



Published by
giz
Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



In cooperation with
UNIQUE
forestry and land use



Sustainable finance strategy of Cat Tien National Park for the period 2021-2030

REPORT TO UNIQUE FOR THE GIZ / MARD PROGRAMME ON CONSERVATION AND SUSTAINABLE USE OF FOREST BIODIVERSITY & ECOSYSTEM SERVICES IN VIET NAM



Imprint

Published by the

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered Offices

Bonn and Eschborn, Germany

Programme on Conservation, Sustainable Use of Forest Biodiversity and Ecosystem Services in Viet Nam

As of November 2021

Authors

Tran Thi Thu Ha

In cooperation with

UNIQUE forestry and land use

Disclaimer

The findings, interpretations and conclusions expressed in this document are based on information gathered by GIZ and its consultants, partners and contributors. They do not represent the views of GIZ nor BMZ.

Neither GIZ nor BMZ guarantee the accuracy or completeness of information in this document, and cannot be held responsible for any errors, omissions or losses which result from its use.

On behalf of the

German Federal Ministry for Economic Cooperation and Development (BMZ)

TABLE OF CONTENTS

FOREWORD.....	7
I. CONTEXT, OBJECTIVES, SCOPE, AND METHODOLOGY FOR DEVELOPMENT OF SUSTAINABLE FINANCE STRATEGY FOR CTNP IN THE PERIOD 2021-2030.....	9
1. CONTEXT	9
2. OBJECTIVE	9
3. SCOPE.....	10
4. METHODOLOGY	10
1.1. Sustainable financing concept.....	10
1.2. Criteria for sustainable financing.....	10
1.3. Steps for developing a sustainable finance strategy for CTNP	11
1.4. Method of information and data collection	13
1.5. Method of information and data analysis	13
II. FINANCE STRATEGY FOR CAT TIEN NATIONAL PARK IN THE PERIOD 2021 – 2030... 14	
1. FINANCING STATUS OF CAT TIEN NATIONAL PARK.....	14
1.1. Income and expenditures status and trends	14
1.2. Strengths and weaknesses of existing financial sources	17
1.3. Advantages and disadvantages of sustainable financial strategy development	18
2. FINANCIAL NEEDS OF CAT TIEN NATIONAL PARK IN THE PERIOD 2021-2030	19
3. FINANCIAL GAPS FOR SUSTAINABLE FOREST MANAGEMENT IN THE PERIOD 2021-2030	23
1.1. Predicted financial resources of CTNP in the period 2021-2030.....	23
1.2. Predicted financial resources for sustainable forest management of CTNP.....	24
1.3. Financial gaps for sustainable forest management in the period 2021 – 2030.....	25
4. POTENTIAL FINANCIAL SOLUTIONS AND TOOLS FOR CTNP	28
1.1. Maximize the efficiency of ecotourism business	28
1.2. Review and adjust entrance fees and service prices	30
1.3. Apply the payment for forest environmental services (PFES) scheme for carbon sequestration services.....	31
1.4. Promote fund raising and attracting funding from domestic and international projects in the field of forest protection and biodiversity conservation	32
1.5. Study and pilot the application of new financial initiatives and mechanisms that have not yet been institutionalized	34
1.6. Develop and pilot the internal financial management regulation based on the performance of departments, divisions, and units in the Park.....	36
1.7. Improve the efficiency of financial resources management and use of CTNP.....	37
5. CONCLUSIONS AND RECOMMENDATIONS	37

III. REFERENCES	39
APPENDICES	40
Appendix 1: Financial sources of CTNP in the period 2016 - 2020	40
Appendix 2: Expenditures of CTNP in the period 2017– 2020	41
Appendix 3: Results of financing self-assessment of CTNP.....	42
Appendix 4: Funding needs for the period 2021 -2030 according to the SFMP.....	43
Appendix 5: Funding needs for the period 2021 – 2030 according to the Decision No. 689/QĐ -VQG-KHHTQT of CTNP.....	44
Appendix 6: Projected tourism revenue according to the GIZ Ecotourism Development Plan	45
Appendix 7: Projected funding sources for CTNP in the period 2021-2030.....	46
Appendix 8: Projected funding sources for SFM.....	47
Appendix 9: Financial solutions and initiatives for biodiversity conservation in the Southeast Asia	49
Appendix 10: Annual CO2 absorption by forest ecosystems in CTNP	41
Appendix 11: List of organization operating in the field of conservation and biodiversity conservation in Vietnam	41
Appendix 12: Project Proposal Template.....	50

LIST OF FIGURES

Figure 1. Steps for developing a sustainable finance strategy	12
Figure 2. Revenues of Cat Tien National Park in the period 2016 – 2020.....	15
Figure 3. Status and trends of CTNP's financial sources in the period 2016-2020	15
Figure 4. Status and trends of CTNP's expenditures in the period 2017-2020.....	16
Figure 5. Funding structure according to the SFMP	20
Figure 6. Funding structure according to the Decision No. 689/QĐ-VQG-KHHTQT.....	22
Figure 7. Financial gaps for sustainable forest management according to Option 1	26
Figure 8. Financial gaps for sustainable forest management according to Option 2	26

LIST OF TABLES

Table 1. Objectives of the Sustainable Forest Management Plan in the period 2021-2030	19
Table 2. Funding needs by years according to the Decision No. 689 of CTNP	21
Table 3. Funding needs by periods and sources according the Decision No. 689 of CTNP	21
Table 4. Funding need for sustainable forest management according to the new Ecotourism Plan	22
Table 5. Funding need for sustainable forest management by periods and sources according to the new Ecotourism Plan	22
Table 6. Predicted financial resources of CTNP in the period 2021 – 2030	24
Table 7. Financial resources for sustainable forest management by years in the period 2021 – 2030.....	25
Table 8. Financial resources for sustainable forest management by sources and sub-periods for the period 2021-2030.....	25
Table 9. Comparison of financial advantages and disadvantages of two options	27

LIST OF ABBREVIATION & ACRONYMS

CTNP	Cat Tien National Park
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GIZ-Bio	Conservation and Sustainable Use of Forest Biodiversity & Ecosystem Services in Viet Nam project
MARD	Ministry of Agriculture and Rural Development
MB	Management Board
NP	National Park
NGO	Non-governmental organization
PA	Projected areas
PFES	Payment for forest environment service
SFM	Sustainable forest management
SFMP	Sustainable forest management plan
SFS	Sustainable finance strategy
USD	United States Dollar
VND	Viet Nam Dong
VNForest	Vietnam Administration of Forestry

FOREWORD

With the total area of 71,187.9 ha, encompassing three provinces of Lam Dong, Binh Phuoc, and Dong Nai, Cat Tien National Park (CTNP) is one of the most important national park (NP) of Vietnam. Being not only home for many rare and precious plant and animal species listed in the Red Book of the World Conservation Union (IUCN), the ecosystems, especially forest ecosystems, of CTNP also contribute to climate regulation, flood control, and water source maintenance for Tri An hydropower plant, as well as freshwater supply for Dong Nai and Ba Ria – Vung Tau provinces and Ho Chi Minh city. CTNP was recognized as a world biosphere reserve by UNESCO in 2001. The Bau Sau area is recognized by the Ramsar Convention Secretariat as an important wetland of the world and an international scientific research center. In addition, CTNP is also a very attractive destination for domestic and international tourists with beautiful landscape and unique historical and cultural values. On 27th, September 2012, CTNP was ranked by the Government of Vietnam as a special national monument.

To sustainably manage, protect, develop, and use forest resources, in the past years, with the support of the Ministry of Agriculture and Rural Development (MARD), the Vietnam Administration of Forestry (VNFOREST), national Forest Protection Department (FPD), as well as local authorities of Lam Dong, Binh Phuoc, and Dong Nai provinces, the managers and staff of CTNP has made great efforts to implement various activities and have gained many important achievements such as: increased forest coverage, reduced cases of violation relating to forest resources, protection of the integrity of forest and wetland ecosystems, successful rescue of many wildlife individuals, etc.

In 2020, with the support of the consultants, CTNP developed the “Sustainable management, conservation, and development plan of Cat Tien National Park for the period 2021-2030” (called SFMP in short) with specific objectives, plans, and implementation solutions to sustainably manage and use forest ecosystems in the next 10 years. In addition, the SFMP also includes an investment portfolio (with detailed information on the amount and estimation of funding for each item for the periods 2021 – 2025 and 2026 – 2030) to realize the set targets and plans. The SFMP of CTNP was approved by relevant agencies and authorities in March 2021 and implemented as per Decision No. 689/QĐ-VCT-KHHTQT dated August 30, 2021 of CTNP promulgating the implementation plan for CTNP’s SFMP in the period 2021 – 2030.

Although the SFMP in general and the investment portfolio in particular were developed based on careful considerations of technical and financial aspects, results of performance review of CTNP for the period 2011-2020 showed that 27/137 (equivalent to 19.7%) investment items (mainly in the fields of: relocation of people out of the NP’s boundaries, scientific research, infrastructure development in the park center, and training and development of human resources) have not yet been implemented or have been partially implemented due to the funding shortage, especially the fund from the state budget. In addition, the Covid pandemic has seriously affected (not only in the short term but can have a long term impact) the traditional finance sources of the Park, including: the state budget, income from payment for forest environmental services (PFES), revenues from ecotourism, grants and aids from domestic and foreign programs and projects. To secure sufficient funding for the implementation of the objectives and plans set out in the SFMP,

CTNP needs to have a strategy to diversify funding sources, increase revenues, and effectively use the available revenues.

The sustainable finance strategy of CTNP for the period 2021-2030 (SFS in short) was developed with support from UNIQUE forestry and land-use GmbH under the Conservation, Sustainable Use of Forest Biodiversity and Ecosystem Services Project co-implemented by GIZ and MARD (MARD/GIZ-Bio Project). The focus of this strategy is to conduct status analysis, estimate needs, identify gaps, and recommend appropriate financial solutions for CTNP in the period 2021-2030, from which to support CTNP in the implementation of the approved SFMP.

I. CONTEXT, OBJECTIVES, SCOPE, AND METHODOLOGY FOR DEVELOPMENT OF SUSTAINABLE FINANCE STRATEGY FOR CTNP IN THE PERIOD 2021-2030

1. CONTEXT

The national parks and nature reserves (generally called PAs) in the world operate under different forms, regimes, and purposes but all target the same goal of conserving biodiversity. To operate effectively, PAs need funding to cover direct and indirect costs in order to ensure the effectiveness of biodiversity conservation. The financial sources of most PAs in the world are dependent on government budget and international grants and aids, however these two sources are almost behind the recent expansion of PAs. This creates new challenges for conservation at all levels: global, national, and local (IUCN, 2020).

In Vietnam, the financial sources for PAs come mainly from the state budget. Results of the review of financial status of 36 PAs in the whole country show that: only 8/36 PAs are partially self-financed; and 28/36 remaining PAs are still 100% dependent on the state budget. However, the state budget is always limited and will not be able to continue its current subsidy and support to PAs (Trần Quang Bảo et al, 2019). Whereas, the Sustainable Forest Management Plan (SFMP) for the period 2021 – 2030 (developed in accordance with the guidance in Circular No. 28/2018/TT-BNNPTNT dated November 16, 2018 of MARD) of many PAs nationwide have been approved by relevant authorities. However, during the SFMP development, many PAs have not really paid attention to the development of workplan associated with priorities in forest protection and management, biodiversity conservation, as well as financial plan – which is very important and plays a decisive role in the successful implementation of the planned activities. Therefore, during the implementation of the SFMPs following the Notice No. 8264/TB-BNN-VP dated November 30, 2020 of MARD, many PAs are confused in mobilizing financial resources according to the plan, especially in the context that the traditional financial sources of PAs have been heavily affected by the Covid-19 pandemic and many other outside factors.

In addition, Vietnam is promoting financial self-reliance in public non-business units, including PAs. So far, there have been 85% of the PAs developing their self-financing plans, including plans for biodiversity conservation, public service provision, ecotourism development as well as other non-business services, to attract financial resources for forest protection and biodiversity conservation. However, many PAs have to face with difficulties in realizing their roadmaps and plans for autonomy as they have not been fully aware of the difficulties in mobilizing financial.

2. OBJECTIVE

The development of CTNP's sustainable finance strategy for the period 2021- 2030 is aimed to reflect a new approach to financial planning, from which to support CTNP in capturing and assessing properly the financial status, and at the same time identifying, designing and implementing measures

to improve financial feasibility and sustainability during the implementation of the SFMP in the period 2021 – 2030.

3. SCOPE

The sustainable finance strategy is an integral part of and directly supports the planning for SFMP implementation. However, this strategy does not ensure that the NP is fully funded corresponding its needs. The strategy is also not a substitute for the public investment project planning process as well as the annual or medium-term expenditure planning of the Park. Instead, the Strategy provides information on needs, gaps, orientations and financial conditions, basing on which CTNP can select the financial options and solutions that are most suitable to its actual conditions and develop their own financial strategy to mobilize sufficient resources for the implementation of forest management and protection activities.

4. METHODOLOGY

1.1. Sustainable financing concept

There are different concepts of sustainable financing in the world. However, these concepts share the same point which is to do with far more than just improving budgeting procedures and resource mobilization efforts. The concern of sustainable financing is to achieve permanent and structural changes in the financial conditions that influence biodiversity and ecosystem conservation and effective PA management. Sustainable financing is geared towards improving the sustainability of financial flows associated with agreed PA management plans; takes into account and seeks to actively engage all stakeholders that bear conservation costs; develops integrated financial solutions that balance needs for funding with behavioral incentives, improved administrative and management systems, and other enabling financial conditions (GIZ, 2021).

1.2. Criteria for sustainable financing

The minutes of the International Expert Workshop on Strengthening sustainable financing for Biodiversity Conservation organized by GIZ from 23 to 28 July 2017 in Vilm Island, Baltic coast (Germany) summarized the requirements for PA sustainable financing from available best practice and literature sources around the world, including:

- **Fill financial gaps**
 - **Sufficient funding for operation:** Without sufficient funding, PAs cannot effectively manage and achieve the objectives of biodiversity conservation as well as livelihood support for buffer zone communities
 - **Diversity of financial resources:** Different financial resources will help to spread risks for the PAs. If a resource is reduced or lost, other resources will temporarily compensate for it
 - **Securing financial resources in the long term:** Financial resources for PAs must be secured for a relatively long time frame (at least 3-5 years). It is very hard for PAs to develop long-term biodiversity conservation plans if future financial resources and the constraints associated with them are not foreseen.

