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SITE PROFILE

Than Sa Phuong Hoang Nature Reserve

Management, governance and finance





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Part I: Management and governance

History and development

Thai Nguyen province has a forest cover of 180,000 ha (47%). Just over half of this area is categorized as production forest. Special use and protection forests constitute 20% and 26% respectively¹. Over 23,000 ha of the provinces special use and protection forests were assigned to the formerly titled “Than Sa Phuong Hoang Nature Reserve”. In recent developments, this Nature Reserve has been combined with neighboring Protection Forests and is now called the “Management Board of Special-Use and Protection Forests of Thai Nguyen”. The following sections will describe both Nature Reserve and Protection Forests separately.

The area under administration of the management board comprise two different forest areas: the Than Sa Phuong Hoang (TSPH) Nature Reserve, about 40 km north of Thai Nguyen City, and forests surrounding the Nui Coc reservoir, about 25 km west of the city.

This profile provides a summary of facts and governance for the area under administration of the management board.

Frequently used acronyms

CPC	Commune People’s Committee
DARD	Department of Agriculture and Rural Development
DONRE	Department for Natural Resources and the Environment
FPD	Sub-Department of Forest Protection
NP	National Park
NTFP	Non-Timber Forest Products
MARD	Ministry of Agriculture and Rural Development
MONRE	Ministry of Natural Resources and the Environment
MOST	Ministry of Science and TECHNOLOGY
PFES	Payments for Forest Ecosystem Services
PPC	Provincial People’s Committee
VNFOREST	Vietnam Administration of Forestry

¹ http://english.thainguyen.gov.vn/investment-incentive-policy-of-the-province/-/asset_publisher/C5kLAFKpbtS/content/introduction-about-the-development-potential-of-thai-nguyen-province/5796278; Special use forest: conservation area designated to protect national forest ecosystems and biodiversity; Protection forest: to protecting water and land resources, i.e. prevent erosion, desertification, and reduce the risk of natural calamities, and to regulate climate.

People and land use

Than Sa Phuong Hoang Nature Reserve in Vo Nhai District

Eight communes, comprising 58 villages are located in the buffer zone of the nature reserve. This area is one of the more remote and economically most difficult area of Thai Nguyen province. The population is dominated by Ethnic minorities (about 90%: H'Mong, Thai, Tay, Nung, San Diu and Cao Lan). 12% of households are considered poor. People in these communes have very limited access to cropland and often focus on one crop only. The existing agricultural land is fragmented. To compensate the low income from agriculture, most households rely heavily on forests for their livelihoods. The strong reliance on forest resources makes the protection of forests and wildlife a key aspect of natural resource management in area.

People retain the traditional land management practices, including shifting cultivation (rice, maize), free grazing of livestock (pig, buffalo, cow, goat, and poultry²), harvesting of non-timber forest products (honey, vegetables), and gardening (vegetables, fruit trees).

People cannot receive land use titles (Red Book) for their traditional agricultural land because the area has been demarcated as special use forest zone. With stricter enforcement of forest regulations and reforestation the issue of agricultural land is becoming more and more serious. The situation is further exaggerated by the water shortages for agriculture and the degraded inter-villager road system. Accordingly, over 70% of the villages are classified as extreme hardship villages.

Table 1: Population statistics for the TSPH management area

Commune	Population		Number of poor HH	Number of Ethnic HH	Number of villages	No. of extreme hardship villages
	Household	People				
Dinh Ca town	1087	3695	16	609	2	1
Cuc Duong	633	2780	105	622	5	2
Nghinh Tuong	692	2971	127	692	12	12
Phu Thuong	1279	2585	15	1128	7	1
Sang Moc	706	2910	144	706	9	7
Than Sa	619	2472	88	619	7	7
Thuong Nung	573	4875	175	571	7	5
Vu Chan	706	2822	69	705	9	7
Total	6,295	25,110	739	5,652	58	42

