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 **BIOFIN**
The Biodiversity Finance Initiative



THAILAND BIODIVERSITY FINANCE PLAN (2023-2027)

The Biodiversity Finance Initiative (BIOFIN) - Thailand
United Nations Development Programm (UNDP)

Office of Natural Resources and Environmental Policy and Planning

With support from the GEF-funded Global Biodiversity Framework Early Action Support: GBF-EAS



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Preface

The Thailand Biodiversity Finance Plan (BFP) 2023–2027 represents a significant step forward in the nation’s commitment to preserving its rich biodiversity while aligning with the global objectives set forth in the Kunming-Montreal Global Biodiversity Framework. This Plan is intricately linked to Thailand’s National Biodiversity Action Plan 2023–2027 for ensuring a cohesive approach to environmental stewardship.

The development of the BFP was made possible by the team of experts from Thailand’s Biodiversity Finance Initiative (BIOFIN) of the United Nations Development Programme (UNDP). Through the support of the Global Environment Facility, under the Global Biodiversity Framework Early Action Support (GBF-EAS) project, the UNDP-BIOFIN Thailand collaborated with the Office of Natural Resources and Environmental Policy and Planning and other relevant agencies from various ministries. The BFP was endorsed by the National Committee on Conservation and Utilization of Biodiversity (NCB) on 23 September 2024, marking a pivotal moment in Thailand’s biodiversity conservation efforts.

Central to the BFP is the commitment to a Nature Positive approach. It emphasizes the importance of strategic budget allocation and investment to halt biodiversity loss and promote restoration efforts. The Plan focuses on two thematic finance solutions: Sub-National Public-Private Solutions and Finance Sector Solutions, which are designed to mobilize resources and foster innovative partnerships.

The UNDP-BIOFIN Thailand and its partners view that the BFP will serve as a vital instrument for fostering collaboration among a diverse array of stakeholders, including public and private sectors, financial institutions, civil society, academic, non-governmental organizations, local authorities, and communities. Together, we aim to enhance Thailand’s financial mechanisms and establish a dynamic budgetary framework that supports the conservation and sustainable use of our invaluable biodiversity. Through collective action and shared responsibility, we can ensure a thriving natural heritage for future generations.

The Biodiversity Finance Initiative of the United Nations Development Programme
Office of Natural Resources and Environmental Policy and Planning

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Executive Summary

Thailand's diverse ecosystems and abundant biodiversity are essential for both the well-being of its people and the planet's survival. These natural resources provide vital benefits, including clean air and water, food, medicine, climate regulation, protection from natural disasters, and play a significant role in Thailand's key economic sectors, such as fisheries, forestry, and tourism, contributing almost one-third of the country's Gross Domestic Product (GDP). However, Thailand faces numerous environmental and social challenges, including rapid urbanization, unsustainable practices, waste management, pollution, climate change, and biodiversity loss. Insufficient funding for biodiversity conservation initiatives is another significant challenge. To address these challenges, the government, private sector, civil society, and local communities must collaborate to find innovative finance solutions that promote the conservation of biodiversity, sustainable economic growth, and increased resilience across various sectors of society.

The Biodiversity Finance Plan (BFP) is designed to prioritize finance solutions that promote the conservation and sustainable management of biodiversity and ecosystems. It aims to support the 5th National Biodiversity Strategy and Action Plan (2023-2027), the 13th National Economic and Social Development Plan (2023-2027), and the United Nations' Sustainable Development Goals related to SDG 14: Life Below Water and SDG 15: Life on Land.

Thailand's BFP also aligns with the implementation of the Kunming-Montreal Global Biodiversity Framework (GBF). This international agreement under the United Nations Convention on Biological Diversity (CBD), adopted in December 2022, provides a comprehensive roadmap with ambitious targets and pathways for biodiversity conservation and the sustainable use of resources over the next decade and beyond. Crucially, transformative changes in both the mobilization and allocation of biodiversity finance are required to implement the GBF at both the international and national levels.

Stepping up Finance for Nature: Key Messages

- In December 2022 at the 15th Conference of the Parties (COP 15) to the United Nations Convention on Biological Diversity (CBD), 188 parties, including Thailand, adopted the **Kunming-Montreal Global Biodiversity Framework (“GBF”)** under the UN Convention for Biological Diversity to “halt and reverse biodiversity loss” by 2030.
- Seen as a landmark agreement, the GBF Target 3 aims to conserve 30% of the world’s land, waters and seas by 2030 – known as 30x30.
- Embedding the Biodiversity Finance Plan (BFP) in Thailand’s 5th National Biodiversity Strategy and Action Plan (NBSAP) is crucial for the effective implementation of the GBF Target 19. This integration ensures country-specific analyses of financing needs, priorities, and opportunities, enhancing the efficient use of financial resources.
- The urgent mobilization of local, national, regional, and international biodiversity finance is crucial, especially to close the biodiversity finance gap of US\$700 billion per year, as outlined in the overarching goals to be achieved by 2050.
- The development and implementation of the 2nd Biodiversity Finance Plan and 5th NBSAP will follow a whole-of-government approach, involving all relevant ministries. This aligns with the principles of the United Nations Development Programme (UNDP) Nature Pledge while emphasizing a rights-based and whole-of-society approach.
- Local communities, indigenous peoples and ethnic groups play a crucial role in achieving biodiversity goals.
- Maximizing synergies with the 2030 Agenda for Sustainable Development and other international conventions and agreements, as well as other domestic strategies and plans, is essential for fostering collaboration and inclusivity.
- Private sector engagement and finance, as set out in Target 15 of the GBF, are key for Thailand in achieving a net zero, nature-positive economy. Businesses and financial institutions should assess and transparently disclose their risks, impacts and dependencies on nature, through their operations, supply chains and value chains, and portfolios.
- Establishment and promotion of green finance initiatives and innovative financial instruments, such as green bonds, to encourage investments in nature-based solutions, biodiversity credits, and sustainable practices, fostering a transition towards a nature-positive economy.

- Additionally, along with the creation of a consortium or working group, Thailand should mainstream biodiversity goals into all levels of local and national environmental plans and policies, ensuring biodiversity remains a key consideration in future decision-making.
- Expediting the process of enacting the approval of the National Biodiversity Act is essential.
- The establishment of a business coalition for biodiversity (Business and Biodiversity) will promote seamless collaboration and collective action.
- Developing necessary guidelines, such as those for tourism and biodiversity, as well as sustainable agriculture for biodiversity, is crucial for creating a framework for sustainable practices.

The Biodiversity Finance Initiative in Thailand – updated edition of the Biodiversity Finance Plan (2023-2027)

The United Nations Development Programme (UNDP) launched the Biodiversity Finance Initiative (BIOFIN) in 2012 to address the challenge of financing biodiversity conservation. Thailand joined the initiative in 2015 and has made significant progress in improving finance solutions for biodiversity conservation since then.

With support from BIOFIN, Thailand launched its first Biodiversity Finance Plan (BFP) for the period 2018-2022, laying the foundation for financing biodiversity conservation in the country. The plan prioritized a range of finance solutions and outlined approaches to increase funding and improve the efficiency and effectiveness of financial resource allocation for biodiversity conservation in Thailand. This led to concrete actions and finance results at both national and sub-national levels.

In the updated edition of the Biodiversity Finance Plan (2023-2027), Thailand aims to enhance implementation through a diverse range of biodiversity **finance solutions**, further strengthening the country's budgetary and financial structure and aligning with the updated National Biodiversity Strategy and Action Plan (2023-2027), which supports the global biodiversity targets under the GBF by 2030.

Implementing the Plan

The Biodiversity Finance Plan (BFP) strives to support national strategies and global targets to protect biodiversity. The plan drives conservation efforts through a “triple win” approach by promoting financial strategies that take into account the interconnections among three global challenges: biodiversity loss, climate change, and gender inequality. As a result, biodiversity conservation efforts prioritize gender inclusivity and climate action, alongside biodiversity and ecosystem concerns.

The Biodiversity Finance Plan for Thailand identifies *two signature thematic areas* for intervention, each supported by a set of prioritized finance solutions. These areas are as follows:

1. Sub-National Public-Private Solutions: In the first thematic area, the BFP draws inspiration from past successes of biodiversity finance solutions implemented by local administrative organizations (LAOs). This strategy aims to empower local communities by promoting social engagement and effective public-private partnerships. This involves implementing results-based budgeting for biodiversity and creating incentives that help LAOs achieve biodiversity conservation targets. Furthermore, the plan aims to replicate Koh Tao’s successful environmental management fee model, which funds coral reef and environmental conservation, across other nature-based tourism destinations. This includes supporting local communities in developing sustainable tourism activities, such as finance solutions for sustainable mangrove conservation in Phetchaburi province.

2. Finance Sector Solutions: In the second thematic area, the BFP emphasizes engaging the finance sector as a vital partner in biodiversity conservation. Aligned with initiatives such as the Task Force on Nature-related Financial Disclosures (TNFD), the Plan underscores the necessity for companies and financial institutions to transparently assess and report their dependencies and impacts on the environment. Active private sector involvement will facilitate the establishment of the Thailand Green Taxonomy. The strategic approach includes exploring finance solutions, such as tiger bonds and biodiversity credits. Moreover, private sector impact investments, including digital technology solutions, should be actively promoted. These financial mechanisms aim to provide incentives for biodiversity conservation and sustainable resource use while simultaneously generating revenue for companies and communities engaged in these activities.

The Way Forward

Thailand will need to undertake a range of actions to effectively implement these biodiversity finance solutions, including the development of supportive policies, the creation of incentives that benefit biodiversity, and the mobilization of resources from both the public and private sectors. With technical support from UNDP-BIOFIN, these efforts will contribute to the achievement of the biodiversity goals and targets set out in the plan.

Chapter 1

Introduction: Vision for Biodiversity Financing in Thailand



1. Introduction: Vision for Biodiversity Financing in Thailand

Biodiversity in Thailand

Thailand is one of the world's most biodiverse countries. Despite its relatively small size, it ranks among the top 16 globally in terms of vertebrate and perennial diversity. The country boasts a wide array of ecosystems, including forests, mountains, islands, coastal and marine areas, and traditional agricultural landscapes.

Thailand's land area comprises about 100 million rai (160,000 square kilometres) of forest land, which accounts for approximately 32% of the total land area. Agricultural land covers around 150 million rai (240,000 square kilometres), or 46% of the country. Additionally, wetlands occupy up to 11 million rai (17,600 square kilometres), representing 3% of the total land area.

Moreover, Thailand's biodiversity extends beyond its terrestrial borders, with over 3,000 kilometres of coastline and nearly 1,000 large and small islands contributing to its rich natural heritage.

Thailand has designated protected areas that cover roughly 17% of its land and about 6% of its marine territory. These protected areas include 147 national parks, 58 wildlife sanctuaries, 67 non-hunting zones, and 120 forest parks.

A report by the Office of Natural Resources and Environmental Policy and Planning (ONEP) in 2020 categorized the country's biodiversity into four main groups:

1. Ecosystems: Thailand possesses seven distinct types of ecosystems, including forests, mountains, agriculture, marine and coastal areas, islands, inland water bodies, and dry and semi-humid regions.
2. Plant species: The Flora of Thailand publication from 2015 identified approximately 12,050 plant species hosted by Thailand. Subsequently, various national and international botanical journals focusing on plant taxonomy published between 2014 and 2020 revealed the discovery of 239 new plant species in Thailand.
3. Animal species: As of 2021, there were over 6,928 classifiable invertebrate species and 5,005 vertebrate species in Thailand, indicating an increase of 274 species since 2015. Among the vertebrate species, 676 are classified as threatened, with 141 considered critically endangered, 191 endangered, and 344 vulnerable.

4. Microorganism species: Thailand is home to over 200,000 diverse microorganism species, exhibiting variations in terms of species, genetics, and ecological contexts.

The value of biodiversity

Biodiversity provides essential ecosystem services such as clean air and water, soil fertility, pollination, coastal protection, and natural pest control. It also offers immense cultural, aesthetic, and recreational benefits. Moreover, biodiversity serves as a vast storehouse of genetic diversity, which is essential for the development of new medicines, crop diversity, and technologies that enhance human health and prosperity.

The biodiversity in Thailand not only has environmental significance but also contributes significantly to Thailand's economy. Key economic sectors in Thailand, such as food, medicine, fisheries, forestry, and tourism, heavily rely on the nation's abundant natural resources and biodiversity. These sectors account for over one-third of Thailand's GDP and provide substantial employment opportunities for millions of people. By recognizing and harnessing the economic value of its biodiversity, Thailand can pave the way for sustainable development and long-term prosperity.

Box 1: The global investment case for biodiversity

Multiple significant studies provide empirical evidence that funding biodiversity is an investment, not a cost, with positive financial, economic, and ecological returns:

- The Dasgupta Review highlights that nature provides over US\$125 trillion per year worth of ecosystem services, while the destruction of nature results in estimated annual economic losses of US\$1.4 trillion, equivalent to 1.6% of global GDP.
- The World Economic Forum ranks biodiversity loss among the three most severe global risks, with an estimated US\$44 trillion in economic value— over half of the world's GDP— moderately or highly dependent on nature and its services.
- Swiss Re, a global insurance company, reports that 55% of global GDP relies on high-functioning biodiversity and ecosystem services, while 20% of countries face the risk of ecosystem collapse due to biodiversity decline.
- The World Bank estimates that investing in nature can boost the world economy and prevent the potential loss of US\$2.7 trillion in annual global GDP if biodiversity collapses.

- - Researchers at the University of Cambridge highlight that biodiversity loss can have negative impacts on sovereign debt ratings.
- - The World Economic Forum predicts that transitioning to a nature-positive economy could generate up to US\$10.1 trillion in business value and create 395 million jobs by 2030.

Biodiversity is a significant source of economic benefits for Thailand:

1. Agriculture: Thailand's diverse ecosystems support agriculture, which is a major contributor to the country's economy. The agricultural sector employs over 30% of the population and is crucial to the country's food security.

2. Fisheries: The country's marine ecosystems support a thriving fishing industry. Thailand is one of the world's leading exporters of seafood, and the sector employs millions of people. Within this expanding world market, Thailand has emerged as a major supplier, with the value of its seafood exports reaching over US\$7 billion in recent years.

3. Forestry: The country's forests provide a diverse range of resources and forest products that are essential to many industries. In 2018, forest product exports were valued at approximately 118 billion Baht (US\$3.9 billion), accounting for about 1.2% of the country's total exported goods and services. That figure does not include either the value of domestic consumption of forest products or the ecosystem services forests provide.

4. Tourism: Thailand's rich biodiversity is a major draw for tourists, with its national parks, wildlife sanctuaries, and marine reserves attracting millions of visitors each year. Ecotourism and nature-based tourism generate significant revenue. Tourists flock to see the diverse flora and fauna, participate in jungle treks, birdwatching, and visit coral reefs for snorkeling and diving. The preservation of natural habitats is thus directly linked to the sustained growth of the tourism industry while supporting local economies and conservation efforts.

5. Medicine and nutrition: Biodiversity provides a wealth of medicinal and nutritional resources, including herbs, fruits, and vegetables. These resources have been utilized by traditional medicine practitioners for centuries and are now becoming increasingly important in modern medicine.

Biodiversity, Climate Change, and Environmental Impacts in Thailand

Despite the immense value of nature, the threat posed by biodiversity loss, pollution, and climate change is a critical concern. Human activities, as highlighted by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), have led to species extinction. Presently, approximately one million of the eight million species are vulnerable to extinction due to human-driven actions. The “triple planetary crisis”—biodiversity loss, climate change, and pollution—exacerbates the challenges faced by ecosystems, wildlife, and human well-being. Climate change accelerates biodiversity loss while a decline in biodiversity weakens ecosystems’ resilience to adapt to climate change. Pollution compounds these challenges, contributing to global warming, habitat degradation, and posing risks to human and environmental health. This interconnected issue requires immediate attention to safeguard Thailand’s natural resources.

“Presently, approximately one million of the eight million species are vulnerable to extinction due to human-driven actions.”

Thailand’s vulnerability to climate change, as identified by the Thailand Global Warming Academy, has surged over the past decade. Altered climate patterns and extreme weather events have severely impacted ecosystems, communities, and the economy. Rising temperatures have caused more frequent and intense heatwaves, putting vulnerable populations at risk. Intensifying extreme weather events such as storms, floods, and landslides have inflicted substantial damage on infrastructure, homes, and livelihoods, compounding the challenges faced by the nation (see Box 2). Recognizing these escalating climate risks necessitates comprehensive strategies to mitigate the impacts and build resilience.

Box 2: Climate change and biodiversity challenges in Thailand

Impacts of Climate Change-related Extreme Weather Events:

- According to the Climate Risk Country Profile, floods are the most significant natural hazard in Thailand in terms of economic and human impacts.
- Thailand is recognized as one of the top ten countries most affected by floods worldwide.
- By 2035-2044, the number of people affected by extreme river floods could increase to over 2 million, and coastal flooding could impact an additional 2.4 million people between 2070-2100.
- Projections indicate that Thailand's agricultural sector, located in the tropics, is highly susceptible to the effects of climate change, particularly temperature rises that can negatively impact agricultural productivity.
- The Thai economy faces potential losses of 36 billion Baht in 2023 due to climate change impacts, including intensified droughts, floods, and other extreme weather events. (Source: Joint Standing Committee on Commerce, Industry, and Banking.)

Challenges Across Diverse Ecosystems and Biodiversity Drivers in Thailand:

- **Terrestrial Ecosystems:** Government policies, specifically in agriculture, may lead to habitat loss and degradation. Monoculture practices, commonly used in cornfields and rubber plantations, encroach upon forested areas, necessitating sustainable land-use practices that discourage monoculture and illegal encroachment to ensure long-term sustainability.
- **Marine, Coastal, and Wetlands Ecosystems:** Threats include overfishing, tourism impacts, pollution, erosion, and oil spills. Wetlands face challenges from urban expansion leading to degradation and loss. Efforts to combat illegal fishing and implement sustainable fishing practices are underway.
- **Urban Biodiversity:** Urbanization and pollution contribute to biodiversity loss. Initiatives promoting urban greening, green infrastructure, and public green spaces are emerging to restore and conserve urban ecosystems.

Tackling the Biodiversity and Climate Crisis Together

A successful implementation of biodiversity conservation efforts necessitates a comprehensive **“whole-of-government and society”** approach, supported by international cooperation and donor support. In Thailand, addressing both biodiversity loss and climate change necessitates better alignment between climate and environmental goals. Thailand should work towards harmonizing its Nationally Determined Contributions, which outline emission reduction targets, with its National Biodiversity Strategies and Action Plan (NBSAP). By integrating these two aspects, Thailand can adopt a comprehensive approach that effectively tackles the interconnected challenges of biodiversity loss and climate change.

At the local level, it is vital to support communities in Thailand with investments in nature-based solutions, such as natural forests and forest ecosystems, which offer significant benefits for both climate mitigation and biodiversity conservation. These nature-based solutions play a crucial role in sequestering carbon, regulating water resources, preserving habitats, and enhancing ecosystem resilience. A whole-of-government and whole-of-society approach is essential in Thailand, as it requires collaboration across sectors and stakeholders, the promotion of gender inclusivity, the protection of its rich biodiversity, and the mitigation of climate change impacts by integrating climate and biodiversity considerations into decision-making processes, policy formulation, and investments.

Box 3: A Triple Win—Integrating Biodiversity, Climate Action, and Gender Equality

Thailand has taken significant measures, both at national and intergovernmental levels, to address and preserve biodiversity. These initiatives encompass a diverse range of policies and actions, demonstrating the country’s commitment to biodiversity conservation, climate action, and the advancement of gender equality, as evidenced by the following initiatives:

- a) Department of Climate Change and Environment: The establishment of the Department of Climate Change and Environment (DCCE) signifies Thailand’s recognition of the urgent need to address climate-related challenges. The DCCE plays a crucial role in formulating and implementing policies and strategies to mitigate the impacts of climate change on biodiversity.