- **Improve the efficiency of financial resource use**
- ***Linking financial resources with conservation objectives:*** Financial resources need to be linked to the highest prioritized objectives and activities of biodiversity conservation (often clearly stated in PA conservation strategies or management plans)
- ***Effective management and spending of financial resources:*** Financial resources are normally neither well managed and efficiently spent, nor consistent with updated conservation plans. Reduced costs, improved spending efficiency, and wise spending are basic elements of sustainable finance
- ***Strategic financial planning:*** Long-term strategic financial planning requires PAs to go beyond traditional budget planning and cost accounting. A strategy on how to mobilize, manage and use resources should be developed basing on actual needs of each PA.
- **Reduce the causes of increased conservation costs:**
- ***Meet a full range of conservation costs:*** In addition to direct conservation costs (such as equipment purchase, human resource, infrastructure, patrolling, monitoring, maintenance, survey, and scientific research), it is also needed to pay attention to opportunity costs of local communities around the PAs. If local communities are able, willing, and can participate in biodiversity conservation activities with lower costs, the PAs need to consider the reasonable allocation of conservation funds between the PAs and local communities.
- ***Improve enforcement conditions:*** Sustainable financing needs to take into account external factors (i.e: legal, economic, cultural, ...) that have impacts on conservation costs, capital flows and the effectiveness of conservation management activities. For instance, improper legal basis will be unable to support sustainable finance as it cannot restrict activities that have negative impacts on biodiversity or force these activities to adequately compensate for biodiversity. Therefore, sustainable financing needs to pay attention to these factors

1.3. Steps for developing a sustainable finance strategy for CTNP

CTNP's sustainable finance strategy was developed based on the "Guidelines for PA sustainable finance planning" built and completed by the MARD/GIZ-Bio project in August 2021. This document was compiled based on best practices for PA sustainable finance planning which have been accepted internationally and tailored to the specific conditions of Vietnam. Accordingly, the PA sustainable finance planning process involves three main stages with ten steps as below:

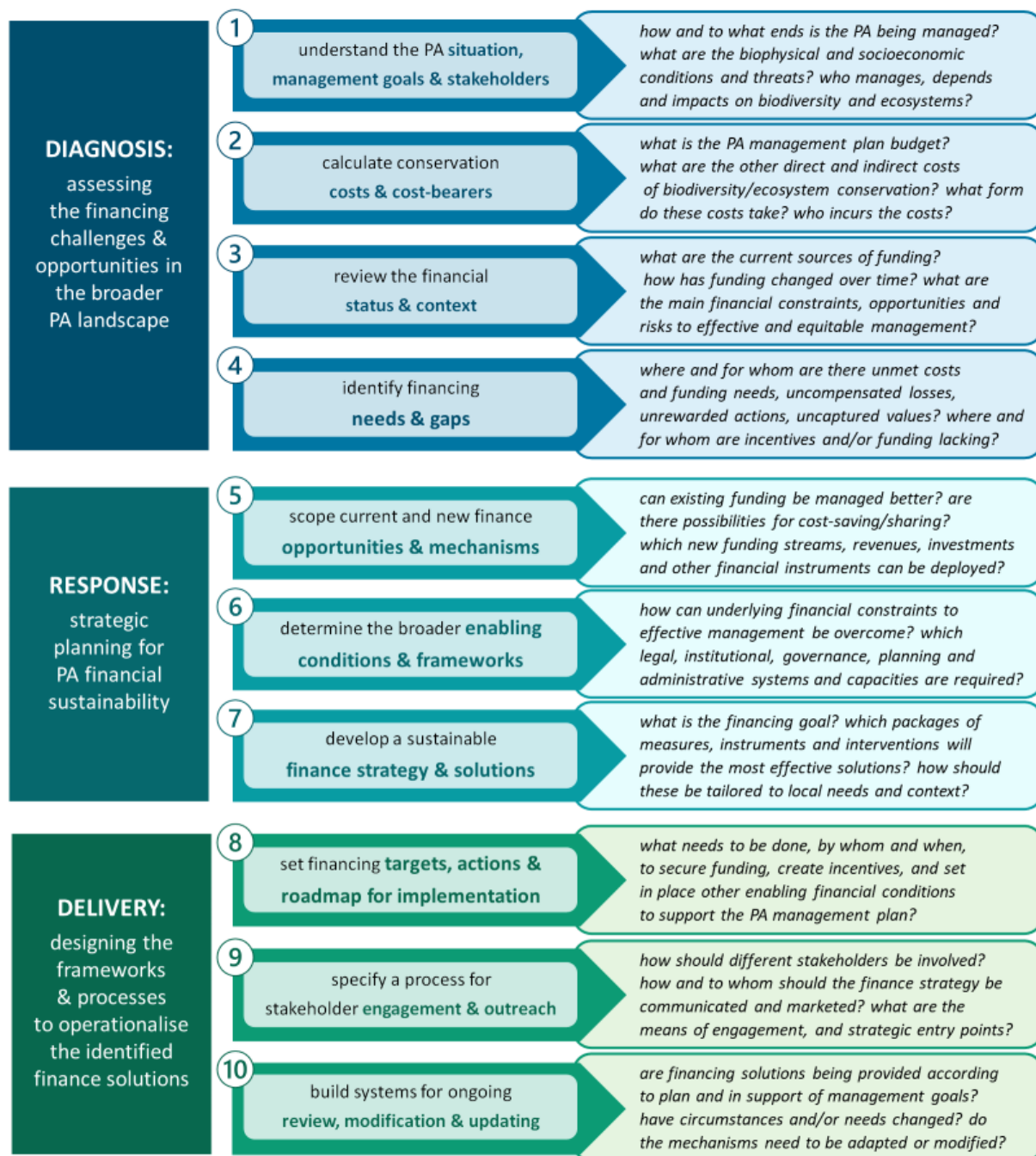


Figure 1. Steps for developing a sustainable finance strategy

Source: Lucy Emerton & Ly Bui (2021)

Diagnosis stage: frames the financing context, issues and needs of the PAs. This sets the scene for the subsequent design and implementation of finance solutions, at the same time, ensures that these are 'fit for purpose' (in other words that any measure, instrument or intervention that is developed explicitly seeks to address the financial constraints to conservation, and is directed towards priority costs and cost-bearers). The **diagnosis** is made by conducting an assessment of financing challenges and opportunities. It involves four steps:

Step 1: understand the PA situation, management goals and stakeholders

Step 2: calculate conservation costs and cost-bearers

Step 3: review the financial status and context; and

Step 4: identify financing needs and gaps

Response stage: determines which finance solutions can be used by the PA management board to overcome financial constraints. It looks at solutions and options for improving existing funding and spending, considers the needs and options for developing new funding and revenue-generation mechanisms, and develops a strategic framework and approach for ensuring that the PA management plan is financially sustainable. The **response** is formulated by developing a strategic plan to identify the measures, instruments and interventions to be developed to enhance financial sustainability and mobilize funding. It involves three steps:

Step 5: scope current and new finance opportunities, mechanisms and options

Step 6: determine the broader enabling conditions and frameworks; and

Step 7: develop a sustainable finance strategy and solutions

Delivery stage: charts out what needs to be done to translate the finance strategy into practice, and implement the identified finance solutions in support of the PA management plan. In this stage, the actions and support structures will be developed to ensure that the finance strategy and solutions can be applied successfully, and will have the desired impacts. The **Delivery** is conducted by designing the frameworks and processes that are required to operationalise the identified finance solutions. These will be used to guide the implementation of the sustainable finance plans of the PAs. This stage involves three steps:

Step 8: set financing targets, actions and roadmap for delivery

Step 9: design a process for stakeholder engagement and outreach;

Step 10: build in ongoing review, modification and updating

1.4. Method of information and data collection

Due to the complicated situation of the Covid-19 pandemic, it was unable for field collection of primary information and data to be carried out. Therefore, the information and data required for the development of SFS were extracted from the field notes by the consultant team who conducted PA financing assessment in November 2020 within the framework of the MARD/GIZ-Bio project as well as collected mainly through online consultations with specialized staff of CTNP and from reliable secondary documents.

1.5. Method of information and data analysis

Important inputs for SFS development include: assessment of financial needs for sustainable forest management, estimated financial gaps in SFMP implementation, results of the reviews of existing financial solutions for sustainable forest management and roadmap for implementation of selected financial solutions.

- The assessment of CTNP's financial status was conducted basing on the financial revenues-expenditures in the period 2016 - 2020
- The assessment of financial needs for sustainable forest management was carried out based on the estimates of investment items proposed in the SFMP, taking into account

the changes upon the approval of the SFMP (for example, changes in investment items for ecotourism or in priority order of proposed investment items).

- The financial gaps was defined on the basis of comparing financial needs with ability to mobilize financial resources in bussiness-as-usual scenario in which the ability to mobilize financial resources in bussiness-as-usual scenario was evaluated based on the trend of each resource in the past 5 years and on the forecasted trends of future resources, especially those that are likely to be affected by the complicated situation of the Covid-19 pandemic.
- Financial solutions that are applicable for CTNP were defined by reviewing, screening and assessing the financial solutions that are being applied domestically and internationally based on a number of criteria such as: (i) the potential to diversify/enhance PA financial resources/expenditure savings, (ii) scale of impacts on financial sustainability of SFMP implementation by the PAs; and (iii) technical, social, and political feasibility, etc.
- The roadmap for implementation of financial solutions is developed based on the results of the review of financial solutions, implementation conditions, as well as implementation capacity of CTNP.

II. FINANCE STRATEGY FOR CAT TIEN NATIONAL PARK IN THE PERIOD 2021 – 2030

1. FINANCING STATUS OF CAT TIEN NATIONAL PARK

1.1. Income and expenditures status and trends

As one of the most important NPs under direct management of MARD, CTNP always receives attention and financial support from different sources, which enables good management of the park. In the period 2016-2020, CTNP received approximately VND 430 billion, 85.88 billion VND/year on average (details in **Appendix 1**), from 5 main sources, including: central state budget, local state budget, ecotourism revenue, PFES revenue, and international aids, of which the state budget and PFES income account for the largest proportion with 52.1% and 26.7% respectively (see **Figure 2**).

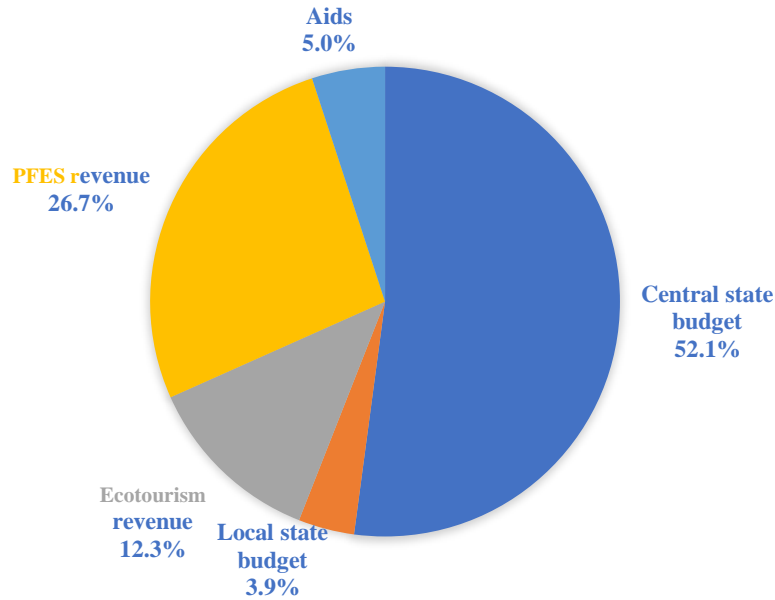


Figure 2. Revenues of Cat Tien National Park in the period 2016 – 2020

Source: CTNP Management Board

In terms of trends, during this period, although total revenue of CTNP increased 13.4%/year on average, except for PFES revenue, which tended to increase, there was an unstable trend for all remaining revenue sources. For example, the central state budget was decreasing over the years in the period 2016-2019 but increased strongly again (nearly 30%) in 2020; ecotourism revenue increased steadily during the period 2016-2019 but decreased sharply in 2020; whereas, aids increased rapidly in the period 2016-2018 and gradually decreased in the period 2019-2020 (see Figure 3).

Unit: million VND

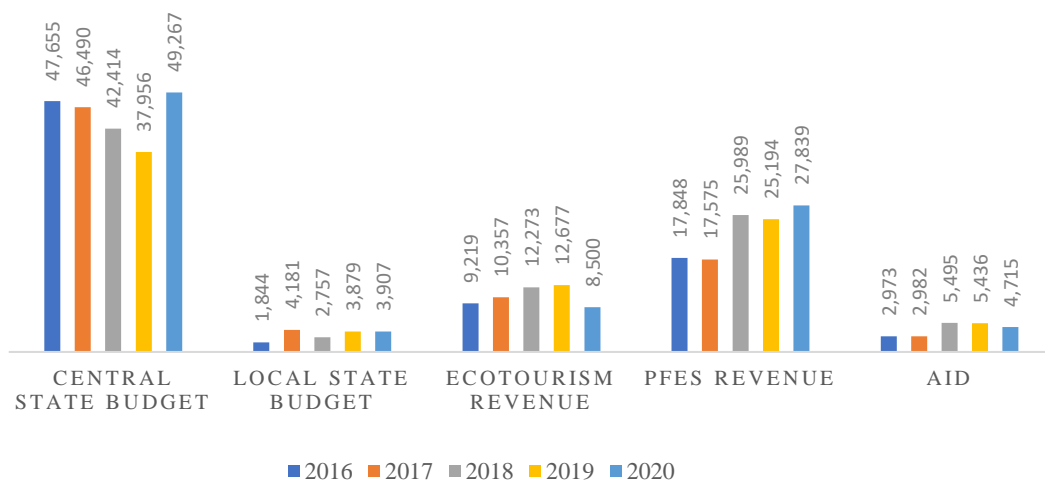


Figure 3. Status and trends of CTNP's financial sources in the period 2016-2020

Source: CTNP Management Board

Regarding spending, in the period 2017-2020, CTNP's spending was for 14 different categories with a relatively stable annual total expenditure of around VND 67.2 to 69.8 billion (VND 68.6 billion on average) (see **Figure 4**), equivalent to 71.3-84.7% (78.7% on average) of the Park's total revenues. Three biggest expenditure categories of CTNP include: staff salaries and operational costs (32.2% on average), forest protection contracts (23.5% on average), and capital costs (16.4% on average). All the remaining expenditures (i.e: forestfire prevention, forest resources change monitoring, biodiversity monitoring, rescue activities, etc.) account for a very small proportion (details in **Appendix 2**).

Unit: million VND

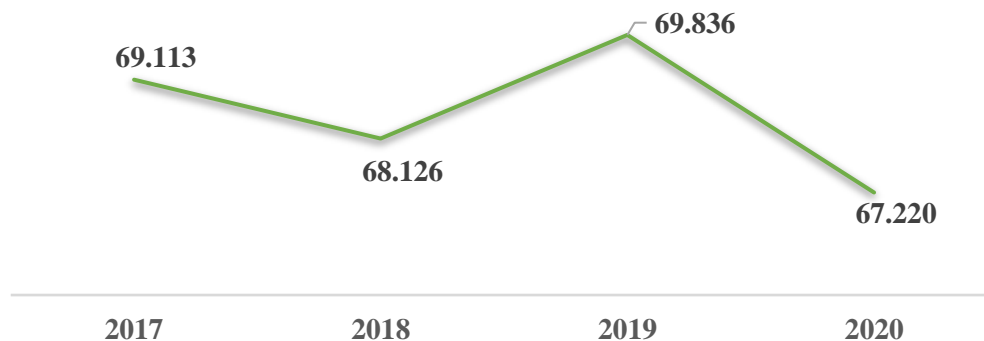


Figure 4. Status and trends of CTNP's expenditures in the period 2017-2020

Source: CTNP Management Board

The analysis of information and data about funding status and trends in CTNP in the period 2016-2020 shows that:

- The diversity of financial resources of CTNP is relatively good and stable. CTNP is 1 of 61 PAs (out of 176 PAs in the whole country) earning revenues from ecotourism activities and is 1 of 7 PAs earning revenues from tourism fees and charges of over 3 billion VND/year (Tran Quang Bao et al, 2019). In addition, CTNP is 1 of 74 forest owners (out of 176 PAs) having income from PFES and is also one of the forest owners receiving the largest amount of PFES money in the whole country (total amount of over VND 100 billion since 2010) (Phạm Thu Thủy et al, 2020).
- With the diversity of revenue sources, CTNP does not have to rely too much on the state budget for operational costs, which is only about 50% of the costs compared to 80-90% of many other PAs in the whole country (Ngô Anh Tuấn and Phạm Hồng Long, 2016).
- Although the revenue sources are diverse and the total revenues tend to increase gradually over the years, some revenue sources of CTNP are not really stable which will cause difficulties for the budget planning of the Park. Moreover, the funding received by the Park could only meet the minimum needs for forest management and protection and biodiversity conservation. There are many activities and aspects related to forest management and protection and biodiversity conservation that have not been implemented due to the lack of funding or insufficient funding, for example: scientific research, animals rescue, forest resources change monitoring, biodiversity monitoring, education and communication, awareness raising, etc.

- The Covid-19 pandemic has obvious impacts on some revenue sources of CTNP, especially the revenue from ecotourism activities, which experiences a decrease of over 30% in 2020 compared to 2019.

This assessment results are relatively consistent with the self-assessment results of the financial status of CTNP at the end of 2020 (see **Appendix 3**).

1.2. Strengths and weaknesses of existing financial sources

As mentioned above, CTNP has 5 main financial sources, including: central state budget, local state budget, ecotourism revenue, PFES revenue, and foreign aids/grants. Each funding source has its own advantages and disadvantages in the financial planning of CTNP in the next period.

