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# **The Biodiversity Finance Initiative (BIOFIN)**

## **The Assessment of Biodiversity Financial Needs in Cambodia**

June 2021

## **List of Abbreviations and Acronyms**

<b>BER</b>	Biodiversity Expenditure Review
<b>BIOFIN</b>	Biodiversity Finance Initiative
<b>CBD</b>	Convention on Biological Diversity
<b>FA</b>	Fisheries Administration
<b>FCPF</b>	Forest Carbon Partnership Facilities
<b>FNA</b>	Finance Needs Assessment
<b>GDANCP</b>	General Directorate of Administration for Nature Conservation and Protection
<b>GSSD</b>	General Secretariat of the National Council for Sustainable Development
<b>MAFF</b>	Ministry of Agriculture, Forestry and Fisheries
<b>MoE</b>	Ministry of Environment
<b>MoWRAM</b>	Ministry of Water Resources and Meteorology
<b>NBSAP</b>	National Biodiversity Strategy and Action Plan
<b>NCSD</b>	National Council for Sustainable Development
<b>NGOs</b>	Non-governmental Organizations
<b>PFMRP</b>	Public Financial Management Reform Program
<b>PIR</b>	Policy and Institutional Review
<b>RGC</b>	Royal Government of Cambodia
<b>UNDP</b>	United Nations Development Programme

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## **Executive summary**

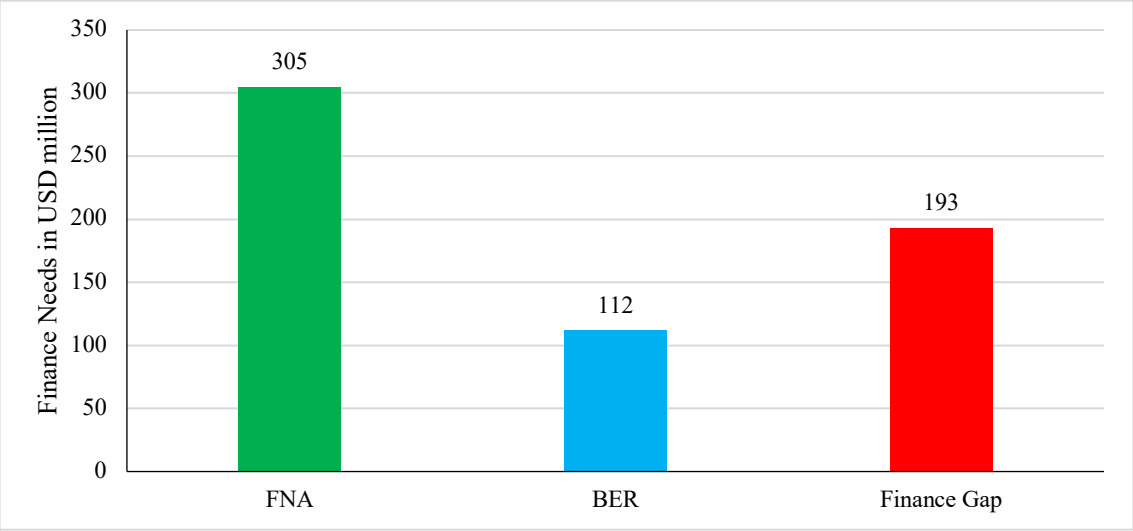
The development of a National Biodiversity Strategy and Action Plan (NBSAP) is the obligation of parties who have ratified the Convention on Biological Diversity (CBD), as well as a necessary step for the conservation and sustainable use of the country's biodiversity. However, the financial needs of the NBSAP implementation have never been evaluated and this limits Cambodia's ability to achieve targets on biodiversity conservation. Detailed financial cost information of the NBSAP is important for government bodies that approve financing. The Biodiversity Finance Initiative (BIOFIN) and the methodology elaborated as part of the project has a systemic approach to estimate costs for the implementation of national goals as well as the estimation of the financing deficit between the Biodiversity Expenditure Review and the costs for the NBSAP implementation.

The FNA is meant to help policy-makers and senior managers to:

- (1) Understand the total cost implications for implementing each NBSAP activity and aggregate the total cost for all strategies and actions within the NBSAP;
- (2) Prioritize the set of costable actions that comprise strategies and actions in the NBSAP; and
- (3) Anticipate the need for increased mobilization of funds for biodiversity and conservation.

The Financial Needs Assessment (FNA) is an assessment of the required expenses to achieve the national goals on biodiversity conservation in Cambodia and contains information on the expected cost of the implementation of the NBSAP and the expected financial gap. The first section of the FNA includes a description of targets and goals included in the NBSAP. The second section of the FNA provides information on methodological approach in estimating the costs of each action in the NBSAP. The third section provides detail information on key findings, such as the results by themes, by relevant ministries and institutions, and the estimation of finance gaps by comparing the result of the Biodiversity Expenditure Review (BER) and the Finance Needs Assessment. The fourth section provides a summary of key findings and recommendations.

The finance needs assessment was estimated from 2018 to 2022. The required budget for the NBSAP implementation for the year 2018 was around USD 305 million and increases to around USD 652 million in 2022. The required budget showed an increasing trend from 2018 to 2022. The finance gap assessment was conducted for the year 2018 only and the result indicated a lack of financial resources of about USD 193 million in the year 2018 for implementing the NBSAP as indicated in the following figure. To eliminate the financial gap, it is necessary to develop a Biodiversity Finance Plan, based on which the experts will be able to identify the financing sources and mechanisms for the purpose of biodiversity conservation goals.



