGs)

The project will contribute primarily towards the implementation of two SDGs in Myanmar through its focus on integrated landscape and seascape management, emphasising the ecosystem approach and maintenance of habitat connectivity, and extension of the protected area system to cover terrestrial, coastal and marine Key Biodiversity Areas: *SDG 14: Conserve and sustainably use the oceans, seas and marine resources*; *SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss*. The project intervention will take strong account of climate change adaptation needs (*SDG 13 Take urgent action to combat climate change and its impacts*) and inclusive and equitable social and economic development for dependent rural communities, thereby contributing towards poverty alleviation (*SDG 1 - No poverty (end poverty in all its forms everywhere)*). In addition, the project will also contribute towards *SDG 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture)* through promoting sustainable land management; *SDG 3 (Good health and well-being)* as a result of sustainable ecosystem services from the management of forest and agricultural landscapes and improved livelihoods; and *SDG 5 (Achieve gender equality and empower all women and girls)* through directed capacity building for equal participation and equitable sharing of benefits from the implementation of project interventions.

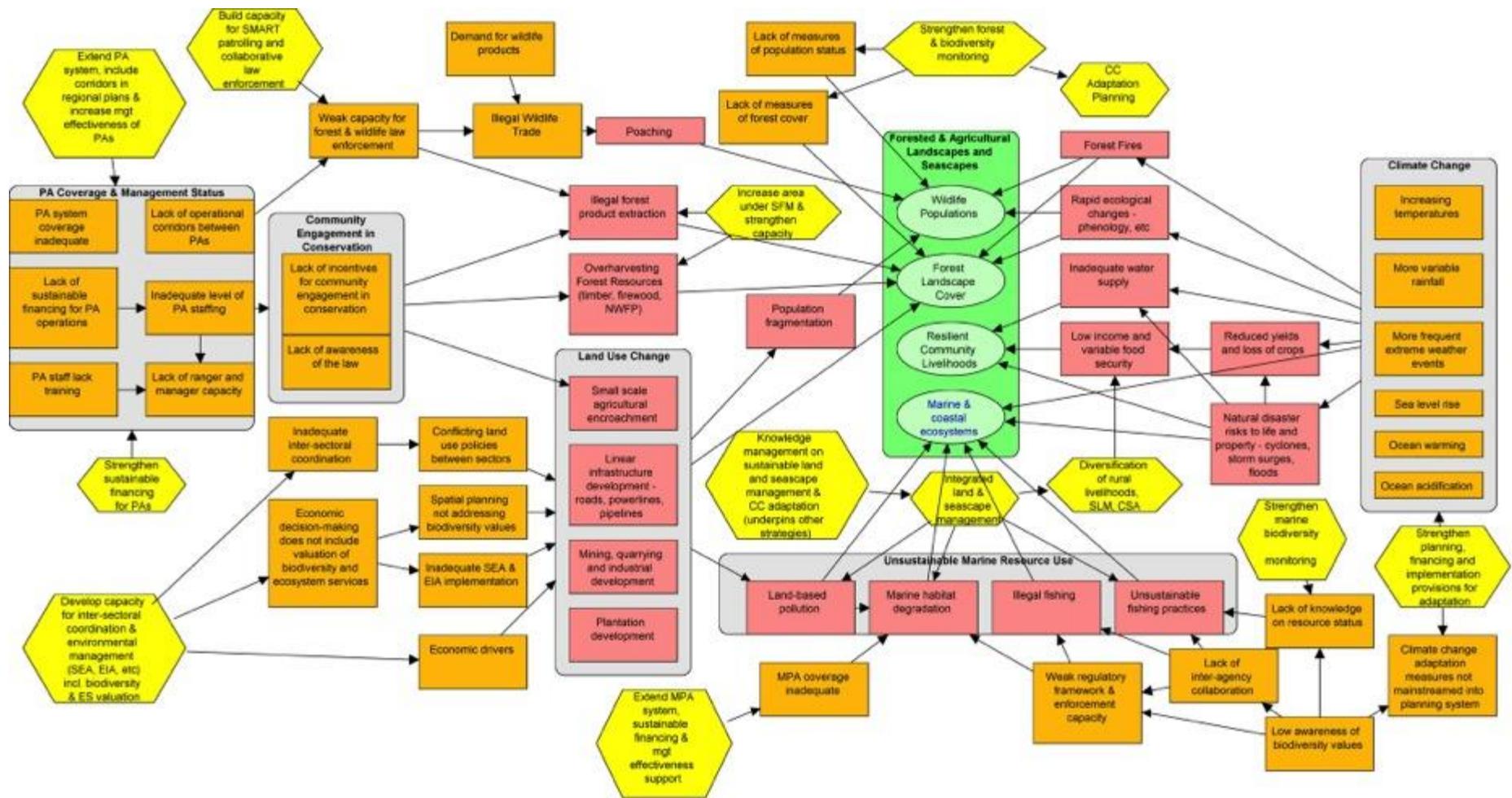


Figure 3. Conceptual model of the factors influencing the project targets, with project interventions.

Key: Project Targets (green oval), direct factors (pink box), indirect factors (orange box), project intervention strategies (yellow hexagon)

III. STRATEGY

The root causes (indirect factors) and direct threats impacting biodiversity condition in Tanintharyi Region are described in the previous section²⁶ and their relationships with the targets for the project intervention illustrated in **Figure 3**, which also identifies the main entry points for the project strategies. The intervention pathways are then described in the theory of change diagram in **Figure 4**²⁷. The GEF alternative aims to remove the barriers to the long-term solution, to achieve the sustainable development and ecological security of Tanintharyi's marine, coastal and terrestrial biodiversity through integrated planning, management and protection involving a wide range of stakeholders. The key barriers are: 1) Under-representation of KBAs in the PA system; 2) insufficient systemic capacity for integrated land and seascape planning and management (ILSM); 3) Weak institutional and staff capacity to manage PAs, buffer zones and corridors; and 4) Insufficient capacity to generate and apply biodiversity information and knowledge. These barriers will be removed through a suite of activities, whose results will contribute towards accomplishment of the project outcomes:

Outcome 1: *Land and seascapes rich in biodiversity in Tanintharyi are connected and their planning and management are integrated.* The first component will support the expansion of Tanintharyi's PAs system, covering priority KBAs in marine, coastal and terrestrial landscapes through the establishment of already proposed PAs and community-based management of KBAs. It will also take initial steps towards participation in transboundary conservation initiatives including the Dawna Tenasserim Landscape and scope for Peace Park development (see Partnerships and South-South/Triangular Cooperation sections and **Annex 19**). This component will also support the development of institutional capacity to enable ILSM, to ensure that development and land use practices in Tanintharyi will support conservation objectives favouring High Conservation Value forests and KBAs through spatial mapping and decision support analysis tools (as is already being initiated for oil palm plantation concessions). It will support establishment of a mechanism within the regional governance system for multi-sectoral ILSM to inform decision-making. It will also enhance capacity within the Tanintharyi government to mainstream ecosystem-based approaches into annual local development planning.

Specifically, this would be supported by regulatory standards developed to safeguard KBAs, HCV Forests, other HCV habitats (e.g. reefs, seagrass beds) and HCSFs from production sectors, notably plantations (oil palm, rubber, other crops), mining, hydropower, fisheries and tourism, whose implementation would be facilitated by a Multi-Sector Standards Working Group with consultant support.

Outcome 2: *Strengthened management and threat reduction in target proposed PAs, smallholder zones and corridors.* This component will safeguard PAs on the ground, by increasing site management capacity and by reducing threats to biodiversity, HCV forests and marine ecosystems in the surrounding target land and seascapes. For the newly established PAs, the project will support establishment of new management structures on the ground, and the development and implementation of park management and business plans. The capacity of communities within the KBAs, buffer zones and corridors will be developed to improve natural resource management and incentivize sustainable livelihoods, with specific attention towards promoting gender equality, and climate resilience through adaptive planning approaches. The key deliverables under Outcome 2 are: a set of PA management and business plans covering at least 500,000 ha, developed with the active participation of key stakeholders and being implemented using a range of governance mechanisms, including co-management and other community-based systems (Output 2.1); and a set of 5-year Sustainable Development Plans for clusters of up to about 20 villages (Output 2.3). These two initiatives will run in parallel, with participatory processes for stakeholders established for both: Stakeholder Working Groups (SWGs) will be established for each

²⁶ See additional information in **Annexes 11 and 14-17**

²⁷ Note: This Theory of Change is retrofitted, because the rationale and structure of the project intervention was established at PIF stage (i.e. approved by GEF), thus allowing no option for changing the project objective, main outcomes or scope, and limited flexibility in terms of the intervention pathways and incremental reasoning.

proposed PA, eventually to become institutionalized as Forums within the governance system of the respective PAs; and Sustainable Development Committees set up for each Village Cluster (VCSDCs).

Outcome 3: *Prototype National Biodiversity Survey framework and geospatial platform operational within Tanintharyi Regional Government.* The third component focuses on developing institutional capacity for the generation and application of biodiversity knowledge at national and subnational levels. The NBS framework will be established as the umbrella for the biodiversity information management system. In building national and local capacity, a wide range of programmes and tools developed by the Smithsonian Institution will be utilised, and a range of training programs established and provided, guided by a capacity building strategy which will be institutionalized within government. Biodiversity information and data will be consolidated through establishment of the NBS framework, focusing initially on the Tanintharyi Range Corridor, coastal wetlands (mangrove and mudflats) and Myeik Archipelago. Working from detailed capacity needs assessments, the capacity of national and local government agencies, research institutions and national CSOs will be strengthened in the areas of biodiversity assessment and monitoring, environmental planning and management for development and poverty alleviation, and utilization of open access methods and tools to design, implement and evaluate projects. Guidelines / SOP will be developed on how to integrate biodiversity and ecosystem services information into the management of protected areas, key biodiversity areas and land use planning.

Outcome 4: *Enhanced knowledge management, monitoring and evaluation support biodiversity conservation in Tanintharyi.* Through this component, the project will ensure that results, information and knowledge accumulated within the project will be documented and disseminated to stakeholder and wider audiences to support learning and the scaling-up of project outcomes; comprehensive monitoring and evaluation procedures will ensure that project decision making is informed and adaptive.

The project component and outcomes are described in greater detail in the Results and Partnerships section, as are the output strategies, and related activities are listed (also given in **Annex 1**). Indicators and assumptions are given in the Results Framework for the project outcomes and objective, and the assumptions indicated in the theory of change diagram are also described below.

The four outcomes will contribute towards achievement of the **Project Objective**, which is *to secure the long-term protection of Key Biodiversity Areas through integrated planning and management of the protected area land/seascape in Tanintharyi.*

The connections between implementation of the project outputs and related initiatives are described in the Partnerships section, coordinated via the PMU and Responsible Parties. The collective sharing of the knowledge, experience and lessons from these initiatives through the proposed Stakeholder Forum mechanism should be of major benefit to all stakeholders involved in this project.

Assumptions

The assumptions identified in the Theory of Change diagram in **Fig. 4** below apply to the *if...then* logic of the results framework, and have been identified for the logical connections between the project outputs and outcomes, and between the outcomes and the project objective as described in **Annex 21**.

Innovativeness

The project establishes, for the first time, integrated land and seascape planning and management in Myanmar, in a region area that harbours one of the most significant biodiversity strongholds in Asia and where emerging development pressures are among the most intense in the region. Support for the integrated approach is combined with emphasis on capacity development actions and focused on the generation and application of biodiversity knowledge – the most essential and fundamental capacity needs – with institutional and technical backing of the Smithsonian Institution. The project comes during a critical window of opportunity and a period of major political and socio-economic transition as Myanmar's economy opens up to the world, a new democratic government takes its first steps and the

regions have new powers and responsibilities for natural resource management: international support and guidance in building national and regional capacity for integrated land and seascape management at this juncture will be hugely important in securing a participatory and well informed route to sustainability.

Global Environmental Benefits

The primary global benefits that will be delivered include adoption of sustainable land management (SLM) and sustainable forest management (SFM) practices that will reduce land degradation and secure ecosystem services and mainstream biodiversity conservation over a landscape of 2,000,000 ha of globally significant terrestrial, coastal and marine ecosystems, and test SFM approaches in at least 200,000 ha, as shown in **Table 1** below. A summary of the approach used to estimate carbon benefits is given in **Annex 24**.

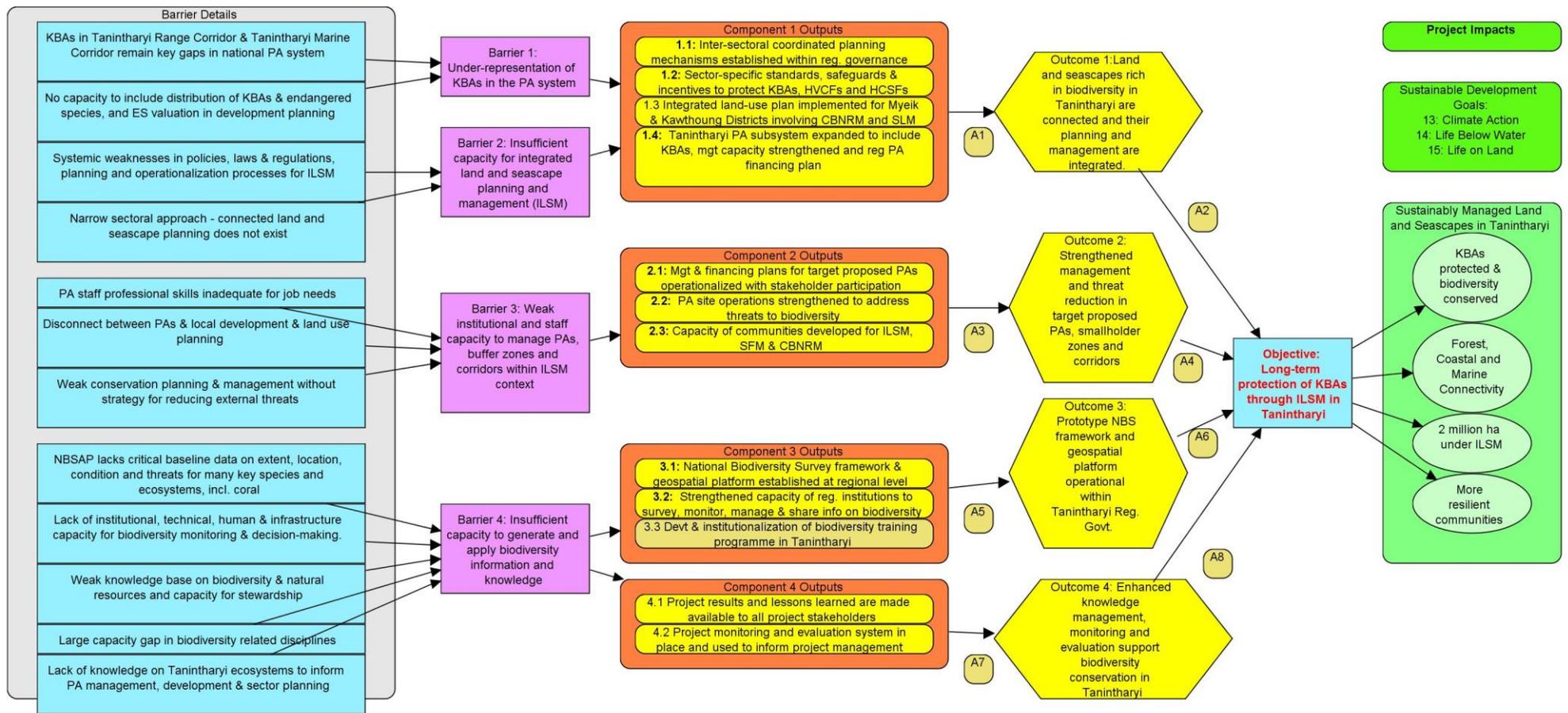


Figure 4. Theory of Change Diagram for the Project

Table 1. Global environmental benefits provided by the project

Baseline practices	Alternative to be put in place by the project	Selected environmental benefit
Component 1: Integrated Land and Seascape Planning and Management		
<p>Land use planning does not account for ecosystem values and biodiversity, leading to continued forest degradation, loss of HVCFs/HCSFs and loss of ecosystem functions</p> <p>Sectoral approach prevails in terms of land use decision-making; forest planning does not incorporate HVCF and HCSF approach, ridge to reef considerations nor SFM tools. National policies do not support land use optimization to sustain resource resilience nor do they allow operationalization of the HCVF and HCSF concept</p> <p>Weak enforcement capacities to ensure compliance with ecological standards in land use, and high levels of trespassing in use of forests</p>	<p>Mainstreaming SLM/SFM principles into region and district land use planning and development planning, compliance monitoring and enforcement:</p> <ul style="list-style-type: none"> - All land in target districts is classified with the principle of retaining highest carrying capacity of land and forest resources for ecosystem service maintenance, and the compliance is monitored and enforced. - The approach of HCVFs and HCSFs is operationalized in Tanintharyi Region with a suite of incentives established to avoid the loss of HCVFs/HCSFs and providing direct contribution to the national REDD + Strategy development process. - Biodiversity and ecosystem values are fully recognised and provisions are made in regional and district land use plans for their maintenance and enhancement. - Local and business communities and foreign investors are engaged in forest area and land use planning and use, and providing direct support for conservation and sustainable forest and land management actions. - Local communities are empowered for community based natural resource management and practicing improved land management and agricultural practices including natural forest regeneration, establishment of community woodlots on degraded lands, community forestry, agroforestry, rubber gardens, integrated pest management and silvicultural management. - Protected area system is expanded to incorporate all the key HCVFs, HCF, and KBAs with management structure and staff emplaced. 	<p>SFM benefits: Pressures on forest landscapes reduced over 1,452,658 ha:</p> <ul style="list-style-type: none"> - Pressures on forest landscapes reduced - Avoidance of emissions from deforestation of 5,063,434 tCO₂-eq in a total area of 381,859 ha over 10 years through the conservation of at least 323,138 ha of new HCVF/HCSF (Lenya and Ngawun proposed PAs)²⁸, at least 43,652 ha of mangroves in Aukland Bay FR and Kyunsu Mangrove PPF, and 15,069 ha of intact or slightly degraded mangroves in Aukland Bay as protected and/or community co-managed areas, receiving strengthened legal protection - Improved functioning ecosystem services (such as carbon sequestration, watershed functions, forest/marine product provisions, maintenance/enhancement of tourism assets) - Improved production sector practices (e.g. plantation and agriculture, extractives etc.) integrating ecosystem services values and biodiversity concerns in its management - Forest reserves, production forests and plantation areas integrate the concept of HVCFs and HCSFs in their management plans. - Concessions and infrastructure development are allocated in such areas to minimize disturbance to the connectivity of forest complexes ensuring the full value of forest ecosystems are maintained. <p>LD benefits: At least 1.45 million ha of Tanintharyi Region covering 4,334,330 ha employing integrated landscape management approach in the land use decision-making and forest and coastal landscape management, under enhanced cross-sector enabling environment for integrated landscape management, and with a range of support tools and mechanisms for cross sector integration. Land degradation reduced on at least 390,824 ha of productive systems. Integrated landscape management practices adopted by local communities in the Tanintharyi Range corridor.</p> <p>BD benefits: Expansion of the Tanintharyi PA system from current 195,402 ha</p>