Central state budget: The central state budget is provided to CTNP in 4 types: salaries and operational expenditures, development investment expenditures, non-recurrent expenditures (i.e.: national programs and projects, urgent missions) and other expenditures (i.e.: support for community development in the buffer zone). In general, the central state budget is quite stable and predictable as it is balanced and allocated directly to CTNP based on the number of park's staff as well as approved budget allocation norms corresponding to annual plan, 3 year plan, and 5 year plan, which enables the Park to forecast and develop plan for use of the allocated fund. In Vietnam, forest management and protection as well as biodiversity conservation is still considered a public service so the State will always allocate part of the state budget to PAs. Being under direct management of MARD, CTNP always receives the state budget in a stable and timely manner. However, the fund allocated to CTNP can only cover minimum operational costs of the management apparatus (the salary norms are even still low which cannot create motivations for staff and employees to have long-term commitments with forest management and protection, and biodiversity conservation of the Park) and if there is investment, it will only be for fundamental construction. Of the five groups of duties assigned to the Park (forest protection, nature conservation, scientific research, ecotourism, and environmental education), funding for scientific research and environmental education is very limited. In the long term, the proportion of state budget allocated to CTNP will decrease gradually alongside the implementation of the Decree No. 16/2015/NĐ-CP and the Decree No. 141/2016/NĐ-CP of the Government on financial self-reliance in public non-business units. In addition, the state budget for PAs in general and for CTNP in particular may be subjected to adjustment as a result of changes in national spending priorities because there is always direct competition for funding between forest management and protection and biodiversity conservation and other important fields such as education, health, national security, etc.

Local state budget: The local state budget is allocated to CTNP via the planting of alternative forests, supporting forest fire prevention and distinguishment, and communication on forest environment, of which only the budget for communication activities is stable but it accounts for only a very small proportion (about 100 million VND/year). In recent years, the local budget allocated for CTNP has increased significantly compared to the previous period. However, as CTNP is not locally managed, and at the same time, the forest management and protection and biodiversity conservation have not been integrated into the local socio-economic development plan, overall, the local state budget for CTNP is not stable.

Ecotourism revenue: In the past years, revenue from ecotourism activities of CTNP is an important financial source for forest management and protection. On average, the Park allocates about 12%-15% of the total ecotourism revenue to supplement the state budget for forest protection and forest fire prevention. Thanks to the outstanding advantages of natural and social tourism resources, the ecotourism activities in Cat Tien National Park have continuously developed for a long time with an

average increase of 16.8%/year, and the average revenue increase of 11.4%/year. By implementing the ecotourism development plan for the period 2021-2030, ecotourism revenue of CTNP is forecasted to increase sharply and continue to maintain its position as an important and sustainable resource for the implementation of the approved SFMP. However, in the meantime, ecotourism activities and revenues in CTNP are being severely affected by the Covid-19 pandemic. It is predicted that only by 2024 could the number of tourists to CTNP be the same as it was in 2019. Moreover, the tourism infrastructure and facilities are being degraded, which requires investment. The investment can last for the next 3-4 years.

PFES revenue: Being one of the PAs piloting and pioneering PFES implementation nationwide, by 2019, CTNP had received PFES payments for 97% of the total forest area under its management from hydropower production facilities, clean water production and supply facilities, and ecotourism service businesses. The average total amount of PFES payment received by CTNP in the period 2016-2020 was 22.9 billion VND/year and in the period 2018-2020 was 26.3 billion VND/year. PFES revenue is always one of the important revenue sources and is used by CTNP to conduct patrolling activities, prevent the threats to forest resources, carry out communication activities, purchase equipment, and upgrade the Park's facilities. It is expected that in the coming time, PFES revenue will continue to increase as CTNP expands its area and applies PFES against water supply services for industrial production, carbon sequestration, etc. The limitation of PFES revenue is that it depends on the outputs of PFES payers.

Aids: As a PA under direct management of MARD, CTNP benefits, at different degrees, from foreign investment projects of International Non-Government Organizations (INGOs). During the period 2010-2020, CTNP was the project area of dozens of international cooperation projects focusing on such fields as ecotourism development, wild animals rescue, PFES payment, community livelihood improvement, etc. In the coming time, CTNP will continue to be the project site of a number of large projects with the scale of 20-25 billion VND/project for a period of 3-5 years, starting from 2021. Although having many advantages compared to other PAs in attracting foreign projects, this funding source only accounts for a very small proportion of the revenue structure of CTNP as most of the projects are directly managed by the donors and CTNP is only provided with a modest amount of funding from these projects and enjoys the benefits generated by the projects (for example: research results, capacity building programs for the park's staff, ...). Another limitation of the aids is that they are for a short-term, infrequent and dependent on donor concerns (sometimes, their concerns are not the primary concerns or priorities of CTNP in terms of wildlife management and biodiversity conservation). In addition, funding and aids for PAs in general and for CTNP in particular are on a decreasing trend when Vietnam is ranked as a middle-income country.

1.3. Advantages and disadvantages of sustainable financial strategy development

With the fluctuation and limitations of existing financial resources, CTNP needs to develop a sustainable finance strategy to diversify resources, stabilize and increase revenue sources to response to the needs of sustainable forest management in the short term and in the long term, to improve the efficiency of financial resources management and use. The development of CTNP's sustainable finance strategy has the following advantages and disadvantages:

Advantages:

- CTNP contains biodiversity resources of national and international conservation importance; the Park's reputation has gone beyond Vietnam territory, so in the coming time, CTNP will continue to attract attention (and funding) from many different sources.

- CTNP always receives the attention and support from its line agency (VNForest) and various national and international organizations for the development, piloting, and implementation of new initiatives, including financing initiatives.
- The park’s staff and employees (especially the Park’s managers) have better qualifications, capacity, experience, dynamism and creativity than the general human resources of other PAs in the country.
- The Park’s financing resources are very diverse and some resources have not been fully exploited: CTNP is an attractive tourist destination, attracting both domestic and international tourists, therefore, there is high potential for ecotourism development; the Park’s forest ecosystems provides a variety of marketable ecosystem services, including the services paid for under the PFES policy.
- CTNP is always paid great attention by the private sector in the fields of ecotourism, communication, image promotion, etc. This is also an opportunity to reinforce the Park’s future financing resources.

Disadvantages:

- State budget – a very important financial source for PAs in general and for CTNP in particular – is allocated according to annual, 3-year, and 5-year budget plans while many sustainable forest management objectives require long-term investment (for example: over 10 years or over 20 years).
- There is the lack of specific regulations and guidelines which leads to various obstacles in cooperation, partnership, and lease of forest environment, therefore, the resources and experience of organizations and individuals involved in infrastructure investment and ecotourism activities in the Park have not been fully exploited.

The State, local authority, and the Park have no special and specific policy to engage the private sector in sustainable forest management.

2. FINANCIAL NEEDS OF CAT TIEN NATIONAL PARK IN THE PERIOD 2021-2030

The SFMP is developed with a number of economic, social, and environmental objectives which are quantified specifically as follows:

Table 1. Objectives of the Sustainable Forest Management Plan in the period 2021-2030

Objectives	Quantitative Indicators
Environmental	<ul style="list-style-type: none"> • Intact protection of 68,121.1 ha of forest (including 66,195 ha of natural forests and 1,213.4 ha of plantations) • Forest coverage of 96% or more by 2030 • Improved quality of 10,758.82 ha of poor and very poor natural forests • Conservation and protection of 28 plant species, 65 rare animal species • 5% reduction in number of forest law violations by 2025 • Rescue of 200 animal individuals/year, successful reintroduction of 90% rescued animal individuals • Development of 50 ha of new plantations • Protection and natural regeneration: 950 ha

	<ul style="list-style-type: none"> • Natural forest tendering: 1,572 ha • 10.000 scattered trees planted
Social	<ul style="list-style-type: none"> • Job creation for 15,000 local laborers • Implementation of 5 livelihood models
Economic	<ul style="list-style-type: none"> • PFES revenue from 30 billion VND • Increased number of tourists by 15% in the period 2021-2025, and 20% in the period 2026-2030 • Increased PFES and ecotourism revenues by 10% by 2025 and 15% by 2030

Source: SFMP

To realize these objectives, two major master programs have been included into the SFMP, including: (i) Forest Protection and Development Contracting Program for households, individuals and local communities and (ii) Sustainable Management, Protection, Development, Use, and Biodiversity Conservation Program. These two master programs are divided into 12 specific plans with a total number of 193 activities. The total funding need for activities under the SFMP is estimated at VND 1,156,165 million (details in **Appendix 4**), of which the state budget funding is VND 566,519 million, PFES revenue is VND 240,817 million, the fund mobilized from international organizations is VND 81,549 million, other funds are VND 267,280 million. The funding need for the period 2021 – 2025 will be VND 704,066 million (accounting for 61%), for the period 2026 – 2030 will be VND 452,009 million (accounting for 39%).

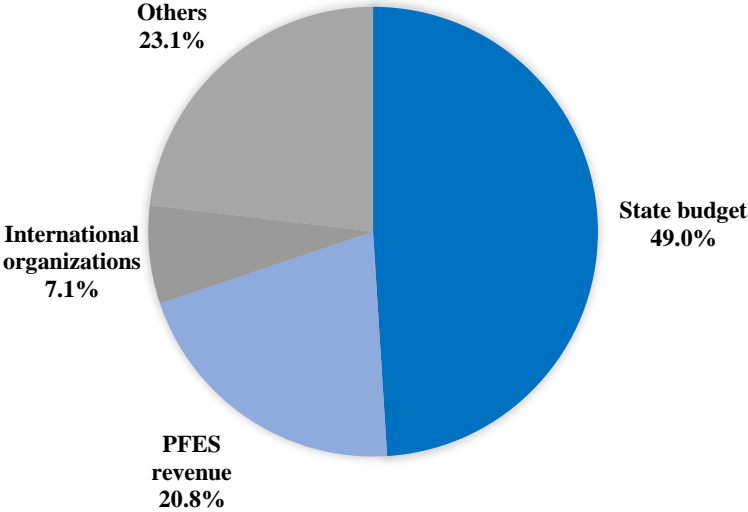


Figure 5. Funding structure according to the SFMP

Based on the approved SFMP and on the urgency of activities and the ability to mobilize funding for implementation of investment proposals, in August 30, 2021, the Director of CTNP issued the Decision No. 689/QĐ-VQG-KHHTQT on the promulgation of the implementation plan for the CTNP’s SFMP in the period 2021 – 2030 including some changes in contents, progress, number of activities, and investment needs compared to the original SFMP (details in **Appendix 5**). The total funding

need is VND 1,153,790 million, of which VND 692,885 million is from the state budget, VND 234,526 million is from the park's revenues, and VND 226,379 million is from other sources. There will be also changes in funding needs for the period 2021-2025 and the period 2026-2030 with a decrease to VND 682,756 million (accounting for 59%) in the period 2021-2025, and an increase to VND 471,034 million (accounting for 41%) in the period 2026-2030. Specific funding needs by year and by structure are presented in Table 2 and Figure 6.

Both the SFMP and the Decision No. 689 do not specify the funding needs by years for the period 2026 - 2030 because based on the implementation situation of the period 2021 – 2025, CTNP can flexibly adjust the investment portfolio, funding amount and needs for the next period.

Table 2. Funding needs by years according to the Decision No. 689 of CTNP

Unit: million VND

Year	Period 2021-2025						Period 2026 - 2030	Total
	2021	2022	2023	2024	2025	Total		
Funding needs	127,227	157,671	172,633	125,969	99,256	682,756	471,034	1,153,790

Table 3. Funding needs by periods and sources according the Decision No. 689 of CTNP

Unit: million VND

Period	State budget		Park's revenues		Others		Total
	2021-2025	2026-2030	2021-2025	2026-2030	2021-2025	2026-2030	
Funding needs	385,771	307,114	145,853	88,673	151,132	75,247	1,153,790
Total	692,885		234,526		226,379		

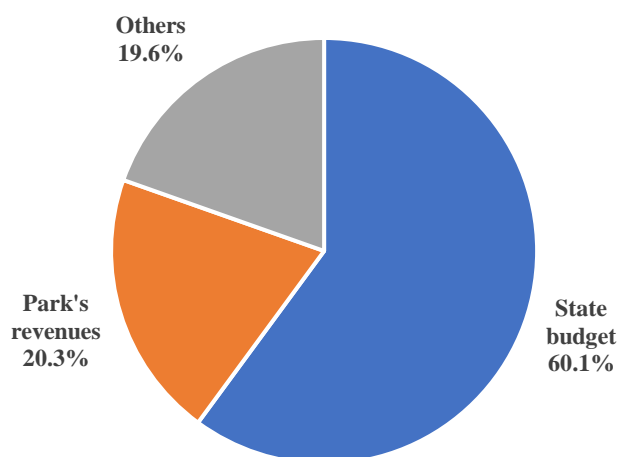


Figure 6. Funding structure according to the Decision No. 689/QĐ-VQG-KHHTQT

Besides, CTNP is also receiving support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH for the development of the Ecotourism Development Plan in the period 2021 – 2030 (the new Ecotourism Plan) with the vision of making CTNP a top tourist destination in the Southeast Asia and a typical PA pioneering ecotourism and nature education activities in Vietnam. This plan targets higher-paying tourist groups with a number of high-class services (especially accommodations). The total funding need for this Project is VND 152,375 million, of which the state budget fund will be VND 88,800 million, fund from park's revenues will be VND 43,075 million, and from other funding sources will be VND 20,500 million.

In case the new Ecotourism Plan is approved by relevant authorities and implemented in replacement of the Tourism Plan developed under the SFMP and the Decision No. 689/QĐ -VQG-KHHTQT (the old Tourism Plan), the total funding need of CTNP in the period 2021 – 2030 will reduce VND 93,825 million down to VND 1,059,965 million. Specifically:

Table 4. Funding need for sustainable forest management according to the new Ecotourism Plan

Unit: million VND

Year	Period 2021-2025						Period 2026-2030	Total
	2021	2022	2023	2024	2025	Total		
Funding need	114,744	137,667	139,915	121,851	107,038	621,214	438,751	1,059,965

Table 5. Funding need for sustainable forest management by periods and sources according to the new Ecotourism Plan

Unit: million VND

Period	State budget		Park's revenues		Other sources		Total
	2021-2025	2026-2030	2021-2025	2026-2030	2021-2025	2026-2030	
Funding need	374,654	289,781	117,628	103,223	128,932	45,747	1,059,965
Total	664,435		220,851		174,679		

3. FINANCIAL GAPS FOR SUSTAINABLE FOREST MANAGEMENT IN THE PERIOD 2021-2030

1.1. Predicted financial resources of CTNP in the period 2021-2030

Central state budget: Until now, CTNP has been allocated (or recorded) fund for the period 2021-2024 for such expenditures as: (i) recurrent expenditures, (ii) non-recurrent expenditures; (iii) infrastructure development expenditures; (iv) forest management and protection expenditures, and (v) buffer zone community development expenditures. All the expenditures for the period 2025 – 2030 will be estimated based on the average costs or the increasing/decreasing trends of each item in the period 2021 – 2024.

Local state budget: is estimated based on the recurrent expenditures for communication, forest fire prevention, plans and norms for caring of replacement plantations in the period 2021-2030.

Ecotourism revenue: Although the ecotourism revenue is being seriously affected by the Covid-19 pandemic, according to the plan of the Ministry of Health, by the end of quarter I of 2022, 70% of Vietnamese population will be vaccinated to get community immunity and the life will be back to normal. So, according to the best scenario, domestic tourism activities will be resumed after a long time of lockdown and social distancing. And the tourism activities of CTNP will soon be recovered once community immunity is achieved and lockdown orders are lifted in Quarter I of 2022 (just in time for the 2022 tourist season). It is forecasted that, in 2022, the number of domestic and international tourists will be the same as in the year 2020 – the time when Vietnam had just overcome the second outbreak of the pandemic (quarter I of 2020). In 2023, the number of domestic and international tourists will be the same as in the year 2019 – the time when there had been no impact from the pandemic yet. Tourism revenue for the period 2024 - 2030 will be forecasted based on the average growth rate of tourism revenue in the period 2016 – 2019. In case CTNP chooses to invest in tourism under the Ecotourism Development Plan supported by GIZ, the revenue will be forecasted based on the economic analysis of the plan (details in **Appendix 6**).

PFES revenue: Starting from 2021, Cat Tien National Park has expanded the PFES scheme to the industrial water production with a revenue of about 10 billion VND. In the next years of the period 2021 – 2030, PFES revenue is forecasted to increase around 10%/year, partly due to the increased production capacity of PFES users and partly because CTNP will continue to expand its area according to the approved roadmap.

Aids: Currently, the funding sources for CTNP in the period 2021 - 2024 has been determined based on the implementation plan of international projects here. The amount of grants/aids the period 2025 – 2030 will be estimated based on the average level and the trends of funding sources in the period 2021 – 2024.

In general, the difference in financial resources for CTNP in the period 2021 – 2030 depends on the choice for ecotourism investment between the Ecotourism Development Plan under the SFMP

(Option 1) and the Ecotourism Development Plan developed by GIZ (Option 2). While Option 1 focuses on investing to upgrade and expand basic infrastructure and tourism facilities, and target general tourism, Option 2 focuses more on accommodation services and targets higher-paying tourists. Therefore, there will be significant change in the anticipated tourism revenue in the coming years, especially after 2025 – when investment in tourism will almost be completed for both Options.