Source: Planning and Finance Division, TSPH, 2021

Nui Coc Reservoir

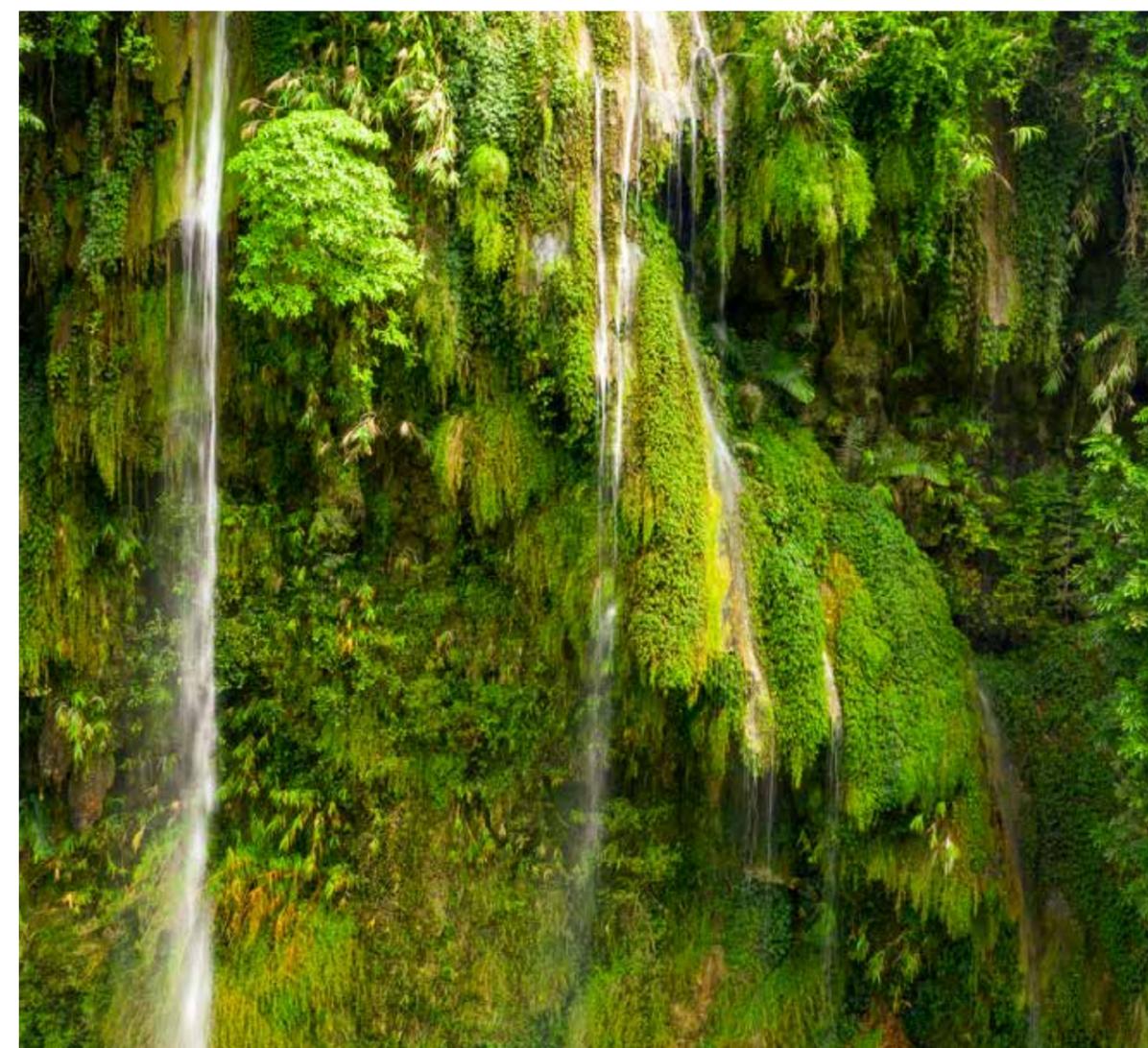
People from six communes live within or neighboring to the forest area at Nui Coc Reservoir. Only five percent of households belong to ethnic minorities (H'Mong, Tay, Nung, San Diu, Ngai, Cao Lan and Hoa) and very few households are considered poor. Key income sources are tea, rice and forest plantations (Acacia). While many households have received the Land Use Certification (Red Book) for their forestland area, the management board still carries to overall protection responsibility

² Livestock numbers in 2019 were estimated at 4,507 Goats, 5,640 Buffalos, 3,010 Cows, 21,130 pigs and 667,000 poultry.