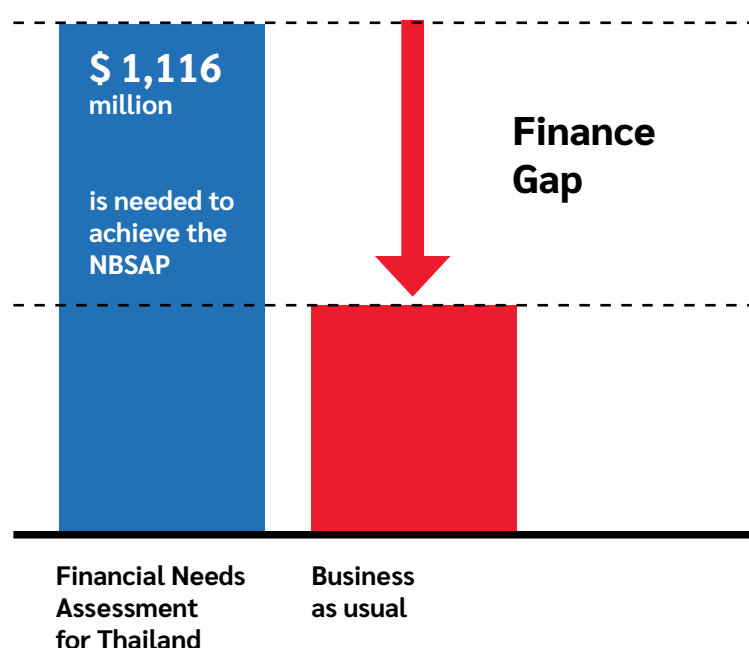
- b) **Green Investment and Financing:** Thailand has prioritized green investments and financing mechanisms that promote sustainable practices and support biodiversity conservation. By mobilizing and allocating resources to environmentally friendly projects, such initiatives aim to reduce the negative impacts on ecosystems and enhance their resilience.
- c) **Carbon Market and Nature-based Solutions:** The development of a carbon market provides financial incentives for projects that reduce greenhouse gas emissions and promote carbon sequestration. Carbon forest initiatives, including reforestation and afforestation efforts, contribute to biodiversity conservation by restoring ecosystems and protecting crucial natural habitats. However, these efforts must be implemented with caution to prevent greenwashing.
- d) **Climate Change Act:** Thailand has enacted a Climate Change Act to establish a legal framework for addressing climate-related challenges. This legislation emphasizes the importance of biodiversity conservation and sets goals and targets for reducing greenhouse gas emissions and adapting to the impacts of climate change.
- e) **Biodiversity Act:** The Office of Natural Resources and Environmental Policy and Planning (ONEP) has drafted the Biodiversity Act, a legislative framework aimed at aligning biodiversity management and promoting and supporting the conservation and sustainable use of biodiversity. This law seeks to eliminate the inconsistencies in legal enforcement on biodiversity issues and serves as an effective mechanism for integrating biodiversity into policies of relevant sectors.
- f) **Bio-Circular-Green Economy and the Sustainable Development Goals (SDGs):** Thailand recognizes the interlinkages between biodiversity, circular economy principles, and the SDGs. By adopting a bio-circular-green economy approach, the country aims to promote sustainable production and consumption patterns that contribute to biodiversity conservation while advancing socio-economic development.
- g) **Integrating and promoting gender equality and women's empowerment initiatives** across various sectors in Thailand, ensuring their inclusion as essential components in the conservation and sustainable use of biodiversity, and in building resilient livelihoods.

Addressing the finance gap for biodiversity conservation in Thailand

Addressing the finance gap for biodiversity conservation in Thailand is crucial for achieving both global and national biodiversity targets. The UNDP's Biodiversity Finance Initiative (BIOFIN) has conducted an in-depth analysis, revealing the substantial financial investment needed to prioritize and implement the country's National Biodiversity Strategy and Action Plan (NBSAP). The study highlighted a significant funding deficit of US\$1,116 million for the period from 2019 to 2021, underscoring the urgent need for additional resources.

To bridge the finance gap, the Royal Thai Government plays a crucial role in driving investments and budget allocations through policy and institutional initiatives, while also addressing financial inefficiencies that lead to environmental degradation. Without realignment of policy incentives, the misallocation of public funds to projects detrimental to biodiversity and ecosystems will continue. Currently, governments worldwide allocate over US\$800 billion annually in harmful subsidies that adversely impact the environment and biodiversity. Additionally, partnerships with the private sector are essential for unlocking additional financial resources. Engaging the private sector through innovative financing solutions can attract much-needed investments.

Figure 1: Finance gap for biodiversity in Thailand



Box 4: Closing the gap in financing the NBSAP and GBF through Target 19

The Kunming-Montreal Global Biodiversity Framework (GBF) aims to restore and reinforce the concept of living in harmony with nature. Aligned with the goals of the Paris Climate Agreement, the GBF emphasizes the crucial role of non-state actors in achieving its primary objective of halting and reversing the loss of biodiversity by 2030. Similar to the Paris Agreement's 2°C target, the GBF's Goal D and Target 19 emphasize the provision of adequate resources, particularly to more vulnerable countries, for nature conservation and aim to bridge the US\$700 billion per year biodiversity finance gap.

Target 19 of GBF

Substantially and progressively increase the level of financial resource allocation from all sources, in an effective, timely and easily accessible manner, including domestic, international, public, and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least US\$200 billion per year by 2030, including by:

- (a) Increasing total biodiversity-related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least US\$20 billion per year by 2025, and to at least US\$30 billion per year by 2030.
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities, and circumstances.
- (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments.
- (d) Stimulating innovative schemes such as payments for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards.

- (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises.
- (f) Enhancing the role of collective actions, including by Indigenous Peoples and local communities, Mother Earth-centric actions [1], and non-market-based approaches including community-based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity.
- (g) Enhancing the effectiveness, efficiency, and transparency of resource provision and use.

Implementing the BFP through “Triple Win” Finance Solutions

BIOFIN has developed a set of “triple win” finance solutions that are key strategies to support national biodiversity targets and address the finance gap for biodiversity. These signature solutions have been identified as such because they are considered to have the maximum potential impact in terms of mobilizing, catalysing, and effectively utilizing financial resources from all sources.

This updated edition of the Biodiversity Finance Plan for Thailand (2023-2027) outlines a diverse set of actions that help to scale up the management and financing for biodiversity in Thailand by fostering cooperation between relevant agencies, stakeholders, local communities, and the private sector. The plan identifies two thematic areas for intervention, each with a set of prioritized finance solutions. The prioritised finance solutions being implemented in Thailand at both national and sub-national levels are listed below:

1. Sub-National Public-Private Solutions: In the first thematic area, the plan draws inspiration from successful sub-national government initiatives. This strategy aims to create platforms that empower local communities, encouraging social engagement and effective public-private partnerships. This involves implementing results-based budgeting for biodiversity, creating incentives that help Local Administrative Organizations (LAOs) achieve biodiversity conservation targets. The Plan further aims to replicate Koh Tao’s environmental management fee model in other nature-based tourism destinations. This includes supporting local communities in developing sustainable tourism activities.

2. Finance Sector Solutions: In the second thematic area, the plan emphasizes engaging the finance sector as a vital partner in biodiversity conservation. Aligned with initiatives such as the Task Force on Nature-related Financial Disclosures (TNFD), it underscores the necessity for companies and financial institutions to transparently assess and report their dependencies and impacts on nature. Active private sector involvement is considered crucial, aligning with the objectives outlined in the Thailand Green Taxonomy. The strategic approach includes exploring finance solutions, such as tiger bonds and biodiversity credits. Moreover, private sector impact investments, including digital technology solutions, are actively promoted. These mechanisms aim to provide financial incentives for biodiversity conservation and sustainable resource use while simultaneously generating revenue for companies and communities engaged in these activities.

Chapter 2

Linkages to Key National Agendas



2. Linkages to Key National Agendas

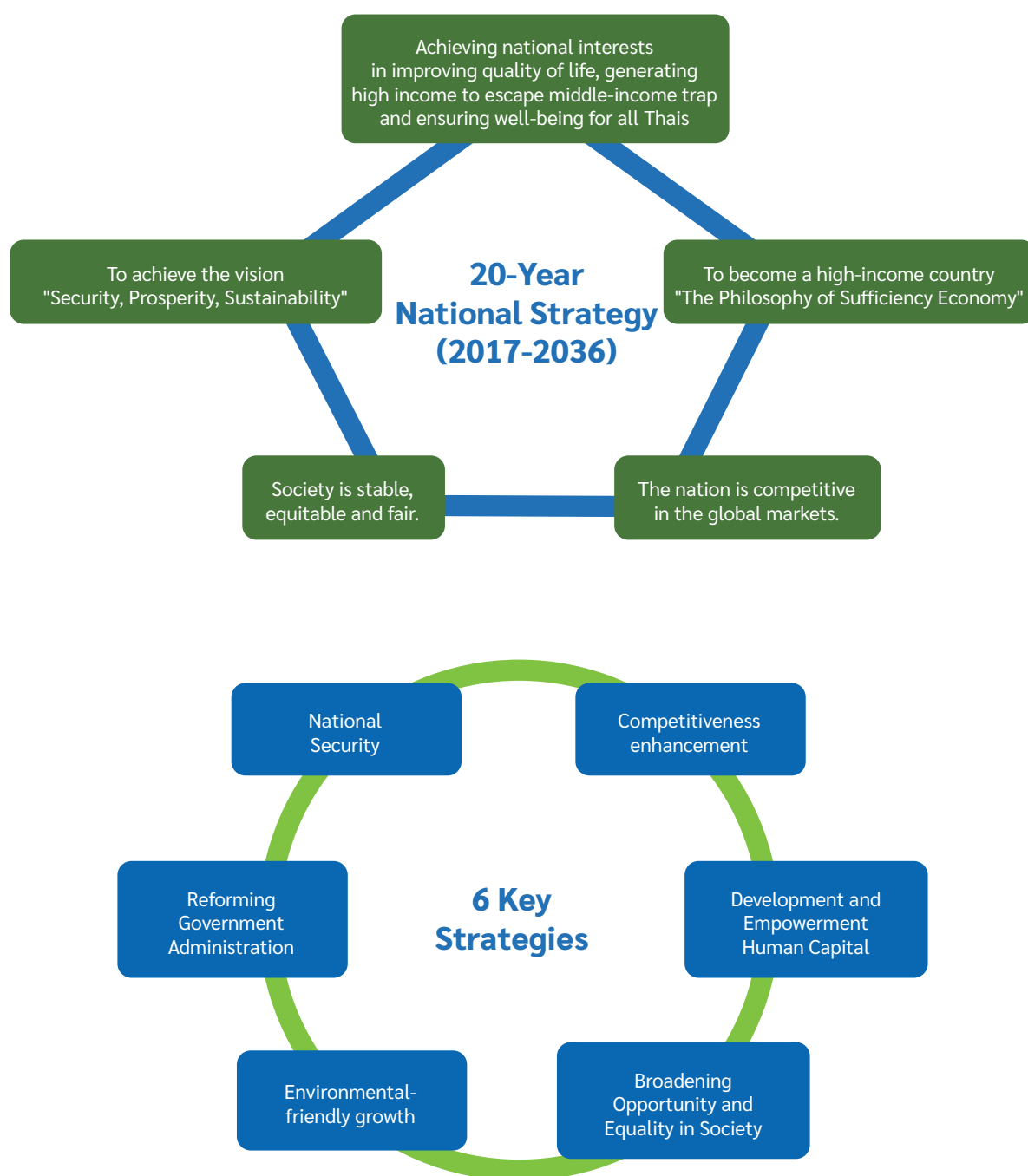
This section provides an outline of Thailand's comprehensive national priorities and emphasizes the urgency to enhance efforts toward biodiversity conservation. It brings a spotlight on efforts towards the 30x30 target and the potential for financing Other Effective Area-based Conservation Measures (OECMs). Finally, it presents an overview of Thailand's biodiversity finance landscape, highlighting the involvement of vital stakeholders from the public, private, and civil society sectors at national and local levels.

20-Year National Strategy (2018–2037)

This edition of the Biodiversity Finance Plan provides support to the government's 20-Year National Strategy (2018-2037). In the pursuit of progress across social, economic, and environmental domains, the country will need to achieve a delicate balance between economic growth, inequality reduction, and environmental sustainability, all of which significantly hinge on the extent of financial resources available. Thus, financing will play a crucial role in Thailand's success in creating a balanced and sustainable economy.

The 13th National Economic and Social Development Plan (2023–2027) is committed to fostering Thailand's security, prosperity, and sustainability. The National Economic and Social Development Council (NESDC) has included the Sufficiency Economy Philosophy, the Bio-Circular-Green (BCG) Economy and the UN Sustainable Development Goals (SDGs) in the plan.

Figure 2: The 20-Year National Strategy Framework (2018-2037)–6 Key Strategies



Box 5: The Sufficiency Economy Philosophy

Thailand has a unique framework for sustainable development called the “Sufficiency Economy Philosophy” (SEP). The SEP was introduced in 1974 by His Majesty the late King Bhumibol Adulyadej. SEP is a sustainable development approach which espouses moderation and prudence within a framework based on knowledge and virtue. The philosophy attaches great importance to human development at all levels and emphasizes the need to strengthen the capacity of communities to ensure a balanced way of life and resilience, with full respect for the environment.

The SEP, simply put, is Thailand’s guiding light on the path toward sustainable development. Successive governments have embraced the approach within National Economic and Social Development Plans (NESDPs) and the 20-year National Strategy (2018-2037). Businesses have also put in place measures to ensure good governance. People on the ground across the country welcome the SEP because the bottom-up decision-making structure respects their voices, their environment, and their way of life.

Recently, Thailand has identified eight key priorities and economic drivers to propel its development forward:

1. Tourism Hub: Positioning Thailand as a premier global tourism destination, enhancing its diverse attractions and rich cultural heritage.
2. Wellness and Medical Hub: Establishing Thailand as a leading centre for wellness and medical services, capitalizing on its advanced healthcare infrastructure and traditional medicine expertise.
3. Agriculture and Food Hub: Showcasing Thailand’s rich agricultural heritage and food industry, aiming to become a top exporter of quality agricultural products and innovative food solutions.
4. Aviation Hub: Developing Thailand into a major aviation hub in the region, improving its airport infrastructure and connectivity.
5. Logistics Hub: Enhancing the country’s logistics capabilities to serve as a key logistical centre in Southeast Asia, facilitating efficient trade and transportation.
6. Future Mobility Hub: Leading in the development of future mobility solutions, including electric vehicles and smart transportation systems.
7. Digital Economy Hub: Driving the growth of Thailand’s digital economy by fostering innovation, digital infrastructure, and tech startups.
8. Financial Hub: Strengthening Thailand’s position as a regional financial centre, attracting investment and offering a robust financial ecosystem.

Box 6: Biodiversity and Nature positive bio-circular-green economy for sustainable business development

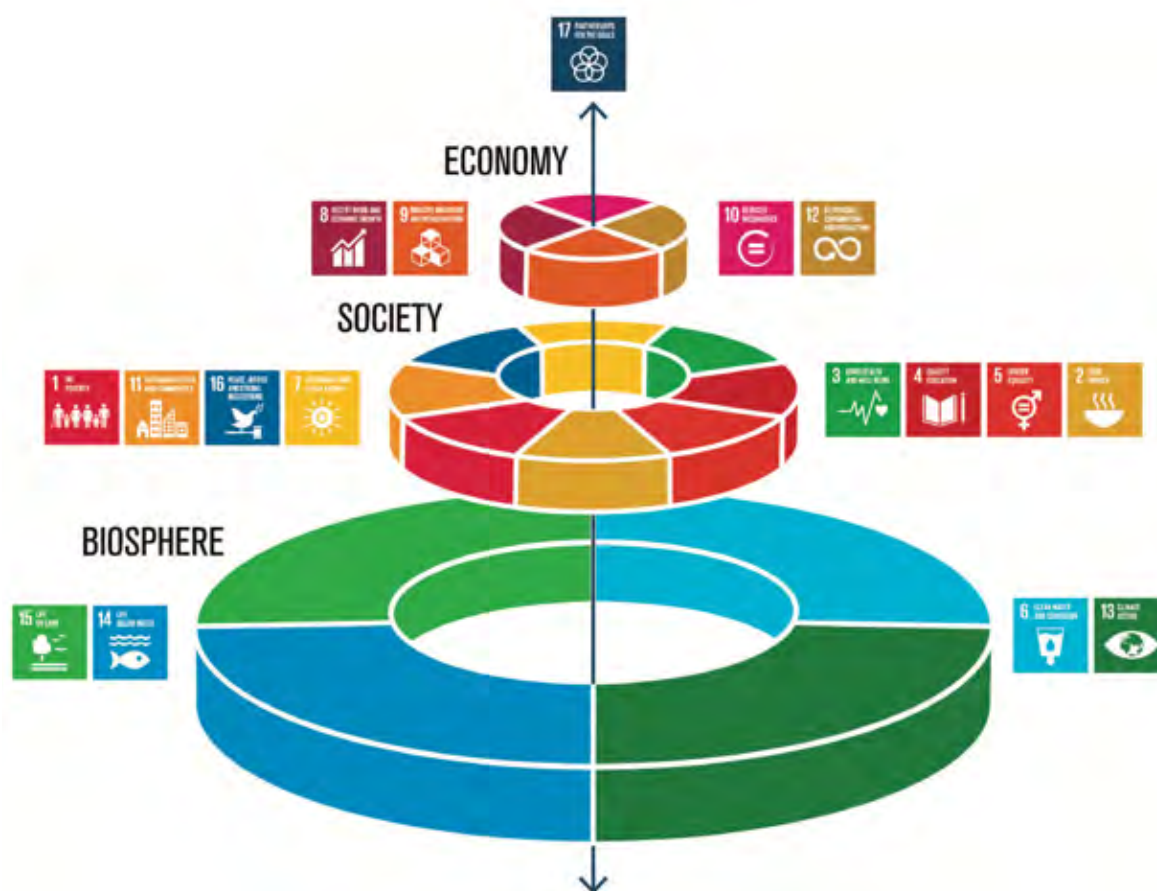
Thailand has embraced an economic development strategy based on the Bio-Circular-Green Economy (BCG). The BCG model integrates three economic approaches, where technology and innovation are used to create value, reduce waste, advance resource efficiency, and promote sustainable business models. It also calls for more holistic efforts to achieve more balanced, inclusive, and sustainable growth for national development and post-pandemic recovery.

- The BCG industries are expected to generate 4.4 trillion Baht, or 24% of GDP, in 2026.
- The Thai government has set a target to increase the proportion of renewable energy in the country's energy mix to 30% by 2036. The government has been investing in solar and wind power projects. In 2020, Thailand was ranked the ninth largest solar power producer in the world.
- The BCG model aims to reduce greenhouse gas emissions by 20-25% by 2030, compared to business-as-usual scenarios. For example, the government has been investing in public transportation infrastructure and encouraging the use of electric vehicles. In 2020, Thailand was ranked the second largest producer of electric vehicles in ASEAN.
- Thailand aims to reduce its overall waste generation by 50% and increase the proportion of waste that is recycled to 70% by 2027.
- The government has plans to develop a green finance strategy to mobilize private capital for sustainable development and support the conservation and sustainable use of biodiversity.
- The government has been promoting sustainable tourism, which includes activities such as ecotourism, community-based tourism, and responsible wildlife tourism.

Biodiversity finance and the United Nation's Sustainable Development Goals (SDGs)

Biodiversity and ecosystem services are fundamental to sustainable development and play a vital role in achieving the UN Sustainable Development Goals (SDGs). These goals aim to eradicate poverty, protect the planet, and ensure prosperity for all.

Figure 3: The UN Sustainable Development Goals (SDGs)



Biodiversity finance is a critical component in achieving the SDGs 14 and 15, which specifically focus on life below water and life on land, respectively. These two goals recognize the importance of conserving biodiversity and ecosystems that support life on our planet.

SDG 14 aims to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Achieving this goal requires effective management of marine and coastal ecosystems, the preservation of marine biodiversity, and the reduction of pollution and other harmful practices that threaten ocean health.

Similarly, SDG 15 focuses on protecting, restoring, and promoting the sustainable use of terrestrial ecosystems, forests, and biodiversity. This goal recognizes the importance of biodiversity and ecosystems in providing essential services, such as air and water purification, soil fertility, and climate regulation. It also emphasizes the need to combat desertification, land degradation, and biodiversity loss, as these threats have significant negative impacts on human well-being and livelihoods.

Biodiversity finance is crucial for achieving these two goals by providing tools and mechanisms to help mobilize the necessary financial resources for conservation and sustainable use. This includes financing for protected areas, biodiversity-friendly agriculture and forestry practices, and sustainable fishing practices, among others.

Moreover, effective biodiversity finance mechanisms can help incentivize the private sector to invest in conservation and sustainable use practices, creating new opportunities for sustainable economic growth and development. This, in turn, can support the achievement of other SDGs, such as SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 8 (Decent Work and Economic Growth), among others. Overall, biodiversity finance is an essential component of achieving SDGs 14 and 15, and its effective implementation can provide a pathway to sustainable development for both current and future generations.