²⁸ See SFM TT in Annex 6 for details: covers 10 year period at a national average avoided deforestation rate of -0.81tC/yr

		<p>by at least 333,538 ha to 528,940 ha, securing KBAs in marine and terrestrial landscapes and HCVFs.</p> <p>In addition, there is significant scope for establishing core protected terrestrial and marine areas within the land and seascapes of Auckland Bay Mangrove (356,570 ha including Forest Reserves totaling 43,651 ha) and R2R Seascape (306,501 ha) to meet or exceed this target</p>
<p>Component 2: Strengthened PA, Buffer Zone and Corridor Management</p>		
<p>Protected areas will continue to be under-resourced, with no management structure on the ground for some PAs, resulting in suboptimal management effectiveness. Protected areas remain as islands and threats from surrounding landscapes continue to increase, undermining PA objectives.</p> <p>Proclamation of new protected areas will come too late after heavy degradation of the habitats and there are insufficient resources and capacity for properly managing the areas even after proclamation.</p>	<p>Existing and new PAs are actively managed based on management plans and with participation of stakeholders including local communities, local governments, and businesses. PA boundaries are clearly demarcated, and basic park management infrastructure and equipment supporting PA management.</p> <p>PA managers are fully aware of costs for basic and optimal management of PAs, and will be able to request and encourage appropriate funding from the central government. Local level habitat and biological monitoring systems for key ecosystem and threatened species are in place, with established protocol for monitoring based on the SMART patrolling and enforcement techniques.</p> <p>Incentives for communities to reduce unsustainable forest use created through application of various incentive and support systems, including co-management, training, alternative livelihood support schemes such as conservation job creation and high value non-wood forest product development and marketing.</p>	<p>BD Benefits: Improved management effectiveness of at least 323,138 ha of new PAs and community conserved areas in the Tanintharyi Range Corridor with a large array of globally threatened/ endangered species including species that are not yet described in science as well as pristine HCVFs/HCSFs. This area is part of the most important transboundary tiger landscape bordering Thailand.</p> <p>The project will also put in place integrated management of mangrove forest, intertidal flats and coastal waters of Auckland Bay Mangrove (356,570 ha, with Auckland Bay Forest Reserve and Kyunsu Mangrove Public Protected Forest, totaling 43,652 ha, providing a minimum area of integrated management and complemented by other co-management sites to be identified in Y1), including the development of conservation areas and establishment of large areas of community forests: most of which should be protected and, in the case of degraded forest and mangroves, allowed to regenerate naturally; and some of which can be sustainably harvested and used to meet local timber and fuelwood needs.</p> <p>Effective management of 10,400 ha of new Locally Managed Marine Areas including globally significant coral resources of the Myeik Archipelago in the Tanintharyi Marine Corridor.</p> <p>Increased or stable numbers of tiger, Asian elephant, Asian tapir, Gurney's pitta, plain-pouched hornbill and marine communities associated with coral reefs, seagrass beds, rocky shores, mangroves and intertidal flats.</p> <p>Reduction of threats to biodiversity from incompatible land use practices in PA landscapes/seascapes.</p> <p>SFM Benefits: Emplacement of system for identification, management and monitoring of HCVFs, with participation of local communities for management and monitoring.</p>
<p>Component 3: Strengthened Capacity for Application of Biodiversity Knowledge</p>		
<p>Low capacity for ecological surveys in relation to the country's size, abundance of biodiversity and intense development pressure will lead to massive loss of biodiversity resources, compromising</p>	<p>Accelerated establishment of foundation for biodiversity stewardship:</p> <ul style="list-style-type: none"> - National Biodiversity Survey (NBS) framework is established at national and local levels, providing duplicable systematic biological assessment protocols and standards. 	<p>BD Benefit: Effective management of the above mentioned globally significant biodiversity and habitats in the Tanintharyi region. Accelerated emplacement of the framework and capacity which is also applied to increase effective management of the target PAs, landscapes/seascapes.</p>

<p>sustainable development. Scientific knowledge on biodiversity and ecosystems will be confined to very few individuals and some foreign scientists, with no systematic application at policy level and on the ground.</p>	<ul style="list-style-type: none"> - National biodiversity data repository is established, resulting in improved knowledge sharing. - Geospatial tools for stakeholders and decision makers is available to inform and improve land use planning. - Capacity development system for maintenance and effective use of the NBS system is in place. 	
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National socio-economic benefits

Forest protection, strengthened SFM and watershed management achieved through the combined impacts of all project components will ensure the sustainability of ecosystem services that contribute directly to the national economy, including water supply, slope stabilization, soil protection, pollination, tourism and recreation, etc. These services are as yet unquantified, but underpin a number of Myanmar's most important economic sectors – hydro-electric power, agriculture, forestry and tourism development. In line with the emphasis on ridge to reef connections, sustainable land management in catchment areas will provide benefits to downstream riparian and coastal communities through ensuring sustained watershed services such as secure water supply, water purification and regulation of floodwaters. The maintenance of forested catchment areas will also assist in maintaining coastal water quality, essential for the continued productivity of Tanintharyi's marine fishery resources and coastal tourism attractions (clean beaches, clear water and vibrant reefs). While no values are available to support the specific contributions from this land and seascape in Tanintharyi Region, one recent study²⁹ estimated that the value of Myanmar's overall forest ecosystem services is over \$7 billion USD. Of this, some 85%, or around \$6 billion USD – comes from forest ecosystem services such as forest carbon sequestration, watershed protection services, insect pollination, tourism, and mangrove protection of coastlines and fish nurseries. Investment in forest conservation is therefore expected to deliver significant net returns, estimated at around \$39 billion USD over the next twenty years, or a net present value of \$10 billion USD.

The second component of the project will secure effective management of protected areas, and community conserved dryland forests, mangroves and marine areas. These will secure ecosystem services (as mentioned above) and also provide jobs and livelihoods that support local communities. The community forestry activities in the mangroves and the three LMMAs are particularly significant as examples of sustainable livelihood support. In total, it is estimated that some 50,000 people will be direct beneficiaries of the project across the targeted land and seascapes follows (see **Annex 14**). The project encompasses parts of Kyunsu, Tanintharyi and Bokpyin townships. Total population in project area of 1,452,658 ha is estimated to be 145,230 (10.3% of population in Tanintharyi Region), based on spatial analysis of 2014 village tract census data.

The third component will build capacity within local government agencies and academic institutions for ILSM and biodiversity conservation, strengthening the academic programmes offered and improving the career prospects of students and trained government staff as they become the new local and national leaders in the field of integrated natural resource management.

Project Landscapes

The total area covered by the project landscapes is 1.452 million ha, which is some 33.5% of the total geographical area of Tanintharyi Region (4,334,330 ha). The project landscapes are mainly located in Myeik District, with some portions in Kawthoung District to the South: Lenya PNP, parts of the connecting corridor along the Myeik/Kawthoung boundary, and part of the marine corridor including Langaan Island group. In addition, the project will support the development of integrated land use plans for Myeik and Kawthoung Districts. Profiles for the project landscapes are given in **Annex 11** and the rationale for their selection and maps in **Annex 18**.

²⁹Emerton, L. and Yan Ming Aung. (2013) The Economic Value of Forest Ecosystem Services in Myanmar and Options for Sustainable Financing. International Management Group, Yangon.

Table 2. The distribution of the project landscapes in terms of habitats and existing and proposed protected areas (source: FFI)

Landscape	Project Status	Area ha	KBA Refs	Key species ³⁰	Key Habitats
Lenya	R2R Landscape	183,279	33	Mangrove Terrapin (CR) Spiny Turtle (EN) Asian Box Turtle (VU) Asiatic Softshell Turtle (VU) Black Marsh Turtle (VU) Burmese Eyed Turtle (VU) Gurney's Pitta (EN) Great Slaty Woodpecker (VU) Straw-headed Bulbul (VU) Sunda Pangolin (CR) Stump-tailed Macaque (VU) White-handed Gibbon (EN) Sun Bear (VU) Binturong (VU) Banded Civet (VU) Tiger (EN) Leopard Cat (VU) Asian Elephant (EN) Asian Tapir (EN) Gaur (VU)	Lowland dipterocarp forest, smallholdings, plantations, mining land
Ngawun	R2R Landscape	447,834	52, 108	Gurney's Pitta (EN) Storm's Stork (EN) Blue-banded Kingfisher (VU) Large Green-pigeon (VU) Plain-pouched Hornbill (VU) Wallace's Hawk-eagle (VU)	Lowland dipterocarp forest, smallholdings, plantations
Auckland Bay Mangrove	R2R Landscape	356,570	105,11	Hawksbill Turtle (CR) Leatherback (CR) Mangrove Terrapin (CR) Green Turtle (EN) Spiny Turtle (EN) Asian Box Turtle (VU) Asiatic Softshell Turtle (VU) Black Marsh Turtle (VU) Burmese Eyed Turtle (VU) Plain-pouched Hornbill (VU) Sonneratia griffithii (CR) Heritiera fomes (EN)	Mangroves, intertidal flats, coastal waters, smallholdings
R2R Seascape	R2R Seascape	306,501	105,121	Hawksbill Turtle (CR) Leatherback (CR) Plain-pouched Hornbill (VU)	Forested islands, coral reefs, seagrass beds, sandy beaches, mangroves, smallholdings
R2R Corridor	R2R Corridor	119,220	21	Mangrove Terrapin (CR) Spiny Turtle (EN) Asian Box Turtle (VU) Asiatic Softshell Turtle (VU) Black Marsh Turtle (VU)	Lowland dipterocarp forest, smallholdings, plantations

³⁰ Not comprehensive; Source: <https://myanmarbiodiversity.org/portfolio-items/myanmar-key-biodiversity-areas/>

				Burmese Eyed Turtle (VU) Gurney's Pitta (EN)	
Lensa River	Smallholders Zone	39,254		No information	Lowland dipterocarp forest, mangroves, rivers, smallholdings
Total		1,452,658			

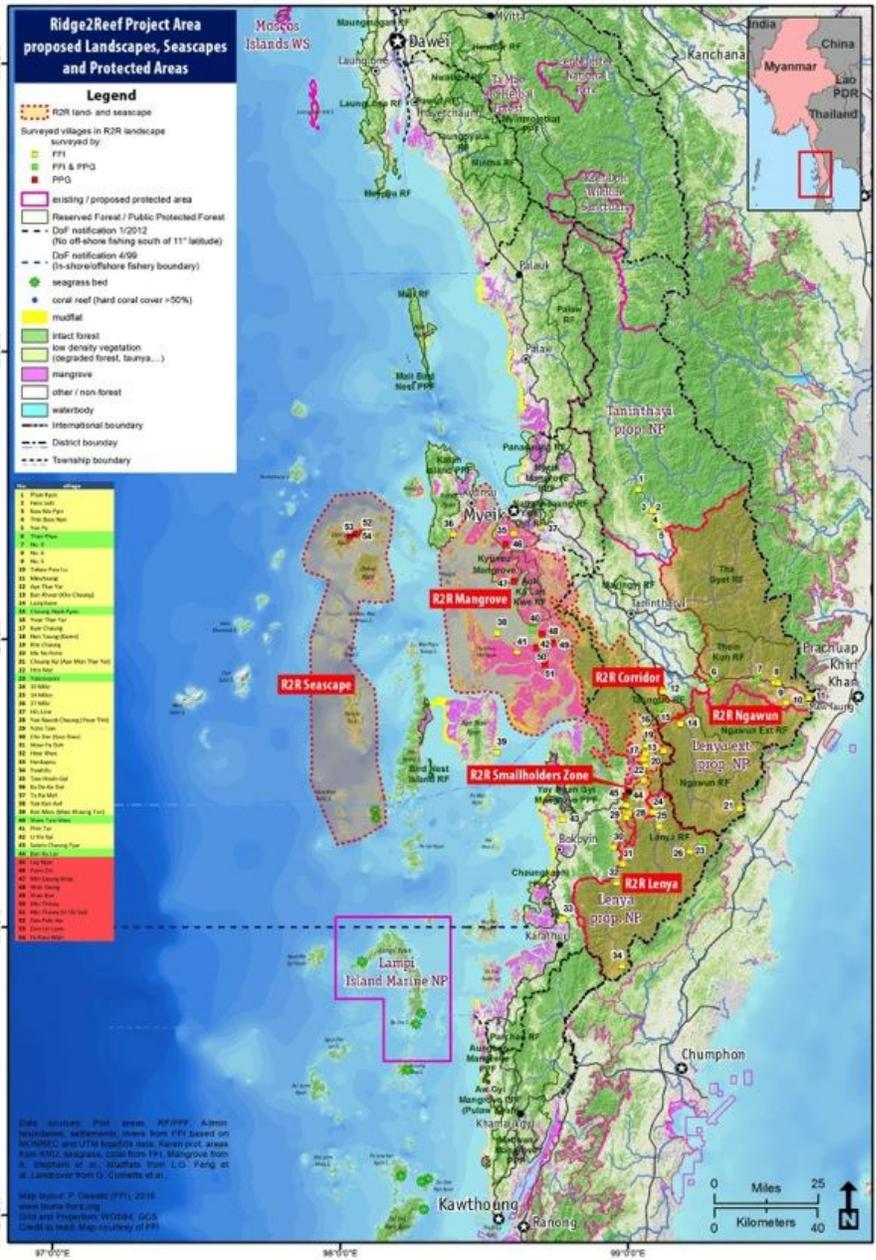


Figure 5. GEF project landscapes, seascapes, key habitats, existing and proposed PAs

IV. RESULTS AND PARTNERSHIPS

i. Expected Results:

The Project objective is *to secure the long-term protection of Key Biodiversity Areas in Tanintharyi through integrated planning and management at land and seascape scales, with interconnectivity from ridge to reef.* This will be achieved by protecting KBAs through various conservation mechanisms, such as protected areas, community forest reserves and locally managed marine areas, and maintaining ecological functions in the surrounding land and seascapes using the High Conservation Value (HCV approach) to identify and safeguard the natural capital upon which local communities are to a greater or lesser extent dependent. Land and seascapes will be interconnected by means of corridors of natural habitat to allow for genetic exchange between populations, migration of species and changes in species' distributions in response to climate change impacts. They will accommodate areas of improved agricultural systems in plantations and the vicinity of settlements that demonstrate more environmentally sustainable practices. Multi-sector mechanisms will be established at local, district and regional levels to drive forward and coordinate the realization of these results.

The project will achieve its objective through four interrelated outcomes:

1. Land and seascapes rich in biodiversity in Tanintharyi are connected and their planning and management are integrated.
2. Management is strengthened and threats are reduced in targeted proposed PAs, smallholder zones and corridors within an ILSM context.
3. National Biodiversity Survey (NBS) framework and knowledge management system for integrated land and seascape management are established.
4. Enhanced knowledge management, monitoring and evaluation support biodiversity conservation in Tanintharyi.

Component 1: Integrated Land and Seascape Planning and Management in Tanintharyi

Total Cost: USD\$ 7,838,116; GEF project grant requested: \$ 1,300,000; Co-financing: \$ 6,538,116

Without GEF intervention (baseline):

The largest and greatest concentrations of KBAs remaining in Myanmar are in the northern and southern extremities of the country, as shown in **Figure 1**. The southern hotspot in Tanintharyi is particularly important because it embraces both terrestrial and marine KBAs, all of which continues to be overexploited, degraded and, in the case of terrestrial habitats, converted to other forms of land use in the face of limited management capacity and lack of enforcement. The Forest Department (FD) and Department of Fisheries (DoF) are engaged in several conservation management initiatives at site levels, notably at: Tanintharyi Nature Reserve (1,700 km²), Dawai District, supported by WCS; Lampi Marine National Park (205 km²), Kawthaung District, supported by Instituto Oikos; and Tanintharyi (2,072 km²) and Ngawun (Lenya Extension, 1,399 km²) proposed PAs, Myeik District, and Lenya proposed PA (1,761 km²), Kawthaung District, supported by FFI. Locally Managed Marine Areas in the Thayawthatangyi Islands and Langann Islands are also being piloted by DOF with FFI support.

While these initiatives are very positive, they address only some of the core parts of KBAs; moreover, there is very limited management and enforcement capacity on the ground or at sea to safeguard even these cores. Meanwhile, surrounding land/seascapes are becoming increasingly fragmented to the extent that ecosystems become dysfunctional, their services to communities and society disrupted, and connectivity is being rapidly lost between mountain ridges and coral reefs. These processes will continue and intensify in the absence of an integrated and sustainable approach to managing natural resources at land and seascape scales, from ridge to reef, to maintain the integrity of these ecosystems.

Ongoing trends are clearly evident from the degradation of natural forest due to illegal encroachment, concessions for oil palm, rubber and mining, and unsustainable agriculture practices (See landscape maps in **Annex 18**). Coastal and marine resources are also being devastated by over-exploitation and climate change impacts, the latter causing coral reefs to bleach (BOBLEME, 2015³¹). Results from the 2013 Nansen marine survey show that pelagic and demersal (bottom-living) fish biomass had fallen by 90% and 70%, respectively, since 1980. Also, the capture rate of marine fishes in shelf areas (<200m depth) of Tanintharyi Region had declined by 85% (from 894 kg/hr to 133kg/hr), reflecting the decline in biomass (Krakstad *et al.*, 2014³²). These results are reinforced by interviews of villagers during the PPG who reported that shrimp catches, for example, are only 10% of what they were 10 years ago.

With GEF intervention (project alternative):

This first component of the project is designed to address planning and management at land and seascape scales through coordinated multi-sector processes to integrate the ways in which different government sectors apply their mandates with respect to their use of and impact on terrestrial and marine resources. Key to this integrated, multi-sector approach is the identification of High Conservation Value (HCV) sites, resources, habitats and landscapes with respect to safeguarding species diversity (HCV1), land/seascape-level ecosystems and mosaics (HCV2), ecosystems and habitats (HCV3), ecosystem services (HCV 4), community interests (HCV5) and cultural values (HCV 6). While the HCV methodology was originally developed by the Forest Stewardship Council in the late 1990s to identify and manage outstanding and/or critical environmental and social values in production landscapes within the forestry sector, it is now widely used in certification standards for forestry, agriculture and some aquatic systems; and more generally in production and sourcing policies and for conservation planning³³. In the case of the GEF alternative, the emphasis will be on identifying HCVs to inform the planning and management of natural resources at land and seascape scales. This is a pilot, initially at district level for Myeik and Kawthaung, spearheaded by the Tanintharyi Regional Government. While it is not intended to include certification of any standards developed for particular sectors, rather to apply the concept, learn lessons from the pilot and then determine the most appropriate way forward for the socio-economic and environmental well-being of the Region, it will inform the identification of protected areas, multiple use forest corridors and community-managed areas.