Table 2: Population statistics for the Nui Coc Protection Forest Area area

District	Commune	Population		Number of poor HH	Number of Ethnic HH	Number of villages	No. of extreme hardship villages
		Household	People				
Pho Yen	Phuc Tan	922	3,684	N/A	146	11	3
Thai Nguyen City	Phuc Triu	200	715	8	N/A	2	0
	Phuc Xuan	970	2,560	N/A	N/a	7	0
Dai Tu	Tan Thai	596	2,002	23	5	2	0
	Van Tho	158	692	2	36	1	0
	Luc Ba	664	2,328	N/A	N/A	4	0
	Total	3,510	11,981	33	187	27	3

Source: Planning and Finance Division, 2021



Conservation and sustainable use

Than Sa Phuong Hoang Nature Reserve

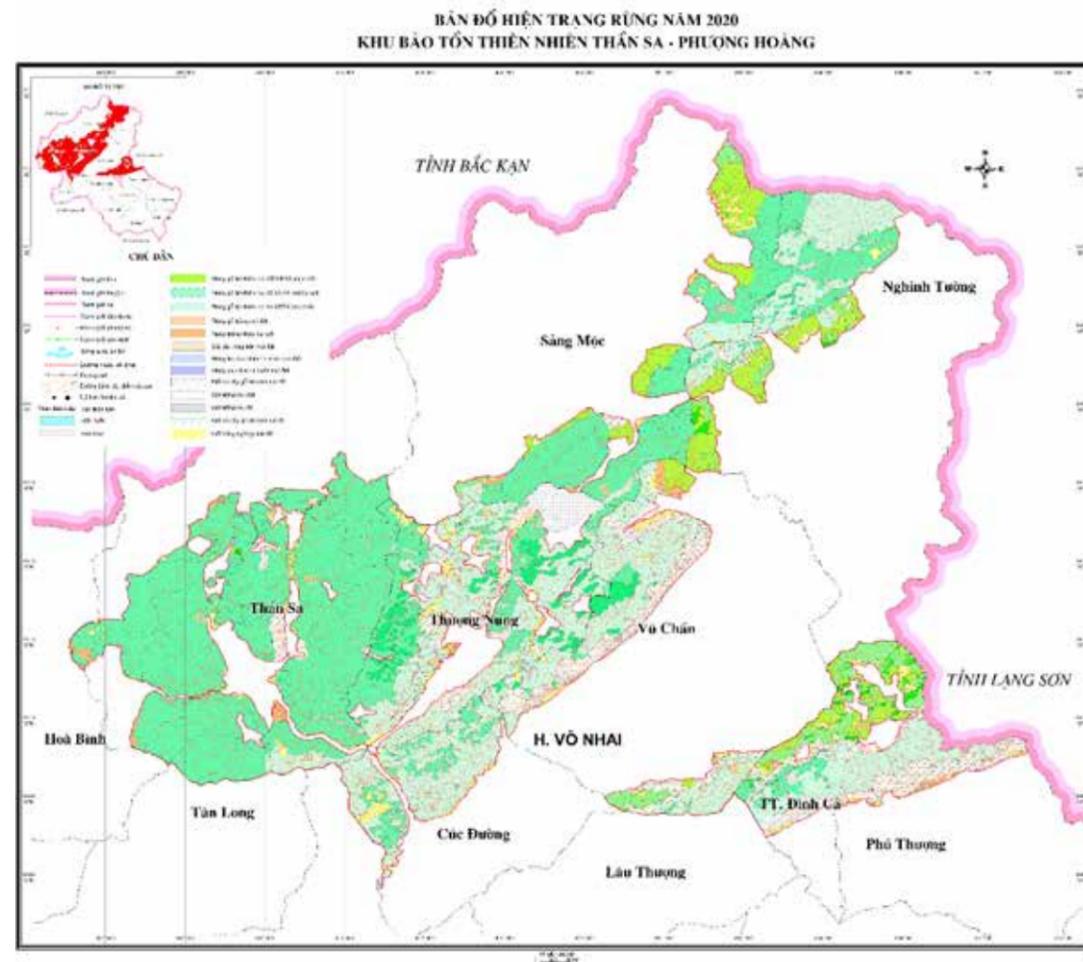
Than Sa Phuong Hoang Nature Reserve (NR) is located on the southernmost part of the Ngan Son range, and has an average altitude of 700m asl. The landscape is characterized by its numerous lime stone rock formations. The NR provides an important link between the forest ecosystems of the Northeastern Vietnam Eco-Region and encompasses river systems: Nghinh Tuong and Dong rivers. The area of forest and forestland under the Special-Use forest category in Than Sa Phuong Hoang NR is 19.914 ha, equaling 49% of the forest cover in Vo Nhai district³. About 90% of the reserve's forestland is stocked with limestone forest. Figure 2 shows the status of forests in the NR.