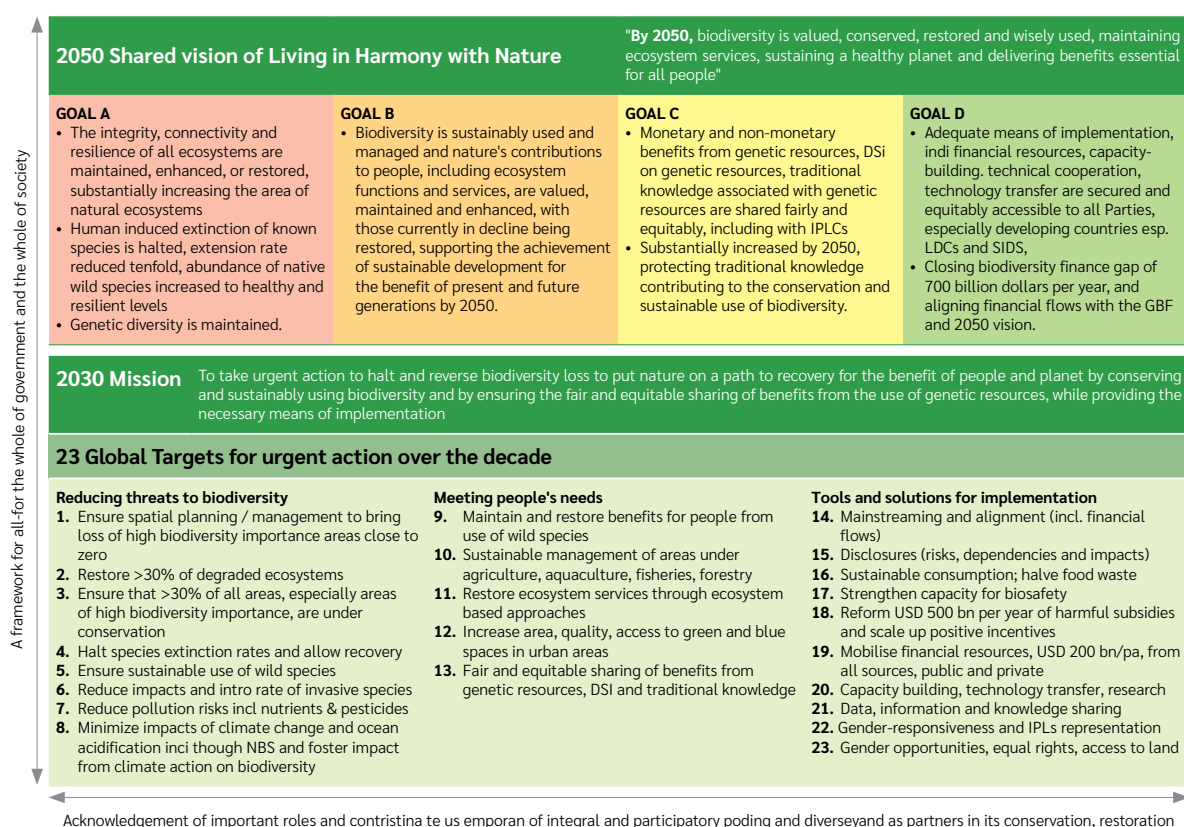
Financing the SDGs through the Integrated National Financing Framework (INFF)

Integrated National Financing Frameworks (INFFs), as adopted by member states in the 2015 Addis Ababa Action Agenda, offer Thailand a strategic approach to financing its national sustainable development objectives and the SDGs. These frameworks, voluntarily embraced and country-led, are designed to mobilize and align financing with all facets of sustainability. Led by the Government of Thailand (National Committee for Sustainable Development), Thailand's INFF process empowers the nation to broaden participation, manage risks, and innovate policies and instruments across domestic and international finance domains in both the public and private sectors. With more than 85 countries engaged in the INFF process, Thailand stands poised to implement this approach, aligning it with the medium-term national development plan. Within these strategies, governments worldwide have prioritized over 250 reforms aimed at mobilizing and aligning both public and private capital with the SDGs.

2.1 Stepping up Action on Nature within the Global Biodiversity Framework (GBF)

Biodiversity concerns need to be at the forefront of sustainable development priorities for the country. The 15th Conference of the Parties to the Convention on Biological Diversity (COP 15 CBD), which took place in December 2022, yielded a global consensus on biodiversity for the upcoming decade under the Kunming-Montreal Global Diversity Framework (GBF). Notably, this COP stands out as the first to include substantial participation from the financial and business sectors.

Figure 4: Kunming-Montreal Global Framework for Biodiversity (GBF)



The mission of the GBF outlines four overarching goals for the year 2050 and sets forth 23 action-oriented targets to propel initiatives until 2030. Key features include a commitment to effectively conserve and manage a minimum of 30% of both land and oceans (30x30), a substantial increase from the current levels of approximately 17% and 8%, respectively. Additionally, the framework pledges to restore a minimum of 30% of degraded ecosystems. Specific targets include halving global food waste, addressing the risks associated with pesticides and highly hazardous chemicals, and implementing nature-based solutions to align climate and biodiversity action. Crucially, the GBF establishes financial targets for 2030, including phasing out or reforming subsidies harmful to biodiversity by at least US\$500 billion annually (Target 18) and mobilizing at least US\$200 billion annually from public and private sources for biodiversity conservation funding (Target 19).

Thailand's 5th National Biodiversity Strategy and Action Plan (NBSAP) 2023-2027

A comprehensive, multi-stakeholder, and integrated approach is essential for the successful implementation of biodiversity actions in Thailand. The 5th National Biodiversity Strategy and Action Plan for 2023-2027 serves as a cornerstone, outlining Thailand's specific priorities, targets, and strategies for conserving and sustainably managing its biodiversity. It provides a roadmap that aligns with national development objectives and guides the country's conservation actions. Thailand's NBSAP is also aligned with the goals and targets of the GBF to ensure coherence and effective progress towards global biodiversity conservation.

Thailand's NBSAP will use the Bio-Circular-Green Economy model to balance economic growth with environmental conservation, with objectives including protecting and restoring biodiversity and ecosystem services, managing invasive alien species, and developing finance mechanisms for biodiversity conservation. By 2050, Thailand is committed to ensuring a high quality of life for its people in harmony with a thriving natural environment and to protecting 30% of land and marine areas by 2030, in line with the High Ambition Coalition for Nature and People. Currently, marine protected areas cover 5-7% and land protected areas cover 15% of Thailand's territory.

Thailand has advanced several key initiatives to align the implementation of its NBSAP with the Kunming-Montreal Global Biodiversity Framework. These initiatives include protecting and rehabilitating ecosystems; promoting the sustainable use of biodiversity and ecosystem services; raising awareness of biodiversity; managing invasive alien species; establishing financial mechanisms and incentives for conservation; and regulating Access and Benefit Sharing (ABS) of biological and genetic resources. Additionally, Thailand's 5th NBSAP incorporates new issues adopted at COP 15, which were not strongly emphasized in the previous edition, to ensure successful implementation.

Box 7: Thailand's 5th National Biodiversity Strategy and Action Plan (2023-2027)–3 Goals, 12 National Targets

Goal 1 – Conserve and restore biodiversity, ecosystems, endangered species, and ecosystem services of important biodiversity landscapes and seascapes and eliminate key biodiversity threats.

National Target 1: Decreasing and restoring landscapes and seascapes change to decrease biodiversity area loss.

National Target 2: Improving Protected Areas and establishing new Other Effective Conservation Areas (OECMs) for ecosystem integrity and connectivity.

National Target 3: Halting the extinction of wild/threatened species, managing invasive species and resolving human and wildlife conflict to support species and genetic diversity management.

National Target 4: Minimizing climate change and pollution impacts on biodiversity loss and increasing urban green and blue spaces for biodiversity restoration.

Goal 2 – Increase the benefits and appreciation of national biodiversity to generate income from bio-economy and enhance citizen's well-being.

National Target 5: Promoting and facilitating the bio-economy through biological resources and ecosystem services for citizen's well-being.

National Target 6: Enhancing and practicing sustainable agriculture, aquaculture, fisheries, forestry, and tourism for sustainable use of biodiversity.

National Target 7: Establishing mechanisms to promote and support access to genetic resources and digital sequencing with fair and equitable benefit sharing for all and promoting modern biotechnology and biosafety measures for genetic resources use.

Goal 3 – Strengthen all stakeholders by providing tools, knowledge, data, finance solutions, funding, and legal frameworks to support plan implementation and achieve national biodiversity targets.

National Target 8: Integrating and mainstreaming biodiversity and its values into policies, planning, and actions through collaboration and participation of all sectors, including the state, non-state actors, the private sector, businesses, the academic sector, and citizen groups to achieve national biodiversity targets.

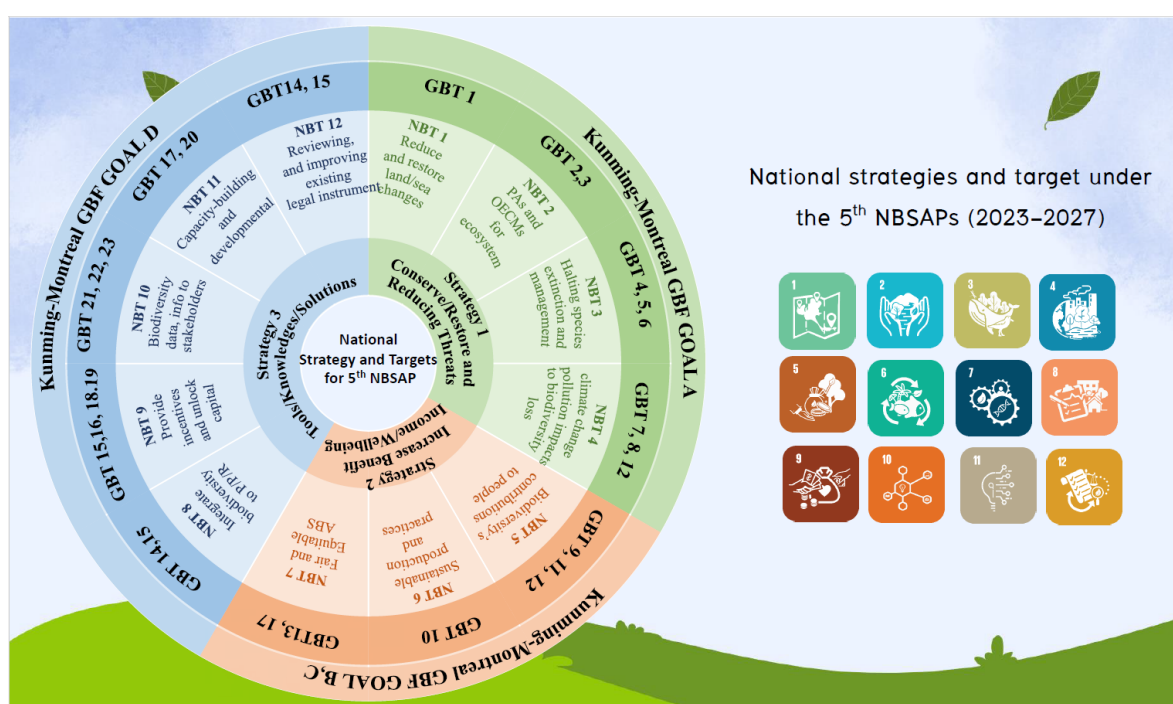
National Target 9: Providing support mechanisms—both domestic and international—in particular, economic and social incentives, financial and investment support, and unlocked funding sources from businesses, banks, donors, and citizens to accomplish national biodiversity targets.

National Target 10: Establishing biodiversity database, information, and knowledge that are accessible to the public, citizens, businesses, and government agencies for data-driven decision-making and actions and citizen awareness.

National Target 11: Strengthening capacity development, technology transfer, and technical and scientific cooperation to achieve all national biodiversity targets.

National Target 12: Reviewing and improving existing legal instruments and procedures effectively and practically, aiming to fill gaps in the implementation of the NBSAPs, including the enactment of the Biodiversity Act and other actions if necessary.

Figure 5: National Goals and Targets for the 5th NBSAP



The National Biodiversity Finance Plan (BFP) aims to mobilize funding from various sources, including government budgets, international funds, private investments, and innovative financing mechanisms. This financial mobilization is instrumental in advancing the implementation of the NBSAP and Global Biodiversity Targets (GBT). By providing the financial mechanisms, the Biodiversity Finance Plan empowers Thailand to reach its global biodiversity targets, particularly GBF Targets 14, 15, 16, 18, and 19.

Thailand will achieve the GBF Target 19 by implementing national biodiversity finance plans. In addition to this, GBF Targets 14, 15, 16, and 18 seek to create transformative change in economic and financial systems that drive decisions to invest in nature, in both the public and private sectors.

Target 14 overview	Integrate biodiversity and its multiple values into policies, strategies, regulations, planning and development processes, and national accounting, progressively aligning all relevant public and private activities, fiscal and financial flows with the goals and targets of the GBF.
Target 15 overview	Take legal, administrative, or policy measures to enable financial institutions and businesses to reduce negative impacts and increase positive impacts on biodiversity, through monitoring and disclosing risks and dependencies on nature, providing information to consumers, and reporting on compliance with access and benefit sharing.
Target 16 overview	Empower consumers to make better decisions through policy, legislation, education, and access to information.
Target 18 overview	Scale up positive incentives for the conservation and sustainable use of biodiversity, and eliminate, phase out or reform incentives, including subsidies, harmful to biodiversity, in a proportionate, just, fair, effective, and equitable way, by at least \$500 billion per year by 2030.
Target 19 overview	Mobilize at least \$200 billion per year from international and domestic public and private sources, including at least \$20 billion per year in international financial resources from developed countries, by 2025 and \$30 billion by 2030, enhancing collective actions (including Indigenous Peoples and local communities), stimulating innovative schemes, enhancing effectiveness, efficiency, and transparency.

Box 8: The UNDP Nature Pledge

The Nature Pledge provides a pathway to transform our global systems to meet vital targets to protect and restore our planet, eradicate poverty, reduce gender and other inequalities, protect human rights, and accelerate overall progress on our global goals.

Transformational Systems Shift Approach

Through the Nature Pledge, three interconnected shifts will be advanced, which are needed for countries to transform the economic, financial, social, and political systems that are maintaining unsustainable consumption of our natural resources in ways that threaten lives and livelihoods.

1. Global Value Shift: Driving change in narratives, attitudes, beliefs, and behaviours about nature to overhaul outdated traditional values. Old perceptions often create false dilemmas—the misconception that we must choose between human interests and the environment, hindering progress. Shifting policies and frameworks in response to biodiversity risks reinforces the correct understanding that economic growth and environmental welfare are not mutually exclusive. Sustainable growth can secure opportunities, peace, and a healthy future for generations to come.

2. Economic and Finance Shift: Supporting a transition from a nature-negative to nature-positive economy. For example, the Taskforce on Nature-Related Financial Disclosures (TNFD) encourages the private sector to align business models with the Global Biodiversity Framework, fostering nature-positive practices and creating sustainable jobs.

3. Policy and Practice Shift: Implementing large-scale changes at the grassroots level, driven by central policy authorities and local communities while leveraging the knowledge of local communities, indigenous peoples, and ethnic groups. UNDP initiatives, such as the Biodiversity Finance Initiative and the Vertical Fund Portfolio embody this approach in driving regional financial mechanisms.

These shifts aim to create cascading effects, driving momentum, speed, and widespread behavioural change in addressing our pressing planetary crisis.

2.2 Spotlight on 30x30 target and opportunities for OECMs in Thailand

The Global Biodiversity Framework (GBF) landmark agreement sets forth an ambitious target to conserve 30% of the Earth's land, waters and seas by 2030, commonly referred to as the "30x30" target. The 30x30 target roughly triples the environmental conservation commitment set by the previous Aichi Targets. Currently, about 17% of terrestrial and 8% of marine areas are under some form of protection. This means the new 30x30 target represents a significant global commitment.

Box 9: The business case for 30x30 target

According to the "Waldron report," the estimated cost of implementing the 30x30 target is approximately US\$100 billion per year. In comparison to the current spending on protected areas, which amounts to roughly US\$20 billion, there is a substantial funding gap of US\$80 billion per year to achieve the 30x30 target. A subsequent study related to the Waldron report revealed that over 80% of the current spending is concentrated in high-income countries. This leaves low, lower-middle, and upper-middle-income countries with an even larger relative finance gap.

The Waldron report reveals that protecting 30% of the world's land and ocean delivers substantial benefits, surpassing the costs by a factor of at least 5:1. Based on the work of over 100 scientists and economists, it represents the most comprehensive assessment of the financial and economic impacts of protected areas to date. Similarly, McKinsey's study highlights that increasing protected areas to 30% of land and ocean would support 30 million jobs in ecotourism and sustainable fisheries, add 650,000 new jobs in conservation management, and contribute US\$500 billion to global GDP through ecotourism and sustainable fisheries. This expansion would also lead to significant reductions in CO2 emissions, lower the risk of zoonotic diseases, and provide expanded habitats for endangered species.

Thailand has committed to the 30x30 target and is currently developing a national action plan to meet this target. While establishing more protected areas, both on land and in ocean areas, is crucial to reaching this target, the plan also highlights opportunities for conservation beyond these designated zones. These opportunities include acknowledging management practices that safeguard biodiversity, known as "Other Effective Area-Based Conservation Measures (OECMs)"—a geographically defined area other than a Protected Area, which is governed and managed to achieve outcomes for in-situ conservation of biodiversity, with associated ecosystem functions and services, taking into account cultural, spiritual, socioeconomic, and other locally relevant values. There is potential to identify such areas on private sector land and ocean areas, even when biodiversity conservation is not their primary focus. Recognized as a leader in regional biodiversity conservation, Thailand is well-positioned to establish OECMs as areas that foster collaboration among local communities, the private sector, and the government in biodiversity conservation while promoting sustainable use. The country aims to expand OECM recognition leading up to 2030.



Over 180 leading conservation groups, organizations, universities, networks, and initiatives in Thailand, collectively known as the 30x30 Thailand Coalition, are committed to safeguarding a minimum of 30% of the country's terrestrial, inland water, coastal and marine areas, with a special emphasis on regions that hold significant importance for biodiversity and the functioning and services of ecosystems.

Source: Taskforce for Nature Volunteers (Thailand)

National Dialogue on Other Effective Area-based Conservation Measures (OECMs)

On June 22, 2023, ONEP, World Wide Fund for Nature (WWF), International Union for Conservation of Nature (IUCN), and UNDP jointly organized a national dialogue regarding OECMs. Representatives from various government agencies managing protected areas in Thailand, alongside national and international NGOs, academic institutions, and the private sector, attended the workshop. The primary objective was to initiate the collective understanding of OECMs. In the Thai context, OECMs' application could notably enhance biodiversity conservation and offer new prospects outside conventional protected areas. The workshop included presentations detailing the advancements in identifying and recognizing OECMs in India, the Republic of Korea, and Bangladesh. Moreover, it highlighted the advantages of using spatial conservation planning to identify potential areas for biodiversity conservation, aligning with the GBF target. Finally, the National Working Group for OECM in Thailand was officially established by ONEP with an aspiration to implement the OECMs going forward.

Box 10: Identifying opportunities for OECMs in Thailand

- **Protected Areas in Thailand:** As of May 2021, Thailand has 245 reported protected areas according to the World Database on Protected Areas (WDPA). These areas play a crucial role in conserving the country's biodiversity and ecosystems.
- **Terrestrial Protected Areas:** Currently, approximately 18.5% of Thailand's terrestrial areas are designated as protected areas, encompassing 202 protected areas spanning a total of 96,035.2 square kilometres.
- **Marine Protected Areas:** Thailand's marine protected areas cover about 4.4% of the country's marine areas, comprising 41 protected areas that span 13,411.5 square kilometres.
- **Opportunities for OECMs in Thailand:** OECMs present a promising approach to complement existing protected areas and enhance biodiversity conservation efforts. In Thailand, numerous landscapes and seascapes outside of protected areas hold significant biodiversity value and provide crucial ecosystem services. These areas offer opportunities for the identification, support, and reporting of OECMs.
- **Enhancing Biodiversity Conservation:** OECMs can effectively contribute to the conservation of biodiversity in areas where traditional protected area designations may not be applicable or where alternative conservation approaches are required. By recognizing and supporting these areas, OECMs can provide a vital means of conserving biodiversity and associated ecosystem functions and services, contributing to Thailand's efforts to achieve the 30x30 target.

2.3 Thailand's biodiversity finance landscape: Key agencies, objectives, and budgets

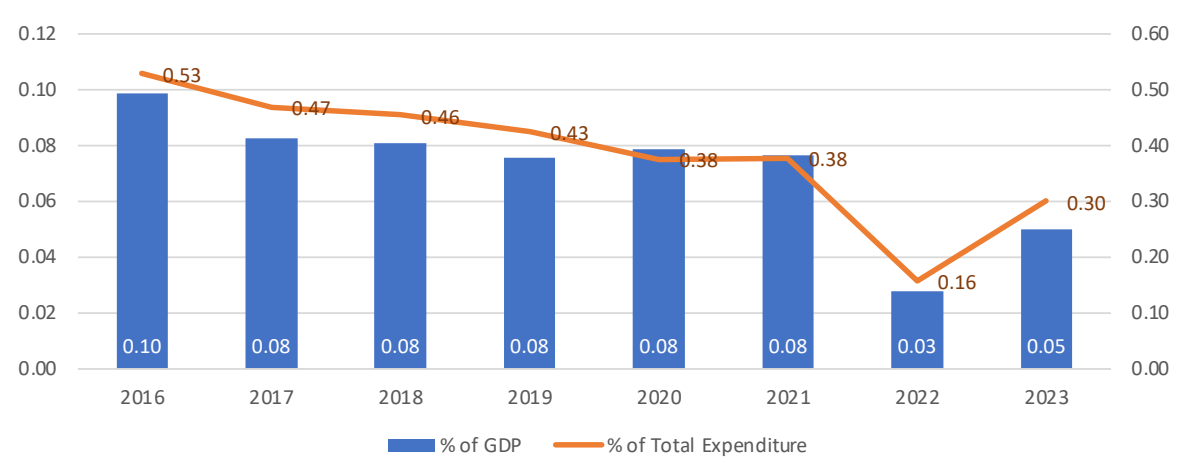
The Budget and Expenditure Review (BER) serves as an evidence-based component of the Biodiversity Finance Initiative (BIOFIN) by comprehensively evaluating Thailand's biodiversity policy environment and investment status. This assessment utilizes data from budgets, budget allocations, and actual expenditures to reflect Thailand's biodiversity policies. Data were drawn from both external and domestic sources to inform the BER for the fiscal years 2016–2021 and 2022–2024.

Aligned with the BIOFIN methodology, the BER identifies all government agencies involved in biodiversity-related spending, evaluates the proportion of their expenditures, and assesses biodiversity-related expenditures. This version of the BER incorporates project/program-level budget data obtained from the government's electronic Monitoring and Evaluation System of National Strategy and Country Reform (eMENSCR) platform. Private sector and non-governmental

organization data are derived from surveys, while external funding sources are referenced from the OECD’s Creditor Reporting System and the Global Environment Facility’s website. The review is contextualized within the framework of Thailand’s National Biodiversity Strategies and Action Plan (NBSAP), presenting findings based on agencies’ broad roles in biodiversity conservation and sustainable use.