Predicted financial resources of CTNP by years according to business-as-usual scenario is summarized in the following table (details in **Appendix 7**).

Table 6. Predicted financial resources of CTNP in the period 2021 – 2030

Year	Option 1 (million VND)	2 (million VND)
2021	110,470	110,470
2022	121,938	123,443
2023	142,527	144,026
2024	151,937	154,481
2025	151,765	154,225
2026	160,723	169,562
2027	170,543	179,789
2028	181,312	191,062
2029	193,125	203,497
2030	206,085	217,220
Total	1,590,426	1,647,774

The data in table 6 shows that: The total expected revenue of CTNP in Option 1 will be VND 1,590,426 million (of which, the expected revenue in the period 2021-2025 will be VND 678,637 million and in the period 2026 – 2030 will be VND 911,789 million). Whereas, the total expected revenue of CTNP in Option 2 will be VND 1,647,774 million (of which, the expected revenue in the period 2021 – 2025 will be VND 686,645 million and in the period 2026 – 2030 will be VND 961,129 million). Thus, the difference in the total expected revenue of the 2 options will be about VND 57 billion (equivalent to about 3.6%).

1.2. Predicted financial resources for sustainable forest management of CTNP

Resources for the implementation of SFMP’s objectives are determined based on the predicted revenue of each source (including: state budget, ecotourism, PFES, aids/grants), the contribution of each source to sustainable forest management (for instance: about 15% of the total ecotourism revenue is used for forest management and protection; 90% of the total PFES revenue is used for forest management and protection, etc.) and operating costs (including salaries and operating costs for CTNP Management Board, which is estimated to account for about 32.2% of the total revenue of the park as in the period 2016 - 2020).

As shown in section 3.1, the only difference between Option 1 and Option 2 is the expected ecotourism revenue, the other sources will be the same. Ecotourism revenue in Option 2 is predicted to be about VND 17 billion higher than that of Option 1 (equivalent to about 30%). However, as the operating costs in Option 2 is higher than that in Option 1 (since the operating cost accounts for

about 32.2% of the total revenue of each option), the remaining resources for sustainable forest management of Option 2 are about VND 10 billion lower than of Option 1. Results of predicted financial resources for sustainable forest management in the period 2021 – 2030 are summarized in the tables below (details in **Appendix 8**)

Table 7. Financial resources for sustainable forest management by years in the period 2021 – 2030

Year	Period 2021 - 2025						Period 2026 - 2030	Total
	2021	2022	2023	2024	2025	Total		
Option 1 (million VND)	69,374	71,899	84,629	89,641	88,000	403,543	514,017	917,560
Option 2 (million VND)	69,374	71,640	84,371	89,204	87,577	402,165	505,531	907,696

Table 8. Financial resources for sustainable forest management by sources and sub-periods for the period 2021-2030

Periods	State budget		Park's revenue		Other		Total
	2021 - 2025	2026 - 2030	2021 - 2025	2026 - 2030	2021 - 2025	2026 - 2030	
Option 1 (million VND)	238,668	263,151	163,398	194,251	29,046	29,046	917,560
Total	501,818		357,649		58,093		
Option 2 (million VND)	238,668	263,151	164,213	183,573	29,046	29,046	
Total	501,818		347,785		58,093		907,696

1.3. Financial gaps for sustainable forest management in the period 2021 – 2030

Based on the predicted funding needs and financial resources, the financial gaps for each option are estimated as follows:

Option 1: The total financial gap for the period 2021 - 2030 will be VND 236,320 million, of which VND 279,213 million will be the shortage for the period 2021 – 2025, and 42,983 million VND will be the surplus for the period 2026 – 2030. By financial resources: there will be VND 191,067 million shortage in state budget, VND 123,123 million surplus in the park's revenues and VND 168,287 million shortage in other sources for the entire period.

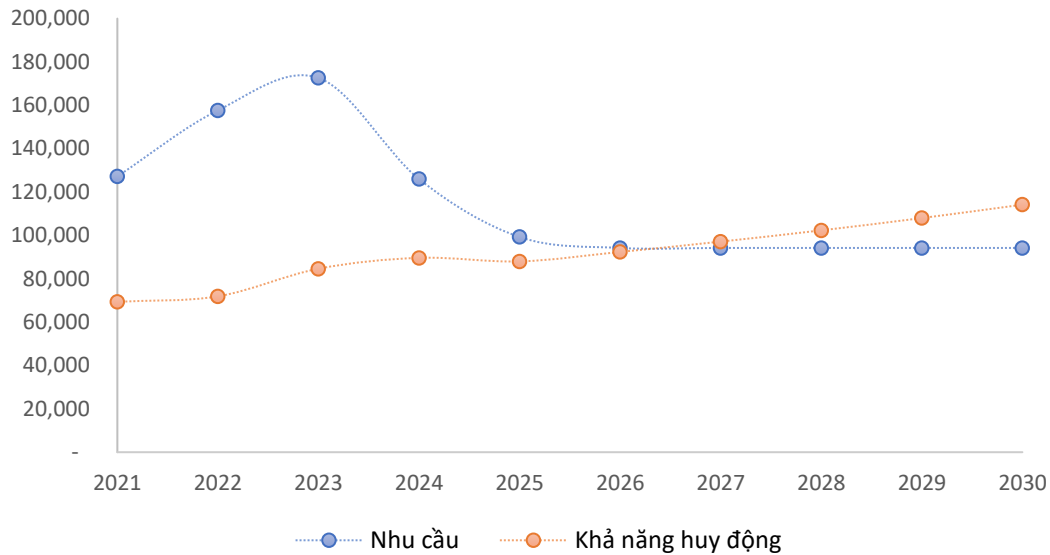


Figure 7. Financial gaps for sustainable forest management according to Option 1

Option 2: The total financial gap for the period 2021 - 2030 will be VND 152,269 million, of which, VND 219,049 million will be the shortage for the period 2021 – 2025, and VND 66,780 million will be the surplus for the period 2026 – 2030. By financial resources, there will be VND 162,617 VND million shortage in state budget, VND 126,934 million surplus in the park’s revenues, and VND 116,587 million shortage in other sources.

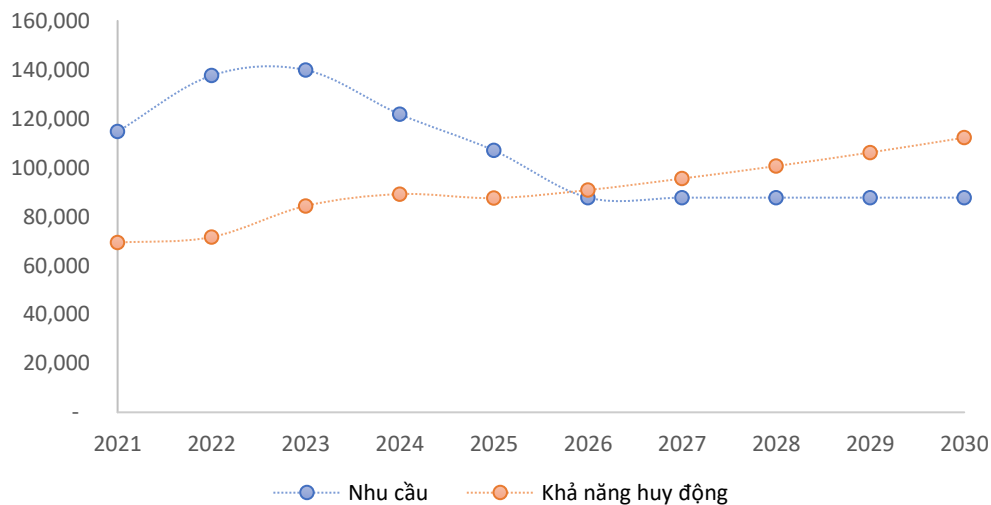


Figure 8. Financial gaps for sustainable forest management according to Option 2

Results of the analysis of financial gaps show that each option has its own advantages and disadvantages. These advantages and disadvantages are summarized in the table below:

Table 9. Comparison of financial advantages and disadvantages of two options

	Option 1	Option 2
Advantages	<ul style="list-style-type: none"> • The actual fund for SFM is higher than the predicted funding needs in Option 2 (about 10 billion VND) • Reflect more clearly the self-financing orientation (reduce the proportion of state budget, increase the proportion of funding from the revenues of the park and from external sources) 	<ul style="list-style-type: none"> • The total funding required is lower than the predicted funding needs in Option 1 • Less dependence on external funding (grants, aids, social funds) • If needed, the Park can use its own revenues in replacement of external funds to ensure the planned investments
Disadvantages	<ul style="list-style-type: none"> • The pressure of fund raising for the period 2021-2025 is significantly greater than Option 2 (about 70 billion VND) • To be dependent on external sources (grants, aids, and social funds) while these sources are unstable and there are still many mechanism problems which are beyond the Park's influence • Time is required for the revenues to exceed expenditures compared to Option 2 (about 1 year) 	<ul style="list-style-type: none"> • The actual funding for SFM is lower than Option 1

The selection of Option 1 or Option 2 depends on actual situation at the time of investments and on the Park's ability to mobilize external funding.

However, no matter whether Option 1 or Option 2 is selected, the best scenario will be that CTNP can mobilize enough funding as expected and can flexibly use the funds among different sources (for example, the park's own revenues can be used to supplement the gaps of the state budget or invest in items for which funding is expected to be mobilized from international cooperation projects or socialized) and among the periods (for instance, some items planned to be implemented in the period 2021 – 2025 can be moved to the period 2026 - 2030 when the park's revenues, especially ecotourism revenue, have increased significantly), the gap in the mobilized funding is still about VND 169.7 – 236.6 billion (equivalent to 15.8 – 20.5% of the total funding needs) for the period 2021 – 2030.

In reality, the state budget may be cut due to the Covid-19's long-term impacts on the national economy. In addition, most of the financial gaps are with other sources, including grants/aids, and social fund. These two sources are not stable. Especially, there are still many shortcomings in the current mechanism of funding socialization for PAS and it is likely that in the period 2021 – 2025, these shortcomings still remain unsolved, causing difficulties for the Park to mobilize funding from this source. Therefore, CTNP needs to consider implementing a number of solutions to compensate for the financial gaps. The solutions should target two objectives: (1) increase revenues or invest in SFM and/or (2) enhance spending efficiency of the mobilized funding sources.

4. POTENTIAL FINANCIAL SOLUTIONS AND TOOLS FOR CTNP

To identify potential financial solutions and tools for CTNP, the UNIQUE consultant team has conducted a quick review of 54 financial solution/initiative groups for the forestry sector which are compiled in the BIOFIN¹ Catalogue (details can be found at: <https://www.biofin.org/finance-solutions>), of which 32 solutions/initiatives are being implemented/piloted in Vietnam and some other countries in the Southeast Asia such as Thailand, Indonesia, Malaysia, Philippines (refer to **Appendix 9**). In addition, the consultant team also reviewed PA financial solutions/initiatives in the documents and materials of IUCN, UNDP, WWF, GIZ, etc. By reviewing and evaluating the feasibility of PA financial solutions and tools in terms of technical, financial and political aspects, the UNIQUE consultant team has identified some financial solutions and tools which are suitable to CTNP, including:

1.1. Maximize the efficiency of ecotourism business

Legal basis: Ecotourism development in PAs has been institutionalized in the Law on Forestry No. 16/2016/QH24, dated November 15, 2017 (Articles 53, 56); the Law on Biodiversity No. 32/VBHN-VPQH, dated December 10, 2018 (Article 5); the Law on Tourism No. 09/2017/QH14, dated June 19, 2017 (Article 5), the Decree No. 156/2018/NĐ-CP dated November 16th, 2018 of the Government on enforcement of a number of articles of the Law on Forestry, the Decree No. 141/2016/NĐ-CP dated October 10th, 2016 prescribing the autonomy mechanism applicable to public non-business units engaged in non-business economic and other non-business activities and in some other legal documents issued by the Ministry of Agriculture and Rural Development, the Ministry of Culture, Sports and Tourism, People's Committees of provinces and cities, etc.

Practical basis: Eco-tourism development has an important meaning in the roadmap of socializing conservation work, contributing to raise community's awareness and responsibility in SFM, biodiversity conservation, and ecological landscape protection. Ecotourism revenue provides significant support to the recurrent expenditures of many PAs, contributing to reduce the burden on the state budget and increase income for PA staff and employees. According to VNForest's report (2019), there are currently 61 Management Boards of special-use forests (including 26 NPs, 35 NRs and Landscape Protected Areas) organizing ecotourism activities (of which 37 Management Boards organizing ecotourism activities themselves, 11 Management Boards collaborating with other actors, and 13 Management Boards leasing forest environment services, specifically Phong Nha-Ke Bang and Ba Vi National Parks apply these three models at the same time). Study results in Ba Vi NP show that, of three ecotourism models, the model of leasing forest environment services generates the highest revenue and profit, followed by the partnership model, and finally the self-organizing model (Trần Quang Bảo et al, 2020).

Being a NP with many advantages in terms of natural landscape and social resources, CTNP has implemented ecotourism activities very early and achieved certain successes in this field. In the period 2021 – 2030, there will be more opportunities for CTNP's ecotourism to further develop as the demand for nature-based tourism continues to grow and the Park's tourism infrastructure is gradually improved. The ecotourism plan under the SFMP and the ecotourism plan developed by GIZ have proposed a number of solutions to maximize the ecotourism potential of CTNP, helping to diversify tourism products and services to serve the diverse needs of domestic and international tourists. Both ecotourism plans mentioned the options for cooperation, partnership/leasing of forest environment

¹ BIOFIN is the Global Biodiversity Finance Initiative (BIOFIN) is managed by UNDP, in partnership with the European Commission and the Governments of Germany, Switzerland, Norway and Flanders. BIOFIN's goal is to comprehensively address the financial problems of biodiversity. Vietnam is one of more than 30 countries participating in the implementation of this initiative.

for organizations and professional private tourism service providers who have available funding, experience, and knowledge about tourism products as well as the ability to access the market to increase the possibility of success of different tourism businesses. CTNP MB has also developed a plan for cooperation, partnership/leasing of forest environment, however, most of the activities are planned for the period 2026 – 2030 and opportunities for tourism development may be missed when the Covid-19 pandemic situation is stabilized and tourism demand (especially nature-based tourism) will grow strongly in the period 2022 – 2025. International lessons learnt show that, to exploit the potential and maximize the efficiency of ecotourism activities, CTNP needs to promote cooperation, partnership and leasing of forest environment. The most important thing in the cooperation, partnership and leasing of forest environment is that the contracts must be of mutual benefit, and the process of bidding and franchising tourism products must be transparent and consistent to attract the best individuals and agencies so that the Park's revenue could be maximized (IUCN ESARO, 2020).

Difficulties facing the implementation of solutions:

- The GIZ-supported ecotourism development plan is currently still in the process of development and has not been appraised and approved by the relevant authorities.
- The resources for ecotourism development (finance, human resources, technology, etc.) of the Park are still limited; the facilities and basic infrastructure partially meet the needs for organizing ecotourism activities
- There is the lack of specific regulations and guidance on implementing activities of tourism business cooperation and partnership or leasing of forest environment which makes it difficult for the Park to call for investment and cooperate with the private sector.

Roadmap for implementation (2022 – 2024):

- Push up the appraisal and approval process of the Tourism Plan
- Study domestic lessons learnt for the development of the Plan for cooperation, partnership, and leasing of forest environment, in which clarifications should be made for: (i) the planned areas for cooperation, partnership, or leasing of forest environment; (ii) anticipated time for cooperation, partnership, or leasing of forest environment; (iii) benefit sharing mechanism for cooperation and partnership as well as the leasing rate; (iv) cooperation and partnership categories and area limit for forest environment leasing; (v) methods of and conditions for cooperation, partnership, and leasing of forest environment
- Survey and assess the needs for cooperation, partnership and leasing of forest environment of individuals and agencies that satisfy basic conditions including: (i) appropriate capacity; (ii) experienced in organizing successful ecotourism business; (iii) suitable proposed plan for cooperation, partnership and leasing of forest environment in accordance with current regulations and the Park's plan
- Pilot cooperation, partnership, and leasing of forest environment on a small scale
- Expand the cooperation, partnership, and leasing of forest environment on the basis of the evaluation of the pilot activities

Prospect: Some PAs nationwide are leasing their forest environment at the price from 500,000 VND/ha/year (for example: Ba Vi NP) to 5,000,000 VND/ha/year (Cat Ba NP). The implementation of the Ecotourism Plan in combination with cooperation, partnership and forest environment leasing activities not only helps CTNP to make use of the fund and ecotourism business experience of

capable individuals and agencies but also helps to diversify and maximize ecotourism revenue, thereby contributing more to the resources for forest protection and development.