Outcome 1: Land and seascapes rich in biodiversity in Tanintharyi are connected and their planning and management are integrated.

The key deliverables under Outcome 1 are the development of landscape level resource-use plans covering some 1.45 million ha of terrestrial, coastal and marine areas of Myeik and Kawthaung districts (Output 1.3), informed by multi-sector standards (Output 1.2) and complementing a strategy for expanding Tanintharyi's terrestrial and marine PAs subsystem; and the institutionalization within Tanintharyi Regional Government of the processes and mechanisms for their development and implementation.

Formulation of these district-level resource plans will be facilitated by a Regional Technical Advisory and Coordination Group (RTACG) established by the Project Board and chaired by the the Tanintharyi's General Administration Department in accordance with the ToR in **Annex 5 Part B** (Output 1.1). RTACG will coordinate and guide the activities of Working Groups (WGs) for Landscapes (Lenya, Ngawun, Aukland Bay Mangrove), R2R Seascape and the R2R Corridor, each of which will be coordinated by a senior representative from the FD, DoF and FD, respectively. Other issue-based working groups will be established as necessary, for example a Multi-Sector Standards WG including representatives from the sectors and civil society (Output

³¹ BOBLEME (2015). Situation analysis of the Myeik Archipelago, BOBLEME-2015-Ecology-36

³² Jens-Otto Krakstad, Kathrine Michalsen, Bjørn Krafft, Espen Bagøien, Oddgeir Alvheim, Tore Strømme, Mya Than, Tun, Htun Thein, San Thar Tun (2014). Cruise Report "Dr. Fridtjof Nansen" Myanmar Ecosystem Survey, 13 November - 17 December 2013. Institute of Marine Research, Norway. NORAD – FAO Project GCP/INT/003/NOR Cruise Reports "Dr. Fridtjof " EAF-N/2013/9. 60 pp.

³³ Brown, E. and M.J.M. Senior (20140). Common Guidance for the Management and Monitoring of High Conservation Values. HCV Resource Network.

1.2)³⁴. The project will also involve the township, district and region level planning and implementation committees to ensure it is institutionally embedded in the governments systems.

The Landscape, Seascape and Corridor WGs will use, where possible, or establish appropriate administrative coordinating mechanisms to engage village tracts, townships and districts in the development of their respective strategies (Activity 1.1.3). Such mechanisms may also be used for the development of Sustainable Development Plans for village clusters (Activity 2.3.3) in line with the land use zoning established by the district land use plans.

RTACG will work closely with stakeholders in the region by means of the Tanintharyi Land and Seascapes Forum (TLSF), comprising representatives from CBOs, communities (village clusters), research and educational institutions and the private sector. Draft outputs from the various WGs (e.g. sector-specific standards, land and seascape strategies) and from the RTACG (e.g. land and marine resource-use plans) will be shared with the Forum. This consultative group will be represented on the Project Board by its Chairperson, who will have observer status. Knowledge events will be hosted biennially by Myeik University under the auspices of this same Forum (Output 3.3).

The Project Board, RTACG, Working Groups, core members of the Tanintharyi Land and Seascapes Forum, other stakeholder groups as appropriate (e.g. Village Cluster Sustainable Development Committees) and regional staff from FD and DoF will be trained in the principles and practices of land/seascape management based on the HCV approach (Activity 1.1.2), using modules developed under Output 3.3.

The strategy for expanding Tanintharyi's PAs subsystem (Output 1.4) should be based on the HCV approach, considering the distribution and status of KBAs, existing and proposed PAs including forest reserves and community managed areas (e.g. CFRs and LMMAs), and cultural heritage. Key considerations to be addressed in this strategy are: adequate representation of the Region's and Myanmar's biodiversity and ecosystems; application of relevant management categories³⁵³⁶ and adoption of appropriate governance regimes³⁷ across the PAS subsystem; and provision of corridors and stepping stones to connect or re-connect biodiversity hotspots and refugia. It will be particularly important and timely to explore the full spectrum of governance options, given the recent history of the region and on-going post conflict negotiations between the Union Government and Karen National Union (KNU). This will include initial steps towards participation in transboundary conservation initiatives such as Dawna Tenasserim Landscape and investigation of the potential for Peace Park development (see South-South/Triangular Cooperation section and **Annex 19**).

The PAs subsystem strategy will be underpinned by a financing plan that identifies necessary institutional capacity required at regional level, based on the development of staffing structures and application of competence standards³⁸ within the FD and DoF (Output 1.4, Activity 1.4.3). Financing mechanisms will also be identified and some will be piloted. This should include the introduction of community-based ecotourism based on a strategic, coordinated approach that offers visitors a range of community-based activities to experience tropical evergreen forest, mangrove, coral reef and island ecosystems. The development of a

³⁴ Relevant standards include the Round Table on Sustainable Palm Oil <http://www.rspo.org/> environmental standards for oil palm plantations (which could also be applied to rubber plantations), FAO standards for sustainable fisheries (linking with the proposed FAO/GEF MyCOAST project) - <http://www.fao.org/fishery/ssf/guidelines/en>, Global Sustainable Tourism Council criteria for tourism <http://www.gstcouncil.org/en/gstc-criteria-hotels-tour-operators-destinations/sustainable-tourism-gstc-criteria.html>. For the mining sector, guidance could be sought from the BGR Project "Sustainable Development of the Mining Sector in Myanmar", which is a module integrated in the technical cooperation programme "Sustainable Economic Development" commissioned by the German Federal Ministry for Economic Cooperation and Development. The project partner is the Department of Mines that has been integrated in the re-structured MoNREC. The overall aim is the improvement of the quality of mining supervision and operations with respect to safety, social and environmental aspects. The first phase of the project is scheduled for a 2-year term, ending November 2017.

³⁵ Dudley, N. (Editor) (2008). Guidelines for Applying Protected Area Management Categories. Gland, Switzerland: IUCN. x + 86pp.

³⁶ Day J., Dudley N., Hockings M., Holmes G., Laffoley D., Stolton S. & S. Wells, 2012. Guidelines for applying the IUCN Protected Area Management Categories to Marine Protected Areas. Gland, Switzerland: IUCN. 36pp.

³⁷ Borrini-Feyerabend, G., N. Dudley, T. Jaeger, B. Lassen, N. Pathak Broome, A. Phillips and T. Sandwith (2013). Governance of Protected Areas: From understanding to action. Best Practice Protected Area Guidelines Series No. 20, Gland, Switzerland: IUCN. xvi + 124pp

³⁸ Appleton, M.R. (2016). A Global Register of Competences for Protected Area Practitioners. Gland, Switzerland: IUCN. 154 pp.

Community-based Ecotourism Strategy is timely, given government's increasing relaxation of restrictions on tourists to the Myeik Archipelago, and its implementation under Component 2 will provide important opportunities to improve local livelihoods and increase community support for conserving land and seascapes. The Outputs under Outcome 1 are listed below; **all activities and their respective budgets are given in Annex 1.**

Output 1.1: Inter-sectoral, coordinated land/seascape planning mechanisms established within regional governance structure to integrate management of ecosystem services and biodiversity, using the High Conservation Value (HCV) approach.

Output 1.2: Sector-specific standards, safeguards and incentives to protect Key Biodiversity Areas (KBAs), HCV Forests and High Carbon Stock Forests (HCSFs) developed and operational.

Output 1.3: Integrated land and marine resource-use plans developed and implemented for Myeik and Kawthaung districts, involving community-based natural resource management (CBNRM) and sustainable land and sea management measures, including enforcement.

Output 1.4: Tanintharyi PA system expanded through proclamation of new sites that increase its representativeness of HCV biodiversity and cultural diversity; management capacity strengthened; and regional financing plan developed.

Component 2: Strengthened management and threat reduction in target proposed PAs and surrounding land/seascapes.

Total Cost: US\$ 7,800,000; GEF project grant requested: US\$2,300,000; Co-financing: US\$ 5,500,000.

Without GEF intervention (baseline)

Myanmar's protected areas system currently covers 5.7.0% (38,906 km²)³⁹ of total land area and less than 0.05% (269 km²)⁴⁰ of total marine area. It is inadequate both in terms of its coverage, falling well short of the 2030 target of 10% of total land area set in the 30-year National Forestry Master Plan, and representation of key terrestrial and marine ecosystems. Sundaic Lowland Forest, which lies in the Tanintharyi Range Corridor, is not yet represented within the national PA system; and marine ecosystems, notably those of the Myeik Archipelago in the Tanintharyi Marine Corridor, are poorly represented. Both of these corridors (**Figure 2**) are fundamentally important to conserving and maintaining the integrity of Tanintharyi's KBAs (**Figure 1**).

Currently, the only PA designated within the Tanintharyi Range Corridor is Tanintharyi Nature Reserve (1,700 km²), while three other areas totalling 5,755 km² (Tanintharyi, Ngawun/Lenya Extension and Lenya) have been proposed for designation as national parks since at least 2004. The only PA within Tanintharyi Marine Corridor is Lampi Island Marine National Park (205 km²). Thus, the bulk of these corridors remains unprotected. Mangroves are another ecosystem type that is poorly represented in the national PA system; and these are extensive along the interface between the within the Tanintharyi Marine and Range Corridors.

In the absence of immediate conservation interventions and engagement with local communities to improve and develop their livelihoods in more sustainable ways than currently practiced, key endangered species will continue to be lost, ecosystems will become dysfunctional and food, energy and water security in the Region will diminish.

With GEF intervention (project alternative):

The second component will focus on safeguarding PAs by increasing site management capacity and by reducing threats to biodiversity, HCV forests and marine ecosystems in the surrounding target land and

³⁹ Ministry of Environmental Conservation and Forestry, 2015. Republic of the Union of Myanmar: National Biodiversity Strategy and Action Plan (2015-2020).

⁴⁰ UNEP-WCMC (2016). Protected Area Country Profile for Myanmar from the World Database of Protected Areas, October 2016. Available at: www.protectedplanet.net

seascapes. The project will support the establishment of management structures for newly established PAs through on-the-ground presence, and the development and implementation of PA management and business plans. The capacity of communities within the land and seascapes, smallholder zones and the R2R Corridor will be developed to improve CBNRM potential and incentivise sustainable livelihoods, with due attention towards promoting gender equality.

Outcome 2: Strengthened management and threat reduction in target proposed PAs, smallholder zones and corridors.

Outcome 2 is very much focused on a ‘parks for people’ concept, people being local communities in the first instance and gradually, as PAs and communities develop ecotourism initiatives, this will embrace visitors. The key deliverables under Outcome 2 are: a set of PA management and business plans covering at least 500,000 ha, developed with the active participation of key stakeholders and being implemented using a range of governance mechanisms, including co-management and other community-based systems (Output 2.1); and a set of 5-year Sustainable Development Plans for clusters of up to about 20 villages (Output 2.3).

These two initiatives will run in parallel, with participatory processes for stakeholders established for both: Stakeholder Working Groups (SWGs) will be established for each proposed PA, eventually to become institutionalized as Forums within the governance system of the respective PAs; and Sustainable Development Committees (SDCs) set up for each Village Cluster (VCSDCs). SWGs should comprise representatives of local communities, CSOs, NGOs, research and educational institutions, private sector and other government agencies having an interest in the PA. SDCs should be representative of villages within the cluster and include officers from the relevant government agencies, such as forestry, fisheries, rural development, agriculture and tourism. To the extent possible, SWGs and especially VCSDCs should be gender balanced and representative of different ethnic and age groups.

The total project area of 1,452,658 ha comprises three landscapes, one seascape, one corridor connecting Ngawun Landscape with Auckland Bay Mangrove Landscape to maintain the ridge-to-reef connectivity and Lenya River Smallholders Zone, which is an enclave of village settlements surrounded by project landscapes on three sides and remaining natural forest earmarked as oil palm concessions to the west (**Figure 5** and **Table 3**). Sites targeted for establishing as PAs are Ngawun Reserve Forest (Lenya Extension), Lenya Forest Reserve, part or all of the Auckland Bay Mangrove Landscape (to be determined) and part or all of the seascape that runs from the Thayawthatangyi-Daung Islands to those of Langann (to be determined). The total area of these proposed PAs is 333,538 ha, which is currently less than the target of 500,000 ha specified in the PIF. However, there is plenty of scope for establishing core protected terrestrial and marine areas within the land and seascapes of Auckland Bay Mangrove and R2R Seascape to meet or exceed this target (**Table 4**). In particular, the opportunity will be taken to establish large areas of community forests: most of which should be protected and, in the case of degraded forest and mangroves, allowed to regenerate naturally; and some of which can be sustainably harvested and used to meet local timber and fuelwood needs. This is directly in line with the National Forestry Master Plan target of establishing 980,000 ha of community forest by 2030. Similarly, the opportunity will be taken to replicate recent experience with LMMAs and establish others within the R2R Seascape. Ideally, emphasis should be given to protect both the terrestrial and marine components of islands, mini-R2Rs demonstration models, to provide stepping-stones of land and sea connectivity along the Tanintharyi Marine Corridor.

Table 3. Project area and target sites for new PAs and demonstrating integrated natural resource management				
PROJECT AREA				
Name	Legal Status	Project Status	Area ha	Activity
Lenya	Forest Reserve	R2R Landscape	183,279	Reduce deforestation in proposed PA
Ngawun	Forest Reserve	R2R Landscape	447,834	Reduce deforestation in proposed PA, SFM & SLM
Aukland Bay Mangrove	FR/PPF/UA*	R2R Landscape	356,570	Reduce deforestation in proposed PAs, community based SFM
R2R Seascape	Territorial Waters	R2R Seascape	306,501	Reduce deforestation in proposed PAs, community-based coastal resource management
R2R Corridor	FR/OPC/UA**	R2R Corridor	119,220	INRM/SLM/SFM
Lenya River	unknown	Smallholders Zone (outside Lenya Landscape)	39,254	INRM/SLM
Total			1,452,658	
PROJECT TARGET SITES				
Proposed Protected Area	Legal Status	Project Status	Area ha	Activity
Lenya	Forest Reserve	R2R Landscape	183,279	Reduce deforestation in proposed PA
Lenya Extension	Forest Reserve	Part of Ngawun R2R Landscape	139,859	Reduce deforestation in proposed PA
Aukland Bay Mangrove	FR/PPF/UA*	R2R Landscape		Reduce deforestation in proposed PAs, community based SFM, target to be determined in Y1, minimum of 43,652 ha for FR & PPF.
Aukland Bay Forest Reserve			19,341	
Kyunsu Mangrove Public Protected Forest (PPF),			24,311	
R2R Seascape	Territorial Waters	R2R Seascape	TBD	Reduce deforestation in proposed PAs, community-based coastal resource management, targets to be determined in Y1
- Lin Long	LMMA	R2R Seascape	3,605	Community-based coastal resource management
- Donepale Aw	LMMA	R2R Seascape	1,877	Community-based coastal resource management
- Langann	LMMA	R2R Seascape	4,918	Community-based coastal resource management
Total			377,190	
Integrated NRM	Legal Status	Project Status	Area ha	Activity
R2R Corridor	FR/OPC/UA**	R2R Corridor	119,220	INRM / SLM / SFM
Lenya River	unknown	Smallholders Zone (outside Lenya Landscape)	39,254	INRM/SLM
Mawtaung Road	unknown	Smallholders Zone (inside Ngawun Landscape)	34,352	INRM/SLM
Yadanarpon Road	unknown	Smallholders Zone (inside Lenya Landscape)	16,197	INRM/SLM
Total		Integrated Natural Resource Management	209,023	

*Aukland Bay Mangrove Landscape comprises Aukland Bay Forest Reserve (FR), 19,341 ha (GIS estimate), and Kyunsu Mangrove Public Protected Forest (PPF), 24,311 ha (GIS estimate), from Myeik southwards to Shaw Taw Maw (represents approximately 20% of the mangrove and associated terrestrial vegetation), and the rest is unassigned.

**The Corridor comprises Taungfru Reserve Forest (18,974 ha of which 4,756 ha is under production according to Myeik District 10-year Management Plan 2016-2025); the rest is Permanently Protected Forest or proposed PPF and much of that is earmarked as oil palm concessions. Note that all oil palm concessions are currently under review by the Regional Government.

LMMA: Locally Managed Marine Area NRM: Natural Resource Management TBD = To Be Determined

Table 4. Terrestrial and marine components of Auckland Bay Mangrove and R2R Seascape (units in hectares)

Land/seascape	Ocean	Water	Mangrove	Intact forest	Degraded forest	Non-forest	Grand Total
Auckland Bay Mangrove*	169,011 47%	5,758 2%	112,776 32%	6,718 2%	33,391 9%	28,915 8%	356,570 100%
Kyunsu Mangrove PPF	4,130	425	15,625	27	1,454	2,650	24,311
Auckland Bay RF	2,987	486	13,303	130	981	1,452	19,340
R2R Seascape	261,194 85%	2,528 1%	1,593 1%	17,655 6%	14,253 5%	9,278 3%	306,501 100%

* Kyunsu Mangrove Public Protected Forest and Auckland Bay Reserve Forest are the only designated forests (i.e. under permanent protection) in the Auckland Bay Mangrove R2R Landscape. Their boundaries, shown in **Annex 18 (Map 4)**, cover approximately 20% of the total mangrove and associated terrestrial vegetation in this Landscape.

Within the project area three Smallholder Zones are earmarked for integrated natural resource management (INRM), one being the above-mentioned enclave of villages along the Lenya River and the other two arising from encroachments either side of the historically recent access roads through the Tanintharyi Range to the border post with Thailand (**Table 3**). Interventions within these zones are intended to contain settlements and associated smallholdings to existing lines of disturbance within the respective zones, improve and diversify existing livelihoods to reduce encroachment, overexploitation, degradation and other threats to surrounding HCV forests and demonstrate best practices in INRM for mainstreaming elsewhere in the Region. Key to the success of this approach will be securing long-term tenure (lease) of land holdings for smallholders so that they can invest with confidence in the future, rather than having to focus on short-term gains achieved through environmentally unsound or less sound practices. Such improvements in land tenure policy are similarly applicable to seascapes, for example with LMMAS.