The review reveals that the primary source of biodiversity funds in Thailand originates from the government budget. The total amount of biodiversity-related expenditures for the fiscal years 2022–2024 is 20.8 billion baht, with some fluctuations annually. This funding is crucial for sustaining conservation and research activities in the country. However, a concerning trend is observed—biodiversity allocations from the government budget as a percentage of total government expenditures have declined, dropping from 0.53% in 2016 to 0.38% in 2020, hitting a low of 0.16% in 2022, before a modest rebound to 0.30% in 2023. Official Development Assistance (ODA) serves as another crucial funding source, primarily designated for project-based activities.

Figure 6: The Biodiversity Expenditure Review for the fiscal years 2016–2023



Source: UNDP BER, 2024

The responsibility for biodiversity-related activities predominantly rests on three core environmental agencies: the Department of Marine and Coastal Resources (DMCR), the Department of National Parks, Wildlife and Plant Conservation (DNP), and the Royal Forest Department (RFD)—all under the Ministry of Natural Resources and Environment (MONRE). As the central authority overseeing biodiversity conservation and management efforts in Thailand, MONRE plays a pivotal role.

While biodiversity-related ODA mainly comes from the Global Environment Facility (GEF), funds from sources outside the government's budget lack comprehensive documentation. Case studies indicate that the private sector and non-governmental organizations play a vital role in allocating funds for biodiversity-related activities, particularly in ecosystem restoration and development. Considering the declining trend in national budget allocations for biodiversity, exploring financing from non-government sources, especially the private sector, is imperative. Investments should be directed towards activities that prevent future costs, such as preventative actions and infrastructure, and implementing measures to enhance budget approval efficiency. All of these can help resource requirements in achieving biodiversity goals.

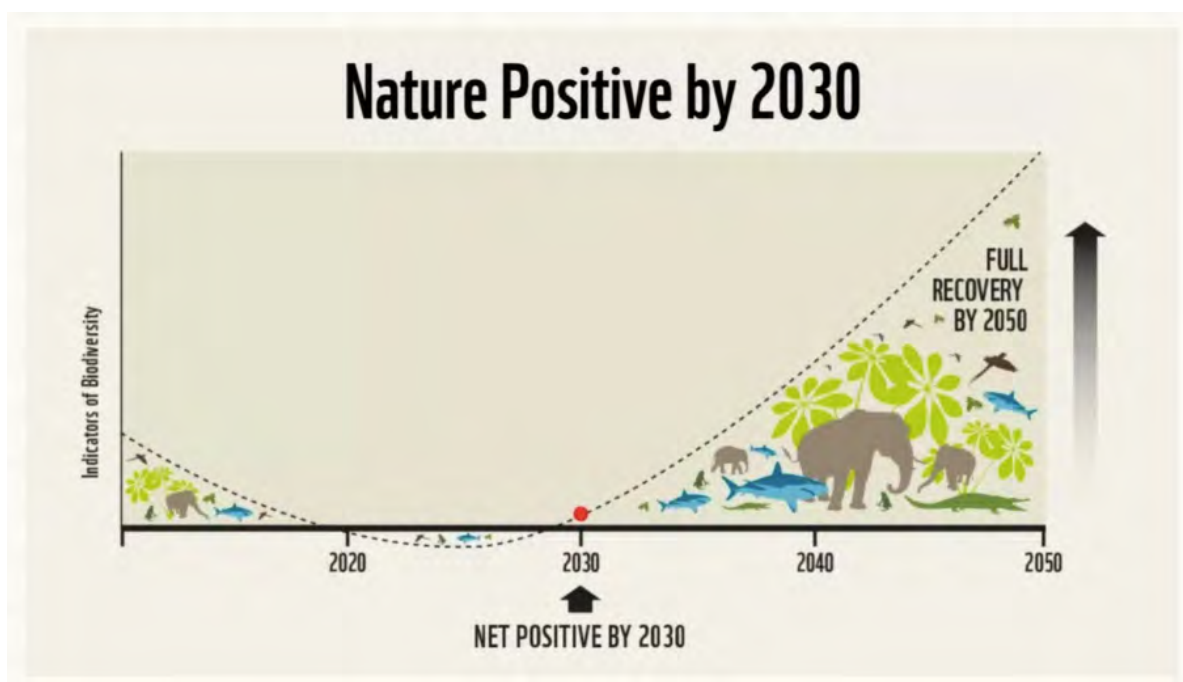
2.4 Engaging the business and finance sector in addressing biodiversity loss and climate action

Business and the finance sector play a key role in biodiversity finance. These sectors have the potential to mobilize substantial financial resources and implement sustainable practices that are essential for conserving biodiversity and delivering climate action.

Towards a Nature-positive economy in Thailand

Aligned with the UN Climate Convention's pursuit of achieving "net zero" emissions, the global goal for nature is now to secure a Nature-positive world by 2030. This goal demands urgent action to halt and reverse current trends of nature loss.

Nature-positive is defined as halting and reversing nature loss, measured from 2020 levels, by increasing the health, abundance, diversity, and resilience of species, populations, and ecosystems so that by 2030 nature is visibly and measurably on the path of recovery.



In Thailand, embracing a nature-positive economy represents a pivotal opportunity to harmonize economic growth with environmental stewardship. By setting ambitious targets for net-positive impacts on biodiversity, communities, and climate, businesses in Thailand can enhance their long-term sustainability and competitiveness. This approach not only mitigates environmental impact but also opens avenues for new revenue streams and market opportunities.

The benefits of this business, finance, and banking transformation are substantial. Companies stand to gain from cost efficiencies through resource optimization, access to new markets and products driven by sustainable practices, and strengthened stakeholder relationships and brand reputation.

The role of business and finance sectors in implementing the GBF

The Global Biodiversity Framework (GBF) underscores the urgent need for global action to halt biodiversity loss and restore ecosystems, placing increased responsibility on the private sector and financial institutions to integrate biodiversity considerations into their business strategies, investments, and lending practices.

GBF Target 15 holds particular relevance for businesses and financial institutions, as it requires governments to mandate the assessment and disclosure of their nature-related risks, impacts, and dependencies. This commitment forms the foundation for action, aiming to mitigate negative impacts, enhance positive contributions through restoration and regeneration, the adaptation of business strategies and models, and the active promotion of progressive policies. Several other targets—such as Targets 7, 8, 9, 10, 14, 16, 18, and 19—are also crucial for the attainment of this target. Clearly outlining the expectations and responsibilities of business and finance stakeholders in achieving these targets—through national goals, prioritization, and concrete actions—will be key to accelerating early intervention efforts.

Practical frameworks, tools, and methodologies already exist and are being applied successfully to support businesses and financial institutions in assessing and disclosing their nature-related risks, impacts and dependencies. These frameworks can also assist governments in adopting the right legal, administrative, or policy measures.

Box 11: Introducing the TNFD Framework

What is the TNFD?

The Taskforce on Nature-related Financial Disclosures (TNFD) is a global risk management and disclosure framework that provides guidance to businesses and financial institutions on how to assess and disclose their nature-related dependencies, impacts, risks, and opportunities, including across entire value chains. This enables organizations to manage dependencies, impacts, and risks, with the ultimate aim of shifting global financial flows from nature-negative outcomes towards nature-positive outcomes.

The TNFD framework builds on the structure and foundation of the Task Force on Climate-related Disclosures (TCFD) recommendations, harnessing synergies in framework design and stakeholder engagement to ensure consistency in structure, reporting, and approach, and accelerate its adoption in the business sector.

The TNFD framework going forward.

The final recommendations, released in September 2023, serve as crucial guidance for businesses and financial institutions to proactively navigate forthcoming regulatory changes stemming from the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF). Notably, these final recommendations from the TNFD are strategically aligned with and complementary to the Task

Force on Climate-related Financial Disclosures (TCFD). Financial institutions already engaged in addressing climate risks can seamlessly leverage the TNFD's integrated approach to concurrently manage nature-related financial risks.

Through the TNFD's open innovation process of developing over the past two years, insights and knowledge from over 1,000 institutions in the TNFD Forum have been integrated to refine the framework. It has been found that over 200 institutions are now pilot testing the framework. Additionally, several companies, and financial institutions, including those in Thailand, have already publicly signalled their support and intention to move towards disclosing their nature-related risks, impacts and dependencies in line with the TNFD recommendations.

Source: Business for Nature, 2023

The global landscape of green and sustainable finance has experienced remarkable growth in recent years. Financial products, such as bonds, funds, and Exchange Traded Funds, emphasizing sustainability have become integral to investment strategies worldwide. The rise in investor interest has been driven by the development of precise frameworks, known as taxonomies, which define criteria for qualifying investments to attain specific environmental objectives and uphold market integrity.

A green taxonomy operates as a structured classification system, delineating activities, assets, and revenue segments that align with key sustainability goals, as per the eligibility conditions stipulated by the taxonomy. For instance, the EU Taxonomy outlines a catalog of environmentally sustainable economic activities, complete with thresholds and metrics. Similarly, China's green classification system identifies assets and projects eligible for financing through green bonds, focusing on those that significantly contribute to addressing environmental issues, climate change, and resource efficiency.

The purpose of green taxonomies is to offer clarity and guidance to market participants. By aiding investors and companies in identifying environmentally friendly activities, these taxonomies facilitate well-informed decisions regarding sustainable business planning and activities. Furthermore, a green taxonomy plays a pivotal role in assisting regulators and investors in managing the risks associated with greenwashing, thereby enhancing integrity and reducing misinformation in the market. In Thailand, adopting and adapting such taxonomies can serve as a strategic framework for engaging the private sector in biodiversity conservation efforts and promoting sustainable financial practices.

Source: Global green taxonomy development, alignment, and implementation, (Climate Bonds Initiative, 2022)

Box 12: Linkage between the Global Biodiversity Expenditure (GLOBE) Taxonomy and the Thailand Taxonomy (Bank of Thailand)

The linkage between the Global Biodiversity Expenditure (GLOBE) Taxonomy and the Thailand Taxonomy, initiated by the Bank of Thailand, can play a key role in structuring and categorizing whitelisted biodiversity-related expenditures.

The GLOBE Taxonomy is a structured system designed to categorize and detail biodiversity-related expenditures across various sectors and themes. Its purpose is to provide a comprehensive classification of expenses related to biodiversity and ecosystems, enhancing understanding, analysis, and appropriate allocation of resources within the realm of biodiversity financing. The GLOBE Taxonomy's key elements include nine primary biodiversity expenditure categories (Level 1), subcategories, examples of expenditures, and biodiversity attribution rates. The GLOBE Taxonomy aims to be a useful tool for all CBD parties.

During Phase I, Thailand introduced a Green Taxonomy as part of its classification system, focusing specifically on climate-related sustainable economic activities. During Phase II, the expenditure taxonomy is expected to include a set of criteria or a list of activities linked to nature, aiming to specify environmental objectives and draft the principles used to identify activities as “green.”

The current Thailand Taxonomy identifies the economic sectors where these principles are applied and provides guidance on how to implement these environmentally beneficial practices. As such, the Thailand Taxonomy encompasses six environmental objectives, namely: (1) Climate change mitigation; (2) Climate change adaptation; (3) Sustainable use and protection of marine and water resources; (4) Protection and restoration of biodiversity and ecosystems; (5) Pollution prevention and control; and (6) Resource resilience and transition to a circular economy.

Source: Bank of Thailand/Deloitte Thailand

A Spectrum of Approaches in Thailand: From CSR to Innovative Finance

Thai companies recognize the benefits of engaging in corporate social responsibility (CSR) activities as they contribute to building trust, fostering goodwill, and enhancing their reputation. The social and religious context in Thailand, rooted in the Buddhist merit-making culture, emphasizes the importance of performing charitable deeds. As a result, many Thai companies actively participate in philanthropic actions and encourage employee volunteering, aligning with the cultural values and traditions of the country.

In recent years, businesses have been adopting more sustainable and socially responsible practices, which has led to a growing trend of companies investing in biodiversity conservation in Thailand. Many companies now recognize the importance of protecting the environment and have incorporated biodiversity conservation into their CSR initiatives. These initiatives have included promoting sustainable agriculture, undertaking reforestation projects, and implementing eco-friendly technologies.

ESG (Environmental, Social, and Governance) and impact investment are increasingly critical in the investment landscape as they play a pivotal role in financing sustainability efforts. These approaches involve making investments that not only generate financial returns but also strive to create positive social and environmental impacts. The Stock Exchange of Thailand (SET) regularly organizes capacity-building and training activities to promote corporate sustainability management, ESG reporting and responsible investing. In the context of biodiversity conservation in Thailand, ESG and impact investment can significantly contribute by channeling capital towards projects and initiatives that promote sustainable practices, protect natural habitats, and support the preservation of the country's diverse ecosystems. For example, in late 2023, Thailand launched several ESG (TESG) funds “to promote long-term savings and encourage Thailand's sustainable investment”.

Box 13: “Koh Tao, Better Together” crowdfunding campaign

In recent years, crowdfunding has gained significant traction as a powerful tool for financing projects and initiatives, particularly for small and medium-sized enterprises (SMEs) in Thailand. Fintech has also emerged as a promising avenue for raising funds to support sustainability-focused initiatives.

For example, UNDP, together with Krungthai Bank and Raks Thai Foundation, launched the “Koh Tao, Better Together” crowdfunding campaign, raising nearly US\$100,000 to help COVID-19 impacted communities sustain their lives and marine and coastal ecosystems in Koh Tao.

This campaign financed green jobs for two hundred fisher folk and boat drivers by re-skilling local communities to collect marine debris and clean the beaches on Koh Tao using a cash-for-work modality. The initiative helped to reduce coastal environmental problems, marine debris pollution, restore the marine ecosystem and improve livelihoods.

Box 14: Promoting Green Bond Investment in Biodiversity Conservation

Green bonds have emerged as a global financial instrument to fund environmentally sustainable projects, attracting widespread attention from governments, international organizations, and corporations. These bonds, initiated in 2007, play a crucial role in financing projects that advance sustainable development and curb carbon emissions, with the global market projected to reach US\$1 trillion in annual issuance by 2023.

In the Asia-Pacific region, the issuance of green bonds, though smaller compared to global figures, enjoys robust institutional support from governments. Currently, the region has witnessed seventy-two local government and sovereign green bond deals, with China leading the way, followed by Japan and South Korea. Despite this, only 2% of China's green bonds relate to biodiversity, water, and land use.

Thailand entered the green bond market in 2018 and has since experienced rapid growth, primarily driven by private sector issuers. The Securities Exchange Commission (SEC) has played a proactive role by issuing guidelines in 2018 and 2019. These guidelines allow issuers to align with internationally accepted green, social, or sustainability (GSS) bond standards while adhering to conventional corporate bond regulations. To enhance transparency, the SEC encourages Green, Social, and Sustainability (GSS) bond issuers to appoint external reviewers and disclose their credentials publicly. Additionally, measures have been taken to offset the monitoring and verification costs associated with green bond issuance.

The Thai green bond market has matured, with twenty-two green bonds issued in local currency, totaling US\$ 2.59 billion as of November 10, 2021. The broader GSS bonds market in Thailand, encompassing green, social, and sustainability bonds, reached a total value of US\$ 8.89 billion as of November 11, 2021.

As the green bond market develops, there is a critical need to mobilize investments for biodiversity conservation. This requires concerted efforts, including sharing success stories, promoting greater transparency in the use of bond proceeds, and identifying new revenue sources that contribute to biodiversity conservation (BIOFIN, 2023).

2.5 The importance of local-level action for biodiversity conservation

The mainstreaming of biodiversity conservation activities at the local level is mainly supported through the budgets of provincial and local authorities. Furthermore, the work of many national-level agencies is carried out with local participation. This is in line with a growing awareness of the importance of biodiversity conservation and management at the local level. Involvement of people in close proximity to natural resources and nature can help ensure increased effectiveness of biodiversity-related programs. Such involvement also helps to alleviate funding constraints by lessening the dependency on the funding of environmental and mainstreaming agencies.

Localisation of the Sustainable Development Goals (SDGs) refers to the process of adapting the global goals to local contexts and implementing them at the regional, national, and local levels. Thailand has made significant progress in localising the SDGs, including aligning them with the country's national development plans.

One key aspect of localising the SDGs in Thailand is ensuring that they are relevant and applicable to local communities. To achieve this, the government has engaged with stakeholders at the local level to identify and address the most pressing issues and challenges faced by communities. This has led to the development of localised solutions that align with the SDGs, such as community-based ecotourism and sustainable agriculture practices.

UNDP Thailand, the Ministry of Interior, and the European Union launched the 15 SDG provincial profiles covering 15 pilot provinces, including Bangkok, Chiang Rai, Chiang Mai, Tak, Nakhon Ratchasima, Narathiwat, Pattani, Phetchaburi, Phuket, Mae Hong Son, Yala, Songkhla, Surat Thani, Udon Thani, and Ubon Ratchathani. These profiles support these provinces in addressing key challenges to accelerate SDG implementation. With 15 visions of 15 Provincial Governors in four thematic frameworks: Sustainable Tourism, Disaster Management, Natural Resource Management, and Border Province Management, the SDG profiles will facilitate the implementation of Thailand's finance solutions, including results-based budgeting for biodiversity by local government units, sustainable tourism finance solutions, and the repurposing of harmful subsidies on nature.

Chapter 3

The Biodiversity Finance Plan for Thailand



3. The Biodiversity Finance Plan for Thailand

The second Biodiversity Finance Plan for Thailand (2023-2027) is a comprehensive tool for mobilizing biodiversity finance that includes a wide range of finance solutions. As a living document, it is continuously updated based on Thailand's progress and sets targets and indicators to ensure that financing contributes effectively to the country's biodiversity targets.

Addressing the global decline in biodiversity finance by 2030 requires a significant financial commitment, estimated at US\$722 to 967 billion annually. However, the current global funding for biodiversity conservation efforts is only around US\$124 to 143 billion per year, creating a substantial financing gap of US\$711 billion annually. Thailand's Biodiversity Finance Plan plays a key role in closing the financing gap for biodiversity, a matter of profound importance.

In alignment with international biodiversity targets, specifically Targets 14, 15, 16, 18, and 19 of the Kunming-Montreal Global Biodiversity Framework, alongside the 30 x 30 agenda, the BFP adopts a systematic approach and the BIOFIN methodology. It acknowledges the necessity for diverse finance solutions, encompassing public sector financing, government subsidies, results-based budgeting, financial technology, and collaboration with the finance and private sectors. These finance solutions, detailed within the plan, are essential for effectively mobilizing financial flows for environmental conservation and aligning with the mandates set forth in the National Biodiversity Strategy and Action Plan (NBSAP) 2023–2027.

Drawing inspiration from the global work of the Biodiversity Finance Initiative (BIOFIN)—where BIOFIN member countries have mobilized **US\$ 400 million** through biodiversity finance solutions globally, leading to over **US\$ 1 billion** in additional investments from various sectors, with public finance constituting the largest share.

3.1 Goals and Targets

The Biodiversity Finance Plan for Thailand has outlined three main goals and targets: to increase financial resources, **reduce harmful investment impacts on biodiversity** and **enhance effectiveness** of biodiversity conservation efforts in the country. Closing the biodiversity finance gap will require actions on three fronts: 1) Increase and catalyse resources from multiple sources, including the public sector, private sector, and civil society, 2) Reduce harmful impacts from investments that negatively affect biodiversity, and 3) Enhance effectiveness and nature-climate synergies.

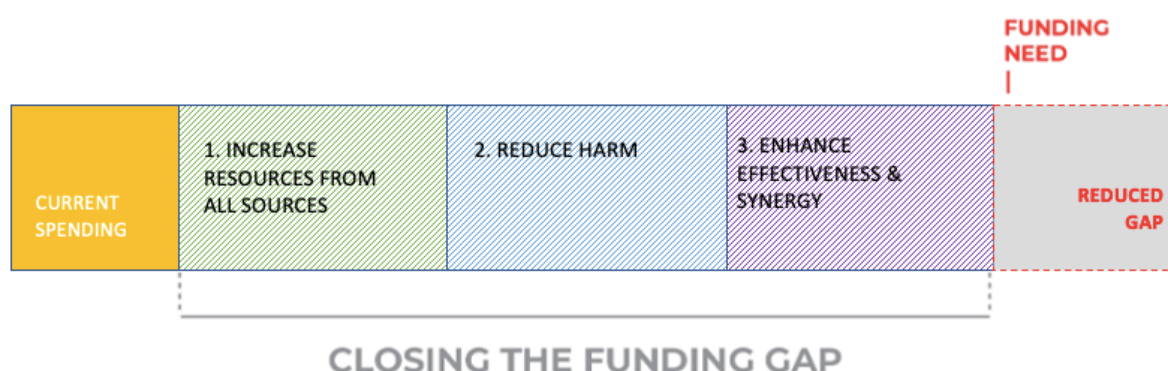
Box 15: The Biodiversity Finance Plan for Thailand: Three High-Level Goals

1. Increase and catalyse resources from multiple sources, including the public sector, private sector, and civil society. The bulk of biodiversity finance in Thailand comes from the government budget and greater funding levels are needed. Additionally, tapping into private sources, such as impact investments, corporate partnerships, and innovative financing mechanisms, is also essential to unlock additional funding and drive sustainable biodiversity outcomes.