# 1. Introduction

## 1.1 Background

The Rectangular Strategy-Phase III (2013-2018) and Phase IV (2018-2023) has recognized Cambodia's medium and long term socio-economic development and transition from the least developing country status to a middle-income country that will require further stepping-up of the effectiveness of the protection, conservation and restoration of ecosystems; the sustainable use, transformation and commercialization of nature resources; and the sharing of benefits from the utilization of natural assets for the well-being of all in Cambodia.

Although various mechanisms have been put in place to mobilize funds for sustainable natural resource management, the national budget allocated to biodiversity conservation is still limited, as indicated in the Sixth National Report to the Convention on Biological Diversity. Public financial management has continued to improve in Cambodia. Between 2013 and 2018, the state's current revenue increased more than twofold, from USD 2.3 billion to USD 4.6 billion, which has allowed the total expenditure to be increased nearly twofold as well. It is not possible to assess exactly how much of the national budget was allocated to biodiversity. Increased in the budgets of ministries dealing with biodiversity can be used as indicators of possible budget allocation to biodiversity plans and programmes. However, it is possible to roughly estimate financial needs that may be required to achieve biodiversity conservation targets.

The Biodiversity Finance Initiative (BIOFIN) is a UNDP managed global collaborative partnership to develop and implement an evidence-based methodology that improves biodiversity outcomes using finance and economics (UNDP, 2018). The Biodiversity Financial Needs Assessment (FNA) is one of the components in BIOFIN and is an attempt to estimate the financial resources required to achieve biodiversity targets set by a country in a methodical and comprehensive manner. The BIOFIN Workbook (UNDP, 2018) provides a descriptive guide into assessing the financial needs of a country and recommends that the analysis should cover both national and subnational biodiversity targets. By estimating the biodiversity conservation finance needs of a country, the process not only assists in the development of a finance plan to generate new resources and/or improve the allocation of existing resources, but also provides prominence to the issues surrounding biodiversity conservation and the importance of investing in biodiversity. The investment in biodiversity and ecosystem conservation is recognized as an investment into sustainable development due to the economic returns generated from healthy ecosystems and ecosystem services. The FNA component of BIOFIN enables financing the national biodiversity targets in a coordinated and effective manner.

Therefore, the overall aim of the FNA component of BIOFIN is to cost the national biodiversity strategies over medium to long term planning period, and to compare the finance needs with

business as usual biodiversity expenditure in order to estimate the finance gap for achieving biodiversity conservation goals in Cambodia.

As advised in the Workbook, the FNA process was done in close consultation with the Biodiversity Policy and Institutional Review (PIR) and the Biodiversity Expenditure Review (BER) processes. Since both of these components commenced prior to the FNA, the FNA process was able to benefit from the work done in PIR and BER. For instance, identification of key biodiversity related strategies in the PIR was useful for the FNA, while the key institutions selected for BER were used in FNA and the same representatives participated in both BER and FNA working groups. The experts leading the PIR, BER and FNA components of BIOFIN worked closely together in producing the reports for each component as these are interconnected through the terminology, stakeholders consulted, the analysis, and other factors.

The FNA for Cambodia closely followed the guidance provided by the BOFIN Workbook. The main document to be considered was the National Biodiversity Strategy and Action Plan 2016 (NBSAP) as it is the most current and comprehensive strategy for biodiversity conservation in Cambodia. Cambodia developed the NBSAP in line with article six of the CBD, in order to integrate conservation and sustainable use of biodiversity into sectoral and cross-sectoral activities. The NBSAP is the principal instrument for the implementation of the Convention at the national level. Despite the NBSAP identifying particular targets to achieve the biodiversity goals, there have been a few challenges in the implementation of actions. One such challenge is the absence of detailed costing of actions and a resource mobilization plan.

The structure of the FNA report for Cambodia includes an executive summary providing a concise presentation of the entire process, followed by a general introduction, and the three main sections: the methodology, results, and conclusions and recommendations. Thereafter the financial gap is presented based on the difference between the finance needs for biodiversity conservation goals and the current expenditure towards biodiversity as identified in the BER component of the project. Finally, the conclusion and recommendations section is presented to enable the process of BIOFIN to continue smoothly.

## **1.2 Objectives**

The specific objectives of the FNA include:

- Clarifying strategies and actions in national biodiversity plans/programmes in order to describe “costable actions” and provide a logical framework for positive outputs in biodiversity conservation;
- Producing a detailed budget for each costable action by defining unit costs and quantities over the target time frame;
- Utilizing the detailed budgets to make a strong case for biodiversity finance by linking the costs of achieving specific results to the national budget processes; and
- Connecting the FNA to the BER to identify finance gaps.



### 1.3 Scope of the assessment

The scope of this assessment was to undertake a cost analysis, define the financial needs, and calculate the finance gap for implementing Cambodia's NBSAP, as well as support the formulation of a Biodiversity Finance Plan to help support the implementation of the NBSAP. Specifically, the following objectives were to be met:

- a. To assess and provide a summary of all of the additional costs involved in implementing the biodiversity strategies within the Cambodia's NBSAP from 2018 to 2022;
- b. To calculate the total finance gap for implementing the Cambodia's NBSAP for the year 2018; and
- c. To support, as needed, the development of a Biodiversity Finance Plan within Cambodia.