1.2. Review and adjust entrance fees and service prices

Legal basis: The Law on fees and charges No. 97/2015/QH dated November 25, 2015 allows public service organizations (including those with the task of biodiversity conservation) to collect fees and charges and to set prices for certain types of services, in which, fees and charges are determined by the National Assembly, the Ministry of Finance and the provincial People's Committees while the service prices are determined by service providers based on market principles.

Practical basis: CTNP is currently applying the entrance fees in accordance with the Circular No. 206/2016/TT-BTC (replacing the Circular No. 126/2012/BTC) on entrance fees for visiting 6 national parks under VNFOREST (including CTNP). The Circular become effective from January 1, 2017. Accordingly, the entrance fee applied for children is 10,000 VND/person, students: 20,000 VND/person, and for adults is 60,000 VND/person. In the period 2016 – 2020, the average entrance fee in CTNP was VND 42,588 which was less than USD 2 and 5 times lower than the entrance fee and affordability of visitors to PAs around the world (about 11.2 USD) (Van Zyl et al., 2019). Prices for services such as accommodation, transportation, guides, etc. are determined by the Park itself, however, most of the service prices are low (over 80% of the services are priced below 200,000 VND/use). Meanwhile, many studies in PAs in Vietnam show that visitors' ability and willingness to pay for entrance fees and services are higher than the currently applied fees and prices. For example, the study conducted by Nguyen Van Hieu et al. (2019) which employed the Choice Experiment Method to estimate tourists' willingness to pay in Ba Vi National Park shows that, tourists are willing to pay for the increase in the entrance fee of roughly VND 37,000 (increasing 61% compared to the current price) and for the increase in the room rate of roughly VND 181,000 (increasing 24% compared to the current price) in order to contribute more funding for forest protection and development in particular and the protection of natural resources in general. Another study by Nguyen Quoc Dung et al. (2018) shows that tourists are willing to pay up to 110,000 VND/person for the entrance fee to enjoy the landscape beauty of forest ecosystems in Son Tra peninsula and about VND 485,000 for other services (for one day) and VND 1,265,000 (for two days). Besides, many other studies show that tourist demands do not fluctuate with the entrance fees of PAs in Vietnam. Therefore, CTNP can review and adjust the entrance fees as well as the prices of existing services, and at the same time, consider setting the prices for a number of services allowed by the law but without specific guidelines for implementation such as entrance fees to nature museums, forest resources-based scientific research fees, etc. to increase revenue for sustainable forest management.

Difficulties facing the implementation of solutions:

- The process of adjusting and changing the entrance fee usually takes a long time because it requires the consent of 5 other NPs under VNForest's direct management and needs the approval of the Ministry of Finance
- It is very complicated to conduct market survey to determine new fees and prices, which requires the support of external experts

Roadmap for implementation (2022 - 2023):

- Conduct market survey, evaluate the possibility of increasing entrance fees and service prices of existing services, assess the applicability of fees and prices for some new services, and

adjust the Regulation on integrated financial management of revenues as a result of increased fees and prices

- Pilot implementation (including the process of investment and service improvement in response to increasing demand of visitors and commensurate with the piloted service price)
- Propose to the Ministry of Finance to adjust or issue new fees

Prospect: In case the Ministry of Finance agrees to allow the Park to increase the entrance fee by 50% after 2023, along with the anticipated increase in tourist numbers, CTNP will have an additional VND 11.6 billion for the period 2021 – 2030.

1.3. Apply the payment for forest environmental services (PFES) scheme for carbon sequestration services

Legal basis: Payment for forest environmental services scheme for carbon sequestration services has been institutionalized in the Law on Forestry 2017 and the Decree No. 156/2018/NĐ-CP dated November 16, 2019 of the Government. Accordingly, organizations and individuals engaged in production and business activities causing massive green gas emission have to pay service charges for absorbing and storing carbon in forests. In addition, the responsibility for mitigating greenhouse gas emissions and protecting the ozone layer of producer is also stipulated in Articles 91, 92, and 139 of the Law on Environment Protection. This is the basis for the formation of domestic and international carbon markets.

Practical basis: The carbon sequestration service is the largest commercialized forest environmental service in the world market and is always the focus of international dialogues on reducing greenhouse gas emissions (Phạm Thu Thuy and Nguyen Van Dien, 2019). In Vietnam, in the past years, with technical and financial support of various domestic and international organization, MARD and MONRE have carried out a number of studies related to PFES scheme for carbon sequestration services.

On 7 August 2019, MARD organized a workshop to get public comments on the pilot implementation of the PFES scheme for carbon sequestration services in the provinces of Quang Ninh and Thanh Hoa, Thua Thien Hue, and Quang Nam. Accordingly, producers and traders of coal thermal power and cement in these 4 provinces will make indirect payments to the forest owners via provincial VNFF at the rate of 4,000 VND/kwh of commercial power and 2,100 VND/ton of clanke. On 22 October, 2020, MARD and the World Bank – the trustee of the Forest Carbon Partnership Fund (FCPF) – signed the Emission Reduction Payment Agreement for the North Central Region (ERPA). Under this agreement, Vietnam will transfer to FCPF 10.3 million ton of CO₂ of emissions reduction in 6 provinces in the North Central region (including: Thanh Hoa, Nghe An, Ha Tinh, Quang Binh, Quang Tri, and Thua Thien Hue) in the period 2018 – 2024. In return, FCPF will pay Vietnam USD 51.5 million². Most recently, on 31 October 2012, MARD signed a Letter of Intent with the Organization for Forest Financing (Emergent) – the trustee of the Lowering Emissions by Accelerating Forest finance (LEAF) Coalition. With this Letter of Intent, Vietnam transfers to LEAF/Emergent 5.15 million tons of CO₂ emissions reduction from forests in the South Central region and Central Highlands in the 2022-2026 period with the total amount of USD 51.5 million³.

On 8 July, 2021, MONRE also conducted public consultation on the Draft Decree regulating greenhouse gas emission reduction and ozone layer protection, including regulations on roadmap for the development of the domestic carbon market and the implementation of domestic and foreign

² Source: <https://www.mard.gov.vn/Pages/le-ky-thoa-thuan-chi-tra-qiam-phat-thai-chuong-trinh-qiam-phat-thai-vung-bac-trung-bo-viet-nam--.aspx#>

³ Source: <https://tongcuclamnghiep.gov.vn/LamNghiep/Index/viet-nam-chuyen-nhuong-515-trieu-tan-co2-cho-leafemergent-4432>

credit exchange projects. Accordingly, the period 2021 – 2025 is for preparation, the period 2026 – 2027 will be for piloting the domestic carbon market, and the year 2028 will be for official operation of the domestic market and participation in the world market.

Thus, it can be said that, the domestic and international carbon markets are very promising. Being one of the current largest forest owners in the entire country, CTNP can actively prepare to participate in the carbon credits buying and selling market as soon as possible to increase resources for sustainable forest management.

Difficulties facing the implementation of solutions:

- To be dependent on implementation roadmap and level of legal framework completion (formulation of Decrees and Circulars guiding the implementation, etc.) of MARD and MONRE
- Many producing and trading facilities causing massive green gas emission that are subject to payment for service charges for absorbing and storing carbon in forests are not ready or even uncooperative in the implementation of the scheme
- Technical capacity requirements (measurement, inventory, calculation of GHG absorption, etc.) are relatively high.

Roadmap for implementation (2022 – 2025):

- Study and develop measures to enhance the ability to absorb greenhouse gases of forest ecosystems in CTNP
- Strengthen capacity for Park's staff in methods of data collection, assessment, measurement, calculation of GHG absorption of forest ecosystems
- Develop carbon baseline for forest ecosystems of CTNP
- Gather information about producers causing massive green gas emission in the provinces of Lam Dong, Binh Phuoc, and Dong Nai
- Carry out some communication activities, enhance awareness and responsibility of potential payers for carbon sequestration services
- Register to participate in pilot PFES activities for the carbon sequestration services
- From 2026 onwards: Participate in domestic and international carbon markets

Prospect: Currently, the drafts by MARD and MONRE do not specify if forest owners will be paid based on the carbon sequestration capacity of forest ecosystems or based on additional carbon sequestration (is the difference in carbon sequestration before and after market operation) once domestic and international carbon markets are to operate. In case the payment is made based on annual carbon sequestration capacity of forest ecosystems, with a total forested land area of more than 68,000 ha of which nearly 67,000 ha are natural forests and more than 1,200 are plantations, CTNP can provide about 480,000 CO₂ credits per year (see details in **Appendix 10**). Assuming that each carbon credit is sold at the current price of USD 5, CTNP can earn at least 52-55 billion VND/year when participating in the carbon market.

1.4. Promote fund raising and attracting funding from domestic and international projects in the field of forest protection and biodiversity conservation

Legal basis: Article 37 of the Decree No. 117/2010/NĐ-CP dated December 24, 2010 on organization and management of the special-use forest system stipulates that the operating funding

sources for special-use forests include 3 main sources: the state budget, non-business revenues, and grants from domestic and international projects.

Practical basis: Currently in Vietnam, there are many development organizations, local and international NGOs, and embassies providing funds for forest protection and biodiversity conservation in PAs nationwide under the form of Service Contract or Grant or Cooperative Agreement (refer to **Appendix 10**). Each organization will have its own funding orientations and priorities, but all focus on such areas as scientific research, community development, education, awareness raising for biodiversity. The funding scale is also very diverse, but the most common is from USD 20,000 – 50,000 for projects implemented in one year. The announcements calling for cooperation and submitting project ideas is continuously updated on official website/fanpage of the organizations, which clearly specify: (i) priority areas, (ii) procedures for evaluating project ideas/proposals, (iii) templates for project ideas (refer to **Appendix 11**).

Difficulties facing the implementation of solutions:

- Each organization has its own requirement on the on form, scale, and conditions of cooperation/funding for PAs; the time to announce the cooperation proposal/call for ideas is often not fixed and may be in a short time, therefore, PAs wishing to approach and propose cooperation need to study and prepare background information in advance (especially the ideas that fit into the organization's priority areas)
- Many organizations do not have the Vietnamese language website/fanpage, therefore, CTNP's staff need to have good proposal writing skills and English communication skills to be able to search for information, approach and exchange with representatives of the funding organizations.

Roadmap for implementation (2022-2023):

- Strengthen the capacity to frame ideas and write funding proposals, foreign languages, communication skills for officials and employees of CTNP
- Continue to research, supplement and finalize the list of organizations, support programs and priority activities in the field of forest protection and biodiversity conservation
- Select the organization, support programs with priority orientation and requirements in line with the Park's orientation and needs of forest protection and biodiversity conservation, search for information and prepare proposals together with relevant documents at the request of the selected organization or programs.
- Approach (or may request the line agency which is VNForest/MARD to guide, connect, and introduce) to these organizations and programs at appropriate times.

Prospect: Financial support from domestic and international organizations, programs and projects is one of popular financial channels for PAs. CTNP, with the richest and most diverse biodiversity resources in the country and the staff recently sent to training courses on soft skills, has a great chance to access and obtain grants from supporting organizations and programs, especially for the ideas of biodiversity conservation associated with buffer zone development (through public awareness raising and livelihoods improvement activities).

1.5. Study and pilot the application of new financial initiatives and mechanisms that have not yet been institutionalized

Practical basis: Currently, a number of PAs nationwide are piloting new financial initiatives and mechanisms to increase resources for forest management and protection management as well as biodiversity conservation, including:

Leasing of forest environment for scientific research: Within the framework of the project “Protection of Biodiversity and Enhancement of ecosystem services of the Dong Chau– Khe Nuoc Trong forest, Le Thuy district, Quang Binh province”, the district People’s Committee of Le Thuy and the Management Board of Dong Chau Protective Forest in central Quang Binh have signed a contract for the Viet Nature Conservation Centre to lease 768 ha of evergreen broadleaf forest for scientific research and biodiversity conservation (focusing on the Edwards’s Pheasant – a Critically Endangered species endemic to Vietnam). The contract lasts for 30 years (from 2015 to 2045) with the value of USD 1.5 million. This is the first pioneering model of leasing forest environment in protection forest for scientific research applied for the first time in Vietnam.

Entrance fee to Nature Museum: In 2018, within the framework of the Biodiversity Finance Initiative (BIOFIN), under the cooperation of BIOFIN, the Ministry of Finance and the Vietnam Administration of Forestry, the Nature Museum of Cuc Phuong National Park has been upgraded to enhance visitor experience and improve services with an investment of VND 5.3 billion from the state budget within 2 years and to pilot the service fee to visit the Nature Museum at 40,000 VND/person/visit for adults; 20,000 VND/person/visit for students, and 10,000 VND/person/visit for children above 6 years old. It is expected that 10% of revenue from the entrance fee to the Nature Museum will be remitted to the state budget and the remaining 90% will be used for further improvement of service quality and reinvest in the Museum’s activities. The piloting of entrance fee to the Nature Museum of Cuc Phuong National Park will help to: (i) increase number of visitors to the Nature Museum over the years; (ii) diversifying revenue sources for the Nature Museum from entrance fee, event organization, and souvenir sales, etc.; (iii) the total annual revenue and net income of Cuc Phuong National Park will increase over the years.

Biodiversity offset: Biodiversity offset is an activity to conserve areas with higher biodiversity values than the biodiversity in areas affected by development projects. There are two types of biodiversity offset: compulsory biodiversity offset in accordance with the law and voluntary biodiversity offset to receive a certain business advantage during the implementation of a development project (for example: priority for operating licenses, enhance reputation and competitive advantage, etc.). Vietnam has recently had a regulation that when converting a forest use purpose to another purpose, investment in afforestation to replace the forest area that will be converted is required. However, replacement afforestation has not taken into account the biodiversity value of the lost forest area and does not guarantee the principle of no loss in terms of habitat structure, species composition, ecological functions, use and non-use values related to biodiversity. The pilot activity of biodiversity offset for forest ecosystems which is considered to be successful in Vietnam belongs to Holcim Cement company – a cement manufacturing company in Kien Giang province. Being aware that the company’s production activities can have many consequences to the biodiversity, change the landscape, generate smoke emissions, waste water and wastes, in the period 2008 – 2010, Holcim Cement invested 60,000 USD/year to preserve the natural grassland ecosystem in the Mekong Delta and in the period 2010 – 2012, Holcim Cement invested USD 1,000,000 to preserve and restore the limestone mountain ecosystems in Kien Giang province. In the period 2015 – 2020, Holcim Cement continued to collaborate with IUCN, Kien Giang People’s Committee, and the Kien Giang Provincial

Friendship Association to conserve natural wetlands and the environment around the company's mining area.

Mobilization of private funds for the rearing, caring and conservation of wild animals and plants: In Vietnam, there are currently a number of wildlife conservation organizations and units operating entirely on the voluntary contributions of national and international organizations and individuals who have love for the nature, animals and plants in the area. Individuals and organizations that voluntarily contribute funds can be entitled the sponsorship and can choose the names for the animals as well as be provided with information about the entire process of raising, caring and protecting the selected animals and plants. This model is being successfully applied by Wildlife At Risk (WAR) in Vietnam.

Collaboration with the private sector in communication, image building associated with biodiversity: In recent years, in Vietnam, more and more businesses have appeared with orientations and needs to build an environmental-friendly and biodiversity conservation-friendly image through activities to support biodiversity. For instance, Honda Viet Nam company invested VND 3.5 billion for afforestation activities under the Clean Development Mechanism in Hoa Binh province in the period 2008-2016 and VND 4.9 billion for afforestation activities under the Clean Development Mechanism in Bac Kan province in the period 2013 – 2015; the Coca-Cola Viet Nam company contributed USD 1.2 million to the project Biodiversity Conservation and Community-based Ecotourism Development in Tram Chim National Park in the period 2007 – 2015; the MSIG Insurance Corporation collaborates with the Save Vietnam's Wildlife (SVW) to maintain biodiversity conservation activities in Pu Mat and Cuc Phuong National Parks, including capacity building for the rangers, provision of equipment for patrolling, wildlife monitoring and rescue, etc.