2. Reduce harmful investment impacts on biodiversity. One of the significant opportunities to bridge the funding gap lies in redirecting subsidies that unintentionally harm biodiversity. Repurposing subsidies represents a key driver in addressing this issue and unlocking substantial financial resources.

3. Enhance effectiveness and nature-climate synergies. This involves enhancing the overall effectiveness and efficiency of conservation efforts in the country. It includes measures such as improving local budgets specifically allocated for biodiversity and climate-related activities. By prioritizing and allocating adequate financial resources at the local level, we can achieve greater conservation outcomes and foster synergies between biodiversity and climate goals.

Figure 7: Closing the Funding Gap for Thailand. BIOFIN (2022)



- 1. The first goal aims to enhance funding for biodiversity conservation in Thailand by mobilizing financial resources from various sources, including the public sector, private sector, and civil society.** To achieve this goal, the BFP has set a target of generating new revenues directed towards biodiversity conservation through economic incentives for the private sector and the general public to contribute to biodiversity.

Targets:

- Enhance the capacity of the country to generate funding from diverse sources, including a) individuals through digital and crowdfunding platforms, b) financial institutions and other private sector actors, and c) international donors/ blended finance such as the Global Biodiversity Fund.
- Promote sustainable financing mechanisms, such as tiger ecosystem bonds, with a target of attracting US\$200 million in private-sector investment and public-sector funding within the next 5 years.
- Develop and promote sustainable tourism mechanisms/products that support biodiversity conservation, with the target of generating at least 10 million Baht annually from tourism revenue for biodiversity conservation in pilot areas over the next five years. These mechanisms and products should prioritize the preservation of biodiversity and contribute to the long-term sustainability of the local tourism industry.
- Develop and implement at least two new innovative financing mechanisms that aim to generate revenues for biodiversity conservation in Thailand, such as carbon and biodiversity credits or conservation license plate schemes.

2. **The second goal of the plan is to reduce harm to biodiversity, resulting in a lower funding need for reversing the damage to nature.** This will involve strategic investment and policy recommendations to reduce harmful government subsidies, which in turn will avoid future expenditures and reduce the investment necessary to mitigate damage. The plan has set a target to realign existing financing systems to reduce negative impacts and improve outcomes. The plan has identified several finance-led initiatives such as the Task Force on Nature-Related Financial Disclosures (TNFD), among others.

Targets:

- Provide policy recommendations in order to reduce at least three harmful subsidies that have negative impacts on biodiversity, such as subsidies for land-use practices that destroy natural habitats, by advocating for policy reforms and promoting alternative practices.
 - Encourage at least five private sector actors from the SET100 list per year to adopt the TNFD framework for disclosing nature-related risks and opportunities in their financial reporting. This target can be achieved by relevant agencies providing knowledge and training for the private sector.
3. **The third goal of the plan is to boost the overall effectiveness of measures.** It aims to strengthen conservation outcomes by focusing on improved efficiency, effectiveness, and synergies. To attain this goal, the plan seeks to optimize Thailand's resources by capacity building, nurturing partnerships, supporting the Thailand Taxonomy, implementing results-based budgeting, and enhancing institutional collaboration at all levels of government.

Targets:

- Localise the BIOFIN methodology in at least 15 local government units to produce the Local Biodiversity Strategic and Action Plans (LBSAP) in Thailand.
- Develop and implement a results-based budgeting framework enabling local government agencies nationwide to understand how to justify budget procedures, utilise a local budget to increase the biodiversity benefits, and achieve the Bio-Circular-Green (BCG) economy.
- Connect the GLOBE Taxonomy with the Thailand Taxonomy to identify biodiversity expenditures and align with the NBSAP.

By achieving these goals and targets, the Biodiversity Finance Plan for Thailand seeks to improve biodiversity conservation finance results in the country while also contributing to the efforts to achieve the targets laid out in the 5th NBSAP, Global Biodiversity Framework (GBF), and SDGs.

To achieve these goals and targets, the BFP should tap into various sources of international financial flows, including the new Global Biodiversity Fund that was established by the international community recently. This fund is part of global efforts to mobilise US\$200 billion “from all sources” to protect 30% of the world’s land and water ecosystems by 2030. By aligning its biodiversity finance efforts with this global fund, Thailand can tap into new and additional sources of funding for its biodiversity conservation efforts.

Moreover, the Biodiversity Finance Plan can also explore synergies with climate finance initiatives, which could further mobilize financial resources for biodiversity conservation in Thailand. For instance, Thailand can explore opportunities for carbon and biodiversity credits, which can generate revenues for biodiversity conservation while also contributing to climate change mitigation efforts.

As discussed earlier, public funding alone is not enough to address the challenges facing biodiversity, and innovative funding mechanisms that draw from both public and private sources are needed. The private sector, from SMEs to large corporations, can contribute significantly to conservation efforts, and many different sectors can be tapped in order to mobilize additional financial resources. Civil society organizations also play a critical role in driving conservation efforts, and partnerships with NGOs and other organizations facilitate seamless collaboration and build a shared vision for biodiversity conservation. By bringing together diverse stakeholders and exploring innovative funding mechanisms, a more effective and impactful approach to biodiversity conservation can be created.

Overall, these goals and targets are realistic for Thailand based on its current expenditures, trends, and potential funding sources. By mobilizing a diverse range of financial resources and strengthening financial mechanisms for biodiversity conservation, Thailand can make significant progress towards closing the finance gap for environmental conservation.

Box 16: Screening, Assessment and Prioritization of Finance Solutions

Back In 2017, a validation workshop organized by UNDP-BIOFIN Thailand identified and selected specific finance solutions for implementation, which were included in the first BFP (2018 – 2022).

For the second BFP (2023 – 2027), national consultation sessions were organized from 2023 to 2024 by ONEP, UNDP, and relevant stakeholders to review the draft Biodiversity Finance Plan.

BIOFIN experts compiled solution recommendations and prioritized them based on their impact on biodiversity, finance results, and the likelihood of driving the success of financial mechanism. The second BFP incorporated input from the BIOFIN Thailand technical team, expert interviews, and an analysis of previous assessments to identify and prioritize solutions.

The process resulted in two thematic finance solutions, shown in Table 2, categorized by sector, finance result intended, and source of finance.

To successfully execute the BFP, multiple agencies, institutions, and stakeholders, including government agencies, civil society organizations, NGOs, private sector entities, and development partners, must collaborate. The Plan emphasizes the importance of innovation and collaboration in financing biodiversity conservation efforts, and it offers a comprehensive approach to biodiversity finance in Thailand by prioritizing effective, feasible, and sustainable finance solutions. The aim is for key players to take ownership of the Plan and support its implementation.

1. Thematic area: Sub-national public-private solutions

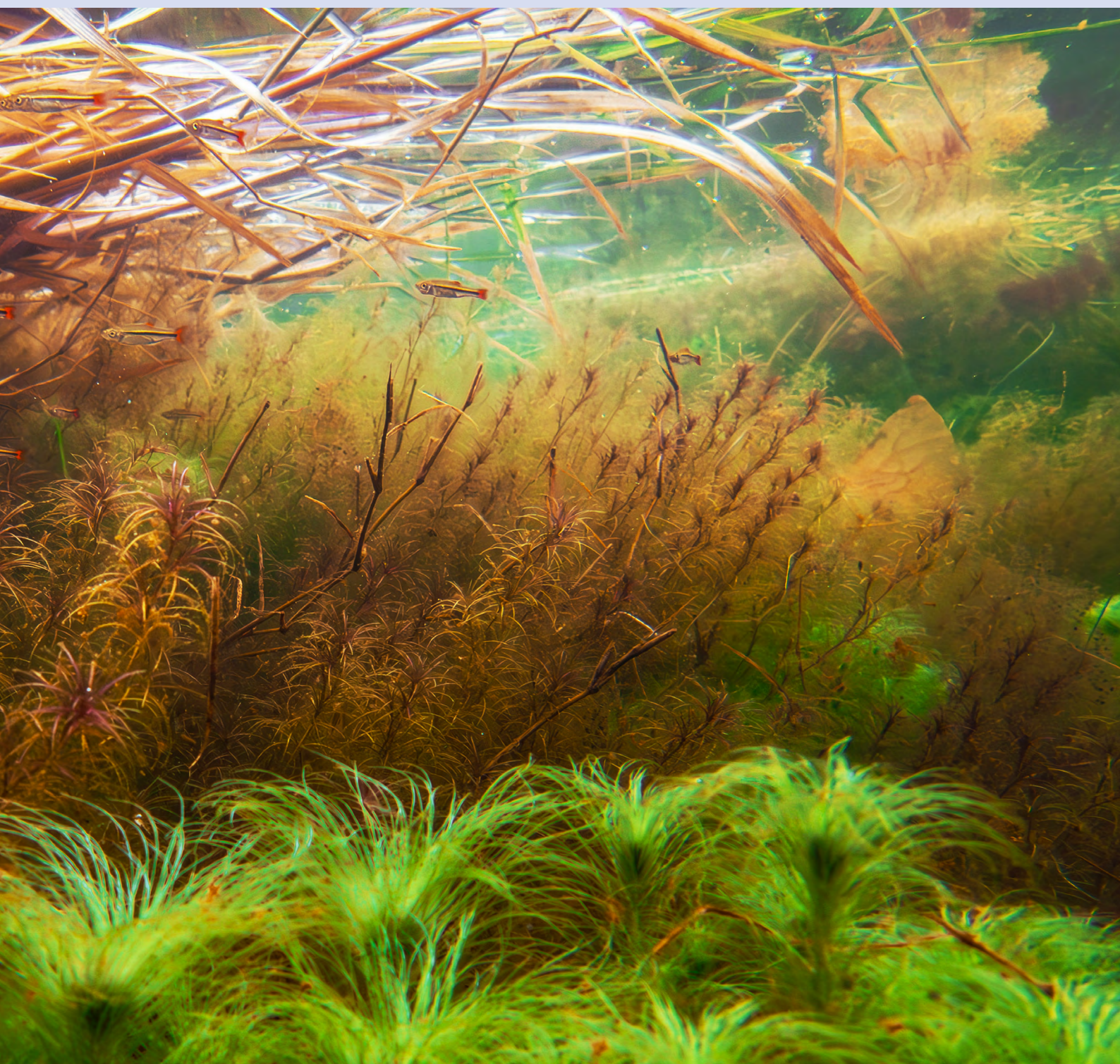
Recommended Finance solutions	Sector	Finance results	Source of finance	Contribution to BFP, NBSAP, GBF & UN SDGs
<ul style="list-style-type: none"> Enhancing effectiveness and biodiversity impact of local budgets in Thailand 	Local government organisations	Generate revenues	Private	BFP Goal 1, Goal 2, Goal 3
<ul style="list-style-type: none"> Increasing sources of revenues for safeguarding biodiversity and environmental management (Koh Tao Model) 	Tourism	Budget realignment	Public	NBSAP Goal 1, Goal 2, Goal 3
	Pollution management	Avoid future cost		GBF Targets 2, 3, 14, 16, 18 & 19.
<ul style="list-style-type: none"> Local bio-economy development 	Agriculture Fisheries	Deliver better results		SDGs 5, 11, 13, 14, 15 & 17
<ul style="list-style-type: none"> Study to identify and assess subsidies with possible negative impacts on biodiversity and propose redesign options. 	Fiscal and budgeting bureau			

2. Thematic area: Finance sector solutions

Recommended Finance solutions	Sector	Finance results	Source of finance	Contribution to BFP, NBSAP, GBF & UN SDGs
<ul style="list-style-type: none"> Encouraging the private sector to integrate biodiversity through Nature-based Platforms (TNFD) Thailand Green Taxonomy 	SMEs, corporate, banking & finance	Budget realignment Generate revenues	Private Public	BFP Goal 1, Goal 2, Goal 3 NBSAP Goal 1 and Goal 3 GBF Targets 14, 15, 16 & 19. SDGs 8, 9, 13, 14, 15 & 17
<ul style="list-style-type: none"> Biodiversity credit scheme structure 	Mangroves Wildlife			
<ul style="list-style-type: none"> Tiger Ecosystems Bond 	Protected Areas (PAs) OECMs			
<ul style="list-style-type: none"> Deployment of conservation vehicle license plates 	Transportation Sub-national government			

Chapter 4

Thematic Biodiversity Finance Solution



4.

Thematic Biodiversity Finance Solutions

The following section of the Plan outlines the key finance solutions according to their thematic areas. These solutions are at varying stages of implementation, each with its own specific objectives, relevant entities, and financial projections. In this section, each solution is analysed in terms of its context, progress, and potential for future implementation. The document also identifies financial solutions that require further baseline analysis, recognizing that the plan is a living document that will be continuously reviewed and revised as new information emerges. The ultimate goal of these finance solutions is to establish a biodiversity financing portfolio that bolsters Thailand's biodiversity conservation efforts. Each finance solution is accompanied by an 'Action Plan' with a clearly defined timeline.

Unlocking a Triple Win: Climate, Biodiversity and Gender in Thailand's Biodiversity Finance Plan

Thailand's Biodiversity Finance Plan focuses on addressing three key challenges: climate change, biodiversity loss, and gender considerations. By connecting these elements, the plan will provide benefits for all stakeholders, including advancing women's empowerment and strengthening the links between human rights, gender equality, and biodiversity conservation. To ensure effective and inclusive implementation, the plan incorporates gender-sensitive indicators to systematically align with biodiversity frameworks. Recognizing the inseparable relationship between climate change, biodiversity conservation, and gender inclusivity is crucial. The BFP Plan, therefore, seeks to achieve these three outcomes simultaneously to fulfil the goals and targets of the Kunming-Montreal Global Biodiversity Framework, ultimately creating a triple-win scenario for climate, biodiversity, and gender.

4.1 Sub-National Public-Private Solutions

4.1.1 FINANCE SOLUTION

Enhancing effectiveness and biodiversity impact of local budgets in Thailand

Contribution to NBSAP, GBF & SDGs

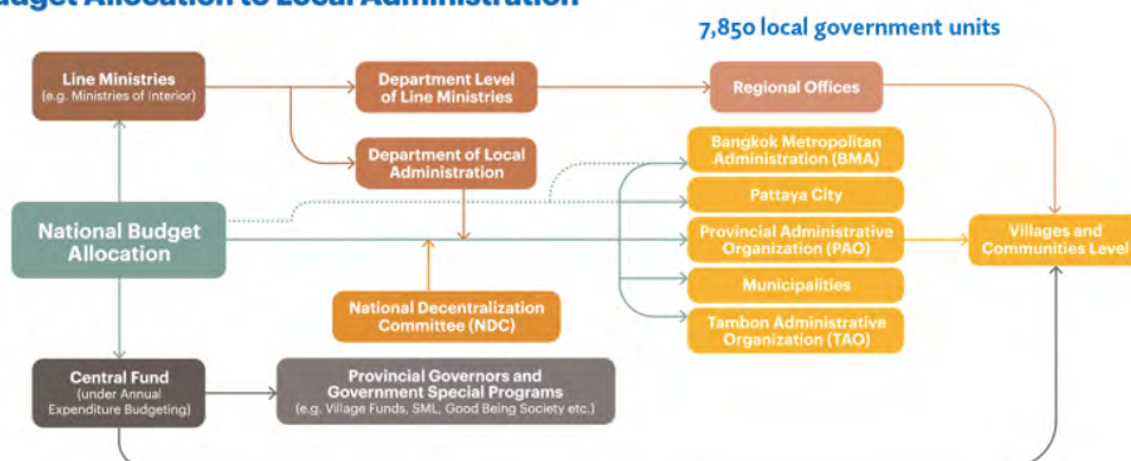
Main finance mechanism	Policy guidelines	NBSAP Goals 1, 2, 3
Solution type	Enhance local budget execution	GBF Target 19.1: Financial resources
Source of funds	Public	
Instrument type	Fiscal	SDGs 14 & 15
Finance result	Deliver better biodiversity outcomes/ realign expenditures	

Context

Since the 1990s, decentralization reforms have been introduced by the Thai government to allow local governments and central agencies to work together as governing units. This has resulted in a transfer of responsibilities to local administrative organizations (LAOs), provincial administration organizations (PAOs), and municipalities. To enhance the autonomy and accountability of LAOs, the government has set a goal to upgrade all LAOs to become direct budget-receiving units.

As of the fiscal year 2023, 301 LAOs, PAOs, city municipalities, and town municipalities have become direct budget-receiving units. The government aims to have all districts and municipalities functioning as direct budget-receiving units by the fiscal year 2024, as stated by the Department of Local Administration in 2021. However, most local authorities lack the resources and expertise needed to develop comprehensive local biodiversity budgets and align their budgets with conservation objectives, hindering effective biodiversity conservation efforts at the local level.

Budget Allocation to Local Administration



Investment case

- Investing in the capacity building of local governments in Thailand for biodiversity management is crucial, and the central government is taking action by collaborating with the Department for Local Administration and the Royal Plant Genetic and Conservation Project under Her Royal Highness Princess Sirindhorn to develop policy guidelines for local biodiversity budgeting.
- Policy guidelines will help integrate biodiversity into local budgets and provide a clearer understanding of the resources required for achieving conservation goals.
- The creation of an LAO consortium or working group will bring together stakeholders from different sectors to develop common frameworks for budgeting towards biodiversity conservation.
- The curriculum and training modules on results-based budgeting for biodiversity will be incorporated into the capacity development plan, along with a Training of Trainer (ToT) module for LAOs. This initiative aims to enhance LAO's knowledge of implementing policy guidelines and strategic plans, ultimately leading to improved biodiversity conservation outcomes.

Objectives

This finance solution seeks to enhance the ability of Local Administrative Organizations (LAOs) in Thailand to effectively incorporate biodiversity conservation into their budgeting systems and action plans, particularly during the fiscal budget preparation stage. The approach involves several key actions, including the establishment of a dedicated finance mechanism working group in Thailand to develop policy guidelines. Additionally, a capacity development strategy will be introduced, with a particular focus on enhancing budgetary allocations to support biodiversity conservation. To facilitate this, a training curriculum on results-based budgeting for biodiversity will be developed and tested, emphasizing capacity building for LAOs to expand their ability to implement the policy guidelines effectively. To evaluate the effectiveness and benefits of the curriculum and training materials, a monitoring and evaluation process will be conducted. Lastly, information will be collected for knowledge management purposes to further improve the impact of the finance solution.

Partners

Strategic partners for this solution are the Royal Plant Genetic Conservation Project under Her Royal Highness Princess Maha Chakri Sirindhorn (RSPG), the Department of Local Administration (DLA) under the Ministry of Interior (MOI), and other key stakeholders in the Working Group.

Scaling up and replication

Scaling up and replication are key components of the Biodiversity Finance Plan (2023-2027), which aims to support the implementation of the Plan at sub-national levels in order to enhance effectiveness and impact on biodiversity management. One of the strategies to achieve this goal is through the development of a training module on results-based budgeting for biodiversity management, specifically for Local Administrative Organizations (LAOs).

To create this training module, BIOFIN has engaged National Consultants with expertise in the field of biodiversity conservation and biodiversity finance. The consultants will develop a comprehensive training module that includes practical tools and methodologies to help LAOs integrate biodiversity considerations into their budgeting processes.

The training module will cover a range of topics, including the importance of biodiversity conservation, the benefits of integrating biodiversity into budgeting processes, and how to develop and implement results-based budgeting strategies. Furthermore, it will also provide guidance on how to monitor and evaluate the effectiveness of these strategies, in order to ensure that they are achieving their intended results.

BIOFIN Framework



The ultimate goal of the training module is to build the capacity of LAOs to comprehensively integrate biodiversity conservation into their budgeting processes. Once the training module is developed, it will be tested and refined in pilot sites before being rolled out to a wider range of LAOs across the country. By doing so, BIOFIN is committed to scaling up and replicating the successful strategies for integrating biodiversity into budgeting processes, thereby enhancing the impact of biodiversity conservation efforts in Thailand.

Action Plan

Key activities	Lead/key stakeholders	Timeframe
1. Conduct Data Analysis of relevant policies, guidelines, and other related documents, as well as consultations with key stakeholders	<ul style="list-style-type: none"> Working Group BIOFIN LAOs from 5 regions 	2022
2. Formulate Implementation Plans	<ul style="list-style-type: none"> RSPG Universities ONEP 	2023

Key activities	Lead/key stakeholders	Timeframe
3. Conduct a series of Training Needs Assessment (TNA) to identify the specific training needs of local administrative organizations (LAOs) with regards to biodiversity management and budgeting	<ul style="list-style-type: none"> • Working Group • BIOFIN • LAOs from 5 regions • RSPG 	2023
4. Conduct validation workshops with key stakeholders to ensure that the training curriculum aligns with their needs and expectations	<ul style="list-style-type: none"> • Universities • ONEP 	2023
5. Develop qualified trainers. Provide training of trainers (ToT) sessions to equip the trainers with the necessary skills to effectively deliver the training curriculum		2023
6. Implement the pilot test of the training curriculum in a select number of LAOs to ensure its effectiveness. Conduct regular monitoring and evaluation of the pilot test to identify areas for improvement and make necessary adjustments to the training curriculum.		2024

4.1.2 FINANCE SOLUTION

Increasing sources of revenue for safeguarding biodiversity and environmental management

Contribution to NBSAP, GBF & SDGs

Main finance mechanism

Environmental management fee / user charges

NBSAP Strategy 1, 2, 3

GBF Target 19.1: Financial resources

GBF Target 2: Ecosystem restoration

SDGs 5, 11, 13, 14

Context

As the number of tourists visiting nature-based island destinations in Thailand continues to grow, it can put significant pressure on the environment and biodiversity of these fragile ecosystems. The influx of visitors can contribute to habitat loss, pollution, and disturbance to local wildlife, ultimately impacting the long-term sustainability of the tourism industry. As a result, it has become increasingly important to implement finance solutions, such as user charges, to support biodiversity conservation efforts. The revenue generated from these charges can be used to fund various conservation initiatives, such as habitat restoration, waste management, and environmental education, to mitigate the negative impacts of tourism and ensure the sustainability of these destinations for future generations.