## 2. Methodology

This section provides the methodology and approach used to complete the FNA analysis in Cambodia along with the process undertaken to cost the NBSAP (2016) and determine the additional financial needs required for its implementation.

### 2.1 FNA process

In preparing the FNA, all actions listed in the NBSAP (2016) were taken into considerations. The following process suggested in the BIOFIN Workbook (Figure 1) (UNDP 2018) was adopted in producing a well-documented, and fully cost budget for achieving biodiversity targets and to materialize the investments in biodiversity.



**Figure 1:** The FNA process as illustrated in the BIOFIN Workbook (UNDP, 2018)

## 2.2 Approach to costing

Cambodia has prepared its NBSAP (2016), which consists of 498 key actions, 78 strategic objectives under 24 themes and ministries and institutions responsible for implementing specific actions and activities. The 24 themes were grouped under: (i) Protection of Biodiversity: themes 1 to 8 (Group 1); (ii) Sustainable Use of Biodiversity: themes 9 to 16 (Group 2); and (iii) Enabling Environment: themes 17 to 24 (Group 3) (Table 1).

The BIOFIN global methodology has recommended worksheets for a data management system to support calculating costs, but it also allows governments to adopt alternative methods of cost estimation which they think are more relevant to their situations. A worksheet was used to estimate finance needs and finance gaps for the biodiversity strategy and the action plans. The costing was conducted from 2018 to 2022, which could provide general estimates and trends of budget needs in the future. However, the financial gap was estimated only for the year 2018 since Biodiversity Expenditure Review (BER) was also estimated for only that year. The BER was estimated only in 2018 because it is the year that Cambodia implemented Public Financial Management Reform Program (PFMRP). The PFMRP allowed for more available data from relevant ministries to conduct Biodiversity Expenditure Review (BER) in 2018.

The budget trends from 2018 to 2022 were separated into two costs: investment and operational costs. Two basic assumptions were applied when analyzing the investment costs: (1) spent investment costs were estimated for the years 2018, and 2019. The unspent investment costs in 2018 would be rolled over to 2019 in addition to the required investment cost in 2019 and the unspent costs in 2019 would be rolled over to 2020 in addition to the required investment cost in 2020. For the year 2021 and 2022, the incremental cost was applied, instead of analyzing the spent and unspent investment cost; (2) the operational cost was assumed to be 10% increase year by year.

Detailed cost estimation at the action levels (the 495 actions) was conducted for the year 2018. From 2019 to 2022, cost estimation was analyzed at the strategic objective levels of the NBSAP.

<b>Table 1: Summary of all themes in Cambodia's NBSAP 2016</b>		
<b>Group</b>	<b>Themes</b>	<b>Key Actions</b>
<b>(1) Protection of Biodiversity</b>	<b>Theme 1:</b> Protected area system	21
	<b>Theme 2:</b> Threatened species	15
	<b>Theme 3:</b> Ex-situ conservation	17
	<b>Theme 4:</b> Sustainable mining	17
	<b>Theme 5:</b> Environmental security	20
	<b>Theme 6:</b> Sustainable land-use planning	14
	<b>Theme 7:</b> Sustainable water resources	9
	<b>Theme 8:</b> Biodiversity and climate change	22

<b>(2) Sustainable Use of Biodiversity</b>	<b>Theme 9:</b> Sustainable forestry	23
	<b>Theme 10:</b> Sustainable freshwater fisheries and aquaculture	34
	<b>Theme 11:</b> Sustainable coastal and marine resources management	34
	<b>Theme 12:</b> Sustainable animal wildlife resources management	17
	<b>Theme 13:</b> Sustainable agriculture and animal production	24
	<b>Theme 14:</b> Sustainable energy resources management	21
	<b>Theme 15:</b> Access and Benefit-Sharing	54
	<b>Theme 16:</b> Customary sustainable use and traditional knowledge	14
<b>(3) Enabling Environment</b>	<b>Theme 17:</b> Industry, technology and services	62
	<b>Theme 18:</b> Resource mobilization	18
	<b>Theme 19:</b> Community participation	10
	<b>Theme 20:</b> Awareness, education, and research coordination and development	9
	<b>Theme 21:</b> Legislation and institutional structure	7
	<b>Theme 22:</b> Quality of life and poverty reduction	12
	<b>Theme 23:</b> Landscape and seascape management and coordination	7
	<b>Theme 24:</b> Clearing-house mechanism for technical and scientific cooperation, knowledge sharing and information exchange	17
	<b>Total</b>	<b>498 Key Actions</b>

The costing of the 498 key actions of Cambodia's NBSAP was conducted based on reviewing existing documents (In References) and experts' input from relevant ministries, private sectors, and international NGOs through the inception and validation workshops. A pool of experts was drawn from all stakeholder organizations during the inception and validation workshops as outlined in appendix 1 and 2. The whole process of the FNA was overseen by the BIOFIN national and global team. The following activities were carried out in preparation for the costing:

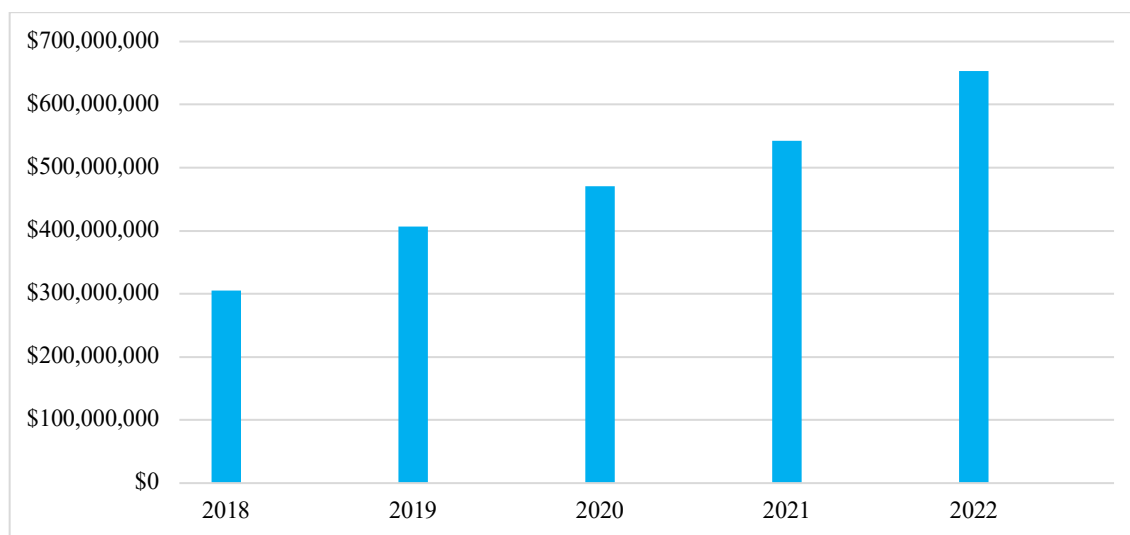
- Discussed with Cambodia's National BIOFIN team to determine costing method;
- Designed the template for costing in Excel;
- Conducted a desktop research on cost assumptions to be used in costing; and
- Collected standard costs to be used for costing.

### 3. Key Findings and Discussion

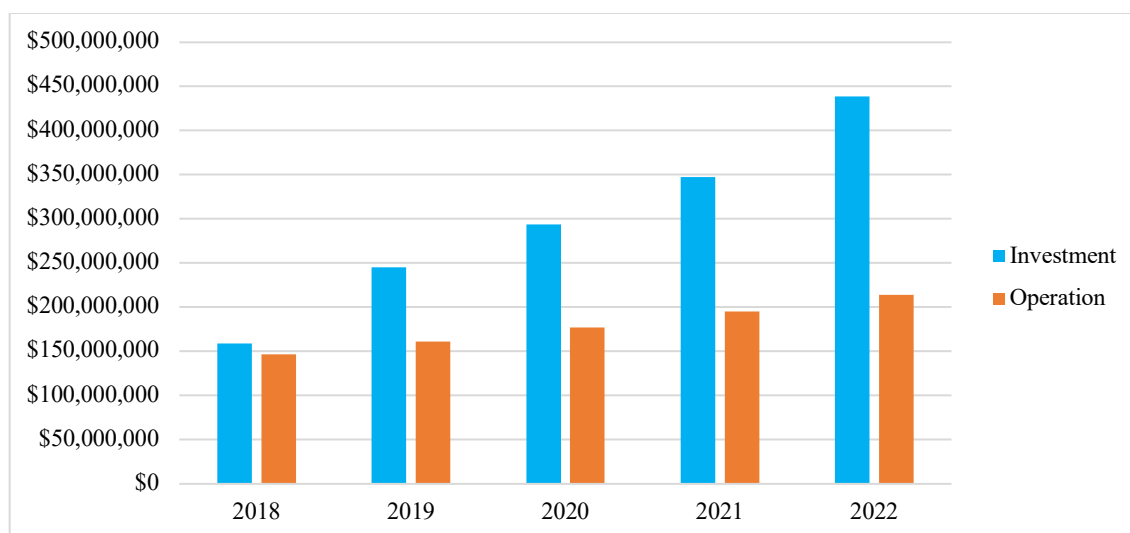
### 3.1 Finance Needs for NBSAP Targets

#### Overall Trends of Finance Needs from 2018 to 2022

The overall finance needs from 2018 to 2022 indicated an increasing trend from approximately USD 305 million to USD 650 million. The left-over budget from the year 2018 to 2020 caused significant increase in required budget for the year 2021 and 2022 (Figure 2). The investment and operation cost also showed an increasing trend over the year where investment cost represents the largest budget requirements compared to the operation cost (Figure 3).