INRM will also be applied to the R2R Corridor, only here the main challenge will be to engage with the oil palm sector as most of the remaining natural forest (some is relatively intact, some is degraded) comprises concessions; only the north-west portion of natural forest is unassigned. There are only a handful of villages, most of which are along the north-eastern periphery where forest degradation is significant. There remains a narrow, 1-2 km, neck of forest linking Ngawun Landscape with the R2R Corridor; once this is gone then the connectivity between ridge and reef is lost. This neck needs to be extended along the ridge until it meets with mangrove in the far north-western corner of the Corridor. It is quite possible that some of the oil palm concessions may be rescinded, in which case more efforts on addressing degradation along the periphery of the Corridor, particularly its NW-SE boundary.

Development of PA management and business plans will be a fundamental part of establishing PA infrastructure and identifying and strengthening staff competences (Output 2.2). This will be supported under Output 3.3 (Activity 3.3.1), alongside training of PA staff in biodiversity conservation and monitoring in line with staff competency requirements (Activity 3.3.2). Where appropriate, it will be important for PAs to collaborate with communities in monitoring and enforcement work, including patrolling using SMART (Spatial Monitoring and Reporting Tool). Such conservation-oriented work by communities will be incorporated within their Village Plans and/or Village Cluster Sustainable Development Plans. Existing small grants programmes will be supported by the project, or established if not already in place, for which purposes the project will develop its own set of grant criteria to ensure that such support is directly in line with its planned outputs and targets, including a 60% allocation to female applicants to support gender mainstreaming.

The Outputs under Outcome 2 are below; **all activities and their respective budgets are given in Annex 1.**

Output 2.1: Management and financing plans for target proposed PAs developed and operational with full stakeholder participation..

Output 2.2: PA site operations strengthened to address existing threats to biodiversity.

Output 2.3: Capacity of communities developed within KBAs, HCV habitats, smallholder zones and corridors for integrated and sustainable management of land/seascapes, including community-based natural resource management.

Component 3: Emplacement of the National Biodiversity Survey framework and geospatial platform for Integrated Land and Seascape Management

Total Cost: USD\$ 4,147,000; GEF project grant requested: \$ 1,147,000; Co-financing: \$ 3,000,000

Without GEF intervention (baseline):

Tanintharyi supports a wealth of terrestrial and marine life about which some data has been gathered, collated and analysed, providing enough information to know that its biodiversity is not only regionally but also nationally and globally important, including elements that are unique and of outstanding global value in terms of the world's natural heritage. However, the status and distribution of Tanintharyi's biodiversity has only recently begun to be more thoroughly researched in the last decade or two and such information as does exist tends to be scattered among those agencies, institutions and organisations delivering a host of different projects and mandates. Moreover, there are no national standards and protocols in place for surveying biodiversity, storing and managing such information, and enabling it to be readily shared and accessible by those involved in research, education, planning and management, policy and decision making within the natural resources and related sectors. This jeopardises informed decision-making, policy development and management of land and marine resources, as well as limiting the development of research and education. Given that Tanintharyi's regional economy is hugely dependent on its natural resource base, it is essential to ensure that existing data and information about biodiversity are readily accessible and priority gaps in knowledge are filled by new surveys and studies for more sustainable planning and management purposes at integrated land and seascape levels.

With GEF intervention (project alternative):

The third component focuses on developing institutional capacity for the generation and application of biodiversity knowledge at national and subnational levels, with a capacity building strategy for biodiversity knowledge generation and application integrated in the regional and national development framework and institutionalized in the government's human resource management strategy. The National Biodiversity Survey (NBS) framework will be established as the umbrella for the biodiversity information management system. In building national and local capacity, a wide range of programmes and tools developed by the Smithsonian Institution will be utilised, and a modular training programme in biodiversity conservation and monitoring will be established and institutionalized. Biodiversity information and data will be consolidated through establishment of the NBS framework, focusing on the Tanintharyi Range Corridor, coastal wetlands (mangrove and mudflats) and Myeik Archipelago, and a prototype framework and geospatial platform will be established for the Tanintharyi Regional Government. Working from detailed capacity needs assessments, the capacity of national and regional government agencies, research institutions and national CSOs will be strengthened in the areas of biodiversity assessment and monitoring, environmental planning and management for development and poverty alleviation, and utilization of open access methods and tools to design, implement and evaluate projects.

Outcome 3: Prototype National Biodiversity Survey framework and geospatial platform operational within Tanintharyi Regional Government.

Outcome 3 is focused on developing standards for surveying and monitoring biodiversity, particularly at species level, applying those in the field at target sites as part of a training programme, which generates new data on the distribution and status of target species that can help to inform the identification of HCV sites and ecosystems and their management at land/seascape and PA levels. Alongside designing the NBS framework will be the design and establishment of a geospatial, web-based platform for accessing and making available data and information on Tanintharyi's terrestrial and marine biodiversity (Output 1). Protocols will be place to manage access to third parties and, for reasons of security, certain data on endangered and/or rare species will need to be protected. It will be important to ensure that protocols are aligned with and support the Union Government's routine reporting to the Convention on Biological Diversity.

Once the underlying database system for the platform has been established, it will be populated with existing and historic data held by partner organisations involved directly in the project and others, especially those in the Region including research institutions universities. During the design stage, it will be necessary to determine data transfer and sharing protocols. Such procedures should be kept simple and sustainable, in terms of time and costs of 'cleaning' and managing data. The principles of data providers making their information available at no cost, maintaining responsibility for data quality and determining the levels of access to their data by third parties are tried and tested, and should be adopted. There are potential synergies to be gained by collaborating with OneMap Myanmar, who are working with the Regional Government on a review of oil palm concessions for which a geospatial platform is being established. This can be explored further during project inception.

The project will work closely with Myeik University and other regional research institutions to develop training modules on field survey methods, undertake field surveys and support population and management of biodiversity databases. Such collaboration is intended to strengthen their capacities so that by the end of the project they will be able to continue supporting the Regional Government in surveying and monitoring biodiversity, and managing data and developing information and knowledge for the regional Tanintharyi biodiversity platform (Output 3.2). Guidelines / SOP will be developed for government on how to integrate biodiversity and ecosystem services information into the management of protected areas, key biodiversity areas and land use planning.

Output 3 addresses broader training needs in biodiversity conservation and monitoring, to be developed and institutionalised as a training programme of some ten modules (1-2 weeks each module) and run each year of the project (possibly twice annually in the initial 1-2 years). The programme will address staff competence requirements within FD and DoF for staff engaged in PA and related conservation management work (Activity 3.1.1), which will be laid out in a capacity building strategy for adoption by MoNREC and DOF, as well as contribute to degree and master courses at Myeik and other universities in the Region.

The project will also support Myeik University in taking the lead to host a biennial Tanintharyi Land and Seascapes Knowledge Forum, which will bring together agencies, institutions, NGOs, community leaders and private sector to share lesson learnt and experience gained in managing land and marine resources sustainably to benefit biodiversity, ecosystem functioning and people's livelihood needs, as well as their enjoyment and appreciation of their natural world.

The Outputs under Outcome 3 are listed below; **all activities and their respective budgets are in Annex 1.**

Output 3.1: National Biodiversity Survey framework and geospatial platform designed, piloted and institutionalized within Tanintharyi Regional Government.

Output 3.2: Strengthened capacities of regional universities, research institutions and government agencies (FD and DOF) to survey and monitor biodiversity; and to store, manage and disseminate such data, information and knowledge.

Output 3.3: Development and institutionalization of a modular biodiversity conservation and monitoring training programme in Tanintharyi Region.

Component 4: Knowledge management, monitoring and evaluation

Total Cost: US\$753,000; GEF project grant requested: US\$253,000; Co-financing: US\$500,000

Without GEF intervention (baseline):

Information and knowledge in relation to integrated landscape planning and management in Myanmar and especially Tanintharyi Region is limited, often anecdotal and mostly restricted to a sectoral approach. An integrated cross-sectoral and landscape-based approach is missing. This inadequate knowledge and information sharing on the status of natural resources, biodiversity, ecosystem services and sustainable livelihood options is recognized as a key barrier to progress in achieving integrated landscape planning and

management. It reflects a relatively weak learning environment for sustainable natural resource management and poor opportunities for knowledge exchange on integrated natural resource management and conservation approaches.

With GEF intervention (project alternative):

Through this component the project will ensure that information and knowledge accumulated and produced within the project will be documented and made available for wider communication and dissemination of project lessons and experiences to support the replication and scaling-up of project results. Further to the focused capacity development and information management systems to be developed in Component 3, project support through Component 4 will enable the strengthening of institutional and individual understanding of the mechanisms and approaches to achieve integrated landscape planning and management, where to source information on biodiversity and natural resource status, and information on these resources. The project will support the enhanced documentation and sharing of best practices and knowledge arising from project activities, including case studies and technical reports to document best practices and traditional (indigenous) knowledge. This will be achieved through sharing these materials on project-related websites, social media and a range of outreach and communication materials. Three Stakeholder Forum meetings, culminating in a project completion conference will be convened at Myeik University in order to comprehensively share experiences between all regional stakeholders and provide opportunity for the development of a shared vision and collaborative efforts towards this. Lastly, project support will ensure the establishment of a rigorous project M&E process to take stock of progress and constraints, support adaptive management and coordination between the various project components, and document and share lessons learned.

Outcome 4: Enhanced knowledge management, monitoring and evaluation support biodiversity conservation in Tanintharyi

Under Output 4.1, the documentation and dissemination of emerging project results, best practices in integrated land and seascape management and lessons learned will be supported. This will include case studies to document and present best practices, based on innovative activities piloted through project support, and including traditional (indigenous) technical knowledge of sustainable forest and marine resource management and livelihood practices. Results will be published, disseminated and presented at Stakeholder Forum meetings as well as national and international knowledge sharing events. The project will make use of a targeted communication strategy to systematically document, publish and share information emanating from project activities and knowledge sharing events, including use of UNDP and project partner websites and knowledge sharing mechanisms and social media.

To develop and implement an effective monitoring and evaluation system under Output 4.2, the project will assist a series of activities to enable well-informed and participatory project management decision-making and stock taking and dissemination of emerging good and best practices to stakeholders within Tanintharyi Region, nationally and globally. This will include the regular review and updating of the M&E plan (**Annex 2**) with indicators, baselines and targets, annual work plans and budgets and the generation of comprehensive monitoring and progress reports. The project will ensure that gender mainstreaming and SESP requirements are met as an integral part of the project planning, implementation and M&E cycle. Regular Project Board and Regional Technical Advisory and Coordination Group meetings will enable key stakeholders to be actively involved in a participatory M&E process, further supported by the Stakeholder Forum (see Output 4.1). Lastly, the project will conduct a timely MTR and TE to take stock of progress and the implementation process, emerging constraints and (at mid-term stage) to formulate possible remedial measures or adaptive management to ensure optimal implementation efficiency and knowledge generation.

The Outputs under Outcome 4 are listed below; **all activities and their respective budgets are in Annex 1.**

Output 4.1: Project results and lessons learned are made available to all project stakeholders

Output 4.2: Project monitoring and evaluation system in place and used to inform project management decision-making

ii. Partnerships:

UNDP will be responsible for the overall implementation of this proposed GEF project under UNDP's Direct Implementation Modality (DIM), in collaboration with four Responsible Parties (RPs), specifically: Forestry Department, Department of Fisheries, Fauna and Flora International and the Smithsonian Institution, as described more fully in **Section VIII**. The Government of Myanmar has explicitly endorsed this modality whereby UNDP will focus its delivery through government agencies, NGOs, CBOs and universities in the Tanintharyi Region as much as possible, with technical and capacity building support provided by international organisations.

Thus, responsibility for the delivery of Component 1 rests primarily with UNDP and its PMU, based at the FD's offices (TBC) in Myeik. Delivery of Outcome 1 outputs is very much dependent on the working groups being established at all levels of governance and administrative levels within the Region. Overall coordination and technical guidance will be provided by a Regional Technical and Advisory Coordination Group (RTACG) set up by the Project Board and representative of the key sectors necessary to effect an integrated approach to land and seascape management from ridge to reef. Sectors include: agriculture (and plantations), environment, fisheries, forestry, general administration, forest and marine police, navy, mining and tourism. Working Groups on multi-sector standards and on land and seascapes will be established by the RTACG to develop standards for the different sectors and strategies for the respective land and seascapes. Civil society, NGOs, CBOs, universities and research organisations, private sector and other non-government partners and interest groups will have the opportunity to be consulted and express their views on strategies and plans generated by the project under the auspices of a Tanintharyi Land and Seascapes Forum established by the Project to provide a sounding board for the RTACG. All four RPs will work closely with UNDP in delivering Outcome 1: FD and FoF will proactively support the various coordinating and working groups with their presence, leadership and sector knowledge to the multi-sector and land/seascape working groups; and SI will support with training and materials on planning, managing and monitoring HCV sites and landscapes.

FFI will take the lead on Component 2 and, in collaboration with relevant government agencies, work closely with local communities at village cluster levels to deliver Sustainable Development Plans to contribute to the reduction of threats and pressures in areas peripheral to existing and proposed PAs. It will also focus on supporting the establishment of new PAs, developing management and business plans and training staff (and community members) in management and enforcement work. FFI and SI will collaborate closely, with survey, monitoring and training inputs to Component 2 provided by SI. Founded in 1903, FFI is the world's first international conservation organisation. It has been working in Myanmar with MoNREC for over a decade, most recently in the Tanintharyi Region where it supports the conservation planning and management of biodiversity at land and seascape scales.

SI will be responsible for delivering Component 3, collaborating closely with Myeik University and other educational bodies in the Region, to: set up biodiversity survey protocols; develop an on-line platform for disseminating and sharing biodiversity data; undertake field surveys to generate new knowledge about biodiversity in poorly studied areas prioritised for conservation; and to develop a modular training programme on biodiversity conservation to support the various capacity development initiatives across all project components. SI, founded in 1846 and the world's largest museum and research complex, has been working in Myanmar for over 20 years in a long-term partnership with MoNREC, particularly with respect to building capacity in biodiversity surveys and research to generate scientific knowledge for policy, decision-making and educational outreach.

Various other organisations are working in the Region on a range of projects and other initiatives that provide opportunities for collaboration and synergy with the R2R project. The project will coordinate with other ongoing projects and initiatives, in particular the proposed FAO/GEF MyCoast project, Instituto Oikos

project in Lampi Marine National Park, WCS project in Tanintharyi Nature Reserve, the UNDP/GEF 5 Protected Area System project, ADB Greater Mekong Subregion Core Environment Programme and OneMap Myanmar amongst others so that there is coordination and synergy, and exchange of lessons and experiences that will strengthen the quality of project implementation.

First and foremost, under the auspices of the Tanintharyi Land and Seascapes Forum, it is intended that Myeik University should host a biennial knowledge event to share knowledge and experience and strengthen networking among such partners. Relevant organisations and initiatives that the project will collaborate with are listed in **Annex 20**.

iii. Stakeholder engagement:

The implementation of the project will be based on extensive engagement with stakeholders at all levels across the project land and seascapes. **Table 1** in **Annex 20** described the engagement of stakeholders by output, **Table 2 (Annex 20)** outlines and the main roles/ responsibilities during project implementation for various project stakeholders at all levels, while **Table 3 (Annex 20)** describes those organizations and initiatives providing opportunities for collaboration. At a broad level, participation and representation of stakeholders will be conducted through the governance structures put in place by the project as outlined and depicted in the organogram in the Project Management Arrangements section, and through the existing governance structures at national, regional and local levels (e.g. national government ministries and departments, regional government agencies (eg forestry, fisheries), PA management authorities, and district and township administrations. Stakeholders will be consulted and engaged throughout the project implementation phase to: (i) promote understanding of the project's outcomes; (ii) promote stakeholder ownership of the project through engagement in planning, implementation and monitoring of the project interventions; (iii) communication to the public in a consistent, supportive and effective manner; and (iv) maximisation of linkage and synergy with other ongoing projects.

With regards to the direct engagement of local communities, in Component 1, Output 1.1 will build on the experiences of UNDPs township planning project which is anchored within the key institutions responsible for local development and development of annual township level plans (Township Planning and Implementation Committee, ward and village tract administrators, Hluttaw members and representatives from civil society). By engaging in the annual planning process the integration of management of ecosystem services and biodiversity at land and seascape scales in Myeik and Kawthoung districts will become part of the annual plans and contribute to institutionalize a systematic and inclusive approach of involving communities. Output 1.3 will develop and implement integrated land and marine resource-use plans for Myeik and Kawthoung districts, involving community-based natural resource management (CBNRM) and sustainable land and sea management measures. Output 1.4 will include the development and operationalization of a community-based ecotourism strategy for Tanintharyi.

In Component 2, Output 2.1 will develop management and financing plans for target proposed PAs with full stakeholder participation. The project will design participatory processes for development of management plans for sites targeted to be conserved and establish a Stakeholder Working Group for each proposed PA, namely Lenya, Ngawun (formerly Lenya Extension) and Auckland Bay Mangroves and Thayawthangyi-Daung and Langann Islands. Subsequently, it will implement the management plans in partnership with relevant stakeholders and, in particular, identify and realise opportunities for co-managing forests, mangroves and marine areas with local communities. This will include developing strategies for community engagement (e.g. joint patrolling, community patrolling in KNU areas).

Output 2.3 will invest substantially in developing the capacity of communities within KBAs, HCV habitats, smallholder zones and corridors for integrated and sustainable management of land/seascapes, including community-based natural resource management. This will involve a series of activities which will include:

undertaking sustainability assessments of village clusters within land and seascapes, smallholder zones and R2R corridor to identify threats; economic, social and environmental sustainability of existing livelihoods; and opportunities for improving sustainability of livelihoods, along with associated training and other needs. Secondly, Village Cluster Sustainable Development Committees (VCSDCs) will be established, comprising village representatives and government agencies, to coordinate development of sustainability plans and liaise with respective townships and districts regarding support from relevant sectors to support plan implementation. 5-year Sustainable Development Plans will be prepared for village clusters in R2R Seascope, R2R Mangrove, R2R Corridor and Smallholder Zones (Lenya River, Mawtaung Road and Yadanarpon Road), based on SLM principles and with provisions for: long-term security of tenure for smallholdings; improved economic and environmental sustainability of livelihoods through agri-environment, agro-forestry and fishery practices and enhanced diversification of livelihoods; and protection of surrounding HCV habitats from further fragmentation and degradation. Small grants programmes will be established or strengthened for village clusters (US\$ 50,000 per cluster of approximately 20 villages per year - smaller clusters in R2R Seascope) to support implementation of Village Cluster Sustainable Development Plans (VCSDPs). A simple community-based system will monitor health and wealth of village communities; and the health of the environment (natural capital and HCV habitats) within and surrounding smallholdings and fishing grounds. Finally, village cluster enforcement networks will be established using SMART (Spatial Monitoring and Reporting Tool) technology that enables villagers to report illegal activities to relevant authorities via an application to their mobiles, providing such details as time, date and location (automated via GPS), activity and, if observed, details of individuals, vehicles, boats and equipment involved. Such information would also contribute to the village cluster monitoring system.