The diverse climatic and topographical conditions give way to a highly divers flora and fauna.

- Flora: 160 families, 1,096 species, including 319 tree species, 574 species of medicinal plants, 84 ornamental species, and 162 edible plants.
- Fauna: 93 families, 295 species, including 56 mammal species, 117 bird species, 28 reptile species, 11 amphibian species, and 77 fish species.⁴ 34 species are protected (15 group IB, 19 group IIB)⁵

However, in comparison to other Special-Use forest units very little information is available regarding the biodiversity values of the nature reserve (NR). Than Sa Phuong Hoang NR comprises many attractive and archaeological sites, including caves (e.g. Tham Bau, Tham Luong, Phieng Tung) and waterfalls. The most famous sites are Phuong Hoang Cave and Mo Ga stream (recognized as national historical relics), and the archaeological site Nguom rock roof.

Figure 2: Forest status and categories in TSPH

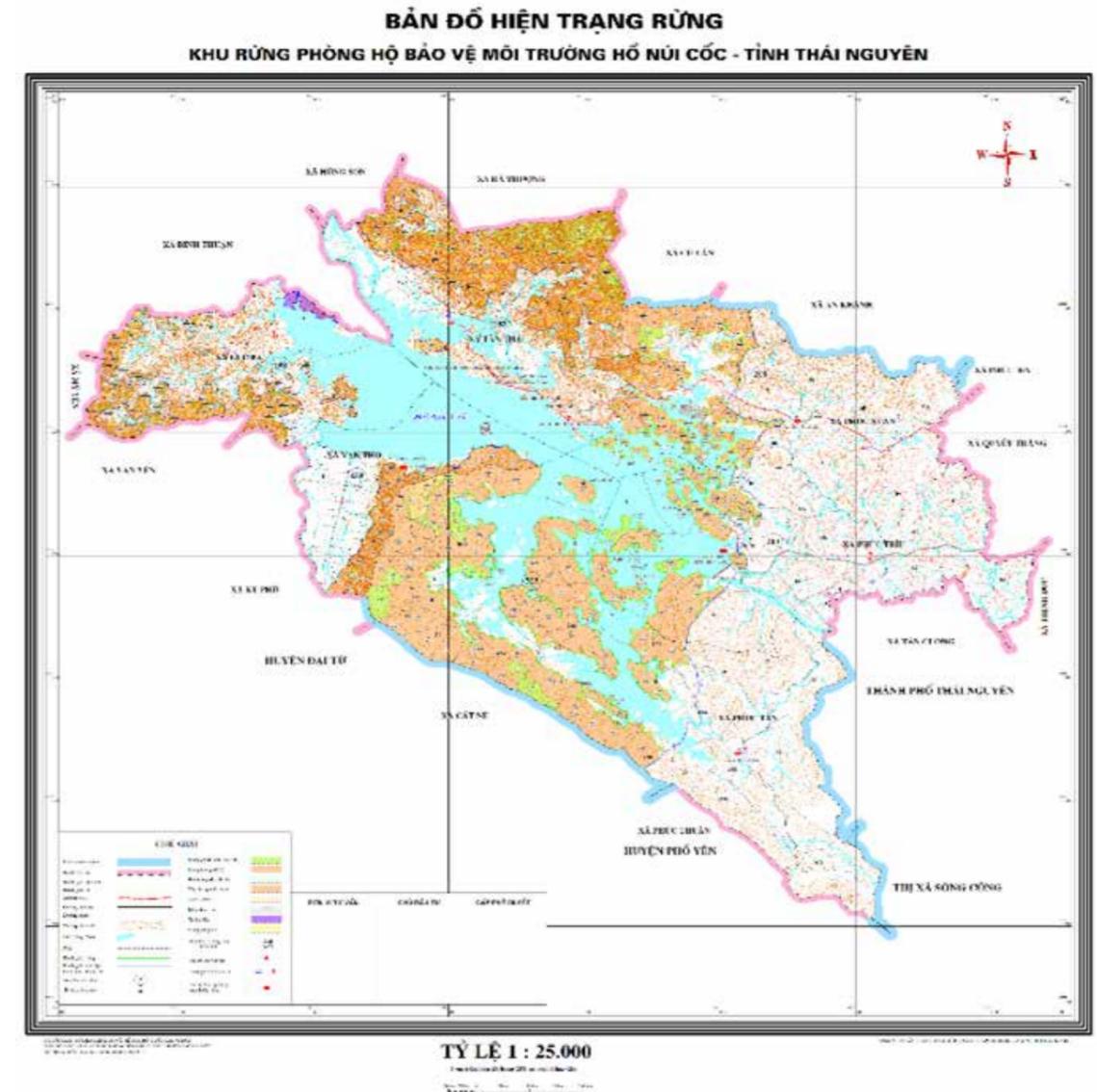


Forests in the Nui Coc forest area

The Nui Coc forest area comprises 3,453 ha of forest and forestland categorized as protection forest. The forest is distributed around and on a number of the islands of Nui Coc Reservoir. Only 11% (376 ha) are natural, but degraded forests, characterized by bamboo, bush and young regeneration. The majority of the land is planted with Acacia and managed in short rotations for the production of chip wood. 5% of the area are under other, non-forest land use. The reservoir, covering 25km², has a storage capacity of 175 million cubic meters. It provides irrigation water for 12,000 ha agricultural land, industries, and towns and villages. The protection forests are very important for the provision of water to the reservoir. Forests reduce the amount of soil movement, thus preventing water pollution and sedimentation.

There is potential to develop tourism, building on the beautiful combination of water and forest in the landscape.

Figure 3: Forest status and categories in Nui Coc Protection Forest Area



³ Forest cover in the Vo Nhai District is 40,289 ha.

⁴ <http://baotonthiennhien.thainguyen.vn/tiem-nang-du-lich?inheritRedirect=true>

⁵ IB: endangered, precious, and rare species of forest fauna threatened with extinction and banned from exploitation

IIB: species of forest fauna that are currently not threatened with extinction but might become extinct

Ecosystem services

Forests in Than Sa Phuong Hoang Nature Reserve and around the Nui Coc reservoir provide important ecosystem services. However, the Management Board does not (yet) receive related funding (e.g. from the Payment for Forest Environmental Services).⁶