**Figure 2:** Overall trends of finance needs from 2018 to 2022 in million USD



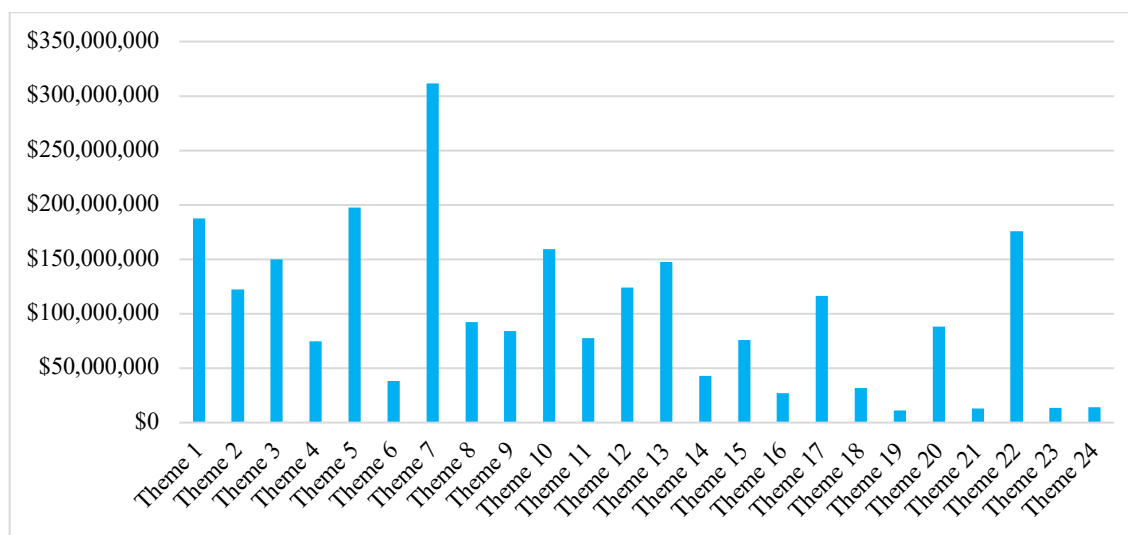
**Figure 3:** Overall trends of the investment and operation cost in million USD

### **Budget Required by Themes from 2018 to 2022**

The additional financial resources required for the achievement of national biodiversity conservation targets in Cambodia are presented by themes in this section. The financial needs presented here will be organized based on the 24 themes from 2018 to 2022. The costing results demonstrated that the financial needs for achieving NBSAP goals and biodiversity conservation was approximately USD305 million, USD 406 million, USD 471 million, USD 542 million, and USD 652 million for the year 2018, 2019, 2020, 2021 and 2022, respectively. From 2018 to 2022, the top 5 themes that would require considerable budget to implement and reach the biodiversity targets are (Appendix 1; Table 2; Figure 4):

- Theme 7 (Sustainable Water Resources) with the required budget around USD 311 million;
- Theme 5 (Environmental Security) with the required budget around USD 197 million;
- Theme 1 (Protected Area System) with the required budget about USD187 million;
- Theme 22 (Quality of Life and Poverty Reduction) with the required budget USD175 million; and
- Theme 10 (Sustainable Freshwater Fisheries and Aquaculture) with the required budget around USD159 million.

Theme 19 (Community Participation) required the smallest budget (approximately USD 10 million) to implement among the 24 themes.



**Figure 4:** Total required budget for each theme from 2018 to 2022

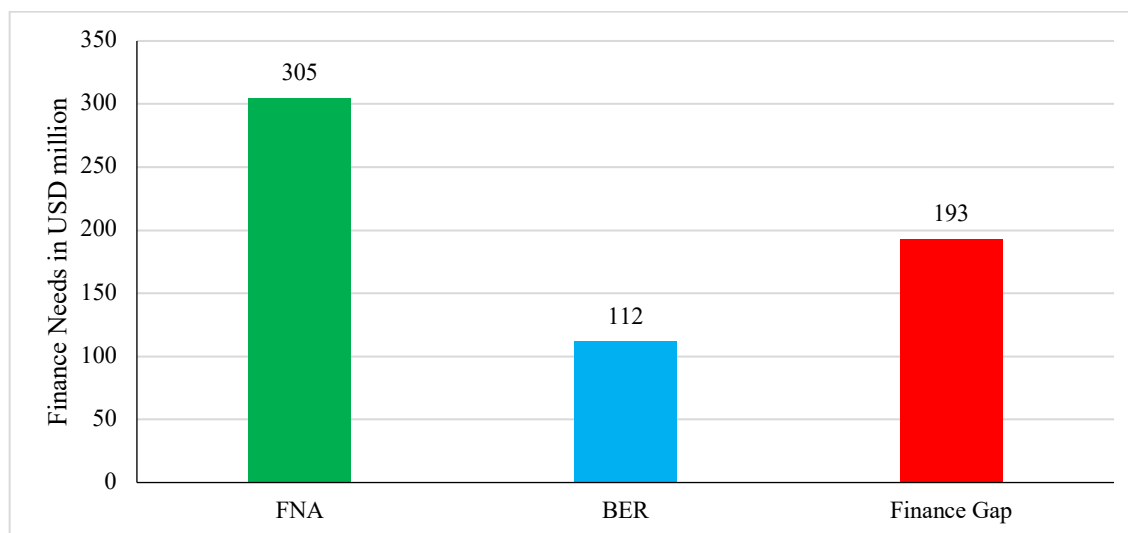
**Table 2:** Finance needs by NBSAP's themes, the 20 Aichi Targets, and the BIOFIN categories from 2018 to 2022