Finally, in Components 3 and 4, the sharing of project results, knowledge, lessons learned and experiences through the Stakeholder Forum would overtly include participation from communities involved in the project activities, especially regarding local traditional knowledge and practices that may contribute towards conservation and sustainable natural resource management.

The risks and mitigation measures and recommendations from the Social and Environmental Screening Procedure for the project will guide the project to manage potential adverse impacts from the project to the environment and people whilst enhancing the environmental benefits to the local people (see **Annex 7**). Gender-based stakeholder engagement in project implementation will be pursued primarily on the basis of the gender analysis and action points developed for the project to address gender-specific needs and priorities (See IV.iv and **Annex 14** for socio-economic situation analysis including community engagement and gender mainstreaming recommendations).

During the PPG phase, extensive consultations with stakeholders at all levels have taken place through: bilateral consultations with central government agencies, civil society organizations, and relevant development partners; visits to the target project sites and meetings with local governments/ field agencies and local communities; stakeholder consultation workshops; and various studies and assessments which included field visits and local stakeholder consultations (see **Annex 13**: List of People Consulted, and **Annexes 14-17** for the various studies and assessments). Besides the inputs for project development, these stakeholder consultations have helped raise the awareness of the project concept and logic, project components and what they seek to achieve. This is expected to have developed a platform for further engagement of the stakeholders during project implementation.

iv. Mainstreaming gender:

During the PPG phase, a consultancy study was undertaken to conduct a gender assessment reviewing the role of females, males and youth in the project development and implementation and potential impacts of the project on each gender group, and to develop a gender mainstreaming plan for the project. This aimed

to ensure an inclusive approach through which women and men are able to participate actively and benefit equitably, have equitable access to the project resources and receive fair social and economic benefits. The full report of this study is given in **Annex 14**, while its key findings and recommendations are summarized here. **Table 4 in Annex 20** describes proposed actions to mainstream gender into project output implementation including gender indicators.

Gender analysis

The situation analysis for the project study area included social economic assessment of selected communities throughout the island, mangrove and inland landscapes. In the context of this holistic approach, specific gender assessments included: gender dimensions of fisheries, gender dimensions of forest management, gender division of labour, and female headed households.

In the case of fisheries, fishing in coastal and deep-sea waters is almost always a male sphere, and carries with it high work-related health and safety risks. Women in fishing households perform preparatory work, such as mending nets, although their contribution is often "informal" and rarely remunerated. Women's roles are most prominent in small-scale and industrial fisheries, which is in post-production, processing and marketing. In the study area, post harvesting shrimp paste making is only done by women.

In the case of forest living, women have close ties to communal lands. This is where they gather fuel wood and forest plants for use within the household. Depending on their original residential area, livelihood pattern also varies from place to place. This attachment was revealed in one case where villagers had been resettled outside a protected area but preferred to return to use their old orchards (and were prevented from doing so). Because they depend on these resources, women need to be involved in decisions about how communal lands are managed. Ignore the roles of women as resource users and conservation programs will fail to address the needs of those very individuals who are key to the sustainable use of the environment.

Rural women and men often have deep knowledge of forest resources and different roles in tree and forest management. Women practice traditional agro-forestry production systems, such as home gardening, and harvest and sell wood and tree products and forest products such as honey as part of small-scale enterprises. They are mainly responsible for collection of fuel wood for the household, and of plants used as food and medicines. Men are involved more in high-value activities such as cutting timber. In the study areas, apart from wood cutting and trading, there was no noticeable task done by both male and female that could depend on their duration of settlement in the area. As per government land use policy, land is owned by the state, while local men have rights to trees and women to tree products. It was found out that trees and forests are more important to rural women's livelihoods than to those of men. In addition, responsibility for caring for household members and household chores falls mainly on women, leaving less time for agricultural production. As a result, they are becoming more reliant on forest foods and income from traditional orchards. During conflicts and forced relocation time, displaced rural people become more reliant on forest products and services. Given their responsibility for meeting household food and fuel needs, depletion of forest resources increases burdens on women especially, forcing them to walk more distance to collect fuel wood. In addition, fuel wood scarcity has led to a reduction in the number of meals cooked in poor households.

In terms of division of labour, while women work both inside and outside the home, men work almost exclusively outside the home. Women's responsibilities include housekeeping, cooking and fetching water and wood. Men have primary responsibility for fishing, harvesting, maintaining equipment, hunting and gathering. In the process of making shrimp paste, women themselves recognize that they are supporting men's work but believe that they are dependent and jobless. See **Table 5 in Annex 14** for details of gender roles by labour activity.

Finally, as per the 2015 Myanmar Census, the total number of conventional households in **Kyunsu** Township is 32,988 of which 27,672 are Male Headed Households (MHH) and 5,316 (16.1%) are Female Headed Households (FHH). In **Tanintharyi** Township, the total number of conventional households is 19,929, with MHH 11,956 and FHH 7,973 (40.0%). The study shows that in all visited villages, FHHs are the most vulnerable within the community compared with MHHs because of the burden to support the family and the restriction of not being able to leave in search of work. In MHHs, while women take care of household tasks, the men go out to look for work and food. Women are severely overburdened by the double responsibilities of household work and economic effort. Most FHHs are engaged as daily waged workers and some had assistance from grown up children. Many FHHs are headed by widows, having lost their husbands to disease, fishing accidents, drug addiction or alcohol abuse. Most of the FGD groups mentioned that the husbands had died following excess use of amphetamine/ alcohol; there is high usage of amphetamines to resist cold and water pressure and to cope with long diving hours, followed by strokes, decompression sickness and other complications especially among the Moken fishermen.

v. South-South and Triangular Cooperation (SSTRC):

WWF's advocacy for conserving the Dawna Tenasserim Landscape (see Partnerships section above and **Annex 19**) is a transboundary initiative that is defined by the Dawna and Tenasserim mountain ranges of Myanmar and Thailand, respectively, and embraces one of the largest PAs networks (30,539 km²) in Southeast Asia. This landscape comprises almost 50,000 km² of wilderness and supports over 150 species of mammals and nearly 570 bird species, including some 200 of the estimated 250 tigers remaining in the Greater Mekong Region and fewer than 1,600 elephants⁴¹. The Myanmar portion of this Landscape receives heavy rainfall and supports some of the largest areas of lowland evergreen forest remaining in the Indo-Burma biodiversity hotspot. The Thai side is dryer and covered by a mosaic of evergreen and deciduous forests. The protected area network includes the contiguous Western Forest Complex that is transborder with the Tanintharyi Nature Reserve in the north and the Kaeng Krachan Forest Complex in the south that is transborder with part of the R2R Ngawun Landscape.

This landscape is home to diverse ethnic groups who have thrived there for centuries. Recent history has witnessed much internal ethnic conflict on the Myanmar side and cross-border wildlife and other trafficking. A ceasefire agreement was signed between the KNU and former military government in 2012, since when negotiations have been ongoing to resolve areas of conflict. Among the significant issues is the resettlement of Karen people wishing to return to this Region, mostly from across the border in Thailand. KNU is understandably apprehensive about the implications of establishing protected areas in 'Karen' areas, a case in point being the proposed Tanintharyi NP, which was included in the PIF. This has been substituted with the Ngawun landscape, which includes the proposed Lenya NP Extension and several forest reserves, as a gesture of reassurance.

The key point is that the landscape approach to conserving biodiversity and ecosystem offers more flexibility to design an appropriate regime for managing land (and marine) resources in sustainable ways that safeguard KBAs and HCV sites than more conventional approaches. Thus, the vision of a transboundary landscape with Thailand, within which core protected areas are buffered by surround areas of sustainably managed parts of the landscape is a particularly helpful model to envision over the longer term as the project is rolled out.

As trust builds between parties previously in conflict in Myanmar, management capacity develops and integrated approaches to land and seascape management area realised, so transboundary cooperation can be explored with Thailand to take develop the vision of a Dawna Tenasserim Landscape or something more

⁴¹ WWF, 2014. WWF-Greater Mekong: Dawna Tenasserim Landscape. Leaflet.

appropriately aligned with the context at that time. There are also other potential opportunities to consider alongside this vision, for example the establishment of a 'Peace Park', an initiative that originated in Southern Africa in the early 1990s (www.peaceparks.org). Peace parks are also known as transfrontier conservation areas (TFCAs), which are defined as "the area or component of a large ecological region that straddles the boundaries of two or more countries, encompassing one or more protected areas as well as multiple resource use areas" (Southern African Development Community (SADC) Protocol on Wildlife Conservation and Law Enforcement, 1999).

In addition to the potential for transboundary cooperation on protected area management, there is also significant scope for cooperation on transboundary illegal wildlife trade (IWT) along the long and porous border with Thailand. Initial efforts have been made to document IWT along the Mawthoung Road by FFI and Myeik University, and cross-border routes such as this certainly deserve specific enforcement attention. An exchange visit in May 2016 facilitated by FFI and WWF Thailand, involving the participation of Thai representatives from Kuiburi NP and provincial government participating in the ITHCP inception workshop (see Partnerships above), heralds increasing cooperation on the ground between the two countries. Wider capacity building and cooperation has been initiated by the ASEAN Wildlife Enforcement Network (ASEAN-WEN), and the UNDP/GEF Project *Combatting IWT, focusing on Ivory, Rhino Horn, Tiger and Pangolins in Thailand* (at PPG stage) offers the opportunity to collaborate with the Thai Department of Wildlife, National Parks and Fauna and Flora Conservation and NGO partners WWF and IUCN on strengthening checkpoint controls and capacity development on enforcement. Support for such collaboration may be forthcoming through the new USAID initiative to combat wildlife trafficking in Asia (announced September 2016) by reducing demand and expanding international cooperation. The USAID Wildlife Asia project will collaborate with ASEAN member states to enhance wildlife law enforcement.

In coastal waters, rampant overexploitation of marine resources is a major issue (see **Annex 15** - Baseline Report on Seascapes and Marine Resources). There are very few controls in place and the fishing communities are hit hardest when trawlers illegally operate in inshore waters. Both this R2R and the proposed MyCoast project are designed to address some of the barriers but only at demonstration scales. There is a much higher level, political agenda to address involving cooperation between, for example, member countries of the BOBLME project or ASEAN in order to eliminate illegal trawling by 'foreign' fishing vessels, as this undermines any national enforcement or management measures. Marine Police reported at the PPG stakeholder workshop that trawlers from overseas probably account for 70% of unlicensed fishing (30% are Myanmar vessels) and most are from Thailand. Of the 70% unlicensed fishing trawlers from overseas, probably half of them are crewed by Burmese people. Securing marine resources through enforcement measures, incentive and disincentives is a major challenge and it has to be addressed before there can be any prospect of sustainably managing the fisheries.

V. FEASIBILITY

i. Cost efficiency and effectiveness:

The weak national and regional frameworks, institutional capacity and information sharing platforms for Integrated Landscape and Seascape Management (ILSM) are significant barriers impeding the development of a sustainable management regime for Tanintharyi's biodiverse and highly productive terrestrial, coastal and marine ecosystems. These barriers negatively affect conservation efforts, as the full value of these biologically rich landscapes cannot be realized and sectoral interventions take priority over the maintenance of biodiversity and ecosystem services. In the case of Tanintharyi's marine resources, there is massive leakage of revenue from fishing – through illegal fishing activities, sale of legal catches directly to neighbouring countries, and poor regulation of local fish catches. With a properly regulated marine environment, these funds could support the sustainable development of the region including building the capacity to effectively manage coastal resources. The project's intervention aims to remove these barriers, allowing environmentally sustainable land uses including fisheries, forestry, smallholder agro-forestry, agriculture, renewable natural resource use, tourism and recreation, water supply (quantity and quality), and climate-resilient local livelihoods to develop, and enhancing benefits to the state, commercial sector and local communities, while maintaining environmental quality and ecological security.

The project takes the approach of addressing barriers to the achievement of effective sustainable land and seascape management incorporating biodiversity conservation and climate change resilience. This approach is cost-effective in that it will have broad applicability both within Tanintharyi Region and also to other states and regions within Myanmar, with potential for replication throughout the country in the long term. As such, the project will contribute directly towards national policy, planning, fiscal and communications goals in support of ILSM, CCA and biodiversity conservation. The project strategy also focuses on demonstrating best practices for ILSM in specific landscapes centred on forest and marine corridors and documenting and sharing these, as well as sharing the experiences of related initiatives in Tanintharyi and Myanmar for replication and upscaling, which is highly cost-effective and low risk. One of the alternatives to this is central command and control approach to protected area and resource management, which is what the approach has been in Myanmar during recent decades (in common with other countries, for example Iran) and which has been shown to be ineffective in that it does not secure the support of the diverse stakeholders and especially local communities that are dependent on such resources.

While this project will be implemented through DIM, much of the work will be led largely by existing government structures, with TA from the relatively advanced CSO sector. This approach is believed to be particularly cost effective, as it reduces costs that would need to be spent on consultant-driven implementation, and it builds the capacity of the government system for ongoing and more widespread implementation of integrated land and seascape management. At a technical level, the streamlining of progressive approaches into natural resource management and land management agencies for eventual replication across the country will be a cost-effective investment in terms of project impact. Workplanning will make most use of local staff and consultants, with only limited senior level inputs from international consultants in order to minimize operational costs. Financial resources will be maximized through direct disbursement to implementing parties based on cash advance requests supported by progress reports and expenditure statements for previous periods. Annual audits will ensure that GEF funds have been effectively used specifically in line with project objectives.

In order to reduce costs and to avoid duplication, the GEF-financed project will pursue an active partnership strategy with other ongoing and planned initiatives, including the FAO/GEF MyCoast project, UN REDD Programme, UN Poverty and Environment Initiative, etc. Through these collaborations, the project will build on the lessons learned and best practices from past and current projects and ensure that cost effectiveness is

included as a selection criteria or in the identification of appropriate adaptation practices and implementation protocols.

The total GEF investment of US\$5,250,000 for this project will leverage a minimum of US\$ 16 million in cofinancing, a cost-effective ratio of 3.28 with additional associated financing inputs anticipated during project implementation.

Finally, the strong high-level political support for this international project and receipt of GEF resources channelled through UNDP provide the impetus needed for addressing the challenges of inter-agency landscape management approaches, including sustaining the connections between terrestrial, coastal and marine resources, and integrating climate change resilience and biodiversity conservation concerns into local level government practices and community livelihoods.

ii. Risk Management:

As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR. Note – see **Annex 6** for SESP risks, which include: potential adverse impacts on human rights of local communities, including marginalized groups; restricted access to natural resources due to enhanced enforcement for local communities, including marginalized groups; rights-holders do not have the capacity to claim their rights; and human rights concerns raised by local people regarding the Project during the stakeholder engagement process. Mitigation measures for these risks are proposed in **Annex 6**.

Table 5. Description of Project Risks and Mitigation Measures

Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
<p>Risk 1. Political tension between ethnic minority groups and the central government and resultant refugee and internal displaced persons camps along the Thai border may limit ability to implement project activities effectively.</p> <p>This risk would potentially block access to project demonstration areas, delaying or stopping those aspects of project implementation. It could also impact plans for establishing and managing new protected areas.</p>	Political	<p>PIF: Medium - High</p> <p>P = 3 I = 3</p> <p>Medium</p>	<p>The national government and the Karen National Union (KNU) signed a peace agreement in 2012. Some of the biodiversity rich areas in Tanintharyi are under the control of ethnic armed groups such as the Karen National Union. Both FFI and Forest Department staff have been able to operate in KNU controlled areas. There has also been an in-principle agreement with the KNU mapping department to collaborate on customary land mapping to avoid overlaps with the proposed parks and facilitate FPIC for park gazettelement. During the PPG process, a series of meetings were held with the KNU regarding their engagement in the project as a key stakeholder (included in the Project Board), and also to obtain permission for baseline assessments. Further, FFI established an agreement on cooperation with KNU in August 2016. The project is open to supporting ex-combatants in developing biodiversity friendly livelihoods, including professional engagement in local conservation work. Local PA managers and conservation officers will be trained in conflict resolution and will conduct patrols unarmed to avoid conflicts in KNU controlled areas.</p>	<i>Project Manager</i>	<i>Declining risk</i>
<p>Risk 2. Relevant government agencies at national and regional levels may be reluctant to promote conservation-oriented land-uses for a fear of losing other development revenues from the overwhelmingly large business and investment interests by local and foreign companies, compounded by corruption. As a result, proposals for extending the PA network may not succeed and forested land would be converted for plantations and mining concessions. Sector-</p>	<i>Strategic</i>	<p>PIF – Medium</p> <p>P = 3 I = 3</p> <p>Medium</p>	<p>Working closely with relevant government agencies, the project aims to influence the national development and fiscal development planning process, through mainstreaming biodiversity and PA system objectives. Participatory land use planning at national, regional and local levels through this project will serve as a platform for development plans that integrate conservation priorities. The project will develop necessary capacity and tools for mainstreaming biodiversity and ecosystem services values into land use planning. The international presence created by the UNDP/GEF supported project will support greater transparency in decision-making for land allocation and concession and business interest management.</p>	<i>Project Manager</i>	<i>Uncertainty re change of government, but positive indications</i>

dominated land use management would prevail, including unsustainable fishery practices.					
Risk 3. The private and business sector associations may be reluctant to collaborate with conservation initiatives, fearing loss of business and revenue expansion opportunities. Lack of cooperation from the private sector may influence government planning and allow the expansion of sector-dominated land uses to occur. This would result in further deforestation, loss of forest connectivity and ecosystem services. On the marine side, unsustainable fishery practices and related revenue leakage would continue.	<i>Strategic</i>	PIF – Medium P = 3 I = 2 Low	The project will work towards developing capacity of local government officials and stakeholders in different sectors, integrating biodiversity and ecosystem services into local land-use and development planning. The emphasis will be that the interventions will be essential for achieving long-term sustainable, inclusive and equitable development, and therefore make business sense. The project will support development and application of a range of tools, including maps (overlay of HVCF, KBAs, carbon density, land use patterns, regional forest and deforestation analysis) and targeted biodiversity and ecosystem valuation work including targeted scenario analysis as appropriate. The process will be done with full participation of the stakeholders in government, non-government and the private sector, including women, fostering understanding of the need for and benefit from striking the right balance between development and safeguarding of biodiversity. A communication strategy and stakeholder involvement plan will also be developed and implemented, to ensure stakeholder support.	<i>Project Manager</i>	<i>Strong / increasing interest in plantation development and other business investment opportunities</i>
Risk 4. Opening of the Dawei Seaport and Development Corridor will cause negative impacts on biodiversity. Opening of Dawei seaport will impact a large tract of landscapes / coastal areas due to rapid economic development and improved accessibility through a new road linking Dawei and Thailand. However, direct impacts will mainly affect the Moscos Island Marine PA near the port, with possible impacts from increased sea traffic and pollution) and	<i>Environmental</i>	PIF – Medium P = 3 I = 3 Medium	Much of the project's site level support will focus on the southern part of Tanintharyi, which will not be directly affected by the sea port construction and economic corridor development. The project will explore ways to capitalize on the infrastructure development and existence of large businesses in the region. The project will seek to develop partnerships with the private sector companies to draw in their support for conservation, such as establishment of offset mechanisms. The project will closely collaborate with WWF Myanmar, which provides targeted support for green infrastructure development over the corridor to minimize the ecological barriers and fragmentation. The project approach to integrate natural capital values and biodiversity conservation in land use planning and management is a direct response to management of this type of risk.	<i>Project Manager</i>	<i>No Change</i>