BIOFIN collaborated with the local municipality, NGOs, and businesses to introduce an environmental management fee / user charge on tourist visitors to Koh Tao Island, generating additional revenue for biodiversity conservation efforts. This innovative approach has been a significant development for Koh Tao, providing a reliable source of long-term funding to protect the island's precious coral reefs and marine biodiversity. The success of this initiative can serve as a model for other destinations, demonstrating the benefits of implementing finance mechanisms to support biodiversity conservation in Thailand's nature-based tourism destinations.

Investment case

- Implementing finance solutions, such as user charges, can generate revenue for biodiversity conservation efforts while ensuring the sustainability of these destinations.
- Koh Tao's environmental management fee stands to generate US\$180,000 - 360,000 per year, which shows the potential for significant revenue generation through user charges.
- The revenue generated from user charges can be used to fund environmental conservation initiatives such as coral reef and habitat restoration, waste management, and environmental education, mitigating the negative impacts of tourism.
- Collaborating with local municipalities, NGOs, and businesses to introduce an environmental management fee/user charge can provide a reliable source of long-term funding for biodiversity conservation efforts.
- Implementing user charges can also contribute to the overall economic development of the region by funding environmental conservation initiatives, which attract eco-tourists and promote sustainable tourism practices.

Solution: “The Koh Tao Model”

The implementation of a user charge on Koh Tao Island has resulted in positive finance results. The Koh Tao municipality office, in collaboration with BIOFIN, introduced a legal framework called the “Koh Tao Pier Fee Management and Collection Act, 2021,” which was issued on December 9th, 2021. This Act allows for the collection of a user charge of 20 Baht (approximately US\$0.60) per tourist. The revenue generated from this fee is estimated to be between US\$180,000 - 360,000 per year and will be used for environment, nature, and biodiversity conservation and management at Koh Tao, when Thailand’s tourism industry returns to normal after the COVID-19 crisis.

The user charge officially started on April 4th, 2022, following approval by the Governor of Surat Thani province on December 9th, 2021. This marks a significant milestone as Thailand’s first legally adopted financial mechanism for biodiversity conservation in nature-based tourism destinations at the local government level.

Moreover, Koh Tao Better Together, a crowdfunding campaign, was launched to raise funds for environmental conservation initiatives. The campaign raised US\$91,980, surpassing its initial target of US\$64,800 by 143%. The funds raised were used to implement a “cash for work” program that provided 200 registered tourist boat drivers and taxi drivers with an opportunity to learn new skills in environmentally friendly work while earning temporary basic income for food and utilities. In exchange, they participated in collecting marine debris from the ocean and cleaning beaches for three months, successfully removing over 40 tons of waste. This program had positive outcomes for both households and marine biodiversity resources on Koh Tao Island.

These finance results demonstrate the potential for the replication of similar finance solutions in other nature-based tourist destinations in Thailand to generate revenue for conservation efforts and ensure the long-term sustainability of the tourism industry.

Partners

The Governors in selected pilot sites, sub-district Municipality Offices in selected pilot sites, NGOs, local community, businesses, the Department of Tourism, and the Department of Local Administration.

Scaling up and replication

The success achieved by this initiative on Koh Tao Island stands as an exemplary model for other nature-based tourism destinations. It serves as a compelling demonstration that the implementation of user charges can yield sustainable revenue streams dedicated to biodiversity conservation while concurrently fostering the growth of the tourism industry. Replicating this proven initiative

in other destinations holds the potential to generate additional funds dedicated to biodiversity conservation, thereby contributing to the sustainable development of the broader tourism sector.

In an effort to broaden the positive impact, the successful model pioneered on Koh Tao Island will be extended to encompass three provinces in Thailand: **Surat Thani, Phang-Nga, and Krabi.** This expansion aims to leverage the lessons learned and successes achieved in Koh Tao, adapting, and implementing the model to suit the unique characteristics and biodiversity challenges of each region. By scaling this initiative to cover diverse destinations, the collective efforts can significantly amplify the funds directed towards biodiversity conservation. This not only enhances the protection of natural ecosystems but also underscores the potential for responsible and sustainable tourism practices across multiple regions in Thailand.

The extension of this model aligns with a broader vision of creating a network of environmentally conscious and economically viable tourism destinations. By integrating sustainable funding mechanisms into tourism practices, these regions can balance economic growth with environmental preservation. The replication of this initiative in Surat Thani, Phang-Nga, and Krabi represents a strategic step towards realizing this vision and fostering a more sustainable and harmonious coexistence between tourism development and biodiversity conservation in Thailand.

Action Plan

Key activities	Lead/key stakeholders	Timeframe
1. Identify potential nature-based tourism destinations in Thailand where the tourism industry can be expanded while ensuring the conservation of biodiversity.	<ul style="list-style-type: none"> • BIOFIN • Governors • Municipalities • National government agencies • Local communities • NGOs • Private sector 	2023
2. Develop a legal framework and obtain necessary approvals from local authorities to introduce a tourism user charge in the identified destinations.	<ul style="list-style-type: none"> • BIOFIN • Municipalities 	2023-2024
3. Conduct baseline studies to estimate the potential revenue that can be generated from the user charge in the selected destinations.	<ul style="list-style-type: none"> • BIOFIN 	2023-2024

Key activities	Lead/key stakeholders	Timeframe
4. Develop a revenue-sharing mechanism that involves local communities, NGOs, and the private sector to ensure the transparent and equitable distribution of revenue generated.	<ul style="list-style-type: none"> • National government agencies • Municipalities • Local communities • NGOs • Private sector 	2024
5. Develop an effective communication strategy to educate tourists about the purpose of the user charge and its contribution to biodiversity conservation.	<ul style="list-style-type: none"> • Municipalities • Local communities • NGOs • Private sector 	2024
6. Implement the user charge system, ensuring adequate infrastructure is in place for effective collection and management of the revenue generated.	<ul style="list-style-type: none"> • Municipalities • Local communities • NGOs 	2024-2025
7. Conduct regular monitoring and evaluation of the initiative to assess its impact on biodiversity conservation and the sustainable development of the tourism industry.	<ul style="list-style-type: none"> • Private sector • BIOFIN 	
8. Share the results of the initiative with other potential destinations and stakeholders to encourage replication and scaling up of the initiative.		
9. Provide technical assistance and capacity building to the local authorities, communities, and the private sector in the replication and scaling up of the initiative.		
10. Develop and implement a mechanism for periodic review and update of the initiative to ensure that it remains relevant and effective in achieving its goals.		

4.1.3 FINANCE SOLUTION

Fostering women and youth empowerment in the development of a Sustainable Local Bioeconomy in Phetchaburi Province		Contribution to NBSAP, GBF & SDGs
Main finance mechanism	Community-based tourism	NBSAP Goals1, 2, 3
Solution type	Addressing social, economic, and environmental issues in a destination or community by promoting sustainable tourism practices and empowering local women and youth	GBF Target 16, 19 SDGs 5, 11, 13, 14
Source of funds	Private	
Instrument type	Community-based tourism networks and partnerships. Biodiversity fund	
Finance result	Generate revenues	

Context

Phetchaburi has a unique combination of rich natural assets, cultural heritage, and culinary traditions. Thus, the development of community-based tourism (CBT) is an important feature of development plans for the province. Nonetheless, tourism related to mangroves has not taken off in Phetchaburi. Successful promotion of sustainable tourism provides an alternative source of income for local communities and the government stands to gain from stronger economic development.

Investment case

- The Thai government prioritizes improving the livelihoods of local communities and sustainable tourism development, as reflected in Phetchaburi's 5-year Provincial Development Plan (2023-2027).
- Despite government efforts, there is still room for improvement in developing community-based tourism based on the sustainable use of mangrove resources in the province.
- Sustainable tourism in the mangrove forest and surrounding areas has the potential to generate income for local communities, stimulate the local economy, and contribute to Phetchaburi's economic development.
- Earmarking a portion of tourism profits for sustainable mangrove management and coastal resource conservation will generate revenues for biodiversity conservation while providing incentives for locals to participate in protection efforts.
- Income generated from sustainable use of natural assets will help avoid future expenses on restoration.

Objectives

The finance solution has two main objectives. The first is to establish sustainable community-based tourism in Phetchaburi that revolves around its natural assets. The second is to create a mechanism for allocating a portion of tourism profits to protect the mangrove ecosystem and other environmental causes. To achieve this, there is a need to develop the necessary capacities. Ideally, existing businesses should be transformed into a Community-based Social Enterprise (CbSE) or a network of CbSEs that provide unique, sustainable tourism experiences centred on Phetchaburi's characteristics. These experiences may include tours showcasing traditional lifestyles within mangrove communities, birdwatching, and whale-watching trips, walking tours of mangroves, produce and food from mangrove plants, and other local specialties. The CbSE(s) should establish guidelines that earmark a percentage of CBT profits for a biodiversity fund. This fund will be set up by the CbSE(s) and overseen by a committee of key stakeholders.

Establishment of a Biodiversity Fund: Key Benefits

- The biodiversity fund earmarks a portion of profits from sustainable community-based tourism activities to safeguard mangrove ecosystem biodiversity and support other environmental purposes.
- The fund helps to create a sustainable and mutually beneficial relationship between tourism and the environment.
- It promotes economic growth while protecting and conserving local ecosystems for future generations.
- Earmarking profits from tourism for the sustainable management of mangroves and other coastal resources generate revenue for biodiversity.
- Income generation from the sustainable use of natural assets provides incentives for local communities to participate in the protection of coastal resources, avoiding future expenditures on restoration.
- The fund supports the development of community-based social enterprises (CbSEs) that offer sustainable tourism experiences based on the uniqueness of Phetchaburi.
- improve the livelihoods of local communities, stimulate the local economy, and contribute to the economic development of Phetchaburi.
- The fund encourages the development of local tour operators and community members who can provide nature-based tourism services.
- It promotes the engagement of social enterprises with expertise in CBT to develop capacity for CbSEs.

- The fund can lead to better conservation of marine and coastal resources through the involvement of key partners such as Department of Marine and Coastal Resources (DMCR) and local government agencies.
- It also supports the development of youth tour guides through partnerships with local schools like Bangtaboon Wittaya School.

Partners

DMCR Office 3 oversees the mangroves in Phetchaburi and has information on the sustainable uses of flora and fauna found in mangroves. Local government agencies, including Subdistrict Administration Organizations (SAOs), city councils, and the provincial government, are key partners in the development of CBT. Laem Phak Bia SAO, Pak Thale SAO, and Bangtaboon City Council in Ban Laem District are particularly important partners. Targets for the development of the CbSE(s) should include local tour operators and community members, as well as members of the Bryde's Whale Group and social enterprises with expertise in CBT. Phetchaburi Chamber of Commerce is a key partner due to the link between CBT and the hospitality industry in the province. Bangtaboon Wittaya School is keen to conserve mangrove ecosystems and has a history of developing youth tour guides and should become a key partner in the finance solution.

Action Plan

Key activities	Timeframe
1. Develop a Road Map for sustainable Community-based Tourism (CBT) development	2024
2. Establish CbSE(s) with provisions for earmarking a defined proportion of profits for a biodiversity fund	2025
3. Set up a committee to oversee the biodiversity fund. The committee will oversee managing revenues from sustainable CBT and allocating funds for biodiversity conservation and environmental management.	2025
4. Build capacity for CbSE(s), focusing on the empowerment of women-led businesses, to ensure CBT operates based on sustainable, gender-inclusive tourism practices.	2025-2026
5. Promote tourism activities of the CbSE(s) to attract visitors to the area.	2025-2026
6. Promote the utilization of the earmarked profits to locals, tourists, and all stakeholders.	2026

4.1.4 FINANCE SOLUTION

Using the Thailand Tourism Fee (TTF) to support biodiversity conservation at the local community level

Contribution to NBSAP, GBF & SDGs

Main finance mechanism	Thailand Tourism Fee (TTF)	NBSAP Strategy 1
Solution type	Designating a portion of the tourism fee specifically for the purpose of biodiversity conservation efforts	GBF Target 19.1: Financial resources
Source of funds	Private	SDGs 11, 13, 14, 15,17
Instrument type	Earmarking. Tourism Fund	
Finance result	Generate revenues	

Context

Thailand is renowned for its natural beauty and rich biodiversity, attracting millions of visitors each year. However, the rapid growth of the tourism industry has led to increased pressure on the country's natural resources and ecosystems. To address this issue, a potential solution is to allocate a portion of the funds collected from the Thailand Tourism Fee (TTF) towards biodiversity conservation efforts.

As per the original plan, starting in June 2023, all international visitors to Thailand will be required to pay a 300-Baht tourism fee through the TTF system. It was designed to be implemented by airlines. This fee is in compliance with the revised National Tourism Policy Act of 2008, which allows for the establishment of a fund through fees obtained from foreign visitors. The fund will primarily be used to enhance tourist destinations and provide insurance coverage for tourists.

By earmarking a portion of the tourism fee for biodiversity purposes, Thailand can support the conservation of critical ecosystems and promote sustainable development. One potential approach could be to allocate 1% of the tourism fee towards biodiversity conservation efforts, which would amount to approximately 33 Baht per visitor.

This investment in biodiversity conservation could have a positive impact on the long-term sustainability of the tourism industry in Thailand. By preserving the natural resources that attract visitors to the country, Thailand can continue to offer unique and high-quality experiences to tourists while also protecting its precious ecosystems for future generations.

Investment case

- The Ministry of Tourism and Sports is expected to receive an estimated 40 million visitors next year.
- Allocating 1% of the tourism fee towards biodiversity conservation could potentially generate around 100 million Baht annually, which could be used to support various conservation efforts, including protection of endangered species, ecosystem restoration, and promotion of sustainable community-based tourism.
- This approach could have a positive impact not only on the environment but also on the tourism industry in Thailand, which heavily relies on its natural attractions.
- Moreover, this could attract ecotourists who are looking for eco-friendly travel options, leading to increased revenue and economic growth in the long run.

Objectives

The objective of the finance solution is to allocate a portion of the Thailand Tourism Fee (TTF) towards biodiversity conservation efforts in order to support the protection of important ecosystems and promote sustainable development.

To implement this objective, the Tourism and Sports Ministry and other relevant government agencies could establish a separate fund dedicated to biodiversity conservation efforts, with a clear mandate and guidelines for its use. This fund could be managed by experts in the field of conservation, including representatives from environmental organizations and local communities, to ensure transparency and accountability.

The allocation of funds could be based on identified priority areas for conservation, such as protecting threatened species, restoring degraded ecosystems, and establishing more OECMs. This would involve setting up a framework for assessing and selecting projects that align with the objective of supporting the protection of important ecosystems and promoting sustainable tourism.

Additionally, the government could establish mechanisms that enable tourists to participate in nature conservation and sustainable tourism practices. This could include initiatives such as eco-tourism certification programs and educational campaigns that highlight the benefits of responsible travel. By promoting sustainable tourism practices, the government can help create a more informed and engaged tourism industry that is committed to protecting Thailand's natural resources and ecosystems.

Overall, the successful implementation of this finance solution would require careful planning, coordination, and stakeholder engagement to ensure that the funds are allocated effectively and efficiently towards biodiversity conservation and sustainable development in Thailand.

Partners

The potential partners for this project include the Department of Tourism under the Ministry of Tourism and Sports, other relevant government agencies, environmental organizations, local communities, and experts in the field of conservation. These partners would be involved in developing guidelines for earmarking a portion of the collected revenue for biodiversity conservation efforts, setting up a framework for assessing and selecting projects, managing the funds, and promoting sustainable tourism practices. Additionally, airlines and other tourism-related businesses could also be involved in the project by collecting and remitting the tourism fee and promoting sustainable tourism practices to their customers.

Action Plan

Key activities	Lead/key stakeholders	Timeframe
1. Develop guidelines for earmarking a portion of the Thailand Tourism Fund (TTF) towards biodiversity conservation efforts, in collaboration with relevant government agencies, environmental organizations, and local communities.	<ul style="list-style-type: none"> BIOFIN Department of Tourism National government agencies Environmental organizations, local communities, and the tourism industry. 	2025
2. Identify priority areas for conservation, such as the protection of threatened species and the restoration of degraded ecosystems, through stakeholder consultations and expert assessments.		2025-2026
3. Establish a mechanism for assessing and selecting conservation projects that align with the objective of protecting important ecosystems and promoting sustainable development.		2025-2026
4. Ensure transparency and accountability in the allocation and use of funds through regular reporting and monitoring of project outcomes.		2025
5. Work with tourism industry stakeholders to raise awareness about the importance of conservation and sustainable tourism practices, through initiatives such as eco-tourism certification programs and educational campaigns.		2025-2026

4.1.5 FINANCE SOLUTION

<u>Redirect or eliminate subsidies that could potentially have adverse effects on biodiversity and ecosystems and suggest options for their redesign.</u>		Contribution to NBSAP, GBF & SDGs
Main finance mechanism	Government subsidies	NBSAP Goals 1, 3
Solution type	Identify and redesign subsidies with negative impacts on biodiversity	GBF Target 18, 19
Source of funds	Public	SDGs 13, 14 & 15
Instrument type	Fiscal	
Finance result	Realignment; Avoid future expenditures; Deliver better	

Context

Policy reforms to end or repurpose subsidies that are harmful to biodiversity can make an important contribution towards closing the biodiversity finance gap by reducing the pressure on biodiversity and thus reducing the financing needed to protect, conserve, and restore. Thailand shall commit to review national subsidies and to redirect or eliminate all subsidies and incentives harmful to biodiversity, and for nature-positive incentives to be scaled up as soon as possible.

Thailand, like many other countries, faces the challenge of balancing economic development with environmental sustainability. The country has a rich biodiversity, including a variety of ecosystems such as forests, wetlands, and coral reefs, which are important for both ecological and economic reasons. However, there are concerns that harmful subsidies and incentives may be negatively impacting biodiversity, such as those in the agricultural and fishery sectors. These subsidies, which may have been intended to improve local livelihoods and promote economic growth, can result in habitat destruction, land degradation, nutrient pollution, and over-exploitation of natural resources. As a result, there is a need to identify and eliminate such subsidies to promote more sustainable use of natural resources and protect biodiversity in Thailand. This would require a careful assessment of the different subsidies and incentives in place, and the development of alternative policies that support sustainable economic development while also protecting the environment.

Investment case

- Eliminating harmful subsidies can help preserve biodiversity and protect the environment in Thailand in line with GBF Target 18, which in turn can benefit local communities and the wider society.
- By eliminating harmful subsidies, the government can save significant costs that are currently being spent on these subsidies. This can create fiscal space for investing in more effective policies that promote sustainable economic development and biodiversity conservation.
- Eliminating harmful subsidies can lead to more efficient use of natural resources, which can improve resource management and help promote sustainable economic development.

Objectives

The study aims to identify key issues concerning policies/ laws, subsidies, and incentives of the Thai government that are key drivers of biodiversity loss and damaging the natural ecosystem.

The following proposed categories will be selected as the scope of work of the study:

- a. Policies and laws: Policies, without reasonable consideration from experts, could have severe consequences for biodiversity. Moreover, policies may lead to legislation, and once enacted into law, they could cause significant disaster for biodiversity and ecosystems. For example, the new Land Tax Act, issued in 2019, has forced landowners all over Thailand to plant only 53 state-approved crops, resulting in the destruction of natural vegetation on their land. Similarly, the Thai government's carbon credit policies, which were implemented without due diligence, have encouraged both the public and private sectors to promote monoculture practices in natural habitats across the country that has led to the loss of biodiverse ecosystems.
- b. Construction projects in natural ecosystems have significant impacts on riverine ecosystems, i.e., unfinished concrete dikes along streams and rivers nationwide, as well as check dams in almost all waterways across the country. Terrestrial-coastal ecosystems are also affected, including seawalls and other coastal structures along the shores of both the Gulf of Thailand and the Andaman Sea. Construction in the most fragile forest ecosystems at mountain peaks, i.e., viewpoint towers on various mountain summits, has destroyed local biodiversity, especially native flora.

- c. Conservation and restoration projects: there are various conservation projects to protect biodiversity and ecosystems. Such projects, on the contrary, have made the diversity and genetic variations of the organisms even less.