Difficulties facing the implementation of solutions:

- Lack of legal basis is the biggest difficulty in implementing the above financial initiatives and mechanisms. The government should provide technical support to facilitate the implementation of these financial initiatives and mechanisms, for instance: stipulating that businesses and development projects that have negative impacts on forest ecosystems and biodiversity must make full biodiversity offset
- Seeking partners for implementation of financial initiatives and mechanisms depends greatly on the dynamism, creativity and implementation capacity of the Park's staff; as well as on the promotion of the unique and available resources of the Park
- Many initiatives and mechanisms depend on the cooperation of the private sector and the participation of the community. Appropriate funding, time and roadmap is required to change the perception of the private sector and mobilize community participation.
- CTNP needs financial and technical support to conduct pre-feasibility studies and develop plans to attract investors for implementation of suitable financial initiatives and mechanisms.

Roadmap for implementation (2022 – 2024):

- Conduct researches to assess the potential of implementing new financial initiatives
- Introduce the Park's resources to potential partners
- Build capacity of the Park's staff
- Develop and pilot appropriate financial initiatives and solutions
- Evaluate, summarize and replicate appropriate financial initiatives and solutions

Prospect: If successfully implemented, the above-mentioned financial initiatives and mechanisms will help to strengthen financial resources for CTNP, thereby closing the financial gaps in the implementation of the plans in the SFMP.

1.6. Develop and pilot the internal financial management regulation based on the performance of departments, divisions, and units in the Park

Legal basis: The Law on State Budget 2015 allow public service organizations, including conservation facilities, to use revenues to cover operating costs (Article 32.5). The Decree No. 163/2016/NĐ-CP of the Government detailing a number of articles of the Law on State Budget, allow the organizations to prepare, allocate, execute and finalize the state budget on the basis of clearly defining budgetary funding associated with tasks, services, and products to be completed with prescribed volume, quantity, quality, standards and techniques. The Decree No. 141/2016/NĐ-CP of the Government prescribing the autonomy mechanism applicable to public non-business units in the fields of economics and others, allow public non-business units (including conservation facilities) to perform self-management of expenditures from services provision according to regulations on operating costs, thereby helping to increase incomes for staff and employees, and improve working performance.

Practical basis: The financial management of CTNP (as well as that of most PAs across the country) still follows activity-based principle rather than results-based principle (use work performance as the basis for determining resources and evaluating the performance of individuals and organizations). The development of performance-based Financial Management Regulations/Internal Expenditures will change the management and organizational culture; promote tasks assignment and decentralization along with monitoring and supervision for transparent and simplified administrative procedures, and create motivations for staff of departments, divisions and units in CTNP to improve effectiveness and efficiency of their works (through a separate salary, bonus and remuneration regime for individuals and collectives who successfully and excellently complete tasks), thereby, improving the efficiency of using the Park's resources.

Difficulties facing the implementation of solutions:

- Currently, there are not enough detailed technical standards for SFM activities to serve as the basis for CTNP to develop performance-based Financial Management Regulation/Internal Expenditure Regulation.
- Initial investment for changing awareness, purchasing software and hardware systems to support internal monitoring and supervision as well as management software is relatively high.

Roadmap for implementation (2022 – 2023):

- Review detailed technical standards for SFM activities
- Develop and pilot the Financial Management Regulation/Internal Expenditure Regulation based on performance of SFM tasks of divisions and units in the Park
- Summarize, evaluate, and draw lessons for the implementation of performance-based Financial Management Regulation/Internal Expenditure Regulation based on the results of task performance

1.7. Improve the efficiency of financial resources management and use of CTNP

Compared to many other PAs nationwide, CTNP has a relatively good financial spending structure with only 32.2% (compared to 70-90% in other PAs) of the total revenues being used to cover salaries and operating costs; 23.5% for forest protection; 16.4% for basic construction works in support of forest management and protection. However, existing resources are not effectively managed and used as the resources for other core conservation activities (i.e.: purchase of means, tools and equipment in support of forest management and protection; forest resources inventory and monitoring; scientific research on the protection, conservation and development of forest fauna and flora, biodiversity, precious, rare, endemic and endangered species of flora and fauna, etc.) are very limited. Although being carefully developed, the Sustainable Forest Management Plan for the period 2021-2030 has not been able to clarify SFM priorities, to assess the urgency of each activity, and to allocate reasonable proportion of investment resources for core conservation items (for instance: the resources for forest protection and biodiversity conservation account for only 19% of the total investment needs, the resources for biodiversity monitoring account for only 2.8% of the total investment needs, the resources for procurement of equipment in support of conservation activities account for only 0.03% of the total investment needs, etc.). Besides, CTNP has not conducted the assessment of the effectiveness of resource use, for example: comparing the effectiveness of the allocation of PFES revenue to individuals and communities involved in forest protection activities with the effectiveness of the Park's self protection of forest from which to adjust the reasonable proportion of revenue distribution from PFES.

To improve the efficiency of management and use of financial resources, first of all, it is necessary to develop the workplan and financial plan in a systematic way, in which, the workplan should be developed based on the results of the performance assessment in the previous period as well as the scenarios (basic and optimal) of possible funding sources and priorities in conservation activities. The workplan should ensure the balance and effective use of resources to overcome funding gaps, and provide sufficient information for stakeholders (MARD, VNForest, Dong Nai People's Committee, People's Committees of buffer zone communes, buffer zone communities, potential donors, etc.) so that they can provide timely support to CTNP during the implementation of activities. The financial plan is an integral part of the workplan. The financial plan here goes beyond the estimations for each type of activity to identify the most appropriate resources for short, medium and long term needs, contributing to the implementation of the workplan with stable and timely allocated financial resources. Good planning not only enables CTNP to properly allocate funds to conservation priorities but also help the Park to mobilize better funding from local donors and stakeholders as they will feel more secure with their funds invested in the Park. In addition, the Park needs to conduct an assessment of the efficiency of financial resources use to serve as the basis for appropriate adjustment.

5. CONCLUSIONS AND RECOMMENDATIONS

The forest ecosystems of CTNP play a very important role in biodiversity conservation and provide valuable ecosystem services that support people's lives and local economic development. However, the financial resources received by CTNP have never been sufficient to meet the requirements of sustainable forest management and this will, in the long run, greatly affect the service delivery capacity of forest ecosystems.

Analysis results show that in the period 2021- 2030, CTNP will need about VND 1,060 – 1,154 billion and lack about VND 169,7 – 236,6 billion for the implementation of plans in the approved SFMP. A

clear look into financial gaps as well as the gaps in resource allocation will help CTNP to develop appropriate plans and roadmap to sustainably supplement revenues and effectively spend so as to achieve the set objectives.

Traditional financial sources of CTNP include: the state budget, PFES revenue, ecotourism revenue, and grants and aids, of which, except for the state budget fund which is quite stable and can be planned in advance, the remaining sources are more or less dependent on external objective factors and are hardly predicted. Under the current conditions, investment in ecotourism development is considered to be the most promising activity, creating the most sustainable revenue for sustainable forest management in CTNP.

In addition to traditional revenue sources, there are many other new financial initiatives and mechanisms which are being applied and piloted in a number of national and international PAs. The piloting and implementation of these new financial initiatives and mechanisms will not only help CTNP to increase revenue, but also improve spending efficiency, thereby helping to close financial gaps in operations. It is a good idea for CTNP to study, evaluate and pilot new financial initiatives and mechanisms that have been successfully implemented elsewhere to improve its own financial situation. The most important thing is that the Management Board of CTNP needs to identify the barriers and difficulties of each new financial initiative and mechanism in order to work with its line agency, relevant authorities/units, and development partners in order to build an appropriate policy framework, to support investment attraction and create motivation for sustainable forest management.

In case the solutions and initiatives are implemented synchronously according to the proposed roadmap, starting from 2026, the total revenue of CTNP will not only be enough to carry out activities in the SFMP but can also cover 30- 50% of salary and operating costs from the state budget. Especially, if it is possible to participate in the domestic and international carbon market soon (even as a pilot), by 2028, CTNP can be 100% self-reliance for its staff salary and operation costs.

III. REFERENCES

- GIZ (2021), Guidelines: a stepwise approach to sustainable finance planning for protected & conserved areas, Technical report, GIZ-Bio Project, Hanoi, Vietnam.
- Hugo Van Zyl, Jame Kinghorn and Lucy Emerton, 2019, National park entrance fees: A Global Benchmarking focused on affordability, Parks, Vol 25.1, pp: 39 – 54.
- IUCN ESARO, 2020, Closing the gap: The financing and resourcing of protected and conserved areas in Eastern and Southern Africa. Nairobi, Kenya: IUCN ESARO; BIOPAMA.
- Ngô Anh Tuấn và Phạm Hồng Long, 2016, Nghiên cứu cơ chế tài chính vé vào cửa tham quan du lịch và cơ chế chi trả dịch vụ môi trường rừng tại các Vườn quốc gia và các Khu rừng đặc dụng, GIZ, Hà Nội, Việt Nam
- Nguyễn Quốc Dụng, Bùi Thị Minh Nguyệt, Nguyễn Việt Dũng và Lê Hà Thu (2018), Đánh giá ban đầu về cơ hội tài chính từ phát triển du lịch sinh thái gắn với bảo tồn thiên nhiên trên bán đảo Sơn Trà, Pan Nature, Hà Nội, Việt Nam.
- Nguyễn Văn Hiếu, Nguyễn Hoàng Nam, Phạm Văn Trung, Trần Minh Tuấn, 2019, Ước lượng mức sẵn lòng chi trả của khách du lịch tại Vườn quốc gia Ba Vì: Phương pháp thực nghiệm lựa chọn, Tạp chí Khoa học Đại học quốc gia Hà Nội: Nghiên cứu Chính sách và Quản lý, Vol.35, pp.85-95.
- Phạm Thu Thủy và Nguyễn Văn Diễn, 2019, Chi trả dịch vụ môi trường rừng cho dịch vụ các-bon tại Việt Nam: Góc nhìn từ kinh nghiệm quốc tế và những vấn đề cần xem xét, Policy Brief, CIFOR, DOI: 10.17528/cifor/007389
- Phạm Thu Thủy, Đào Thị Linh Chi, Nguyễn Thanh Long, Hoàng Tuấn Long, Nguyễn Đình Thảo và Phạm Hồng Lượng, 2020, Tác động kinh tế và xã hội của chi trả dịch vụ môi trường rừng tại Vườn quốc gia Cát Tiên, Báo cáo chuyên đề 215, Bogor, Indonesia: CIFOR.
- Tổng cục Lâm nghiệp (2019), Báo cáo công tác quản lý hệ thống rừng đặc dụng và phòng hộ năm 2019 và giải pháp phát triển bền vững, Hà Nội.
- Trần Quang Bảo, Bùi Thị Minh Nguyệt, Nguyễn Minh Đạo, Đào Lan Phương, Nguyễn Trọng Cường (2020), Cơ chế tài chính bền vững trong hoạt động kinh doanh du lịch và dịch vụ du lịch sinh thái tại các Vườn quốc gia và Khu bảo tồn thiên nhiên ở Việt Nam, Nhà xuất bản Khoa học và Kỹ thuật, Hà Nội.
- Trần Quang Bảo, Đào Lan Phương, Bùi Thị Minh Nguyệt, Nguyễn Minh Đạo và Bùi Trọng Cường (2019), Thực trạng thực hiện cơ chế tự chủ tài chính tại các Vườn quốc gia, khu bảo tồn thiên nhiên, Tạp chí Tài chính, số tháng 8/2019, trang 57- 59

APPENDICES

Appendix 1: Financial sources of CTNP in the period 2016 - 2020

Sources	2016	2017	2018	2019	2020
Central state budget	47,655	46,490	42,414	37,956	49,267
Local state budget	1,844	4,181	2,757	3,879	3,907
Ecotourism revenue	9,219	10,357	12,273	12,677	8,500
PFES revenue	17,848	17,575	25,989	25,194	27,839
Grants and aids	2,973	2,982	5,495	5,436	4,715
Total	79,539	81,585	88,928	85,142	94,228

Source: Finance and Planning Division of CTNP

Appendix 2: Expenditures of CTNP in the period 2017– 2020

No.	Items	2017	2018	2019	2020	Average	Percentage
1	Staff salary and operating costs	21,134	22,508	24,139	20,502	22,071	32.0%
2	Forest protection contracts	17,032	13,185	17,223	17,481	16,230	23.5%
3	Rehabilitation of special-use plantations	2,441	2,479	3,489	3,048	2,864	4.2%
4	Forest fire prevention	8,347	3,212	4,100	5,664	5,331	7.7%
5	Conservation activities	315	346	1,728	2,607	1,249	1.8%
6	Fundamental construction	11,876	16,888	6,883	9,526	11,293	16.4%
7	Forest resources change monitoring	100	79	80	198	114	0.2%
8	Biodiversity monitoring	600	300	320	218	360	0.5%
9	Activities of the Museum	200	700	500	498	475	0.7%
10	Rescue activities	242	494	400	452	397	0.6%
11	Botanical garden	476	500	500	500	494	0.7%
12	Spending from fees		561	2,002	2,019	1,527	2.2%
13	Spending from services	5,506	6,232	6,601	4,297	5,659	8.2%
14	Payment to the state budget	844	642	1,898	210	899	1.3%
Total		69,113	68,126	69,863	67,220	68,962	100%

Source: Finance and Planning Division of CTNP

Appendix 3: Results of financing self-assessment of CTNP

Status/score	↓ (0)	→ (1)	↗ (2)	↑ (3)
Financing constraints and enabling conditions				
Adequacy of funding to meet needs	Inadequate even for basic management & conservation	Covers only minimum management & conservation activities	Covers an adequate level of management & conservation, but still leaves some gaps	Enough to cover all PA needs
Range (diversity) of funding sources	PA relies on only one source of funding	PA relies almost entirely on government & international funding	PA funding also combines self-generated revenues & private contributions	PA funding also integrates several non-traditional financing mechanisms
Budgetary and political priority given to PAs	PAs are far below other sectors	PAs are low priority	PAs are given some priority and attention	PAs are one of the highest priorities
Predictability and stability of funding	Budgets & funding fluctuate widely and unpredictably every year	Budgets & funding fluctuate every year, but are known in advance	Budgets & funding are relatively stable	Budgets & funding are very stable, and can be well-planned in advance
Cost-effectiveness of spending	There is a lot of unnecessary wastage in spending	Spending is not always cost-effective	Spending is usually cost-effective	Explicit efforts are made to ensure that spending is cost-effective
Timing of funding flows	There are major delays in receiving funding	There are minor delays in receiving PA funding	PA funding is usually, but not always, received on time	PA funding is always received on time, when it is needed
Targeting and alignment of PA budgets with conservation needs and priorities	Budgeting and conservation planning processes are completely separate	There are some efforts to reflect conservation priorities in budget planning	Budget planning considers conservation and PA management priorities	PA conservation and financial planning are completely integrated
Adequacy/coverage of budgeting categories and accuracy of cost norms	Core expenditure items are omitted, and all cost norms are too low	Non-core expenditure items are omitted, and most cost norms are too low	Most expenditure items are included, and cost norms are mainly realistic	All expenditure items are included, and all cost norms are realistic
Revenue retention	All revenues are required to be remitted centrally	PA allowed to retain less than half of revenues	PA allowed to retain more than half, but not all, revenues	PA allowed to retain all revenues
Capacity of PA staff in sustainable finance	No financial expertise or qualifications	Include qualified financial experts	Have been trained in sustainable financing planning & mechanisms	Are qualified and experienced in sustainable financing
Integration of biodiversity conservation in sectoral budgets	Line agencies & local authority budgets exclude biodiversity conservation	Conservation is a minor priority in line agencies & local authority budgets	Line agencies & local authority budgets include biodiversity conservation	Line agencies & local authority budgets make good provisions for conservation
Local stakeholders' access to conservation funding and Incentives	No funding/financial incentives available	Only a very small amount of funding/financial incentives are in place	Several sources of funding/financial incentives, but more needs to be done	Sufficient funding/financial incentives in place
Trends over time				
Funding availability	Decreased/got worse	Stayed the same	Increased/improved a little	Increased/improved significantly
Diversity of funding sources	Decreased/got worse	Stayed the same	Increased/improved a little	Increased/improved significantly
Adequacy to meet needs	Decreased/got worse	Stayed the same	Increased/improved a little	Increased/improved significantly
Amount of spending	Decreased/got worse	Stayed the same	Increased/improved a little	Increased/improved significantly
Amount of income	Decreased/got worse	Stayed the same	Increased/improved a little	Increased/improved significantly