Tanintharyi NR (through increased pressure on land conversion for plantation and crop production, and possible increases in encroachment & poaching.)					
Risk 5. Major private sector stakeholders continue business as usual rather than adopting RSPO principles for sustainable plantation development. Development of new plantations would result in landscape-level forest clearance with no HCVF, buffer zones, etc left. Management of existing plantations would not prioritize habitat protection or rehabilitation or measures to support wildlife populations.	<i>Strategic</i>	PIF – Medium P = 2 I = 2 Low	FFI has already established a positive dialogue with key government agencies and leading oil palm estates and facilitated their participation in a global RSPO conference and established a stakeholder RSPO learning group. All key decision makers have expressed their commitment to support the improvement of plantation practices towards achieving RSPO certification. MoNREC has just cancelled plantation licences that overlap with the proposed protected areas, and the new regional government is reviewing contracts issued for plantations. Therefore, both government and private sector commitments are high and the risks are considered low. The project will support an active stakeholder dialogue to change behaviour and mitigate risks.	<i>Project Manager</i>	<i>Strong / increasing interest in plantation development, but new regional government interested in sustainability</i>
Risk 6. Climate change may undermine the conservation objectives of the project in both terrestrial and marine ecosystems. The most immediate climate change related risk is of prolonged elevated seawater temperatures associated with El Nino conditions with the capacity to devastate coral reefs, and possibly seagrass beds & mangroves. Other climate change impacts are less abrupt and would have little direct impact on project outcomes.	<i>Environmental</i>	PIF – Medium P = 3 I = 3 Medium	The project will work to address the anticipated negative impacts of climate change by increasing resilience through improving PA management and landscape linkages, and the expansion and rationalization of the PA system. Through this, the project will contribute to the maintenance of ecosystem resilience under differing climate change conditions, so as to secure a continued sustainable flow of ecosystem services. In particular for marine ecosystem resilience, the project will support measures to strengthen coral reef monitoring, including climate induced bleaching and other impacts, as well as capacity to minimise and respond to those impacts. These will include improved MPA spatial planning and connectivity development to increase coral reef resilience.	<i>Project Manager</i>	<i>Likely increase</i>

iii. Social and environmental safeguards:

During the PPG phase, UNDP contracted a national consultant to conduct a demographic and socioeconomic situation analysis for potential target communities; identify community related social risks including human rights issues and develop risk mitigation measures using the SESP checklist; assess community roles in the project implementation; ensure local communities' understanding and consent to the project, and their participation in project development and implementation; and to conduct a gender assessment and gender mainstreaming strategy for the project. During the course of these duties the consultant conducted extensive consultations with a wide range of stakeholders including village communities as described in **Annex 13** (list of persons consulted) and **Annex 14** (socioeconomic and gender situation analysis report).

Overall the project seeks to uphold international standards concerning human rights and to implement human right based approach through its activities. Component 1 of the project will support a consultative approach to participatory land use planning at the village level for the target landscapes, while Component 2 will proactively support CBNRM approaches including community forestry, community fisheries, community based tourism and small grants to support the demonstration of sustainable livelihoods in villages throughout the project landscapes. It will also proactively support gender mainstreaming (see section IV iv. above and **Table 4 in Annex 20**).

The project has been rated as Moderate risk according to the UNDP *Social and Environmental Screening Procedure* (see **Annex 6**). This is on account of the fact that four risks were rated as *Moderate*: Risk 1: Adverse impacts on human rights of local communities, including marginalized groups. Risk 2: Restricted access to natural resources due to enhanced enforcement for local communities, including marginalized groups. Risk 4. Rights-holders do not have the capacity to claim their rights. Risk 5. Human rights concerns raised by local people regarding the Project during the stakeholder engagement process.

In these cases, safeguard measures are proposed in the SESP Risk mitigation table (see **Annex 14**) that should reduce the risk levels to low. The overall project approach will involve consultations and engagement of all villages in the project target areas in order to obtain support and agreement for proposed project activities. the project will adopt a participatory and consultative approach towards the management of natural resources. It will actively promote and support through small grants the involvement of communities and local organizations in various types of CBNRM, including community forestry, community fisheries, community based tourism and participation in park management. Thus the emphasis is on strengthening the sustainability of local livelihoods rather than strict nature protection. The project aims to ensure that its activities do not restrict **legal access** of local people to natural resources. In addition, appropriate mitigation measures will be considered and incorporated if it is judged that project activities will curtail illegal activities which form a significant portion of local peoples' livelihoods. Customary land use / rights / tenure will be fully respected by the project, and in fact the project will help to map out such claims as part of its participatory land use planning approach. The project will take a positive engagement strategy towards ethnic minorities / indigenous peoples within the project landscapes, and will seek to assist them in developing sustainable marine / forest resource use within the context of their own traditions and customs. Small grants schemes will be provided to such communities along with technical assistance and awareness raising.

The Tanintharyi Land and Seascape Forum offers an opportunity for stakeholders to express concerns about the project both electronically and during its biennial meetings. It is proposed that the project establish a hotline to the PMU (grievance mechanism) which is distributed among all concerned local stakeholders in particular, through which grievances can be expressed, and logged by the PMU. The PMU will then decide upon, act on and record their response to each individual complaint. These will then be reported to the Project Board each year. Complainants also have access to legal recourse through the Myanmar justice system. Environmental and social grievances will be reported to the GEF in the annual PIR.

iv. Sustainability and Scaling Up:

The project design has incorporated sustainability and potential for future scaling-up actions from the beginning. Although primarily focusing on Tanintharyi region, the project incorporates aspects that contribute directly to the national level agenda on governance of natural resources and protected areas, increasing the sustainability and scalability of its outcomes. A key part of the project baseline is the 10-year Strategic framework for “*Building the Foundation for Natural Resource Stewardship, for Sustainable, Inclusive and Equitable Development*” for 2015-2025. This aims to accelerate capacity development for better stewardship of natural resources, directly implementing needs identified under the National Biodiversity Strategy and Action Plan (NBSAP, 2014). The 10-year strategy aims to promote sustainable, inclusive and equitable economic development, reduce poverty and conserve the rich natural heritage of the country. The Framework, which was approved in principle by the Minister of MOECF in November 2013, will focus its initial support on building the scientific foundation and trial application of scientific knowledge for biodiversity stewardship in the coming decade in collaboration with the Smithsonian Institution, FFI, GEGG, UNDP and other partners. The concept of this project is anchored both on this programmatic framework and the subsequent revised NBSAP, under which it will support the emplacement of systemic and institutional capacity at national and local levels with trial application of scientific knowledge for biodiversity stewardship. For example, through Component 3, the project will pilot the National Biodiversity Survey (NBS) system at regional level, and include its by-products, e.g. a data repository and web portal integrated with geospatial tools. This work will address a critical gap for NBSAP implementation and essential foundation for improved biodiversity stewardship and PA management, with initial data population and application work under the NBS focused on Tanintharyi. This aspect of the work will also have regional and local level components in terms of capacity building and demonstration of applying the framework and tools in decision-making for land use planning and management at the regional and local levels. This is particularly timely as the government is expected to finalise the National Land Use Policy soon.

The project contributes directly to PA system-wide work, again providing good upscaling potential. Under Component 1, the project will establish the integration of key biodiversity areas (KBAs) and HCVFs/HCSFs in the regional PA system and land use planning and management, which is highly replicable in other regions. It will also introduce the “ridge to reef” approach, which will be critical in coastal regions such as Tanintharyi. By applying this approach at a sub-national level, the project will help inform development and implementation of national land use policies, which in turn contribute to the sustainable forest management framework at the national level. This directly implements part of the national vision for establishing priority corridors for biodiversity conservation⁴² (for Tanintharyi Range Corridor and Tanintharyi Marine Corridor), and demonstrates tools and approaches for corridor implementation in the country. The network of corridors aims to ensure landscape connectivity, maintaining connectivity between two or more KBAs, maintaining evolutionary and ecological processes and safeguarding against the potential impacts of climate change. The project also takes a systematic approach to tackling threats to KBAs and improving management effectiveness of PAs and landscapes, focusing on the Tanintharyi PA system, with a significant portion of Components 1 and 2 providing systemic level interventions. The 10-year programmatic framework includes a component for scaling up regional experiences to at least three more regions, and the NBS framework will enable these future replications and scale up activities.

The project comes at a critical time for Tanintharyi Region, just as the new government is initiating its term in office, and providing it with critical technical and financial assistance to put in place socially and

⁴² Wildlife Conservation Society 2013. Myanmar Biodiversity Conservation Investment Vision, Wildlife Conservation Society, Yangon, Myanmar.

environmentally sustainable governance systems. As such it has the strong support of the regional government as well as MoNREC at national level. The Karen National Union also have a strong interest in sustaining the many communities in Tanintharyi under their scope, who traditionally make use of the forest in diverse low impact ways to support their needs, and there are KNU supported natural areas which have survived the long civil war in good condition. The project offers the KNU an opportunity to engage with other partners and to receive support for their conservation initiatives which have hitherto been largely unrecognized.

The project period coincides with the new UNDP Country Programme (2018-2022) which is focused on achieving two outcomes; 1) Sustaining peace through national reconciliation and building an effective democratic state, 2) Promoting more inclusive, resilient and sustainable growth and development. The Country Programme will be implemented through integrated programming to better address the interlinkages between peacebuilding, governance, natural resource management/resilience and balanced, inclusive growth, and the vertical linkages between sub-national and national structures. The project will be complemented by UNDP's support to the national and sub-national governments in improving capacities for more inclusive, conflict and gender-sensitive development planning, budgeting and implementation, as well as promoting sustainable management of natural resources and ecosystem services which contribute to inclusive economic development. In particular, the project will benefit from UNDP's support to MONREC at the national level for implementation of the National Environmental Policy Strategic Framework to promote mainstreaming environmental considerations in all policy development and implementation.

Currently, UNDP is initiating Township Democratic Governance Project which will promote engagement with Ethnic Armed Organizations in government led planning process in conflict areas, the project seeks to contribute to an enabling environment for dialogue, collaboration and establishing mutual trust at the local level. This will provide opportunities for collaboration and synergy with the Ridge to Reef project.

v. Economic and/or financial analysis:

N/A

VI. PROJECT RESULTS FRAMEWORK

Contributions to Sustainable Development Goals: Primary focus – 14 (life below water) and 15 (life on land); secondary contributions towards – 1 (no poverty), 13 (urgent action on climate change), 2 (end hunger), 3 (good health) and 5 (gender equality)

Intended Outcome as stated in the UNDAF/Country Programme Results and Resources Framework:

UNDP CO to advise

Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:

UNDP CO to advise

Applicable Outputs from the 2014 – 2017 UNDP Strategic Plan:

Output 1.3: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

Applicable Output Indicators from the UNDP Strategic Plan Integrated Results and Resources Framework:

Output 1.3 indicator 1.3.1: Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level.

	Objective and Outcome Indicators	Baseline ⁴³	Mid-term Target ⁴³	End of Project Target ⁴³	Assumptions ⁴⁴
Project Objective: Securing long-term protection of Key Biodiversity Areas through integrated planning and management of the protected area land and seascape in Tanintharyi	Indicator 1: Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level (IRRF Output 1.3 indicator 1.3.1)	<i>No current policy for mainstreaming biodiversity ecosystem services into ILSM. There are: Environmental Conservation Committee (ECC), and Vacant, Fallow and Virgin Lands Management Committee. Land-coast-sea connections in existing policies not recognised except for temporary coordination committees. National Land Use Policy still in preparation.</i>	<i>ILSM coordination mechanism proposed to Tanintharyi regional government for integration of BD and ES into regional and local planning, in line with national policy and administration structures.</i>	<i>Fully functional and funded ILSM coordination mechanism institutionalized within Tanintharyi regional government ensures integration of BD and ES into regional and local planning, in line with proposed National Land Use Policy and existing coordination mechanisms.</i>	<i>Sectoral agencies are willing to cooperate at national, regional, district and township levels to achieve ILSM. Increases in institutional capacity are sustained through retention of trained staff and organizational stability Project will enhance regional governance by mainstreaming biodiversity and</i>

⁴³ Baseline, mid-term and end of project levels must be expressed in the same neutral unit of analysis as the corresponding indicator.

⁴⁴ Risks must be outlined in the Feasibility section of this project document.

	<p>Indicator 2: Increase in ILSM Capacity Development Score of Tanintharyi regional government for integrated landscape and seascape management (ILSM), (see Annex 13a)</p> <table border="1" data-bbox="388 349 865 625"> <thead> <tr> <th colspan="4">ILSM Capacity Development Scorecard score</th> </tr> <tr> <th></th> <th>Baseline 2016</th> <th>Mid-Term (PY3)</th> <th>EoP Target (PY6)</th> </tr> </thead> <tbody> <tr> <td>Tanintharyi Regional Government</td> <td>7</td> <td>15</td> <td>36</td> </tr> </tbody> </table>	ILSM Capacity Development Scorecard score					Baseline 2016	Mid-Term (PY3)	EoP Target (PY6)	Tanintharyi Regional Government	7	15	36	See inset table for 2016 baseline	See inset table for target score.	See inset table for target score.	ecosystem service considerations and sustainable natural resource management, thereby providing environmental quality and ecological security benefits to all residents
ILSM Capacity Development Scorecard score																	
	Baseline 2016	Mid-Term (PY3)	EoP Target (PY6)														
Tanintharyi Regional Government	7	15	36														
	<p>Indicator 3: Number of direct project beneficiaries (parts of Kyunsu, Tanintharyi and Bokpyin townships within the project landscapes, based on spatial analysis of 2014 village tract census data)</p>	0	At least 4 Village Cluster Sustainable Development Committees in place (at least 40% female) serving at least 25,000 people	50,000 persons in village clusters (at least 50% female) Indirect beneficiaries at least 145,000 persons (estimated population of project target area within these townships; 50% female)													
<p>Component 1: Integrated land and seascape planning and management in Tanintharyi</p>	<p>Indicator 4: Total area of globally significant terrestrial, coastal and marine ecosystems under integrated land and seascape management</p>	0	600,000 hectares	1,452,658 hectares	The recognized benefits of ILSM towards providing ecosystem services, ecological security and biodiversity conservation outweigh the immediate short term economic benefits of sectoral land development practices												

<p>Outcome 1: Land and seascapes rich in biodiversity in Tanintharyi are connected and their planning and management are integrated.</p>	<p>Indicator 5: Number of regional and local plans informed by / integrating biodiversity information including KBAs, HCVF and HCSF distribution</p>	<p>Regional and local government plans do not take account of spatial planning data concerning biodiversity information and comprehensive mapping data for KBAs, HCVF and HCSF is not available</p>	<p>Geospatial platform operational, accessible and being populated with data to inform regional and local plans</p>	<p>Information on distribution and status of biodiversity including KBAs, HCVF and HCSF has informed land use plans for Myeik and Kawthoung Districts and at least two Regional sectoral plans.</p>	<p>MoNREC / FD continue to provide strong political and financial support for the development and operational management of the PA system, as well as science-based integrated management of forest resources as key contributions towards national prosperity and ecological security.</p>													
	<p>Indicator 6: increase in GEF Financial Sustainability Scorecard (see Annex 4a).</p> <table border="1"> <thead> <tr> <th rowspan="2">Component</th> <th colspan="2">Financial Sustainability Scorecard score (%)</th> </tr> <tr> <th>Baseline (2016)</th> <th>Target (PY6)</th> </tr> </thead> <tbody> <tr> <td>1. Legal, regulatory and institutional frameworks</td> <td>15%</td> <td>50%</td> </tr> <tr> <td>2. Business planning and tools for cost- effective management</td> <td>24%</td> <td>60%</td> </tr> <tr> <td>3. Tools for revenue generation</td> <td>4%</td> <td>40%</td> </tr> </tbody> </table>	Component	Financial Sustainability Scorecard score (%)		Baseline (2016)	Target (PY6)	1. Legal, regulatory and institutional frameworks	15%	50%	2. Business planning and tools for cost- effective management	24%	60%	3. Tools for revenue generation	4%	40%	<p>See inset table for 2016 baselines</p>	<p>Component 1: 25% Component 2: 40% Component 3: 20%</p>	<p>See inset table for target scores.</p>
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<p>Component 2:</p>	<p>Indicator 7: Improved management effectiveness of individual existing and new</p>	<p>See inset table for METT baseline scores.</p>	<p>METT scores are mid-way towards end of</p>	<p>See inset table for METT target scores</p>	<p>The Tanintharyi Regional Government and other</p>													

<p>Strengthened management and threat reduction in target proposed PAs and surrounding land and seascapes</p> <p>Outcome 2:</p> <p><i>Strengthened management and threat reduction in target proposed PAs, smallholder zones and corridors</i></p>	<p>PAs of global significance, covering over 500,000 ha⁴⁵, indicated by the percentage increase in the Management Effectiveness Tracking Tool (METT) scores (see Annex 4a):</p>				<p><i>project target.</i></p>		<p><i>key stakeholders continue to be committed to the extension of the PA system, buffer zones and corridors in the face of other demands for land and resources.</i></p> <p><i>Coral reef condition is not impacted by elevated sea water temperatures related to El Nino / global warming impacts beyond the scope of project control</i></p>																								
	<table border="1"> <thead> <tr> <th>Protected Area</th> <th>METT Baseline Score (2016)</th> <th>METT Target Score (PY6)</th> </tr> </thead> <tbody> <tr> <td>Lenya proposed NP (183,012 ha)</td> <td>24</td> <td>60</td> </tr> <tr> <td>Ngawun (Lenya Extension) proposed NP (184,997 ha)</td> <td>21</td> <td>60</td> </tr> <tr> <td>Tha Gyet (166,338 ha) and Thein Khun RFs (96,151 ha)</td> <td>11</td> <td>40</td> </tr> <tr> <td>Thayawtatangyi Island LMMA (5,626 ha)</td> <td></td> <td></td> </tr> <tr> <td>Lin Long-Parawa (3,605 ha)</td> <td>38</td> <td>65</td> </tr> <tr> <td>Don Pale (1,877 ha)</td> <td>36</td> <td>65</td> </tr> <tr> <td>Langann Island LMMA (4,918 ha)</td> <td>40</td> <td>65</td> </tr> </tbody> </table>	Protected Area	METT Baseline Score (2016)					METT Target Score (PY6)	Lenya proposed NP (183,012 ha)	24	60	Ngawun (Lenya Extension) proposed NP (184,997 ha)	21	60	Tha Gyet (166,338 ha) and Thein Khun RFs (96,151 ha)	11	40	Thayawtatangyi Island LMMA (5,626 ha)			Lin Long-Parawa (3,605 ha)	38	65	Don Pale (1,877 ha)	36	65	Langann Island LMMA (4,918 ha)	40	65		
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<p>Indicator 8: Increased capacity of communities to plan and manage land and marine resources in an integrated and sustainable manner indicated by the implementation of Sustainable Development Plans for village clusters.</p>	<p><i>Planning and management of land and marine resources lacks coordination, integration and sustainability.</i></p>	<p><i>At least 4 Sustainable Development Plans drafted for village clusters (approximately 80 villages in total); participatory land use planning process underway for Smallholder Zone properties; village cluster enforcement networks established using SMART for 3 LMMAs.</i></p>	<p><i>At least 4 SDPs implemented; Smallholder Zone properties mapped through participatory land use planning process and recognized by local government; at least 5 infringements reported for each of 3 LMMAs through village cluster enforcement networks.</i></p>																												

⁴⁵ Expansion of the Tanintharyi PA system from the current 195,402 ha by at least 333,538 ha (see Table 3, Proposed PAs) to 528,940 ha, securing KBAs in marine and terrestrial landscapes and HCVFs.