Methodology for biodiversity harmful subsidies assessment (BIOFIN Workbook 2018)



Action Plan

Key activities	Timeframe
1. Listing subsidies and expenditures that harm biodiversity and ecosystems	2023 - 2025
2. Validating the nationwide list of subsidies and proposing the three most impactful subsidies	
3. Proposing actions on re-design subsidies	
4. Discussion with policy makers towards re-design subsidies	
5. Integrating all sectors to implement policy changes	

4.2 Finance Sector Solutions

4.2.1 FINANCE SOLUTION

Implementing TNFD (Task Force on Nature-related Financial Disclosures) guidelines to assist and guide Thai businesses in disclosing their nature-related risks and to contribute to biodiversity conservation	Contribution to NBSAP, GBF & SDGs
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Main finance mechanism	Risk management and disclosure framework	NBSAP Goal 3
Solution type	Tools & guidelines to assist and guide Thai businesses in disclosing their nature-related risks and to contribute to biodiversity conservation	GBF Targets 14, 15, 16, 19. SDGs 8, 9, 13, 14, 15 & 17
Source of funds	Private	
Instrument type	Market mechanisms	
Finance result	Budget realignment	

Context

Bio-Circular-Green economy (BCG) and ESG (Environmental, Social, and Governance) frameworks are increasingly critical in the investment landscape in Thailand as they play a pivotal role in financing sustainability efforts. The Stock Exchange of Thailand (SET) regularly organizes capacity-building and training activities to promote corporate sustainability management, ESG reporting, and responsible investing. In the context of biodiversity conservation in Thailand, ESG and impact investment can significantly contribute by channeling capital towards projects and initiatives that promote sustainable practices, protect natural habitats, and support the preservation of the country's diverse ecosystems.

However, despite these positive trends, significant barriers still need to be addressed, including a lack of awareness regarding the importance of biodiversity, reducing infrastructure, regulatory and informational barriers, and lack of an investable pipeline of projects. Lastly, the government must create a policy framework that encourages and incentivizes private sector investment in sustainable practices.

Insights from Thai Stakeholders: Shaping Biodiversity Finance

In Thailand, a strong alliance of stakeholders, including key actors across different sectors, recently collaborated to exchange information and suggest strategies to boost funding for biodiversity (FIN4BIO, 2023). Their collective aim is to align economic growth with biodiversity conservation.

Three key sectors—policy, private, and financial—participated in consultations and discussions. They provided insights into their needs and proposed financial strategies. The input gathered from these stakeholders identified three key aspects regarding biodiversity finance in Thailand:

1. The complex nature of biodiversity remains a challenge for the financial and business sectors, despite an increasing focus on the issue.
2. Green finance mechanisms have primarily concentrated on low carbon emissions and greenhouse gas (GHG) reduction, with limited emphasis on biodiversity.
3. Financial institutions and major companies are progressively embracing the Bio-Circular-Green economy (BCG) and Environmental, Social, and Governance (ESG) concepts, adopting them as frameworks for their operational strategies.

Stakeholders from the three sectors have reached an agreement to drive forward the issue of finance for biodiversity, which will prioritize the food and agriculture sectors as well as the tourism sector.

Investment case

- Investing in biodiversity conservation can reduce business risks associated with environmental degradation, climate change, and biodiversity loss.
- Biodiversity-friendly business practices can also enhance brand reputation, attract customers who value sustainability, and generate financial returns.
- The Stock Exchange of Thailand (SET) is seeking to promote ESG and sustainability initiatives, with a focus on encouraging listed companies to integrate ESG practices into their business strategies and practices. In addition, the SET has collaborated with various organizations to promote sustainable finance, including issuing green bonds, and promoting the use of sustainability-linked loans.
- The UN Global Compact Network in Thailand also plays a critical role in engaging the private sector in biodiversity conservation efforts. The network provides a platform for businesses to collaborate with other stakeholders, including civil society organizations, academia, and government agencies, to develop innovative solutions that address biodiversity and sustainability challenges.

Objectives

The objective of this finance solution is to support Thai Stakeholders with tools, approaches or guidelines on business and biodiversity. Platforms such as the **Task Force on Nature-related Financial Disclosures (TNFD)** aim to support companies in integrating biodiversity concerns into their financial reporting. By providing a framework for companies to disclose their nature-related risks and opportunities, the TNFD enables investors to better understand the impact of a company's activities on the natural environment and make more informed investment decisions. This, in turn, can help drive investment towards sustainable and responsible companies, encouraging the private sector to take a more active role in promoting biodiversity conservation and sustainable development.

The Nature-Finance Alignment Toolkit

To enhance the alignment of public and private financial flows with nature, concrete solutions are crucial. A promising solution is the development of the Nature-Finance Alignment Toolkit by Nature Finance, which enables governments and financial actors to measure, identify and disclose their alignment with nature. The Alignment Tool is a pioneering tool of its kind that works towards identifying policy solutions and providing a foundation for increasing nature-positive outcomes within the financial sector. By analysing public and private financial flows, the tool assesses their alignment with nature, and the data generated can be used within TNFD framework.

Solution

In order to create a successful stakeholder ecosystem for biodiversity finance in Thailand, it is essential that stakeholders collaborate to establish impact measurement and reporting standards, promote awareness and capacity among potential investors and investees, develop tools and guidelines on businesses' nature-related dependence and impacts, and use innovative financing toolkits/mechanisms that can mobilize funding for conservation efforts.

As part of this effort, the solution aims to assist the private sector in engaging with the TNFD/ Nature-Finance Alignment Toolkit. By enabling private sector involvement in these platforms, the solution aims to foster sustainable practices and encourage businesses to incorporate nature-related concerns into their operations and decision-making procedures.

Partners

This finance solution will play a key role in collaborating with the Security Exchange Commission (SEC), the Stock Exchange of Thailand (SET), and the UN Global Compact to advocate for the adoption of TNFD principles in Thailand. SET has been at the forefront of knowledge dissemination regarding the impact of climate change on businesses through the Task Force on Climate-related Disclosures (TCFD). Conducting a series of workshops focusing on TCFD and the SDGs, Both SEC and SET have aimed to enhance understanding regarding the economic risks and opportunities arising from climate change, including providing information on governance, metrics, and target setting. Further collaboration with the Agence Française de Développement (AFD) could support the implementation of the reporting system through TNFD in Thailand.

BIOFIN's approach is to support the overall adoption of the TNFD framework in Thailand, starting with a selected group of Thai financial institutions and corporates. In collaboration with the Security Exchange Commission and the Stock Exchange of Thailand, this finance solution aims to establish a group of 'frontrunners' based on their demonstrated commitment to sustainability and their potential to influence the widespread adoption of TNFD. By leveraging their influence, this solution seeks to inspire and equip a broader range of financial institutions and organisations with best practices that support the preparation of TNFD reports, consequently promoting biodiversity issues within the sector.

Action Plan

Key activities	Lead/Key stakeholders	Timeframe
1. Offer training and capacity-building programs to companies on disclosing nature-related risks and opportunities in their financial reports.	<ul style="list-style-type: none">• BIOFIN• SEC• SET	2024-2025
2. Develop standardized framework and guidelines, adapted to the Thai context, for frontrunner companies to disclose nature-related risks and opportunities.	<ul style="list-style-type: none">• UN Global Compact members• Frontrunner companies• Thailand Business Council for Sustainable Development (TBCSD)	2024-2025
3. Encourage the Thai business sector to prepare reports demonstrating the impact of their business operations on biodiversity or how they contribute to biodiversity conservation, with an information and service centre serving as a reporting investigator.	<ul style="list-style-type: none">• TEI• AFD	2025-2026
4. Share best practices and lessons learned with other countries and regions to promote the replication of successful models and approaches to biodiversity conservation and sustainable development.		2026

4.2.2 FINANCE SOLUTION

<u>Aligning Thailand's Green Taxonomy with the Global Biodiversity Expenditure (GLOBE) Taxonomy to ensure consistency in classifying and identifying biodiversity-positive activities and investments.</u>	Contribution to NBSAP, GBF & SDGs
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Main finance mechanism	Sustainable Taxonomy	NBSAP Goal 3
Solution type	Alignment of the GLOBE Taxonomy with Thailand's Green Taxonomy	GBF Targets 14, 15, 19
Source of funds	Public/Private	SDGs 8, 9, 13, 14, 15 & 17
Instrument type	Market mechanisms	
Finance result	Budget realignment	

Context

In the global landscape of development finance, taxonomies serve as essential frameworks, categorizing economic activities based on their environmental impact. Specifically, a 'Sustainable' Taxonomy identifies and classifies activities that contribute to environmental sustainability, guiding investments towards initiatives aligned with key environmental goals.

Thailand's Green Taxonomy

Thailand, recognizing the importance of integrating sustainability into its financial sector, has introduced a Green Taxonomy. This classification system focuses on environmentally sustainable economic activities, aiming to provide clear criteria for identifying initiatives that contribute positively to climate resilience, biodiversity conservation, and resource efficiency. The Green Taxonomy in Thailand acts as a strategic tool to channel financial resources into activities that align with the nation's sustainability objectives.

Simultaneously, at the international level, the **Global Biodiversity Expenditure (GLOBE) Taxonomy** has emerged as a comprehensive system for categorizing and detailing expenditures related to biodiversity and ecosystems. The GLOBE Taxonomy plays a crucial role in enhancing understanding, analysis, and appropriate attribution within the realm of biodiversity financing. Its structured framework provides a standardized approach for countries to assess and report biodiversity-related expenditures.

Investment case

- The harmonization of Thailand's Green Taxonomy with the GLOBE Taxonomy ensures a standardized and transparent classification of biodiversity-related expenditures. Investors benefit from a clearer understanding of sustainable initiatives, reducing ambiguity and fostering informed decision-making.
- Aligning with the GLOBE Taxonomy positions Thailand's Green Taxonomy on the global stage. This harmonization enhances the country's recognition and compatibility with international biodiversity financing standards, attracting global investors seeking alignment with global frameworks.
- The harmonized taxonomies simplify the reporting and analysis of biodiversity-related expenditures. Investors and financial institutions can more effectively track and assess the environmental impact of their portfolios, aligning with evolving ESG (Environmental, Social, and Governance) considerations.
- Standardized taxonomies contribute to risk mitigation by offering a common language for assessing environmental risks and opportunities. Investors can make more resilient and sustainable choices, aligning their portfolios with Thailand's environmental objectives and global biodiversity targets.

Objectives

The Thailand Green Taxonomy is a collaborative effort between industry and government, spearheaded by the Bank of Thailand. This initiative is dedicated to formulating a Thai sustainable finance taxonomy, supported by funding from the Thai Government and emphasizing a joint commitment among government entities, financial institutions, and industries to foster sustainable finance markets in Thailand.

In the initial development phase (Phase I), the project concentrated on climate mitigation criteria for a minimum of two environmental objectives. This phase laid the groundwork for subsequent taxonomy phases. The identified environmental objectives for the initial development phase were:

1. Climate change mitigation.
2. Climate change adaptation.

Following this initial phase, the subsequent development phase will encompass the remaining four environmental objectives:

1. Sustainable use and protection of marine and water resources.
2. Protection and restoration of biodiversity and ecosystems.
3. Pollution prevention and control.
4. Resource resilience and transition to a circular economy.

This phased approach aligns with Thailand's sustainability goals and the targeted objectives for specific sectors. The sector-specific plans reinforce Thailand's commitment to mobilize private sector investment, address climate/ biodiversity challenges, and attain sustainability targets. The development phases aim to establish a robust taxonomy framework, potentially incorporating permanent institutional arrangements for taxonomy development and maintenance. The finalized taxonomy criteria may also be integrated into the regulatory architecture to enhance support for sustainable finance in Thailand.

Partners

The collaborative effort for Thailand's Green Taxonomy involves key partnerships between the Bank of Thailand (BOT), the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Thailand Environment Institute (TEI), and the Biodiversity Finance Initiative (BIOFIN). Each partner plays a crucial role in contributing expertise and resources to the initiative.

1. Bank of Thailand (BOT): As the central bank of Thailand, BOT provides policies, guidelines, and expertise in finance and law to the partnership. Its involvement signifies the commitment of the financial sector to driving sustainable finance initiatives. Leveraging its influence and authority, BOT contributes to the development and implementation of sustainable finance practices in Thailand.
2. Office of Natural Resources and Environmental Policy and Planning (ONEP) works closely with the BOT through the designated working group to co-develop the taxonomy. ONEP will act as the reference for identifying a whitelist of nature-positive activities.
3. Thailand Environment Institute (TEI): TEI, as an environmental research and policy organization, provides specialized knowledge and in-depth insights into environmental conservation and sustainability. TEI's role involves contributing to the formulation of taxonomy criteria related to environmental objectives, ensuring that the taxonomy aligns with Thailand's broader environmental and sustainability goals.
4. BIOFIN contributes to the partnership by enhancing capacity-building initiatives related to biodiversity and ecosystem finance. By incorporating BIOFIN into capacity-building efforts, the project aims to strengthen both understanding and the comprehensive integration of biodiversity considerations within the taxonomy. This ensures that the taxonomy not only aligns with financial standards but also prioritizes biodiversity conservation.

Action Plan

Key activities	Lead/Key stakeholders	Timeframe
Capacity Building with GLOBE Taxonomy Integration: 1. Collaborate with the Biodiversity Finance Initiative (BIOFIN) to integrate capacity-building programs related to biodiversity and ecosystems into the taxonomy development process. 2. Conduct workshops and training sessions to enhance understanding and awareness among stakeholders about the importance of biodiversity in sustainable finance.	<ul style="list-style-type: none"> • BIOFIN • Bank of Thailand • Thailand (BOT) Environment Institute (TEI) • Office of Natural Resources and Environmental Policy and Planning (ONEP) 	2024 - 2026

4.2.3 FINANCE SOLUTION

<u>Developing local bio-economy: Leveraging biodiversity and nature credits for resilient mangrove ecosystems in Phetchaburi Province</u>		Contribution to NBSAP, GBF & SDGs
Main finance mechanism	Biodiversity credits	NBSAP Goals 1, 2, 3
Solution type	Nature-based solution that involves sustainable mangrove management and the generation of biodiversity credits	GBF Target 15, 19 SDGs 9, 13, 14
Source of funds	Private	
Instrument type	Market	
Finance result	Generate revenues; Avoid future expenditures	

Context

As climate change impacts become more visible, governments, the private sector, and individuals are increasingly aware of the importance of mitigating its effects. Thailand, as a party to the United Nations Framework Convention on Climate Change (UNFCCC), aims to reduce greenhouse gas emissions by 20-25% by 2030. One of the strategies in Thailand's Climate Change Master Plan (2015-2050) is to increase the area of mangrove forests.

The Department for Marine and Coastal Resources (DMCR) recognizes the vital role of mangroves in mitigating climate change and is involving the private sector and communities in conservation efforts. In 2021, DMCR issued regulations to allow organizations and third parties to invest in planting and maintaining mangroves through a carbon credit scheme. In the second quarter of 2022, DMCR invited interested parties to join the joint investment scheme, receiving carbon credits from mangroves as a return, under DMCR's regulatory framework. Investors can sell the carbon credits generated, and at least 10% of the proceeds from the sale are shared with DMCR.

At the international level, the adoption of the Paris rulebook on the voluntary cooperation of countries in achieving greenhouse gas emission reduction targets in 2021 has opened the door to overseas investments in the generation of carbon credits. In 2022, Thailand and Switzerland entered into a bilateral climate protection agreement, paving the way for Switzerland to invest in carbon offsetting projects in Thailand under Article 6.2 of the Paris rulebook. This agreement provides further opportunities for the development of Thailand's carbon credit market.

UNDP is part of the Biodiversity Credit Alliances (BCA). BCA is a voluntary international alliance that brings together diverse stakeholders to support the realization of the Kunming–Montreal Global Biodiversity Framework, in particular Targets 19(c) and (d), which “encourage the private sector to invest in biodiversity” utilizing, amongst others “biodiversity credits ... with social safeguards.” It exists to provide guidance for the establishment of a credible and scalable market that stands up to the scrutiny of multiple stakeholders. Key among them are Indigenous Peoples and Local Communities at the frontline of the biodiversity crisis.

Thailand is considering the implementation of a mandatory emission trading system as part of adopting a compulsory emission reduction policy. The Department of Climate Change and Environment encourages all sectors to reduce greenhouse gas emissions through voluntary efforts called the “Thailand Voluntary Emission Reduction Program (T-VER)”. The Thailand Greenhouse Gas Management Organization (TGO) established a T-VER program in 2014 as a means for the domestic carbon credit trading system.

With this, BIOFIN views that the development of a national platform of Biodiversity Credit in Thailand is important and requires policy support from the government. This finance solution will follow the Biodiversity Credit Alliance (BCA) principles and apply them in sustainable mangrove management in Phetchaburi province as a pilot run. Further, BIOFIN will explore potential investors at both international and national levels to support the local community's biodiversity credit mechanism.

The Biodiversity Credit Alliance (BCA) is a partnership facilitated by UNDP and UNEP FI, working to help steer the development of a credible and scalable biodiversity credit market which is based on a framework of high-level, science-based principles. One of the purposes of BCA's work is to help biodiversity crediting avoid a "false start" from crediting efforts or transactions that set out with the best of intentions yet end up being criticized because they do not really succeed in helping biodiversity. [BCA, May 2024]

BCA proposes a simple and inclusive definition of "biodiversity credit":

A biodiversity credit is a certificate that represents a measured and evidence-based unit of positive biodiversity outcome that is durable and additional to what would have otherwise occurred.

Investment case

- Generating income from nature credits through community involvement in sustainable mangrove management contributes to various national and provincial-level priorities.
- The carbon credits generated help to achieve Thailand's climate change target.
- Replanting and conserving mangroves align with Thailand's National Biodiversity Strategy and Action Plan (NBSAP), the Ministry of Natural Resources and Environment (MONRE)'s 20-Year Strategic Plan, and the Department for Marine and Coastal Resources (DMCR)'s 20-Year Action Plan, as well as the country's 40 percent forest cover target in the National Forest Policy.
- Income generated from the sale of nature credits can supplement the incomes of local communities, contributing to local economic development goals.
- Revenue generation from sustainable mangrove management provides incentives for local communities and the private sector to engage in nature-positive activities.

- Nature credits generate revenues for biodiversity conservation and provide incentives for sustained conservation efforts, helping to avoid future expenditures on resource rehabilitation.
- Explore market-driven mechanism collaboration with potential investors through the biodiversity credit at international and national levels.

Objectives

The objectives of this finance solution are two-fold. The first is to develop the capacity of local communities to deliver nature credits generated from sustainable mangroves management. The second is to develop a mechanism for earmarking a portion of the profits generated from the sale of nature credits for biodiversity. Generation of nature credits could be undertaken by the CbSE(s) envisioned under the sustainable tourism finance solution. A set proportion of profits from the sale of nature credits can be a source of revenues for the biodiversity fund managed by a committee of key stakeholders. The remaining sums could be reinvested in the generation of more nature credits.

Partners

Key partners are DMCR Office 3 and local communities, especially the envisioned CbSE(s). Potential buyers of nature credits include the private sector, government agencies, private citizens, and even foreign governments. Key partners in terms of the carbon credit standards to be applied depending on the nature of the project and the purpose of the nature credits. Several carbon credit markets currently exist, with different standards regarding the issuance of carbon credits. The local voluntary carbon market follows the Thailand Greenhouse Gas Organization's standard under the Thailand Voluntary Emission Reduction Program (T-VER). However, there are other voluntary and mandatory carbon markets, each with its own sets of standards for the issuance of carbon credits. In the initial stage of development, it is advisable to follow the T-VER certification to benefit from DMCR's carbon credit program.

Action Plan

Key activities	Timeframe
1) Build capacity for CbSE(s) and/or local communities to offer nature credits.	2025
2) Set up provisions to earmark a defined proportion of profits from the sale of nature credits into the biodiversity fund.	2025
3) Connect communities/CbSE(s) with investors who are interested in obtaining nature credits.	2025
4) Investors continually sponsor mangroves management for carbon credit generation.	2025-2033
5) Set up monitoring and data collection systems.	2025
6) Replant/maintain/manage mangrove resources.	2025-2033
7) Certify nature credits and transfer to investor.	2026-2033*

4.2.4 FINANCE SOLUTION

<u>Financing the national tiger action plan (NTAP) through a Tiger Ecosystems Bond</u>		Contribution to NBSAP, GBF & SDGs
Main finance mechanism	Wildlife Conservation Bond	NBSAP Goals 1, 3
Solution type	A financial instrument designed to support tiger conservation plans in Thailand	GBF Targets 3, 14, 19 SDG 15
Source of funds	Private	
Instrument type	Market mechanisms	
Finance result	Generate revenues	

Note: *Timeframe is in accordance with the 2021 DMCR rules.

Context

Thailand has made significant progress in tiger conservation and is the only country in Southeast Asia where the population of tigers has started to increase. This has been a result of the commitment and efforts of the government to protect the tiger landscapes. However, most of the population remains in a couple of protected areas. Reducing the risks to tigers in Thailand will also require recovering and protecting the population in other tiger landscapes within the country.

Although there are multiple advances and efforts in terms of public sector policies and actions aimed at addressing the problems of biodiversity loss and climate change, these initiatives still need to be linked with financial resources for their implementation. When it comes more specifically to financing wild tiger conservation, the global fiscal gap was estimated to be at least US\$138.477 million in 2020 and is expected to increase further annually. In this sense, unlocking private sector financing through specific transactional instruments such as wildlife conservation bonds is detected as a fundamental axis to increase financial flows for the conservation of biodiversity and the protection of ecosystems and natural capital, particularly in the context of tiger conservation.