Table 3: Summary of main ecosystem services

Main ecosystem services	Summary
Provisioning services	<ul style="list-style-type: none"> Timber reserves estimated at 810.000 m³, mostly in the special use forests divers range of non-timber forest products, including medicinal plants, honey, bamboo shoots, food plants, orchids, and rattan. Overexploitation in the past has significantly reduced the availability of NTFP.
Regulating services	<ul style="list-style-type: none"> The management area is part of the watershed of major river systems, including Cau and Thuong rivers. Forests help to regulate water quantity and quality in the watershed and Nui Coc reservoir. Forest carbon storage and sequestration through avoided deforestation and forest degradation, sustainable management of production forests
Cultural services	<ul style="list-style-type: none"> TSPH contains valuable archaeological sites, historical relics & natural beauty. Both TSPH and Nui Coc have potential for tourism development. Part of TSPH belongs to a defense security area, i.e. is off limits to the public.
Supporting services	<ul style="list-style-type: none"> Habitat: diverse topography of TSPH's limestone mountains and related micro-climate in TSPH provides important habitat for many species Biodiversity: divers flora and fauna in TSPH, including critically endangered species such as Chamois (<i>Capricornis milneedwardsii</i>), Flying squirrel (<i>Belomys pearsonii</i>), and King cobra (<i>Ophiophagus hannah</i>).

Forest management, use and conservation

The Management Board (MB) of Special-Use and Protection Forests of Thai Nguyen carries the responsibility for the 23,367 ha of forest and forest land. Local communities or individual households participate in forest management and protection through forest protection contract with the MB. About 65% of forests are contracted to communities and individual households. The remainder is managed directly by the MB.

Table 4: Total area for Forestland allocation within both SUF & PFMB

	Land cover /use in ha			Ownership and management*	
	TSPH NR: Special use forest	Nui Coc reservoir: Protection forest	Total		
Natural forest	17,413	376	17,788		
Acacia plantation	-	2,900	2,900		
Other	2,146	178	2,324		
	19,914	3,454	23,367	Individual land use right	4%
				Forest protection contracts	65%
				Without contract	31%

*The area under forest protection contracts varies between years. In 2020: 50 communities & 49 individual households Forest in TSPH NR and 1 community & 86 individual households in Nui Coc area.

In **Than Sa Phuong Hoang** NR 30 villages were supported through a livelihood investment fund, allocating VND 30 million per village (Decision No. 24/2012/QD-TTg). Using part of this funding, the cultivation of native medicinal plants under the forest canopy (Ba kich, *Morinda officinalis* & Cat Sam, *Millettia speciosa*) was piloted on 6 ha in Sang Moc commune in 2020 and 20 ha in Nghinh Tuong Commune in 2015. Participating households received seedlings and technical training from the MB. The MB is planning to evaluate the pilot models and explore the potential to expand the pilot scheme to other communities in the Than Sa Phuong Hoang and Nui Coc areas.

Ba kich and Cat Sam are well adapted to the soil and climatic conditions in Than Sa Phuong Hoang, and align well with the traditional cultivation approaches of local people. Yield of Ba kich reached up to three tons per ha (about 600 kg of dry Ba kich) after 5 to 7 years. Dry Ba kich can be sold at VND 300,000 to VND 400,000 per kg in local markets. That is under ideal conditions, farmers can generate income exceeding VND 200 million of revenue per ha.

Ba kich fits well to the short rotation Acacia management cycle currently practiced, but could be used in longer rotation models as well. Therefore, farmers in the Nui Coc area are interested to grow Ba kich in Acacia plantations.

Source: Mr. Hà Văn Ninh, Chairman of Nghinh Tuong Communal People Committee & Mr. Nguyen Ngoc Dzung- Villager Leader, Suoi Cai Village, Phuc Triu Commune

Plantation forests surround the **Nui Coc reservoir** were established in the framework of former large scale national reforestation programs. 2,450 ha (incl. the remaining natural forest) are under the management of the MB. The remaining plantation area (about 1,000 ha) belong to individual households. Communities and household participation in forest protection of the MB managed area is based on forest protection contracts. However, the area under contract fluctuates between years, depending on the available funding allocated by the Provincial Peoples Committee.⁷

990 ha Acacia plantations belong to individual households, i.e. are included in the Land Use Right Certification (Red Book). Currently, farmers plant Acacia hybrid with a density 2000-2500 seedling per ha.

The establishment, management and harvesting of short rotation Acacia plantations costs about VND 50 million/ha. Chip wood from a well-managed plantation can earn about VND 100 million/ha at the end of the rotation, leaving a profit of about 50 million/ha (about USD 2,200) - i.e. about half of the net-income from Ba Kich (see box above).