	<p>Indicator 9: Improved integrity and functioning of coral reef ecosystems within the targeted seascape, indicated by coral reef condition (Reef Check methodology)</p>	<p><i>Coral reef condition – Reef Check index of 57.07% for sites surveyed in GEF project seascape (Good condition category) (see Reef Check scores in Annex 23)</i></p>	<p><i>Stable condition of coral reefs (Reef Check scores)</i></p>	<p><i>Stable / improved condition of coral reefs (Reef Check scores)</i></p>																			
	<p>Indicator 10: Status of selected indicator species in the targeted landscapes as indicated by monitoring protocols (see inset table and Annex 2).</p> <table border="1" data-bbox="390 570 810 898"> <thead> <tr> <th>Indicator Species (specify units of measurement)</th> <th>Baseline Status (Year X)</th> <th>Target Status (PY6)</th> </tr> </thead> <tbody> <tr> <td>Tiger</td> <td>TBC</td> <td>TBC</td> </tr> <tr> <td>Asian Elephant</td> <td>TBC</td> <td>TBC</td> </tr> <tr> <td>Asian Tapir</td> <td>TBC</td> <td>TBC</td> </tr> <tr> <td>Gurney's Pitta</td> <td>TBC</td> <td>TBC</td> </tr> <tr> <td>Plain-pouched Hornbill</td> <td>TBC</td> <td>TBC</td> </tr> </tbody> </table>	Indicator Species (specify units of measurement)	Baseline Status (Year X)	Target Status (PY6)	Tiger	TBC	TBC	Asian Elephant	TBC	TBC	Asian Tapir	TBC	TBC	Gurney's Pitta	TBC	TBC	Plain-pouched Hornbill	TBC	TBC	<p><i>See inset table for baseline status. Baselines to be established during Year 1.</i></p>	<p><i>Status of indicator species is maintained or improved over baseline (see inset table)</i></p>	<p><i>Status of indicator species is improved over baseline (see inset table)</i></p>	<p><i>Monitoring and status surveys of key species are conducted systematically</i></p>
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Plain-pouched Hornbill	TBC	TBC																					

<p>Component 3:</p> <p>Emplacement of the National Biodiversity Survey and geospatial platform for Land and Seascape Management</p> <p>Outcome 3:</p> <p>Prototype National Biodiversity Survey framework and geospatial platform operational within Tanintharyi Regional Government.</p>	<p>Indicator 11: Training programme in biodiversity conservation and monitoring is developed and institutionalised with adequate human and financial resources in place at Myeik University, addressing staff competence requirements within FD and DoF for staff engaged in PA and related conservation management work, and capacity development strategy adopted by MoNREC and DoF</p>	<p>Current university programmes cover traditional disciplines of botany, zoology, marine science etc but not applied courses that cut across disciplines or contribute towards conservation management competence standards; lack of directed capacity building on biodiversity knowledge generation and application</p>	<p>Training programme of some ten modules on biodiversity conservation and monitoring is developed and run at least twice; mechanism developed to offset costs through course fees; capacity building strategy on biodiversity knowledge generation and application adopted by MoNREC and DoF</p>	<p>Training programme of some ten modules on biodiversity conservation and monitoring is run annually as part of Myeik University programmes by end of project, with adequate human and financial resources in place; capacity building strategy on biodiversity knowledge generation and application operational within MoNREC and DoF.</p>	<p>Stakeholders responsible for hosting the information system, providing data and information and making use of the information are willing to collaborate and share information and resources openly.</p> <p>The knowledge management system is sustainable, supported by the host government institutions and easily accessible to all stakeholders</p>								
	<p>Indicator 12: Capacity to collect and analyse biodiversity information/data, and apply them to the conservation and management of PAs and KBAs, and land and marine resource use planning, (as measured by the improvement in scores of UNDP capacity development scorecard (see Annex 13b&c):</p> <table border="1"> <thead> <tr> <th>Target Institution</th> <th>Capacity Development Baseline Score (2014)</th> <th>Capacity Development Target Score (PY6)</th> </tr> </thead> <tbody> <tr> <td>Regional Forestry Dept</td> <td>35%</td> <td>76%</td> </tr> <tr> <td>Regional Dept of Fisheries</td> <td>33%</td> <td>72%</td> </tr> </tbody> </table>	Target Institution	Capacity Development Baseline Score (2014)	Capacity Development Target Score (PY6)	Regional Forestry Dept	35%	76%	Regional Dept of Fisheries	33%	72%	<p>See inset table for Capacity Development Scorecard baselines.</p>	<p>Capacity development scores improved by 20% (mid-way towards achieving target)</p>	<p>Increased institutional capacity to collect and analyse biodiversity information/data, and apply them to the conservation and management of PAs and KBAs, and land use planning (see targets in inset table and Annex 13b&c)</p>
Target Institution	Capacity Development Baseline Score (2014)	Capacity Development Target Score (PY6)											
Regional Forestry Dept	35%	76%											
Regional Dept of Fisheries	33%	72%											

<p>Component 4: Knowledge Management, Monitoring and Evaluation</p> <p>Outcome 4: <i>Enhanced knowledge management, monitoring and evaluation support biodiversity conservation in Tanintharyi</i></p>	<p>Indicator 13: Number of key project lessons and strategies for sustainable land and seascape management documented, disseminated and adopted at local and national levels</p>	<p><i>Baseline (2016): Project implementation is yet to start</i></p>	<p><i>Target by midterm: Initial project results and lessons learned shared through website (one news article per month – at least one/year on gender issues; at least 5 completed technical reports available online); Tanintharyi Land and Seascapes Knowledge Forum held (50 female participants); initial ILSM lessons shared with FD, DoF and Regional Government for consideration in landscape planning</i></p>	<p><i>Target by end of project: All project results and lessons learned shared through website with one news article per month – at least one/year on gender issues; at least 15 completed technical reports available online; three Tanintharyi Land and Seascapes Knowledge Forums held (150 female participants in total); ILSM lessons learned presented to FD, DoF and Regional Government for adoption in landscape planning processes.</i></p>	<p><i>Involvement in the design and implementation of project interventions and knowledge sharing on the experiences and expected benefits of ILSM practices will result in long-term support for the project and adoption of new knowledge, skills and practices.</i></p>
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VII. MONITORING AND EVALUATION (M&E) PLAN

The project results as outlined in the results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. Supported by Component 4, which includes knowledge management and M&E, the project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not described here, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies.

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF Tracking Tools) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

M&E Oversight and monitoring responsibilities:

Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted. The Project Manager will develop annual work plans based on the multi-year work plan included in **Annex 1**, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy, communications strategy, etc.) occur on a regular basis.

Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. Immediately following the Mid Term Review, the Project Board will meet to determine the management response to its findings. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

Project Implementing Partner: In this case as the project will follow Direct Implementation Modality (DIM), so the UNDP PMU is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The UNDP PMU will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies.

Additional GEF monitoring and reporting requirements:

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally. This will be supported by knowledge management activities in Component 4, including the sharing of experiences through annual Stakeholder Forum meetings, national and regional workshops and exchange visits, and online information exchange.

GEF Focal Area Tracking Tools: The following GEF Tracking Tool(s) will be used to monitor global environmental benefit results: GEF Biodiversity (METT and sustainable financing scorecard), GEF SFM and GEF LD. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted as **Annex 4** to this project document – will be updated by the Project Manager/Team and shared with *the* mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

Independent Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before

operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center](#). As noted in this guidance, the evaluation will be ‘independent, impartial and rigorous’. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publicly available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

Final Report: The project’s terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Table 6. Mandatory GEF M&E Requirements and M&E Budget

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ⁴⁶ (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD 15,000		Within three months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager with support from STA and RPs	Per year: USD 2,000 x 6 yrs = USD 12,000		Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually

⁴⁶ Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ⁴⁶ (US\$)		Time frame
		GEF grant	Co-financing	
Audit as per UNDP audit policies	UNDP Country Office	Per year: USD 3,500 x 6 yrs = USD 21,000		Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Project Manager	USD 12,000		Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	None		On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of project manager, and UNDP CO		
Project Board meetings	Project Board UNDP Country Office Project Manager	USD1000 per meeting x 12 = USD12,000		Meeting twice annually
Technical Advisory Group meetings*	Technical Advisory Group UNDP Country Office Project Manager	USD 1000 per meeting x 12 = USD 12000		Meeting twice annually
Participatory review and planning workshops for project stakeholders*	Project Manager	USD 500 per meeting = USD 36,000		Quarterly meetings for 3 landscape WGs
Supervision missions	UNDP Country Office	None ⁴⁷		Annually
Oversight missions	UNDP-GEF team	None ⁴⁷		Troubleshooting as needed
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None		To be determined.
Mid-term GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager	None		Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 30,000		Between 2 nd and 3 rd PIR.
Terminal GEF Tracking Tool to be updated by (add name of national/regional institute if relevant)	Project Manager and STA with help from RPs	None		Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 40,000		At least three months before operational closure
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses		USD 190,000		

⁴⁷ The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

VIII. PROJECT MANAGEMENT ARRANGEMENTS

Roles and responsibilities of the project's governance mechanism: The UNDP Country Programme in Myanmar (2013-2017) is directly implemented by UNDP to ensure technical and financial accountability for the funds entrusted by multilateral and international donors. Although the recent political and democratic transition of Myanmar provides new opportunities for UNDP to scale up partnerships with public institutions in Myanmar, for the time being, the modality of Direct Implementation remains the most effective option to ensure delivery of GEF resources for integrated land and seascape management in the Tanintharyi Region. Consequently, the project will be implemented following UNDP's Direct Implementation Modality (DIM), according to the Standard Basic Assistance Agreement between the Government of Myanmar (GoM) and the UNDP Country Programme. The GoM has explicitly endorsed this GEF project to be executed directly by UNDP, with a focus on delivery through government departments, international partner organizations and local institutions (regional government agencies, NGOs, CBOs).

The **Implementing Partner** for this project is *UNDP*. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources. The Implementing Partner is responsible for:

- Approving and signing the multiyear workplan and signing the annual workplans with approval of the Project Board;
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

In view of the national ownership and buildign the national capacity, these responsibilities will be fulfilled by UNDP in close collaboration with the Government of Myanmar.

A **Project Board (PB)** will be established to provide high-level guidance and oversight to steer the implementation of the project. The PB will be co-chaired by the UNDP Country Director and the Director General of the Forestry Department. The PB is responsible for generating consensus on management decisions when guidance is required by the Project Management Unit (PMU), including recommendation for approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, PB decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. The PB will be made up of senior officials from various agencies representing the following categories:

- Executive, representing project ownership including the government co-Chair of the PB
- Senior Supplier, representing the interests of the parties that provide specific cost-sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the PB is to provide guidance regarding the technical feasibility of the project.
- Senior Beneficiary, representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the PB is to ensure the realization of project results from the perspective of project beneficiaries.

See **Annex 5 Part A** for Terms of Reference for the PB. The project organisation structure is shown in **Figure 5**.

Project Assurance: UNDP provides a three-tier oversight and quality assurance role involving UNDP Country Offices, regional and headquarters levels. The project assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. Project Assurance has to be independent of the Project Manager; therefore the Project Board cannot delegate any of its assurance responsibilities to the National Project Manager.

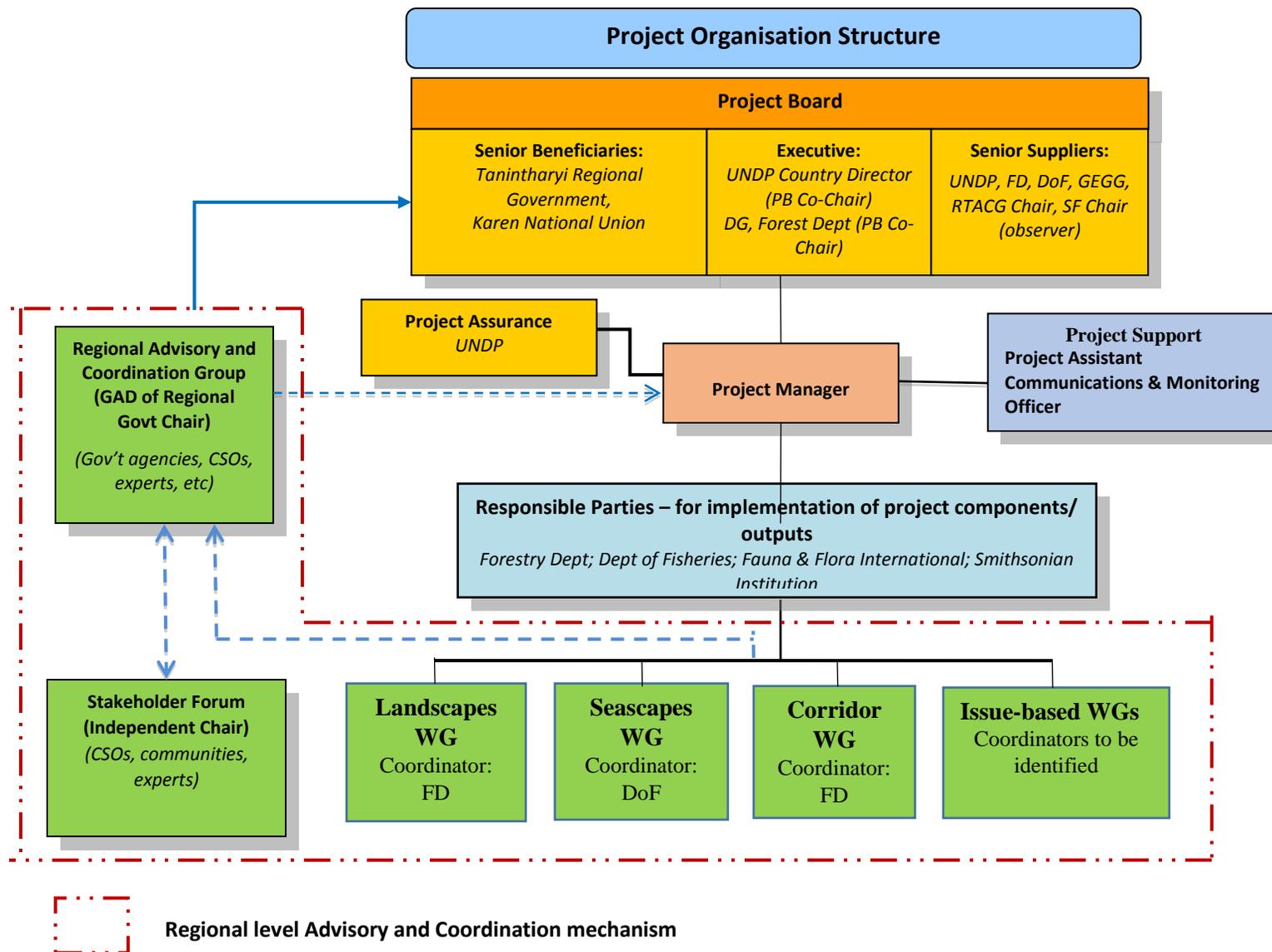


Figure 6. Project organization structure

The **Project Manager** has the authority to run the project on a day-to-day basis on behalf of UNDP. The PM is responsible for day-to-day management and decision-making for the project. The PM's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The Project Manager will be supported by the UNDP CO. UNDP will provide Direct Project Services (DPS), according to UNDP Direct Project Cost (DPC) policy for GEF and AF. DPS costs are those incurred by UNDP for the provision of services that are execution driven costs, directly related to the delivery of project. They relate to operational and administrative support activities carried out by UNDP such as payment processing, recruitment of project personnel/consultants, procurement of goods and services, organization of training/workshops, travel arrangements, shipments, customs, etc. As determined by the GEF Council, Direct Project Costs associated with DPS should not be charged as percentage. It must be itemized and allocated within PMC budget. The Responsible Parties will report to the PM. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

The implementation of field activities will be supported by Coordinators for each of the project landscapes and seascapes, drawn from the Responsible Parties (see below) and located in respective regional government offices. These land/seascape/corridor coordinators will also lead project working groups for their respective 'scapes'. See **Annex 5 Part C** for Terms of Reference for the proposed key project management positions.

A **Senior Technical Advisor** will provide overall technical guidance on Integrated Land and Seascape Management and quality assurance for the implementation of the project's technical components. S/He will liaise with the RPs, land/seascape coordinators and other contracted parties, as well as report to the PM and play an active strategic role in supporting the work of the RTACG.