<b>NBSAP Themes</b>	<b>Aichi Targets</b>	<b>BIOFIN Categories</b>	<b>Total Financial Needs from 2018 to 2022</b>
<b>Theme 1:</b> Protected area system	14,11,12,15,5,9,13	Protected Area and Other Conservation Measures; Restoration	USD 187,648,570
<b>Theme 2:</b> Threatened species	6,12,5,9,13	Protected Area and Other Conservation Measures; Restoration	USD 122,445,895
<b>Theme 3:</b> Ex-situ conservation	12,13	Protected Area and Other Conservation Measures; Restoration	USD 150,157,375
<b>Theme 4:</b> Sustainable mining	4,12,15,8	Sustainable Use; Restoration	USD 74,854,215
<b>Theme 5:</b> Environmental security	8	Restoration	USD 197,785,362
<b>Theme 6:</b> Sustainable land-use planning	15	Sustainable Use	USD 38,477,393
<b>Theme 7:</b> Sustainable water resources	6,10,8	Sustainable Use	USD 311,768,850
<b>Theme 8:</b> Biodiversity and climate change	6,12,15,10	Sustainable Use; Restoration	USD 92,347,225
<b>Theme 9:</b> Sustainable forestry	11,15,5,10,9,13	Sustainable Use	USD 83,908,657
<b>Theme 10:</b> Sustainable freshwater fisheries and aquaculture	6,7,13	Sustainable Use	USD 159,506,840
<b>Theme 11:</b> Sustainable coastal and marine resources management	5,10,8,13	Sustainable Use	USD 77,682,091
<b>Theme 12:</b> Sustainable animal wildlife resources management	7,14,12,13	Sustainable Use	USD 123,961,205
<b>Theme 13:</b> Sustainable agriculture and animal production	7,14,12,13,10,9	Sustainable Use	USD 147,841,279
<b>Theme 14:</b> Sustainable energy resources management	12,13	Green Economy; Sustainable Use	USD 42,871,474
<b>Theme 15:</b> Access and Benefit-Sharing	16	Access and Benefit Sharing	USD 75,678,809

<b>Theme 16:</b> Customary sustainable use and traditional knowledge	6,18	Biodiversity Awareness and Knowledge	USD 26,910,900
<b>Theme 17:</b> Industry, technology and services	4,12,8	Green Economy; Pollution Management; Biosafety	USD 116,645,636
<b>Theme 18:</b> Resource mobilization	20,3	Biodiversity and Development Planning and Finance	USD 31,626,419
<b>Theme 19:</b> Community participation	18	Biodiversity and Development Planning and Finance	USD 10,989,180
<b>Theme 20:</b> Awareness, education, and research coordination and development	1,2,18	Biodiversity Awareness and Knowledge	USD 88,232,010
<b>Theme 21:</b> Legislation and institutional structure	17	Biodiversity and Development Planning and Finance	USD 12,820,710
<b>Theme 22:</b> Quality of life and poverty reduction	2,14	Biodiversity and Development Planning and Finance	USD 175,969,515
<b>Theme 23:</b> Landscape and seascape management and coordination	11	Biodiversity and Development Planning and Finance	USD 13,736,475
<b>Theme 24:</b> Clearing-house mechanism for technical and scientific cooperation, knowledge sharing and information exchange	1,19	Biodiversity Awareness and Knowledge	USD 14,017,754

### 3.2 Finance Gap for Financing the NBSAP Implementation

The finance gap analysis aims to identify the lack of financial resources in implementing the NBSAP through the comparison of the result from the BER and the FNA. As mentioned earlier, the estimation of BER was done for only the year 2018, so the comparison between the FNA and the BER was conducted only in the year 2018. The result from the BER indicated that in the year 2018, the total biodiversity expenditure (without recurrent budget) was approximately USD 112 million, while the FNA indicated that the required budget to implement the NBSAP was around USD 305 million in the same year. Based on this, the finance gap in implementing the NBSAP to achieve biodiversity protection and conservation goals was around USD 193 million in 2018 (Figure 5). Therefore, there is a huge gap in financing the biodiversity protection and conservation in the year 2018 for Cambodia.



**Figure 5:** The finance gap for implementing the NBSAP in 2018  
(Source: National BIOFIN Team)

The Comparison by the 24 themes of the NBSAP illustrated that theme 7 (Sustainable Water Resources) has the largest finance gap of about USD 33 million. The main financial needs of theme 7 are related to investment cost, such as development of water-related infrastructure. Theme 1 (Protected Area System) has the second largest finance gap of around USD 22 million. The main financial needs of theme 1 are also related to investment cost, such as the development of new protected areas or the rehabilitation of existing protected areas. As mentioned in the PIR, the protected area system of Cambodia covers an area of approximately 7.4 million hectares, which is equivalent to 41% of the country territory. Therefore, a huge gap of financial resources could hinder the sustainable management of protected area system of Cambodia. The finance gap analysis also indicated that theme 3 (Ex-situ Conservation) has the third largest finance gap of about USD 19 million. The main financial needs of theme 3 are also related to investment cost, such as establishment of related facilities (botanical garden or national herbarium). Cambodia is lagging behind other countries in the region in terms of necessary facilities, such as national botanical gardens, for supporting the ex-situ conservation. Therefore, necessary financial resources are required to enhance the ex-situ conservation in the kingdom. Among the 24 themes, only theme 18 (Resource Mobilization), theme 19 (Community Participation), theme 21 (Legislation and Institutional Structure), and theme 23 (Landscape and Seascape Management and Coordination) received sufficient financial resources to implement (Table 3).