Appendix 4: Funding needs for the period 2021 -2030 according to the SFMP

#	Categories	Total (million VND)
	TOTAL	1,156.165
I	PLAN FOR CONTRACTING FOREST PROTECTION AND DEVELOPMENT TO LOCAL HOUSEHOLDS, INDIVIDUALS, COMMUNITIES	163,527
1	Plan for contracting forest protection and development	162,047
2	Co-management plan and contents	1,480
II	PLAN FOR SUSTAINBLE FOREST MANAGEMENT, PROTECTION, DEVELOPMENT, AND USE AND BIODIVERSITY CONSERVATION	994,738
1	Forest protection and biodiversity conservation plans	222,849
1.1	<i>Forest protection plan</i>	<i>79,749</i>
1.2	<i>Forest fire prevention plan</i>	<i>49,900</i>
1.3	<i>Pest control plan</i>	<i>5,000</i>
1.4	<i>Biodiversity and high conservation value forests conservation plan</i>	<i>85,300</i>
1.5	<i>Procurement of equipment for biodiversity conservation</i>	<i>400</i>
2	Forest development plan	83,704
3	Forest products harvesting plan (not to be implemented)	-
4	Scientific research, teaching, and human resource training plans	30,500
4.1	<i>Scientific research plan</i>	<i>18,000</i>
4.2	<i>Teaching, and human resource training plan</i>	<i>12,570</i>
5	Eco-tourism, recreation and entertainment development plan	10,100
6	Combined forestry-agricultural-fishery production plan	400
7	Infrastructure development plans	597,066
7.1	<i>Infrastructure development for forest protection and biodiversity conservation</i>	<i>350,606</i>
7.2	<i>Infrastructure development for forest fire prevention and distinguishment</i>	<i>10,360</i>
7.3	<i>Infrastructure development for ecotourism, recreation and entertainment</i>	<i>236,100</i>
8	Services for the communities	16,149
9	PFES and leasing of forest environment	11,000
10	Propaganda, dissemination, and education about the laws on forest protection and development, forest fire prevention	15,400
11	Monitoring of forest resources change, biodiversity; forest survey and inventory	7,500

Source: SFMP of CTNP for the period 2021-2030

Appendix 5: Funding needs for the period 2021 – 2030 according to the Decision No. 689/QĐ -VQG-KHHTQT of CTNP

#	Activities	Funding needs (million VND)			
		Total	State budget	Park's own revenues	Others
1	Protection of existing forests				
2	Land use plan	650	650	0	0
3	Forest protection with local communities	162,046	0	162,046	
4	Forest protection, biodiversity conservation	221,395	117,395	12,700	91,300
5	Forest development	83,704	78,704	0	5,000
6	Combined forestry-agricultural-fishery production plan	400	0	0	400
7	Scientific research, teaching, human resource training	30,970	5,390	1,530	24,050
8	Ecotourism, recreation, entertainment	10,100	0	200	9,900
9	Infrastructure development for forest management, protection, development and use	597,066	477,496	57,050	62,520
10	Service for communities	13,559	0	0	13,559
11	PFES and leasing of forest environment	11,000	0	0	11,000
12	Propaganda, dissemination, and education about the laws on forest protection and development, forest fire prevention	15,400	11,600	1,000	2,800
13	Monitoring of forest resources change, biodiversity; forest survey and inventory	7,500	2,000	0	5,500
14	Monitoring and evaluation plan	0	0	0	0
15	SFMP management	0	0	0	0
	TOTAL	1,153,790	693,235	234,526	226,029

Source: Decision No. 689/QĐ -VQG-KHHTQT dated August 30, 2021 of Cat Tien National Park

Appendix 6: Projected tourism revenue according to the GIZ Ecotourism Development Plan

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected revenue (million VND)	6,500	14,182	15,621	18,276	19,985	28,362	30,994	33,978	37,363	41,202

Source: Ecotourism Development Plan of Cat Tien National Park in the period 2021 - 2030

Appendix 7: Projected funding sources for CTNP in the period 2021-2030

Unit: million VND

#	Funding sources	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
1	Central state budget	55,593	54,226	75,510	80,931	69,847	71,267	72,767	74,353	76,030	77,802	708,325
1.1	<i>State budget allocated for recurrent expenditures (salary and operating costs)</i>	20,000	21,000	23,000	23,562	24,905	26,325	27,825	29,411	31,088	32,860	259,975
1.2	<i>State budget allocated for non-recurrent expenditures (implementation of urgent, non-recurrent tasks)</i>	2,000	4,618	4,618	4,618	3,964	3,964	3,964	3,964	3,964	3,964	39,635
1.3	<i>Investment from the state budget for the development of the Park's infrastructure</i>	15,000	1,900	20,000	25,350	15,563	15,563	15,563	15,563	15,563	15,563	155,625
1.4	<i>Investment from the state budget for sustainable forest management</i>	17,113	24,158	25,342	24,851	22,866	22,866	22,866	22,866	22,866	22,866	228,660
1.5	<i>State budget allocated for other activities (i.e.: investment in buffer zone community development)</i>	1,480	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	2,550	24,430

2	Funding mobilized from local authorities	4,483	2,819	2,994	2,432	3,182	3,182	3,182	3,182	3,182	3,182	31,820
3	Tourism revenue											
	Option 1	6,500	12,677	14,122	15,732	17,526	19,523	21,749	24,229	26,991	30,068	189,116
	Option 2	6,500	14,182	15,621	18,276	19,985	28,362	30,994	33,978	37,363	41,202	246,464
4	PFES revenue	37,840	41,624	45,786	50,365	55,402	60,942	67,036	73,739	81,113	89,225	603,072
5	Grants, aids	6,054	10,592	4,114	2,477	5,809	5,809	5,809	5,809	5,809	5,809	58,093
6	Total											
	Option 1	110,470	121,938	142,527	151,937	151,765	160,723	170,543	181,312	193,125	206,085	1,590,426
	Option 2	110,470	123,443	144,026	154,481	154,225	169,562	179,789	191,062	203,497	217,220	1,647,774

Appendix 8: Projected funding sources for SFM

Unit: million VND

Year		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
I	CONTRIBUTION OF REVENUES TO SFM											
1	State budget	60,076	57,045	78,504	83,363	73,029	74,449	75,949	77,535	79,212	80,984	740,145
2	Ecotourism											
	Option 1	975	1,902	2,118	2,360	2,629	2,929	3,262	3,634	4,049	4,510	28,367
	Option 2	975	2,127	2,343	2,741	2,998	4,254	4,649	5,097	5,604	6,180	36,970
3	PFES	37,840	41,624	45,786	50,365	55,402	60,942	67,036	73,739	81,113	89,225	603,072

4	Grants and aids	6,054	10,592	4,114	2,477	5,809	5,809	5,809	5,809	5,809	5,809	58,093
II	TOTAL REVENUE FOR SFM											
	Option 1	104,945	111,163	130,523	138,565	136,869	144,128	152,057	160,718	170,183	180,528	1,429,677
	Option 2	104,945	111,388	130,748	138,946	137,238	145,454	153,443	162,181	171,739	182,198	1,438,279
III	SALARY AND OPERATING COSTS (32.2% OF THE PARK'S REVENUES)											
	Option 1	35,571	39,264	45,894	48,924	48,868	51,753	54,915	58,383	62,186	66,359	512,117
	Option 2	35,571	39,749	46,376	49,743	49,660	54,599	57,892	61,522	65,526	69,945	530,583
IV	FUNDING FOR SFM											
	Option 1	69,374	71,899	84,629	89,641	88,000	92,375	97,142	102,336	107,997	114,168	917,560
	Option 2	69,374	71,640	84,371	89,204	87,577	90,855	95,551	100,659	106,213	112,253	907,696

Appendix 9: Financial solutions and initiatives for biodiversity conservation in the Southeast Asia

#	Names of the solutions and initiatives	Description	Country where the solutions/initiatives are implemented/piloted
1	Biodiversity friendly subsidies	Government subsidies (including tax relief, technical support, price support) that favor biodiversity by supporting individuals and organizations, and companies acting in the production of organic agricultural products to encourage the expansion of sustainable agriculture, thereby reducing pressures on NPs and NRs	Thailand
2	Biodiversity offset	Actions that increase biodiversity in one place to compensate for biodiversity loss elsewhere, for instance, if a development project causes the loss of 100 ha of forest, the project owner has to regenerate 100 hectares of forest with a full ecosystem of flora, fauna, and microorganisms similar to the lost amount; the application of biodiversity offset will contribute to improve sustainable finance for conservation	Vietnam, Thailand, Indonesia
3	Bioprospecting	Bioprospecting is the systematic search for biochemical and genetic material in nature in order to develop commercially-valuable products while creating a fair compensation system that can benefit all	Thailand, Philippines, Malaysia
4	Biosafety fee	The fee charged to the importer of biological material into a country aiming at preventing alien invasive species (AIS) from entering certain geographical areas	Thailand
5	Carbon market	The mechanism that enables entities that can reduce emissions at low cost (i.e., sustainable forest management) to be paid to do so by high-cost emitters (i.e., change of production technology) in order to ensure the common goal of reducing greenhouse gas (GHG) emissions	Thailand, Indonesia
6	Compensation for planned environmental damage	Financial or other compensation paid by companies, private individuals, or governments for planned environmental damage as part of infrastructure or project development. Compensation levels and forms of compensation are usually determined by law and can be fixed amounts, calculated relative to investment or company sizes, or based on remediation costs and economic damages	Thailand, Vietnam

7	Conservation or wildlife themed items	Special commercial products featuring wildlife are sold at an extra price to costumers and the extra revenues are used for conservation and the protection of wildlife	Thailand, Indonesia, Malaysia
8	Corporate and corporate foundations' donations	Corporations/businesses provide support to conservation organizations and sustainable development organizations through direct-giving programs, private foundations, and/or public charities	Thailand, Vietnam, Indonesia, Malaysia
9	Corporate Social Responsibility Tax	Special form of government taxation that requires (usually large) corporations/companies to spend a percent of their profits every year on corporate social responsibility (CSR) - usually through financing NGOs or paying into government social investment funds	Thailand
10	Corporate sustainability	The integration of sustainability thinking and practice in business operations helps companies to get clear business benefits for operations, reputation, new products and markets, and finance etc.	Malaysia, Philippines, Thailand, Indonesia
11	Cost-effective measures	Numerous cost-effectiveness measures can save money and improve outcomes for government, civil society organizations, and private businesses.	Thailand, Indonesia, Malaysia
12	Debt-For-Nature Swap	Through debt restructuring agreements, governments are able to write off a proportion of their foreign held debt. The savings accrued will be channelled into domestic conservation initiatives and climate adaptation programmes.	Philippines, Thailand, Indonesia
13	Crowdfunding	The practice of securing funding via online platforms that connect the investor or the donor with the project owner to ensure sufficient funding for the project implementation	Thailand, Malaysia, Philippines, Indonesia
14	Disaster risk insurance	Insurance schemes that cover– against a premium– financial losses due to extreme weather and natural disasters; forests and other natural assets can be insured	Vietnam, Indonesia
15	Effective practices for other activities to enhance biodiversity cash flow	The implementation of clusters of cost-effective measures (such as centralized procurement, digitalization, supplier optimization, etc.) can help conservation organizations to optimize their spending methods to save cash flow for conservation activities	Thailand, Indonesia, Malaysia
16	Increased efficiency in public budget spending	The budget spends a fixed percentage on conservation and ensures the correct, sufficient and timely budget allocation	Philippines, Malaysia, Indonesia

17	Taxes and fees for Environmental (and Social) Impact Assessments	Investors of development activities must pay taxes and fees for the consideration and assessment of environmental impacts of individuals and organizations (including conservation organizations) carrying out the environmental impact assessments	Vietnam, Malaysia
18	Green Bank	State or donor-sponsored financial entity offer concessional loans to entities operating in the field of conservation and biodiversity	Indonesia
19	Capacity building for the human resources (in PAs)	Conservation organizations regularly strengthen the capacity of their human resources to practice cost-effective measures; the money saved can go to conservation	Indonesia, Vietnam, Thailand
20	Incentives for sustainable business	The government creates incentives and motivations for businesses to work towards conservation (for example, investing in changing production technology to use fewer natural resources such as land and water)	Thailand
21	Increasing Official Development Assistance (ODA) for biodiversity	The Government takes measures to negotiate and increase ODA capital for conservation	Thailand, Vietnam, Indonesia, Malaysia, Philippines
22	Lobbying for public budget allocations	Lobbying for additional allocations towards conservation by line ministries or national, regional and local authorities	Thailand, Indonesia, Malaysia
23	Mobilization of private donations	Different fund-raising strategies and marketing campaigns are used by conservation societies to raise funding from private citizens including memberships, fundraising events, etc.	Thailand, Vietnam
24	Non-state Protected Areas	Formal protected areas governed (and in many cases owned and managed) by a non-state entity (such as indigenous peoples and/or local communities, private individuals or organizations) to reduce costs of setting up a protected area and the cost of maintaining it	Thailand, Indonesia, Philippines
25	Payment for Forest Environmental Services	Beneficiaries of an ecosystem service (e.g. companies, manufacturing corporations whose inputs are a type of ecosystem services) pay those who provide these services (e.g.: forest owner)	Vietnam, Indonesia, Malaysia, Philippine

26	Increase remittances to increase funding for biodiversity	The Government invests the unused remittances for profits which can then be invested in other activities including conservation and sustainable development activities	Vietnam
27	Result based budgeting	Planning and strategic management tool seeking to link budget allocations with anticipated results. The introduction of result-based budgeting (RBB) contributes to achieving cost-savings and better defining priorities in the allocation of scarce public or private resources. This tool is completely usable for the field of conservation	Philippines, Malaysia
28	Taxes, fees, and penalties for wildlife hunting and transportation	Revenues from taxes, fees, and penalties are used to support sustainable wildlife exploitation and use	Vietnam, Indonesia, Malaysia, Philippine, Philippines
29	Taxes and fees on pesticides and fertilizers	Part of tax and fee revenues may be allocated for biodiversity management purposes	Vietnam, Indonesia, Philippine
30	Taxes and fees on forest products harvesting, transportation, and use	Part of revenues may be allocated for biodiversity management purposes	Vietnam, Indonesia, Malaysia, Philippine, Philippines
31	Trust funds	A type of fund (i.e.: conservation fund, environment fund) set up by the Government to support conservation by mobilizing, coordinating and monitoring the allocation of financial resources for activities	Vietnam, Indonesia, Malaysia, Philippine
32	Venture capital	Start-up incubators - organizations that provide technical and financial services – with priorities given to startups with a clear commitment to biodiversity	Philippine, Philippines

Source: <https://www.biofin.org/finance-solutions>

Appendix 10: Annual CO₂ absorption by forest ecosystems in CTNP

#	Type of forest	Area (ha)	Carbon absorption capacity ⁴ (ton/ha/year)	Potential converted CO ₂ credit amount (tCO ₂ /year)
1	Natural forests	66,915		465,789
1.1	Evergreen broadleaved forests	27,685		247,148
-	Rich broadleaved forest on soil mountain	1,994	1.2	8,782
-	Medium broadleaved forest on soil mountain	14,933	1.9	104,128
-	Poor broadleaved forest on soil mountain	10,755	3.4	134,201
-	Very poor broadleaved forest on soil mountain	2.87	3.6	38
1.1	Bamboo forest	7,885		11,575
-	Bambuco bamboo forest on soil mountain	7,807	0.4	11,461
-	Other bamboo forest on soil mountain	78.1	0.4	115
1.3	Mixed wood-bamboo forest	31,345		207,065
-	Mixed wood-bamboo forest on soil mountain (mainly wood)	11,560	1.8	76,365
-	Mixed bamboo-wood forest on soil mountain (mainly bamboo)	19,785	1.8	130,700
2	Plantations	1,213		14,245
-	Plantation on soil mountain	509	3.2	5,978
-	Other plantation on soil mountain	704	3.2	8,268
TOTAL		68,128		480,034

⁴ Source: MONRE, 2014, The Initial Biannual Updated Report of Vietnam to the UNFCCC, <https://unfccc.int/sites/default/files/resource/bur1vietnam.pdf>

Appendix 11: List of organization operating in the field of conservation and biodiversity conservation in Vietnam