Financing is identified as one of the key pillars to recover the population of tigers through the protection and restoration of tiger landscapes through the National Tiger Action Plan (NTAP). Conservation of tiger landscapes requires taking a landscape approach and aligning financing ambitions – both in terms of long financing duration and large financing size – for implementing a landscape approach. However, traditional grant-based financing, although critically important, is unlikely to bridge the financing gap required for tiger landscape conservation. With this background, UNDP has been designing a financing structure–Tiger Ecosystems Bond– to finance the protection and restoration of tiger landscapes (see Pre-feasibility Assessment for Financing the National Tiger Action Plan through a Tiger Ecosystem Bond). Several options in terms of structuring the bond instrument exist with different pros and cons to each of the options. These options include both balance sheet and off-balance sheet financing solutions. The viability of these different options depends on the business case for investments and a sound legal framework to generate revenue through appropriate avenues, including payment for ecosystem services, eco-tourism, and forestry.

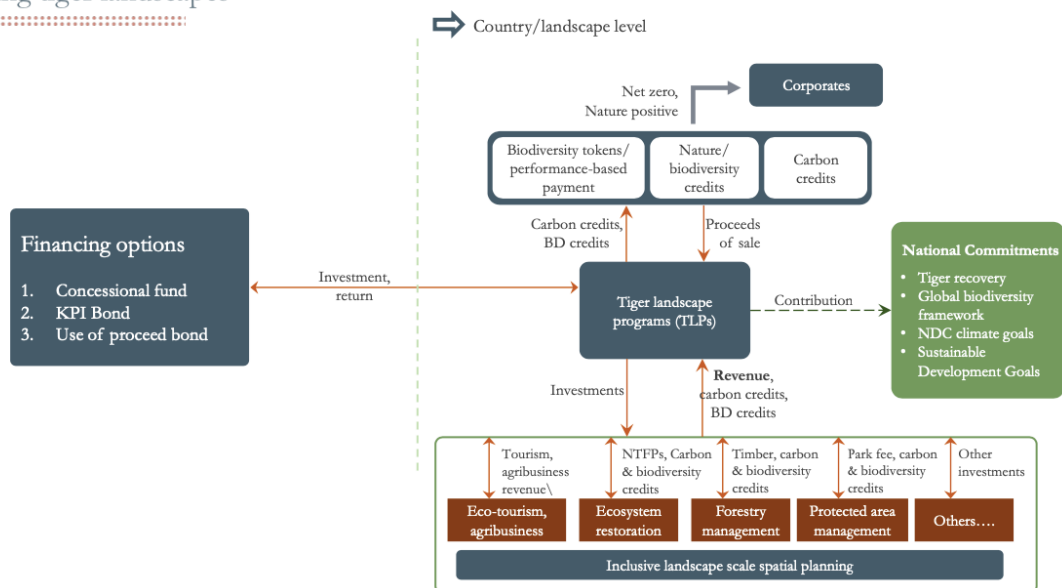
Investment case

- Thailand stands as a unique success story in Southeast Asia, being the only country where the tiger population has shown a positive trajectory, with increases recorded in certain protected areas.
- Despite the growth in tiger numbers, a significant portion of the population is concentrated in limited protected areas. Expanding the population beyond these areas is crucial for ensuring the species' overall well-being.
- National Tiger Action Plan (NTAP): The government of Thailand is finalizing the NTAP, emphasizing finance as a pivotal component for tiger population recovery and the safeguarding of tiger landscapes.

- Conservation efforts will require a comprehensive landscape approach, aligning long-term and substantial financial ambitions to execute conservation strategies effectively.
- Involving the private sector in wildlife conservation bonds can significantly bolster financial support, contributing to biodiversity and ecosystem protection.
- The Tiger Ecosystems Bond, proposed by UNDP, aims to provide a financial structure supporting the protection and restoration of tiger landscapes. This innovative financing instrument offers a variety of structuring options with distinct advantages and limitations.
- Traditional grant-based financing, while crucial, might not bridge the financial gaps needed for comprehensive tiger landscape conservation. The Tiger Ecosystems Bond provides an avenue to address these gaps and stimulate much-needed financial flows for tiger conservation.

Figure 8: Financing Tiger Landscapes in Thailand

Financing tiger landscapes



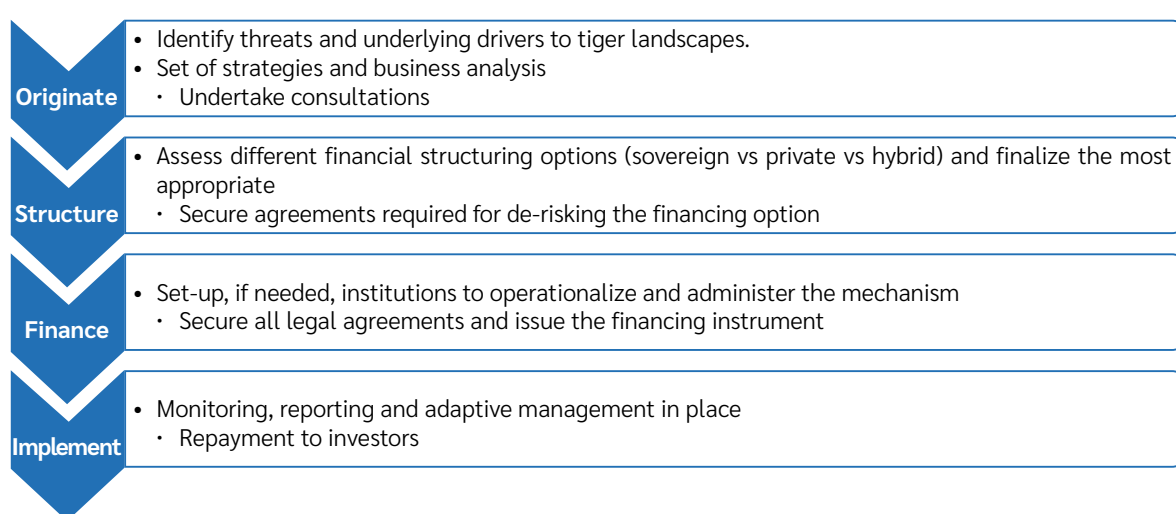
Source: UNDP, 2023

Objectives

The initial objectives of this finance solution are to review local policy and institutions, assess the alignment of legal frameworks on the market for ecosystem services, particularly carbon and biodiversity; assess the financial needs for tiger landscapes and; identify the most financially viable intervention types in the priority tiger landscapes; assess the appropriateness and local market conditions for investments into different sectors through different legal entities in the target landscapes.

Figure 9: Step-by-step approach of the tiger ecosystems bond

Step-by-step approach that can be undertaken:



Partners

- Seeking consultations with the Government (Ministry of Finance, Securities and Exchange Commissions, Ministry of Natural Resources and Environment) to discuss if debt instrument is appropriate to finance investment into the business portfolios identified above, and what kind of instrument could be appropriate within the current fiscal space of the country (i.e., sovereign vs private issue, investment of proceeds and mechanism for repayment, basic parameters such as volume, tenor, and key performance indicators).
- Launching stakeholder engagement to develop granular landscape plans and business portfolios.
- Finalizing the debt structuring process, through engagement between Government, financial institutions, concessional capital providers, communities, and other local stakeholders.

Action Plan

Key activities	Timeframe
1. Policy and Institutional Review	2023- 2024
2. Investment viability	
3. Budget & Expenditure Review	
4. Financial Needs Assessment	
5. Finance plan and solutions	

4.2.5 FINANCE SOLUTION

<u>Deployment of conservation vehicle license plates to support wildlife conservation in Thailand</u>		Contribution to NBSAP, GBF & SDGs
Main finance mechanism	Conservation license plates	NBSAP Goals 1, 3
Solution type	Special license plates are sold at a higher price to car owners. The extra income is earmarked for wildlife conservation, especially for wildlife and protected areas.	GBF Targets 3, 14, 16, 19. SDG 15
Source of funds	Private	
Instrument type	Market mechanisms Earmarking	
Finance result	Generate revenues	

Context

Thailand has over 44 million cars and motorcycles, and this number is increasing. The government suggests a solution to protect wildlife by offering a special conservation license plate that can be purchased at a higher price by vehicle owners. The Department of Land Transport has experience with selling special license plates, such as “lucky number” plates. A market survey conducted by NIDA with 1,122 respondents showed that most Thai vehicle owners are willing to pay US\$33 for a conservation license plate. This finance solution is expected to generate at least US\$11 million for the Thai government, which will then be allocated to conservation efforts through strategic planning and budgeting between the Finance, Land Transport, and Natural Resources and Environment ministries. The solution aims to expand the range of special license plates in Thailand to include conservation plates to raise funds for wildlife conservation, enabling public participation.

Investment case

- Conservation license plates can generate significant revenues as there is a high demand and willingness to pay among consumers in Thailand.
- There are opportunities to expand the range of special license plates offered in Thailand, following successful models like the ‘lucky number’ plates in Trang province that raised US\$1.6 million over the past 4 years.
- A cross-sectoral revenue earmarking policy is an innovative biodiversity finance solution for Thailand, necessary to overcome financial challenges.
- The partnership with the finance and fiscal sectors can provide an e-payment and e-auction platform development for the Department of Land Transportation, enabling the public to easily support the environment through products they already use.

Objectives

The objective of the proposed solution is to create opportunities for public fundraising to support wildlife conservation by introducing special conservation license plates as an extension of the current range of special license plates offered in Thailand. This initiative can potentially leverage the Department of Land Transport’s experience with auctioning special ‘lucky number’ license plates.

The National Working Group for implementation of the finance solution on conservation license plates (WG-CLP), comprising representatives from key government agencies, has been established by the Office of Natural Resources and Environmental Policy and Planning in collaboration with BIOFIN Thailand. The Working Group is responsible for the implementation of conservation license plate scheme and presenting progress updates to the BIOFIN Steering Committee.

Partners

Spearheaded by the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Department of Land Transport (DLT) and the Department of National Parks, Wildlife and Plant Conservation (DNP) will jointly implement the initiative due to their respective mandates related to legal vehicle license permits and managing protected areas. The DLT suggested that the BIOFIN shall engage with the Department of Local Administration (DLA) through the Governor’s Offices at the provincial level. With the new fiscal transfer system, revenue generated from the DLT will be transferred to the provincial level. The finance solution can earmark a portion of the provincial budget to support biodiversity conservation at the sub-national level. Furthermore, the finance and banking sector in Thailand can provide its FINTECH support in developing the e-payment system following the rules and regulations of the Ministry of Finance.

Action Plan

Key activities	Lead/Key stakeholders	Timeframe
1. Establish a National Working Group for Conservation License Plate finance solution	<ul style="list-style-type: none"> • BIOFIN • ONEP • Department of Land Transport • Department of Local Administration • Department of National Parks, Wildlife and Plant Conservation • The Comptroller General's Department • National Government agencies 	2024
2. Develop a legal and organisational framework for the collection and allocation of revenue generated from the sale of conservation license plates by the sub-national government.	<ul style="list-style-type: none"> • BIOFIN • Legal/policy specialist 	2025
3. Provide capacity development support to DLT and sub-national government on implementation scheme for conservation license plates.	<ul style="list-style-type: none"> • BIOFIN • National Government agencies • Sub-national government agencies 	2025-2026
4. Develop a marketing strategy for the conservation license plates to promote their availability and increase demand.	<ul style="list-style-type: none"> • BIOFIN 	2025
5. Develop and pilot run an e-payment and e-auction platform for the DLT to facilitate the efficient sale of conservation license plates.	<ul style="list-style-type: none"> • BIOFIN • National government • Sub-national government • Bank 	2026
6. Monitor and evaluate the implementation of the finance solution and make adjustments as necessary to improve its effectiveness.	<ul style="list-style-type: none"> • BIOFIN • Bank • Relevant government agencies 	2027

4.2.6 FINANCE SOLUTION

The development of Digital platforms to raise funds for sustainable mangroves management in Phetchaburi province.

Contribution to NBSAP, GBF & SDGs

Main finance mechanism	Crowdfunding, e-commerce platforms, NFTs	NBSAP Goals 1, 3
Solution type	Digital technology solution that raises funds for sustainable mangrove management	GBF Target 14, 15, 16, 19
Source of funds	Private	SDGs 9, 13, 14
Instrument type	Market	
Finance result	Generate revenues	

Context

The COVID-19 pandemic led to lockdowns and travel restrictions that had both negative and positive effects. The negative effects included economic downturns, job losses, and decreased revenue in sectors such as tourism and hospitality in Thailand. However, the pandemic also accelerated digital transformation, with people becoming more familiar with online shopping and electronic payments.

During the same period, there was increasing interest in digital assets. Fundraising using digital technology attracted both the private sector and non-profit organizations.

Objectives

The finance solution aims to identify and prioritize appropriate digital channels for fundraising for biodiversity. If a CbSE is established (under the sustainable tourism finance solution) along with a biodiversity fund, digital technology can be utilized to sell sustainably produced local community products. Projects related to mangrove management can apply crowdfunding via digital channels, expanding the campaign's reach. Additionally, non-consumptive use values of natural resources can be monetized by converting digital photographs or drawings of nature into NFTs and selling them on NFT marketplace platforms. The metaverse is the integration of virtual technology that creates an environment reflecting the real world and technological advancements, enabling people to interact and engage in activities together. It presents a potential channel for showcasing Phetchaburi's mangroves and raising funds, but the high investment costs of such projects should be carefully weighed against the potential benefits of new technology.

Partners

Key partners in the implementation of digital technology for nature conservation are the finance and banking sector, start-ups, and local communities. The CbSE(s), as envisioned in the sustainable tourism finance solution, would be ideal as focal points for harnessing digital technology to generate revenues for biodiversity. The CbSE(s) should consult with experts in developing a fundraising plan that leverages digital technology. The CbSE(s) should also collaborate with banks and start-ups to develop products suitable for sale on online marketplaces. The private sector, especially e-commerce and financial technology companies are crucial partners in facilitating e-commerce sales and/or digital fundraising.

Investment case

- The appropriate use of digital technology and platforms can allow people outside of Phetchaburi to contribute to sustainable mangrove management.
- Employing a variety of finance solutions that rely on different revenue sources reduces exposure to shocks in any one sector.
- Digital technology can reach people from other provinces and even other countries, increasing the potential pool of donors for crowdfunding campaigns.
- Non-fungible tokens (NFTs) can be used to raise funds, providing benefits such as transparency of fundraising, engagement with new audiences, and diversification of revenue streams to digital assets.

Action Plan

Key activities	Timeframe
1. Develop a plan to benefit from digital technology to raise funds for biodiversity.	2025
2. Connect potential banks and start-ups with CbSE(s)/local communities to develop products suited for sale on e-commerce platforms.	2025
3. Connect CbSE(s)/local communities to e-commerce operators to sell the developed products.	2025
4. If other digital fundraising activities are also envisioned, there should be engagement with the private sector such as financial technology companies.	2025-2026

Chapter 5

BFP Implementation



5. BFP Implementation

The Biodiversity Finance Plan (BFP) outlines actions across short, medium, and long terms to close the funding gap and enhance biodiversity conservation efforts in the country.

Thailand's Biodiversity Finance Action Plan

Short-Term Action Plan (1-2 years)	<ol style="list-style-type: none">1. Stakeholder Engagement and Awareness<ul style="list-style-type: none">• Conduct awareness campaigns to inform the public, private sector, and civil society about the BFP's objectives and the importance of biodiversity conservation.• Organize workshops and seminars to engage stakeholders and encourage their active participation in the implementation process.2. Policy Alignment and Integration<ul style="list-style-type: none">• Ensure that existing policies at the national and local levels align with the BFP's goals and integrate biodiversity considerations into relevant decision-making processes.3. Impact Investment and Private Sector Partnerships<ul style="list-style-type: none">• Identify and engage key private sector partners interested in biodiversity conservation, promoting the benefits of sustainable practices, and demonstrating how they align with the BFP.4. Innovative Financing Solutions<ul style="list-style-type: none">• Explore innovative finance solutions, such as biodiversity credits, (tiger) bonds, or impact investing, to mobilize short-term financial resources for biodiversity projects.
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Thailand's Biodiversity Finance Action Plan

Medium-Term Action
Plan (2-4 years)

5. Legislative and Regulatory Reforms
 - Advocate for necessary legislative reforms to support biodiversity conservation and sustainable development goals, ensuring a conducive legal environment for the BFP's successful execution.
6. Capacity Building
 - Invest in training programs for local communities and institutions, enhancing their capacity to manage natural resources sustainably and actively contribute to conservation initiatives.
7. Monitoring and Evaluation Framework
 - Establish a robust monitoring and evaluation framework to track the progress of the BFP's implementation, regularly assess the finance results of financial resources mobilized and the effectiveness of conservation efforts.
8. Scaling Innovative Financing
 - Scale up successful pilots of innovative finance mechanisms, collaborating with financial institutions to create more opportunities for sustainable investments in biodiversity projects.

Longer-Term Action
Plan (4-5 years)

9. Mainstreaming Biodiversity
 - Work towards mainstreaming biodiversity considerations into broader economic and development policies, including the development of a specialized biodiversity finance unit within government agencies, ensuring that sustainability is a core element of all future planning and budget decision-making processes.
 10. Community of practice
 - Develop educational programs and research initiatives to foster a deeper understanding of the value and methods of biodiversity finance, creating a knowledge base that informs future conservation finance strategies.
 11. Adaptation and Flexibility
 - Regularly review and adapt the BFP in response to changing environmental, economic, and social conditions, ensuring its continued relevance and effectiveness over the long term.
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Chapter 6

Conclusion



6. Conclusion

At the 15th Conference of the Parties to the Convention on Biological Diversity (CBD COP 15) in 2022, Thailand agreed to develop the National Biodiversity Strategy and Action Plan (NBSAP) and implement it alongside the national Biodiversity Finance Plan (BFP). The NBSAP serves as the primary strategic framework driving the Global Biodiversity Plan under the Convention on Biological Diversity (CBD), while the BFP plays a key role in mobilizing resources to bridge the biodiversity financing gap and support efforts to achieve Thailand's NBSAP objectives.

By engaging with more than two hundred organizations through a whole-of-society approach, Thailand developed its NBSAP with three strategies, three goals, and twelve targets. The BFP for Thailand was validated at the national level and highlighted three high-level goals – (a) increasing and catalysing resources from multiple sources, including the public sector, private sector, and civil society; (b) reducing harm, and (c) enhancing effectiveness and nature-climate synergies.

The successful implementation of the Biodiversity Finance Plan (BFP) for 2023-2027 is crucial to ensuring the long-term sustainability of Thailand's biodiversity and ecosystems. **Findings from the review of biodiversity-related public expenditures and the assessment of financial needs for implementing the NBSAP estimate a funding gap of US\$ 1.116 billion.** Additionally, research on **the re-alignment or reduction of harmful subsidies through various programs between 2021 and 2023 estimated an expenditure of over THB 219.788 billion.**

The development of the Biodiversity Finance Plan is crucial for mobilizing resources and funding to implement the National Biodiversity Action Plan. The plan focuses on achieving four finance results: 1) Revenue generation, 2) Budget realignment, 3) Avoiding future costs of nature restoration, and 4) Delivering better budgetary outcomes. Another key objective of the BFP is to drive financial resources to help Thailand achieve its biodiversity targets at both national and global levels.

Furthermore, the BFP plays a crucial role in supporting the Kunming-Montreal Global Biodiversity Framework ("GBF") through innovative financial mechanisms. Thailand recognizes that **conservation efforts require substantial financial resources, and the government alone cannot address this challenge. Therefore, creating nature-positive investment opportunities from the private sector and collaboration with civil society organizations will help bridge the biodiversity finance gap.** This ensures that various conservation projects have sustainable, long-term funding to continue their initiatives. Additionally, the BFP acknowledges that **financial decision-making**

processes must prioritize biodiversity considerations, as this ensures that economic growth and development can be achieved sustainably without sacrificing ecosystems or creating future cost burdens for nature and environmental restoration.

In conclusion, the Biodiversity Finance Plan (BFP) for Thailand 2023-2027 provides a comprehensive and adaptable framework for achieving biodiversity conservation and sustainable development in Thailand through innovative financing solutions. Its successful implementation will be a crucial step towards ensuring a sustainable future for generations to come and promoting a more balanced and healthier nature.

Thailand Biodiversity Finance Plan (2023-2027)

Copyright	Biodiversity Management Division Office of Natural Resources and Environmental Policy and Planning United Nations Development Programme (UNDP), Thailand Biodiversity Finance Initiative (With support from the GEF-funded Global Biodiversity Framework Early Action Support: GBF-EAS)
Published by	Biodiversity Management Division Office of Natural Resources and Environmental Policy and Planning (Temporary Office) Tipco Tower Building 2, 14th Floor, 118/1 Rama VI Road, Phayathai, Bangkok 10400 Tel. 02-265-6685 Fax 02-265-6684 Email: bdpolicy@onep.go.th United Nations Development Programme (UNDP), Thailand 14th Floor United Nations Building, Rajdamnern Nok Avenue, Bangkok 10200 Tel. 02-288-3350 Email: undp.thailand@undp.org
Citation	Office of Natural Resources and Environmental Policy and Planning. 2024. Thailand Biodiversity Finance Plan (2023-2027). Ministry of Natural Resources and Environment. Bangkok. 102 pages.
ISBN	978-616-316-801-6
Design by	Scand-Media Corporation Co., Ltd.
Photos credits	Chittiwat Pornprasert



United Nations Development Programme Thailand

14th Floor United Nations Building

Rajdamnern Nok Avenue

Bangkok 10200, Thailand

Email: undp.thailand@undp.org

Tel: +66 2 2883350



<http://www.th.undp.org>



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