**Table 3:** Finance Gaps by themes for implementing the NBSAP in 2018 in million USD

Themes	FNA (USD)	BER (USD)	Finance Gaps (USD)
<b>Theme 1:</b> Protected area system	31	8.5	22.5
<b>Theme 2:</b> Threatened species	14.5	0.1	14.4
<b>Theme 3:</b> Ex-situ conservation	19.5	0.3	19.2
<b>Theme 4:</b> Sustainable mining	9.2	0.1	9.1
<b>Theme 5:</b> Environmental security	23.2	9.8	13.4
<b>Theme 6:</b> Sustainable land-use planning	6.3	5.3	1
<b>Theme 7:</b> Sustainable water resources	38	4.2	33.8
<b>Theme 8:</b> Biodiversity and climate change	11.6	11.2	0.4
<b>Theme 9:</b> Sustainable forestry	9.8	4.6	5.2
<b>Theme 10:</b> Sustainable freshwater fisheries and aquaculture	20.7	6.7	14
<b>Theme 11:</b> Sustainable coastal and marine resources management	10.3	0.5	9.8
<b>Theme 12:</b> Sustainable animal wildlife resources management	14.9	0.8	14.1
<b>Theme 13:</b> Sustainable agriculture and animal production	16.7	13.4	3.3
<b>Theme 14:</b> Sustainable energy resources management	6.4	4	2.4
<b>Theme 15:</b> Access and Benefit-Sharing	11.6	0.1	11.5
<b>Theme 16:</b> Customary sustainable use and traditional knowledge	4.1	0.2	3.9
<b>Theme 17:</b> Industry, technology and services	17.5	2.4	15.1
<b>Theme 18:</b> Resource mobilization	5	10.5	-5.5
<b>Theme 19:</b> Community participation	1.8	7.2	-5.4
<b>Theme 20:</b> Awareness, education, and research coordination and development	9.1	7	2.1
<b>Theme 21:</b> Legislation and institutional structure	2.1	2.2	-0.1
<b>Theme 22:</b> Quality of life and poverty reduction	17.9	8.5	9.4
<b>Theme 23:</b> Landscape and seascape management and coordination	2.3	3.8	-1.5
<b>Theme 24:</b> Clearing-house mechanism for technical and scientific cooperation, knowledge sharing and information exchange	2.2	0.7	1.5
<b>Total</b>	<b>307.5</b>	<b>112.1</b>	<b>193.6</b>

Source: BIOFIN National Team

#### **4. Conclusions and recommendations**

The finance needs assessment for Cambodia is important in understanding the budget required for achieving the biodiversity conservation targets listed in the NBSAP 2016. Current analysis of the finance needs assessment reveals an increasing trend of the required budget from 2018 of about USD 305 million to 2022 of about USD 652 million. The investment cost comprises a large proportion of the total spending need compared to the operational costs for all years.

Based on the results by themes from 2018 to 2022, the top 5 themes that require the largest budget to implement include the following:

- (1) Theme 7 (Sustainable Water Resources): around USD 311 million;
- (2) Theme 5 (Environmental Security): around USD 197 million
- (3) Theme 1 (Protected Area System): around USD 187 million;
- (4) Theme 22 (Quality of Life and Poverty Reduction): around USD 175 million; and
- (5) Theme 10 (Sustainable Freshwater Fisheries and Aquaculture): around USD 159 million.

The finance gap analysis for the year 2018 highlighted the need to design specific strategies to mobilize resource to implement the NBSAP. Based on this analysis, Cambodia still lacked around USD 193 million in 2018 to achieve biodiversity conservation goals in the NBSAP. The top 5 areas limited in budget to implement include the following:

- (1) Sustainable Water Resources;
- (2) Protected Area System;
- (3) Ex-situ conservation;
- (4) Industry, Technology and Services (Manufacturing, Biotechnology and Biosafety, and Tourism); and
- (5) Threatened species.

The future resource mobilization strategy should focus on areas where limited resources occur as indicated above in the top 5 areas with limited budget implementation in the year 2018. In terms of biotechnology and biosafety in the area of conservation, Cambodia has limited capacity and budget and this would require close and increased attention and cooperation from donors and public or private sector investments.

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## Appendix 1: Budget Requirements by Themes of NBSAP from 2018 to 2022