#	International name	Vietnamese name	Related field of operation	Priority areas for sponsorship/cooperation	Contact
A. Development organizations					
1	GIZ	Tổ chức Hợp tác phát triển Đức	Environment and natural resources	<ol style="list-style-type: none"> Finalization of the legal framework relating to conservation and sustainable use of biodiversity and forest ecosystems Provide technical support and resources for enhanced capacity of state management in conservation and sustainable use of biodiversity and forest ecosystems Transfer biodiversity-related experience from new international initiatives 	https://www.giz.de/en/worldwide/357.html hoặc https://www.facebook.com/GIZinVIETNAM/
2	JICA			<ol style="list-style-type: none"> Support the development of the biodiversity database system Support the development of biodiversity monitoring system Support Vietnamese delegations to participate in international forums and policy dialogues on biodiversity conservation such as the Conference on Biodiversity Conservation (CBD), the 10th meeting of the Conference of the Parties (COP10) Support the implementation of activities to enhance people's awareness on biodiversity 	https://www.jica.go.jp/vietnam/vietnamese/index.html?fbclid=IwAR20bUswLJGzYVil5L366QJSHAoYjKfvlABmegBGy3TQRVhVhX6OlqJludQ hoặc https://www.facebook.com/jicavietnam/?ref=hl
3	UNDP	Chương trình phát triển Liên hiệp quốc	Nature-based development solutions	<ol style="list-style-type: none"> Support the participation and implementation of many international treaties and strengthen regional and global cooperation to address conservation and sustainable use of biodiversity issues such as the Convention on Biological Diversity, Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, v.v. through the development and implementation of the Law on Biodiversity 2008, National Strategy on Biodiversity, Law on Environment Protection 	https://www1.undp.org/content/vietnam/vi/home2.html hoặc https://www.facebook.com/undpvietnam/

				2. Sponsor and implement local conservation related projects	
4	UNEP	Chương trình Môi trường Liên hiệp quốc	Biodiversity conservation	<ol style="list-style-type: none"> 1. Provide technical support and consultants for the development of legal documents and policies related to the implementation of a number of international treaties including: Convention on Wetlands of international importance, especially as waterfowl habitat; Convention on Biodiversity; Convention on International Trade in Endangered Species of Wild Fauna and Flora, etc. 2. Encourage and support research programs on biodiversity to promote biodiversity conservation development activities nationwide 	https://www.unep.org/explore-topics/green-economy/what-we-do/environment-and-trade-hub/vietnam
5	UNESCO	Tổ chức Giáo dục, Khoa học và Văn hoá Liên hiệp quốc	Sustainable natural resources management, promotion of nature-based solutions, capacity building for governance of marine ecosystems and water resources	<ol style="list-style-type: none"> 1. Implement the program People and the Biosphere to help Vietnam maintain sustainable development by protecting the harmonious relationship between people and nature in which the main focus is the balance and sustainability between the requirements on biodiversity conservation and economic development and preservation of cultural values 2. UNESCO recognized the world biosphere reserves in Vietnam, helping to improve the conservation of special ecosystems corresponding to international standards. Biosphere reserves are being paid attention by the the leaders at all levels and the idea of using the network of Vietnam's biosphere reserves as a model for education for sustainable development is currently being shaped and is of interest to the world. 	https://en.unesco.org/fieldoffice/hanoi
6	USAID	Cơ quan phát triển quốc tế Hoa Kỳ	Biodiversity conservation, encountering wildlife crimes	<ol style="list-style-type: none"> 1. Coordinate with the partners to implement a series of interventions including capacity building for PAs, promotion of environment friendly businesses, law enforcement strengthening, and reduced consumption demands for wild animals and products originated from wildlife. 	https://www.usaid.gov/vj/vietnam/work-with-us/partnership-opportunities

				2. Funding activities which aim at combating illegal wildlife trade; strengthen law enforcement and adjudication capacity, consolidate and unify the legal framework; reduce demand for wild species and wildlife products	
B. International NGOs					
1	Birdlife International	Tổ chức chim quốc tế	Species and habitats conservation	<ol style="list-style-type: none"> 1. Support to improve planning and management of important habitats, sites and species; 2. Introduce and encourage new ideas to mainstream biodiversity conservation into planning and policy; 3. Promote public interest in birds and biodiversity as well as public awareness of the need for biodiversity conservation; 4. Build capacity for improved management of habitats, sites and species; 5. Provide information on biodiversity and protected areas to policy makers and other interest groups. 	https://www.birdlife.org/asia/partners/vietnam-birdlife-international
2	Fauna & Flora International (FFI)	Tổ chức Bảo tồn động, thực vật hoang dã quốc tế	Wild fauna and flora conservation; conservation of threatened ecosystems	<ol style="list-style-type: none"> 6. FFI focuses on the conservation of threatened primates and Vietnam's most threatened limestone ecosystem 7. FFI is currently implementing a series of project relating to biodiversity conservation in the whole country including: conservation of <i>Nomascus concolor</i> in Mu Cang Chai Species and Habitat Conservation Area (Yen Bai) and Muong La Nature Reserve (Son La), conservation of <i>Nomascus nasutus</i> in Trung Khanh Species and Habitat Conservation Area (Cao Bang), conservation of <i>Trachypithecus delacouri</i> in Kim Bang forest (Ha Nam), conservation of <i>Nomascus leucogenys</i> in Pu Mat National Park (Nghe An), conservation of <i>Pygathrix cinerea</i> and <i>Nomascus annamensis</i> in Kon Plong forest (Kon Tum), and conservation of <i>Rhinopithecus avunculus</i> in Khau 	https://www.fauna-flora.org/countries/vietnam

				Ca Species and Habitat Conservation Area and in Quan Ba district (Ha Giang).	
3	Frankfurt Zoological Society (FZS)	Hội động Vật học Frankfurt tại Việt Nam	Protection of wild areas and wildlife conservation	<ol style="list-style-type: none"> 1. FZS cooperated with Cuc Phuong National Park to establish a Primate Rescue Center to nurture and take care of a number of primate species, including some endangered species such as the critically endangered Cat Ba langur, Delacours langurs, and the gray-shanked douc langur, etc. 2. FZS is currently supporting Kon Ka Kinh National Park in preventing illegal logging and wildlife hunting activities; building capacity for the ranger force, providing equipment for forest patrolling and law enforcement 3. FZS also collaborates with Da Nang University to train students in wildlife conservation and develop a conservation database of rare species and unique forest habitats 	https://vietnam.fzs.org/vi
4	GEF	Quỹ môi trường toàn cầu	Enhance the sustainability of PA systems, reduce threats to globally important biodiversity, sustainably use biodiversity, and mainstream biodiversity	<ol style="list-style-type: none"> 1. Since its operation, GEF has provided Vietnam with about USD 49 million to implement national projects (including: 18 project in the field of biodiversity; 04 multi-field projects with biodiversity components) and 3 regional and global projects. Funding for biodiversity accounts for 28% of the total GEF's funding for Vietnam 	https://www.gef.monre.gov.vn/vi/trang-chu/trang-chu-1/

5	Humane Society International (HSI)	Tổ chức quốc tế đối xử nhân đạo với động vật	Support the protection and conservation of animals and habitat improvement	<ol style="list-style-type: none"> 1. HSI has coordinated with specialized agencies of Vietnam to implement the project “Reducing the demand for illegal wildlife species in Vietnam” with the goal of reducing the demand for rhino horn and products from illegally traded endangered and rare wildlife species 2. HSI also develops public awareness communication materials (about 36 million people) on conservation of endangered wildlife 	https://www.hsi.org/about-us/
6	IUCN	Liên minh Bảo tồn thiên nhiên quốc tế	Water/wetlands, sea/coastal areas, international natural heritage conservation, biodiversity conservation	<ol style="list-style-type: none"> 1. Mobilize resources from stakeholders to support Vietnam’s biodiversity conservation and natural resource protection. 2. Provide technical support for the formulation of laws and policies relating to biodiversity conservation such as National Biodiversity Action Plan 1995, Law on Forest Protection and Development 2004, Law on Environment Protection 2005, and the Law on Biodiversity 2008 3. Since 2004, IUCN has implemented hundreds of projects as well as field projects to support biodiversity conservation, environment protection, community livelihood development in the entire country 	https://www.iucn.org/asia/countries/viet-nam
7	TRAFFIC International (TRAFIC)	Mạng lưới giám sát buôn bán Động vật Hoang dã quốc tế	Preserve wild animals and plants, counter wildlife related crimes	<ol style="list-style-type: none"> 1. Support and promote social responsibility and participation of the e-commerce business community in the fight against illegal wildlife trade and reduce the consumption of wild animals and plants 2. Over the past 20 years, TRAFIC has researched consumer attitudes towards rhino horn in Vietnam and provided evidence-based initiatives to reduce demand for rhino horn consumption. 	https://www.savetherhino.org/programmes/trafic-vietnam/

8	World Wide Fund for Nature (WWF)	Tổ chức bảo tồn thiên nhiên thế giới	Biodiversity protection and sustainable management of natural resources	<ol style="list-style-type: none"> 1. WWF has established and focused its conservation activities in 3 priority landscape areas including Central Annamites, Southern Annamites, and the Mekong river delta, in which, WWF - Vietnam supports seeking suitable conservation methods for each landscape area, studied biodiversity values, enforced laws, improved working conditions and capacity of forest rangers to conserve endemic and threatened species in the area such as saola, tiger, elephant... 2. WWF – Vietnam has supported the establishment of nature reserves and national parks to restore and maintain the connectivity of the ecosystem in the region. In the Central Annamites area, WWF – Vietnam has supported the establishment of a system of biodiversity corridors encompassing the provinces of Quang Nam, Quang Tri, and Thua Thien - Hue. 3. WWF Vietnam supports the establishment of Ramsar areas to restore and protect natural wetland areas associated with biodiversity conservation, including the Tram Chim and Lang Sen Conservation Areas 4. WWF – Vietnam also supports the sustainable production and harvesting of natural resources, in which, WWF has developed a fishery program for catfish and shrimp that promotes responsible farming by applying the Aquaculture Stewardship Council's (ASC) international standards. 5. To reduce pressures on PAs, WWF – Vietnam has implemented a number of local livelihood improvement programs. 6. WWF also partnerships with businesses to promote sustainable use of natural resources and ecosystems. 	https://vietnam.panda.org/
C. Local NGOs					

1	Vietnam Association for Conservation of Nature and Environment (VACNE)	Hội Bảo vệ thiên nhiên và môi trường Việt Nam		<ol style="list-style-type: none"> 1. VANCE has participated in the development and implementation of strategies and policies on biodiversity such as: Biodiversity Action Plans 1995 and 2006; Law on Biodiversity 2008; National environmental protection strategy to 2010 with orientation until 2020 2. VANCE has provided critical feedbacks against a number of projects such as the Ho Chi Minh Trail through Cuc Phuong National Park, Phong Nha – Ke Bang National Park, Tam Dao 2 project, etc. 3. VANCE has published many publications and documents related to biodiversity conservation such as: Biodiversity conservation in the Truong Son mountain range, Vietnam's heritage trees, ... thereby contributing significantly to enhance community awareness to protect Vietnam's rare genetic resources 	http://www.vacne.org.vn/
2	Education for Nature Vietnam (ENV)	Trung tâm giáo dục Thiên nhiên	Minimize demand for wild animals and plants, finalize wildlife related policies	<ol style="list-style-type: none"> 1. ENV cooperates with a number of relevant agencies to comment and complete wildlife-related legal documents to improve the efficiency of management and handling of wildlife violations 2. ENV has set up a free wildlife protection hotline to encourage people to report wildlife violations 3. ENV cooperates with authorities and people across the country to detect and handle violations related to bears, tigers, rhinos, and pangolins. 4. ENV regularly releases publications (newsletters, media films, documentaries, reports, researches, educational materials, etc.) to raise public awareness of wildlife conservation and reduce consumption of wildlife and wildlife products 	https://thiennhien.org/
3	PanNature	Trung tâm con người và Thiên nhiên		<ol style="list-style-type: none"> 1. PanNature works with many communities, agencies, government, international organizations and the private sector to support policy formulation, reform and implementation; implements initiatives to conserve and restore ecosystems 	https://nature.org.vn/vn

				2. PanNature has also published more than 170 publications (reference books, leaflets, flyers, posters, manuals, etc.), organized online communication programs about Vietnam's environment and nature to enhance public understanding of the environment and nature and encourage activities of nature conservation and biodiversity conservation	
4	MCD	Trung tâm nghiên cứu Bảo tồn Sinh vật biển và Phát triển cộng đồng	Marine and coastal ecosystems conservation, especially vulnerable areas	<ol style="list-style-type: none"> 1. Implement marine creatures conservation projects in areas with coral reef ecosystems in the Central region and in wetland ecosystems in the Red River Delta and Mekong River Delta in order to preserve marine ecosystems and improve the quality of life of coastal populations in Vietnam 2. MCD plays an important role in the establishment of the Ran Trao coral reef ecosystem protection zone (Khanh Hoa); support the operation of the Red River Delta Biosphere Reserve; 	http://www.mcdvietnam.org
5	GreenVIET	Trung tâm Bảo tồn Đa dạng sinh học Nước Việt xanh	Scientific researches on biodiversity, implementation of communication and education activities to enhance community awareness on biodiversity conservation, engage communities in biodiversity conservation activities	<ol style="list-style-type: none"> 1. GreenVIET has made great efforts to conserve red-shanked douc langur, gray-shanked douc langur, and black-shanked douc langur populations and important ecosystems in the Central - Central Highlands region 2. GreenVIET has conducted a number of scientific research activities on biodiversity in the Central - Central Highlands region 3. GreenVIET has implemented many educational communication projects to raise awareness about biodiversity for pupils and students 4. GreenVIET has made great efforts in fund raising for biodiversity conservation and environmental protection for Da Nang city 5. GreenVIET is implementing a project to plant 1 million trees in Da Nang, Hanoi and Ho Chi Minh City in the period 2020 – 2030 	https://greenviet.org

6	Wildlife At Risk (WAR)	Tổ chức Bảo vệ Động vật hoang dã	Biodiversity conservation in Vietnam through the prevention of illegal captive breeding, trade, and consumption of wild animals and plants and support for the conservation of endangered species and their habitats	<ol style="list-style-type: none"> 1. WAR has conducted many biodiversity survey activities in the mountainous areas of Vietnam (Ngo Luong Nature Reserve – Hoa Binh, Tri Tôn – An Giang, Ta Dung National Park– Dak Nong, Pia Oak mountain – Cao Bang, etc.) to inform managers about biodiversity status of the area and to support the reintroduction of wildlife into suitable habitats 2. WAR implements breeding program to produce and reintroduce endangered wild animals (such as yellow-tailed gecko, Giant Asian pond turtle, Malayan Box Turtle, monitor lizard, pangolin, wildcat, etc.) into wild habitats. 3. WAR has received and rescued many wild animals and reintroduce them into the wild 4. WAR has carried out a number of community education activities to promote conservation of wild, rare and endangered species in Vietnam 	https://wildlifeatrisk.org/vi/
---	------------------------	----------------------------------	--	--	---

Appendix 12: Project Proposal Template⁵

(maximum 5 pages in Vietnamese)

Project name:

I. Information

- Name of organization :
- Contact information (Mailing address, Telephone, Email)
- Representative of the organization (name and position, contact details)
- Contact person (name and position, contact details)
- Basic information about the organization (operational purpose, personnel capacity and project management experience, financial capacity, operating budget of the organization (source of supply, total funding (by year)

II. Brief description of the project

1. *Describe the problem to be solved by the project*
2. *Describe the methodology used to solve the problem*
3. *Basic information about the project area (economic, social, environmental...)*
4. *Brief description of the project*
 - a. Objective
 - b. Expected outcomes
 - c. Planned activities
 - d. Project implementation and management (Community involvement and stakeholders (the organization proposing the project, consulting organization/consultants, relevant authorities and agencies, related programs/projects).
 - e. Project time (month)
 - f. Funding (VND)
 - Fund requested from GEF SGP
 - Contributions from other sources (specify: sources: expected or secured)
5. *Documents to be attached to the Proposal: the organization's legal document, the results of the acceptance of related research topics, list of project that have been and are being implemented (in the same area or/and of the proposing organization,...)*

Organization

(Name, signature and stamp)

⁵ Sample project ideas under the Small Grant Program, Global Environment Fund

Programme on Conservation, Sustainable Use of
Forest Biodiversity and Ecosystem Services in Viet Nam

Unit 021, 2nd Floor, Coco Building
14 Thuy Khue Str., Tay Ho District, Hanoi, Viet Nam

T: +84 24 39 32 95 72
E: office.biodiversity@giz.de
I: www.giz.de/viet-nam