Responsible Parties for Implementation: The Responsible Parties are project partners in receipt of project funds through the PMU for implementation of their assigned project activities. Thus, they are, accountable for implementing and reporting on project activities as per approved work plans and budgets. To the extent possible and relevant, the approach of the project is to decentralize implementation of the project activities to the stakeholders at the regional and local levels, so as to build ownership of project activities and project implementation capacity at these levels in keeping with the national policy objective to increasingly decentralize governance of development programs. Accordingly, the project is designed to be implemented by the following:

- Forestry Department – responsible for technical support for activities within its mandate including biodiversity conservation, protected areas, sustainable forest management, enforcement and related education, training and information management;
- Department of Fisheries – responsibility for technical support to the marine aspects of the project, including marine biodiversity conservation, marine protected areas, sustainable fishery management, enforcement and related education and training and information management;
- Fauna and Flora International – technical assistance to the regional and national government agencies in biodiversity conservation, protected area development and management, and integrated land and seascape management; and
- Smithsonian Institution – technical assistance to the regional and national government agencies in establishing the National Biodiversity Survey (NBS) framework, training practitioners in biodiversity conservation, and generating knowledge from biodiversity surveys to profile important land/seascapes in Tanintharyi.

The above-mentioned organizations will implement the project activities assigned to them with technical support from, or in collaboration with other agencies, depending on the nature of the activities and requisite expertise. RPs will act on the basis of written agreements or contracts with UNDP to purchase goods or provide services to carry out project activities and produce outputs. All RPs are directly accountable to UNDP in accordance with the terms of their agreement or contract with UNDP. Under DIM, UNDP can engage NGOs/CSOs as Responsible Parties through Strategic Selection, based on their collaborative advantage^[4] for the provision of specific inputs and/or delivery of agreed outputs. Additionally, local CSOs and CBOs would be engaged through UNDP's Micro Capital Grant (MCG) facility to deliver specified project activities. UNDP shall ensure that all RP engagements follow UNDP rules and regulations, policies and procedures.

A stakeholder engagement plan is presented in subsection IV.iii. It outlines the participation of all project stakeholders in respect of various project outputs during project implementation.

Regional Advisory and Coordination Group (RACG): a small multi-disciplinary team of scientific/technical experts from government agencies, implementing partners and scientific/technical organizations will be formed, primarily to coordinate a holistic approach to project implementation, supported by sound science to achieve integrated land and seascape management that encompasses biodiversity conservation, sustainable forest management, sustainable land management, climate change adaptation and community livelihoods. Secondly, it will provide technical advice to the project, ensuring that the project interventions are technically sound and in keeping with Government of Myanmar and UNDP/GEF social, environmental and other standards. The Working Groups on Landscapes, Seascapes and Corridor will provide technical support to RACG on ILSM matters, and the RACG can create additional issue-based WGs as needed. See **Annex 5 Part B** for Terms of Reference for the RACG.

There will also be a **Tanintharyi Land and Seascape Forum**, which will provide a mechanism for consultation, sharing of knowledge and lessons learned, and coordination with other project stakeholders and related initiatives (see the Stakeholder Engagement section). This will be a network of local and regional stakeholders that will meet to share results and experiences through conferences hosted every 2 years by Myeik University in collaboration with other project partners, and a communication platform in the form of an electronic network for exchanges managed by the PMU. It will regularly brief the RACG Chairperson on inputs to and outputs from forum meetings, knowledge events and other events and also have observer status on the PB. If the TLSF Chair is appointed by the Project Board, then s/he reports to the PB Chair or his/her delegate.

Working Groups on Landscapes, Seascapes and Corridor will be established to support the implementation of ILSM under Components 1 and 2. These would be led by Landscape Coordinators from FD (for Landscapes and Corridor) and DoF (for Seascapes) and will be aligned with existing initiatives, namely OneMap Myanmar, marine spatial planning with support from FFI, and the current government-led review of oil palm plantation licences. The Working Groups would provide substantive input to the development of project outputs on these subjects (i.e. land use plan for Myeik District, strategy for Protected Area development, community based planning for conservation areas, participatory resource use planning and livelihood support for the smallholder zone, and review of forest connectivity, plantation development and smallholder use of the Corridor Zone). In addition, the RACG has the mandate to create additional issue-based Working Groups, such as on Multi-Sector Standards.

Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: In order to accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications of projects funded

by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies, notably the UNDP Disclosure Policy⁴⁸ and the GEF policy on public involvement⁴⁹.

PMU Office: It is proposed that the PM will be based in Myeik, as the main focus of project intervention, with the Senior Technical Advisor based in Dawei to support the regional government. As part of the co-financing support from the Government of Myanmar, office space will be provided by Forestry Department. These proposed arrangements will be reviewed and confirmed during the project inception period.

IX. FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project is USD 21,788,116. This is financed through a GEF grant of USD 5,250,000 and USD 16,538,116 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.

Parallel co-financing: The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF. The planned parallel co-financing will be used as follows:

Co-financing source	Co-financing type	Co-financing amount (USD)	Planned Activities/Outputs	Risks	Risk Mitigation Measures
MoNREC	In Kind	3,000,000	FD inputs to Components 1 and 2 across all outputs	Changes in Forest Department annual budgets	Inputs are in kind so risk and impacts are relatively low. Seek additional cofinancing from other sources if necessary
Tanintharyi Regional Govt	In Kind	3,000,000	Regional Govt inputs to Components 1 and 2 across all outputs	Changes in Regional Government annual budgets	Inputs are in kind so risk and impacts are relatively low.
UNDP	Grant	6,613,000	Support from parallel initiatives to all Components and outputs	No significant risks	N/A
SI	Grant	1,500,000	SI inputs to Component 3	Changes in SI annual budgets	Seek additional cofinancing from other sources if necessary
FFI	Grant	2,425,116	FFI inputs to Components 1 and 2	Changes in FFI annual budgets	FFI have additional projects coming on line so current total is conservative

Budget Revision and Tolerance: As per UNDP requirements outlined in the UNDP POPP, the Project Board will agree on a budget tolerance level for each plan under the overall annual work plan allowing the Project Manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the Project Board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF:

⁴⁸ See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/

⁴⁹ See https://www.thegef.org/gef/policies_guidelines

- a) Budget re-allocations among components in the project with amounts involving 10% of the total project grant or more;
- b) Introduction of new budget items/or components that exceed 5% of original GEF allocation.

Any over expenditure incurred beyond the available GEF grant amount will be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

Refund to Donor: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

Project Closure: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. On an exceptional basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.

Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be in English) and the corresponding management response, and the end-of-project review Project Board meeting. The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the relevant parties will have already agreed and confirmed in writing on the arrangements for the disposal of any equipment that is still the property of UNDP.

Financial completion: The project will be financially closed when the following conditions have been met:

- a) The project is operationally completed or has been cancelled;
- b) The Implementing Partner has reported all financial transactions to UNDP;
- c) UNDP has closed the accounts for the project;
- d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

X. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas Proposal or Award ID:	00089107	Atlas Primary Output Project ID:	00095489
Atlas Proposal or Award Title:	Ridge to Reef- Tanintharyi		
Atlas Business Unit	MMR 10		
Atlas Primary Output Project Title	Ridge to Reef - Integrated Protected Area Land and Seascape Management in Tanintharyi		
UNDP-GEF PIMS No.	5427		
Implementing Partner	UNDP		

GEF Component/ Atlas Activity	Responsible Party/[1] (Atlas Implementing Agent)	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Amount Year 5 (USD)	Amount Year 6 (USD)	Total (USD)	See Budget Note :
COMPONENT 1: Integrated land/seascape planning and management in Tanintharyi	UNDP	62000	GEF	71400	Contractual Services-Individuals	269,000	269,000	19,000	19,000	19,000	19,000	614,000	1
				72100	Contractual Services-Companies	70,800	78,400	72,400	106,150	95,650	41,400	464,800	2
				71600	Travel	20,000	20,000	20,000	20,000	20,000	20,000	120,000	3
				72200	Equipment & Furniture	45,000	-	-	-	-	-	45,000	4
				72800	Information Technology Equipmt	2,000	-	-	-	-	-	2,000	5
				72500	Supplies	1,000	1,000	1,000	1,000	1,000	1,000	6,000	6
				75700	Training, Workshops and Confer	8,200	8,000	8,000	8,000	8,000	8,000	48,200	7
					Total Outcome 1	416,000	376,400	120,400	154,150	143,650	89,400	1,300,000	
COMPONENT 2: Strengthened management	UNDP	62000	GEF	71300	Local Consultants			5,000	6,000	3,000	-	14,000	8
				72100	Contractual Services-	170,200	188,500	274,000	305,200	280,000	182,100	1,400,000	9

and threat reduction in the target PAs, buffer zones and corridors					Companies								
				71600	Travel	20,000	25,000	64,000	54,000	54,000	20,000	237,000	10
				72200	Equipment & Furniture	1,500	44,000	31,500	4,000	4,000	-	85,000	11
				72600	Grants	30,000	71,400	133,600	160,000	140,000	20,000	555,000	12
				75700	Training, Workshops and Confer	-	3,000	-	2,000	2,000	2,000	9,000	13
					Total Outcome 2	221,700	331,900	508,100	531,200	483,000	224,100	2,300,000	
COMPONENT 3: Emplacement of the National Biodiversity Survey (NBS) framework and knowledge management for ILSM	UNDP	62000	GEF	71600	Travel	55,000	65,000	65,000	65,000	65,000	52,000	367,000	14
				72100	Contractual Services- Companies	75,000	85,000	95,000	100,000	100,000	80,000	535,000	15
				72200	Equipment & Furniture	2,000	2,000	2,000	2,000	2,000		10,000	16
				72800	IT equipment	10,000	10,000	10,000	10,000	25,000	25,000	90,000	17
				75700	Training, Workshops, Conference	15,000	40,000	25,000	40,000	15,000	10,000	145,000	18
					Total Outcome 3	157,000	202,000	197,000	217,000	207,000	167,000	1,147,000	
COMPONENT 4: Knowledge Management and M&E	UNDP	62000	GEF	71200	International Consultants	-	-	16,250	-	-	19,500	35,750	19
				71300	Local Consultants	10,000	10,000	18,750	10,000	10,000	22,500	81,250	20
				71600	Travel	2,000	2,000	7,000	2,000	2,000	7,000	22,000	21
				74100	Professional Services	3,500	3,500	3,500	3,500	3,500	3,500	21,000	22
				74200	AV & print production costs	-	2,000	2,000	2,000	2,000	6,000	14,000	23
				75700	Training, Workshops, Conference	19,000	9,000	14,000	9,000	4,000	24,000	79,000	24
					Total								

					Outcome 4	34,500	26,500	61,500	26,500	21,500	82,500	253,000			
Project Management Unit	UNDP	620 00	GEF	71300	Local Consultants	34,600	34,888	35,185	35,490	35,805	36,129	212,097	25		
				74700	Travel	2,000	2,000	2,000	2,000	2,000	2,000	2,000	12,000	26	
				72200	Equipment & Furniture	1,500	-	-	-	-	-	-	-	1,500	27
				72800	Information Technology Equipmt	7,200	900	900	900	900	900	900	600	11,400	28
				72500	Supplies	400	400	400	400	400	400	400	400	2,400	29
				74200	AV & print production costs	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000	30
				74598/643 98	UNDP Direct Project Costs	600	600	600	600	600	600	600	1,603	4,603	31
					Total Project Management	47,300	39,788	40,085	40,390	40,705	41,732	250,000			
PROJECT TOTAL						876,500	976,588	927,085	969,240	895,855	604,732	5,250,000			

	Amount	Amount	Amount	Amount	Amount	Amount	Total
	Year1	Year 2	Year 3	Year 4	Year 5	Year 6	
GEF	876,500	976,588	927,085	969,240	895,855	604,732	5,250,000
Co-financing	2,756,353	2,756,353	2,756,353	2,756,353	2,756,353	2,756,353	16,538,116
TOTAL	3,632,853	3,732,941	3,683,438	3,725,593	3,652,208	3,361,085	21,788,116

No.	Description
COMPONENT 1	
1	Senior Technical Advisor @ \$20833/month (P4) Y1 and Y2: total \$500,000; ILSM Advisor @ \$1583/month x 6 years: total \$114,000 - all outputs in C1
2	FFI Subcontract (spread across all activities - covering staff costs, travel, supporting costs, printing and workshops) - all outputs in C1
3	STA Travel (Y1 and Y2 12,000 each), Y3 10000, Y4-6 8,000 each - total 58000; FD staff travel 172,000; DoF staff travel 86,000 -all outputs in C1
4	4WD vehicle to support implementation of resource use plans in 1.3.3 and other Component 1 activities \$42000; 3000 STA office furniture (UNDP)
5	STA computer, printer, accessories \$2000 (UNDP) - all outputs in C1
6	Supplies for STA etc \$6000 (UNDP), all outputs in C1
7	Training and workshops on land and seascape planning (1.1), sector standards (1.2), land and marine resource use planning (1.3), PA strategy and financing development (1.4)
COMPONENT 2	
8	FFI Local Consultants for biodiversity surveys \$5000 Output 2.1; FFI livelihoods assessment experts Output 2.3 \$9000
9	FFI Subcontract (spread across all activities - covering staff costs, travel, supporting costs, printing and workshops) 1,400,000; All outputs in Component 2
10	Travel costs for conducting collaborative marine and terrestrial patrols of LMMAs and PAs including community patrolling in KNU areas - FFI 97,000 Output 2.2; travel support for FD and DOF staff to participate in component 2 activities \$140,000, including joint patrolling, attending training in PA management, SMART and biological monitoring (all outputs)
11	FFI Equipment for field surveys under Output 2.2 (85,000)
12	FFI Small grants to villages Y1-Y5 (275000 total); UNDP Micro capital grants to CBOs, etc 280,000 Output 2.3; 60% of grants will go to female applicants.
13	FFI village-township meetings \$9000 Output 3.2;
COMPONENT 3	
14	Travel for international staff, in country travel for Component 3, per diems for training participants as follows: Output 3.1 – SI staff international travel USA – Myanmar 2 trips/year x 6 years @ \$4000 = \$48,000; in-country transport (Yangon – NPT – Dawei – Myeik – Kawthoung and field sites) \$13,000; Output 3.2 – SI staff international travel USA – Myanmar 5 trips/year x 6 years @ \$4000 = \$120,000; in-country travel (Yangon – NPT – Dawei – Myeik – Kawthoung and field sites) \$26,000; per diems for survey participants \$5000 / year x 5 years \$25,000; per diems for training participants \$5000 / year x 5 years \$25,000; Output 3.3 - SI staff international travel USA – Myanmar 3 trips/year x 6 years @ \$4000 = \$72,000; in-country transport (Yangon – NPT – Dawei – Myeik – Kawthoung and field sites) \$13,000; per diems for training participants \$5000 / year x 5 years \$25,000.
15	Subcontract to Smithsonian Institution for all international and local staff costs (this could be extended to include other budget lines as well)
16	Field equipment for biodiversity surveys and monitoring
17	IT equipment for national biological survey, capacity development on information management
18	Training, meetings and field training on survey activities. Tanintharyi Biodiversity Land/Seascapes Forum costed at \$15,000 in Y2&4.
COMPONENT 4	
19	International Consultants: 25 and 30 days at \$650 for MTR and TE \$35,750 (Output 4.2)
20	Local Consultants: Communications and monitoring officer \$1000/month x 30 months (\$30,000) (Output 4.1);25 and 30 days at \$350 for MTR and TE (\$19,250); 32,000 monitoring and analysis (Output 4.2)

21	Travel: for MTR (5000) and TE (5000); monitoring (12000) (Output 4.2)
22	Professional services: Annual audit (A\$3500/ year) total \$21000 (Output 4.2)
23	AV and printing: for lessons learned (10,000); proceedings of SF conference (4000) (Output 4.1)
24	Workshops: Inception workshop 15,000, MTR workshop 10,000, PB meetings 12,000; RACG meetings 12,000 (Output 4.2); SF meetings 30,000 (Output 4.1)
	PROJECT MANAGEMENT COSTS
25	Local Consultants: Project Manager (\$2083/month over 6 years, total \$150,000); Project Assistant (\$800/month plus 3% annual increments over 6 years, total \$62,097)
26	Travel: for PMU staff \$12000
27	Equipment & Furniture: for PMU office \$1500
28	Computers 3 @ \$1500, printer/scanner/fax multifunction 1 @ \$500; laser printer 1 @ \$500, digital camera 1@\$500, IT accessories \$1800, software \$3600
29	Supplies: paper, stationery, printer cartridges etc \$2,400
30	AV & print production costs: \$6,000 for lessons learned, project reports etc
31	UNDP Direct Project Costs – reserve for Direct Project Services to be provided by UNDP CO

XI. LEGAL CONTEXT

Legal Context

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Myanmar and UNDP, signed on 17 September 1987. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

Risk Management

1. UNDP as the Implementing Partner shall comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP agrees to undertake all reasonable efforts to ensure that none of the [project funds]⁵⁰ [UNDP funds received pursuant to the Project Document]⁵¹ are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/ag_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Consistent with UNDP’s Programme and Operations Policies and Procedures, social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

⁵⁰ To be used where UNDP is the Implementing Partner

⁵¹ To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

XII. MANDATORY ANNEXES

1. Multi-year Workplan
2. Monitoring Plan
3. Evaluation Plan
4. GEF Tracking Tool (s) at Baseline
 - a. Biodiversity 1 Tracking Tool
 - b. Land Degradation Tracking Tool
 - c. Sustainable Forest Management Tracking Tool
5. Terms of Reference for Project Management Bodies and Staff
6. UNDP Social and Environmental and Social Screening Template (SESP)
7. UNDP Project Quality Assurance Report
8. UNDP Risk Log
9. Results of the Capacity Assessment of the Project Implementing Partner and HACT Micro Assessment
10. Additional Agreements

See separate files for annexes

XIII. OPTIONAL ANNEXES

11. PA / Landscape Profiles
12. Capacity Development Scorecards
 - a. Integrated Land and Seascape Management Scorecard – Tanintharyi Regional Government
 - b. PA Administration Scorecard – Tanintharyi Regional Forestry Department
 - c. PA Administration Scorecard – Tanintharyi Regional Department of Fisheries
13. Lists of People Consulted during Project Development
14. Socio-economic and Gender Situational Analysis on Tanintharyi Landscape, Seascape and Coastal Area
15. Baseline Report on Seascapes and Marine Resources
16. Baseline Report on Landscapes and Terrestrial Resources
17. Baseline reports on National Biological Survey and Knowledge Management Framework
18. Detailed maps of the project landscapes (source: FFI)
19. Dawna Tenasserim Landscape and Peace Parks
20. Roles of project stakeholders
21. Project assumptions for Theory of Change
22. Threats to Biodiversity, Underlying Factors and Baseline Analysis
23. Reef check baseline data for Seascape indicator 2014-16
24. Summary of the Approach used to Estimate Carbon Benefits

See separate files for annexes