All Themes	2018		2019		2020		2021		2022	
	Investment	Operation	Investment	Operation	Investment	Operation	Investment	Operation	Investment	Operation
Theme 1	USD 18,900,000	USD 12,000,000	USD 20,955,000	USD 13,200,000	USD 22,143,000	USD 14,520,000	USD 24,357,300	USD 15,972,000	USD 28,032,070	USD 17,569,200
Theme 2	USD 11,200,000	USD 3,300,000	USD 17,935,000	USD 3,630,000	USD 21,660,750	USD 3,993,000	USD 23,888,050	USD 4,392,300	USD 27,615,265	USD 4,831,530
Theme 3	USD 14,800,000	USD 4,700,000	USD 20,710,000	USD 5,170,000	USD 24,448,500	USD 5,687,000	USD 27,956,775	USD 6,255,700	USD 33,548,130	USD 6,881,270
Theme 4	USD 3,000,000	USD 6,150,000	USD 6,200,000	USD 6,765,000	USD 8,770,000	USD 7,441,500	USD 9,208,500	USD 8,185,650	USD 10,129,350	USD 9,004,215
Theme 5	USD 12,600,000	USD 10,565,000	USD 22,080,000	USD 11,621,500	USD 27,851,000	USD 12,783,650	USD 32,091,900	USD 14,062,015	USD 38,662,080	USD 15,468,217
Theme 6	USD 0	USD 6,302,500	USD 0	USD 6,932,750	USD 0	USD 7,626,025	USD 0	USD 8,388,628	USD 0	USD 9,227,490
Theme 7	USD 24,500,000	USD 13,500,000	USD 37,250,000	USD 14,850,000	USD 41,900,000	USD 16,335,000	USD 52,375,000	USD 17,968,500	USD 73,325,000	USD 19,765,350
Theme 8	USD 2,300,000	USD 9,550,000	USD 4,520,000	USD 10,505,000	USD 6,176,000	USD 11,555,500	USD 8,479,200	USD 12,711,050	USD 12,568,320	USD 13,982,155
Theme 9	USD 4,550,000	USD 5,250,000	USD 7,522,500	USD 5,775,000	USD 9,492,125	USD 6,352,500	USD 12,686,431	USD 6,987,750	USD 17,605,826	USD 7,686,525
Theme 10	USD 10,300,000	USD 10,400,000	USD 15,880,000	USD 11,440,000	USD 18,874,000	USD 12,584,000	USD 22,648,800	USD 13,842,400	USD 28,311,000	USD 15,226,640
Theme 11	USD 5,250,000	USD 5,030,000	USD 7,877,500	USD 5,533,000	USD 9,286,250	USD 6,086,300	USD 10,867,500	USD 6,694,930	USD 13,692,188	USD 7,364,423
Theme 12	USD 11,600,000	USD 3,300,000	USD 17,530,000	USD 3,630,000	USD 20,173,000	USD 3,993,000	USD 24,220,250	USD 4,392,300	USD 30,291,125	USD 4,831,530
Theme 13	USD 12,000,000	USD 4,690,000	USD 19,730,000	USD 5,159,000	USD 23,596,000	USD 5,674,900	USD 28,315,200	USD 6,242,390	USD 35,567,160	USD 6,866,629
Theme 14	USD 1,300,000	USD 5,050,000	USD 2,050,000	USD 5,555,000	USD 2,422,500	USD 6,110,500	USD 2,785,875	USD 6,721,550	USD 3,482,344	USD 7,393,705
Theme 15	USD 1,000,000	USD 10,585,000	USD 1,575,000	USD 11,643,500	USD 2,182,500	USD 12,807,850	USD 2,696,500	USD 14,088,635	USD 3,602,325	USD 15,497,499
Theme 16	USD 300,000	USD 3,750,000	USD 610,000	USD 4,125,000	USD 866,000	USD 4,537,500	USD 995,900	USD 4,991,250	USD 1,244,875	USD 5,490,375
Theme 17	USD 2,650,000	USD 14,400,000	USD 4,457,500	USD 15,840,000	USD 5,618,125	USD 17,424,000	USD 6,967,188	USD 19,166,400	USD 9,039,383	USD 21,083,040
Theme 18	USD 300,000	USD 4,700,000	USD 475,000	USD 5,170,000	USD 598,250	USD 5,687,000	USD 701,213	USD 6,255,700	USD 857,986	USD 6,881,270
Theme 19	USD 0	USD 1,800,000	USD 0	USD 1,980,000	USD 0	USD 2,178,000	USD 0	USD 2,395,800	USD 0	USD 2,635,380

<b>Theme 20</b>	USD 8,000,000	USD 1,100,000	USD 13,300,000	USD 1,210,000	USD 16,015,000	USD 1,331,000	USD 19,218,000	USD 1,464,100	USD 24,983,400	USD 1,610,510
<b>Theme 21</b>	USD 0	USD 2,100,000	USD 0	USD 2,310,000	USD 0	USD 2,541,000	USD 0	USD 2,795,100	USD 0	USD 3,074,610
<b>Theme 22</b>	USD 14,000,000	USD 3,900,000	USD 24,400,000	USD 4,290,000	USD 31,445,000	USD 4,719,000	USD 36,838,750	USD 5,190,900	USD 45,475,875	USD 5,709,990
<b>Theme 23</b>	USD 0	USD 2,250,000	USD 0	USD 2,475,000	USD 0	USD 2,722,500	USD 0	USD 2,994,750	USD 0	USD 3,294,225
<b>Theme 24</b>	USD 150,000	USD 2,035,000	USD 260,000	USD 2,238,500	USD 330,000	USD 2,462,350	USD 379,500	USD 2,708,585	USD 474,375	USD 2,979,444
	USD 158,700,000	USD 146,407,500	USD 245,317,500	USD 161,048,250	USD 293,848,000	USD 177,153,075	USD 347,677,831	USD 194,868,383	USD 438,508,076	USD 214,355,221
<b>Total</b>	<b>USD 305,107,500</b>		<b>USD 406,365,750</b>		<b>USD 471,001,075</b>		<b>USD 542,546,214</b>		<b>USD 652,863,297</b>	