Government policies for forest protection and development foresee grant payments of VND 30 million/ha to forest owners investing in the establishment of protection forest. The budget required to establish 1 ha of mixed species forest in Nui Coc area is estimated at around VND 50 million to VND 60 million, leaving a funding gap to be carried by the farm household.

Source: Decision No. 38/2016/QD-TTg dated September 14, 2016 by the Prime Minister promulgating a number policies for forest protection and development, and investment in infrastructure and assignment of community work to agricultural and forestry companies.

⁷ The area under forest protection contracts fluctuates according to the financial resources provided by the provincial government (past values ranged between 470 ha and 1,330 ha). The annual PFES revenue from clean water services, tourism activities on the lakes and hydropower of Thai Nguyen province is very low. From 2016 to 2018, Thai Nguyen VNFF received on average VND 2 billion. Against this background, available funding for forest protection is limited - covering only about 12% of the total protection forest area of the province.

Management and stakeholders

The Management Board for Than Sa Phuong Hoang (TSPH) Nature Reserve (established in 1999, under management of DARD)⁸ and Management Board for Forest Protection and Environmental protection of Nui Coc reservoir (established in 1991, under management of the Provincial FPD)⁹ were merged into the Management Board of Special-Use and Protection forests of Thai Nguyen in June 2020 by the PPC of Thai Nguyen¹⁰. The new MB is a state-owned/public organization under the direct administration of DARD. It has to administer and manage 23,367 ha of forest and forestland in two disconnected areas with very different conditions and management targets. The organization is responsible for the development and implementation of forest management plans for forests and forestland in a total of 14 communes and their respective districts.

In 2021, the MB has 35 employees at management level.¹¹ The MB headquarter is located in Cuc Duong Commune, Vo Nhai district. Two Forest Protection Stations are located in the nature reserve area (Than Sa Phuong Hoang) and one in the Forest Protection area (Nui Coc area).

The PFMB is mandated to:

- Manage and protect forest (ecosystem) & biodiversity;
- Restore special use forests, with special attention to rocky, mountainous areas
- Protect and develop protective forests, especially with regard to the protect and regulation of water resources and reservoir
- Support research and implement training activities for forest protection, conservation and sustainable resource use

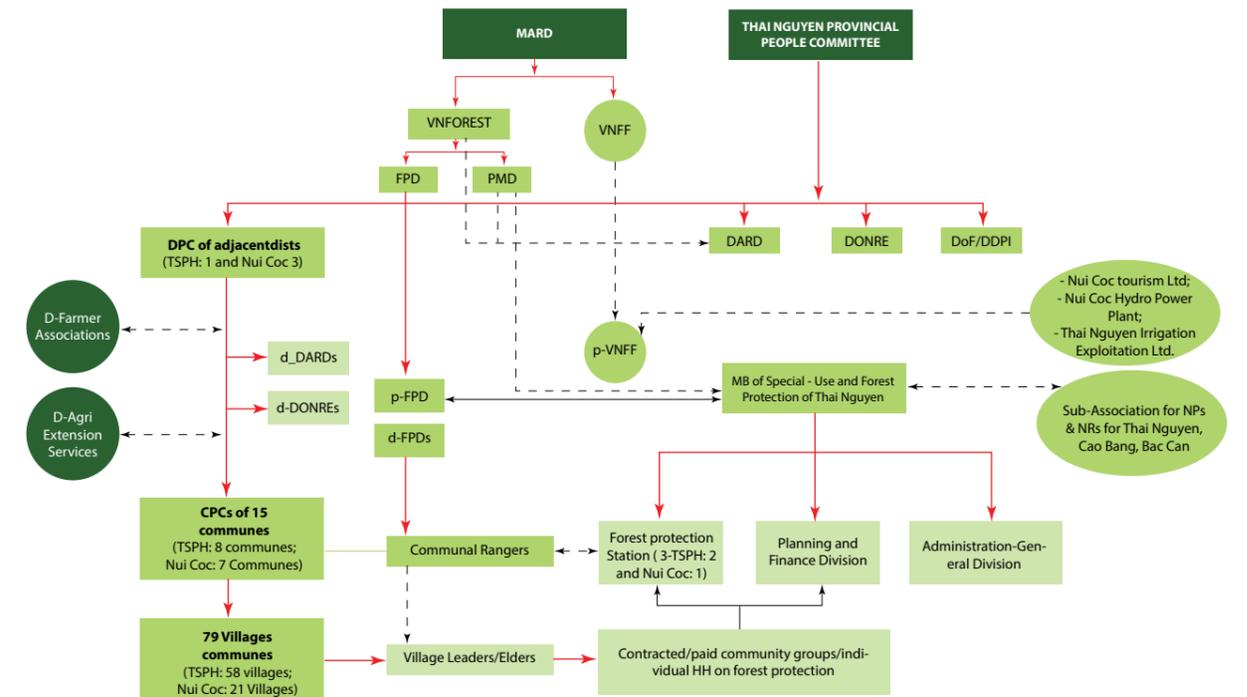
Activities are financed through:

- Budget allocated by the provincial government, including Payment for Forest Environmental Services
- Governmental investment programs(30A program; sustainable forestry development program),
- Households (plantations owned by individuals- in Nui Coc forest protection area).

The MB is responsible not just for the management and protection of the existing natural and plantation forests but also for shaping future landscapes, ensuring the provision of environmental services and community livelihoods. As a result, the MB has to work with a wide range of stakeholders. The diagram below maps out the different stakeholders and their relation to the MB. The diagram illustrates the top-down governance of forests at the provincial level. The MB is authorized, regulated, and monitored by the provincial and district governments.



Figure 4: Stakeholder mapping for the MB for Special-Use and Protection Forest of Thai Nguyen



Stakeholders can be divided into four main groups:

Provincial government (vertical dimension) consisting of Thai Nguyen PPC, DARD, DONRE, DoF and other departments. These organizations ensure that the MB performs according to the centralized state management within the provincial forestry sector and contributes to the provincial forestry objectives and targets;

- DARD and its associates, including the provincial and district Forest Protection Departments (FPD), responsible for guiding, overseeing and facilitating the PFMB in regard to forest management, protection and development activities.¹² A particular focus in the Nui Coc Reservoir area is to support households in developing and approval of harvesting plans, and implementation monitoring of the harvesting of plantation¹³.
- DONRE and its district associate are responsible for monitoring and facilitating the MB regarding land-use regulations. They provide guidance for the resolution of land-use conflicts between MB and other stakeholders (households, communities).¹⁴
- DoF takes the lead to allocate priority funding from the local budget and funds from the Central budget.¹⁵ Based on the approved annual budget estimates DoF will allocate frequent expenditures for implementation of the forest protection action plan.

District authorities (horizontal dimension) mainly include the 4 DPCs containing part of forests allocated to the MB (1 districts bordering Special-Use forest in Than Sa Phuong Hoang and 3 districts bordering protection forests in Nui Coc). The DPCs direct the MB to respond and contribute to the districts' economic, environmental and social objectives including forest management, land-use, livelihood development, ethnic affairs, etc.

⁸ Decision No. 3890 / QD-UB dated December 7, 1999 by the Thai Nguyen PPC

⁹ Decision No. 92/UB-QĐ dated May 13, 1991 by the Thai Nguyen PPC

¹⁰ Decision no. 1835/QĐ-UBND dated June 25, 2020 by the PPC of Thai Nguyen

¹¹ 11 employees are women. 35 have university education.

¹² In line with the Forestry Law, particular Decree 156/2018/ND-CP, Decree 01/2019/ND-CP (ie. organisation of professional forest protection force), Decree 06/2019/ND-CP and other circulars such as #28/2018/TT-BNNPTNGT on sustainable forest management and #27/2018/TT-BNNPTNT on forestry product management

¹³ Based on the regulation on protection forest management at the Decision No. 17/2015/QĐ-TTg dated June 9, 2015 by the Prime Minister

¹⁴ For example related to forest demarcation not yet installed or customary community tenure not yet recognized by the existing regulations.

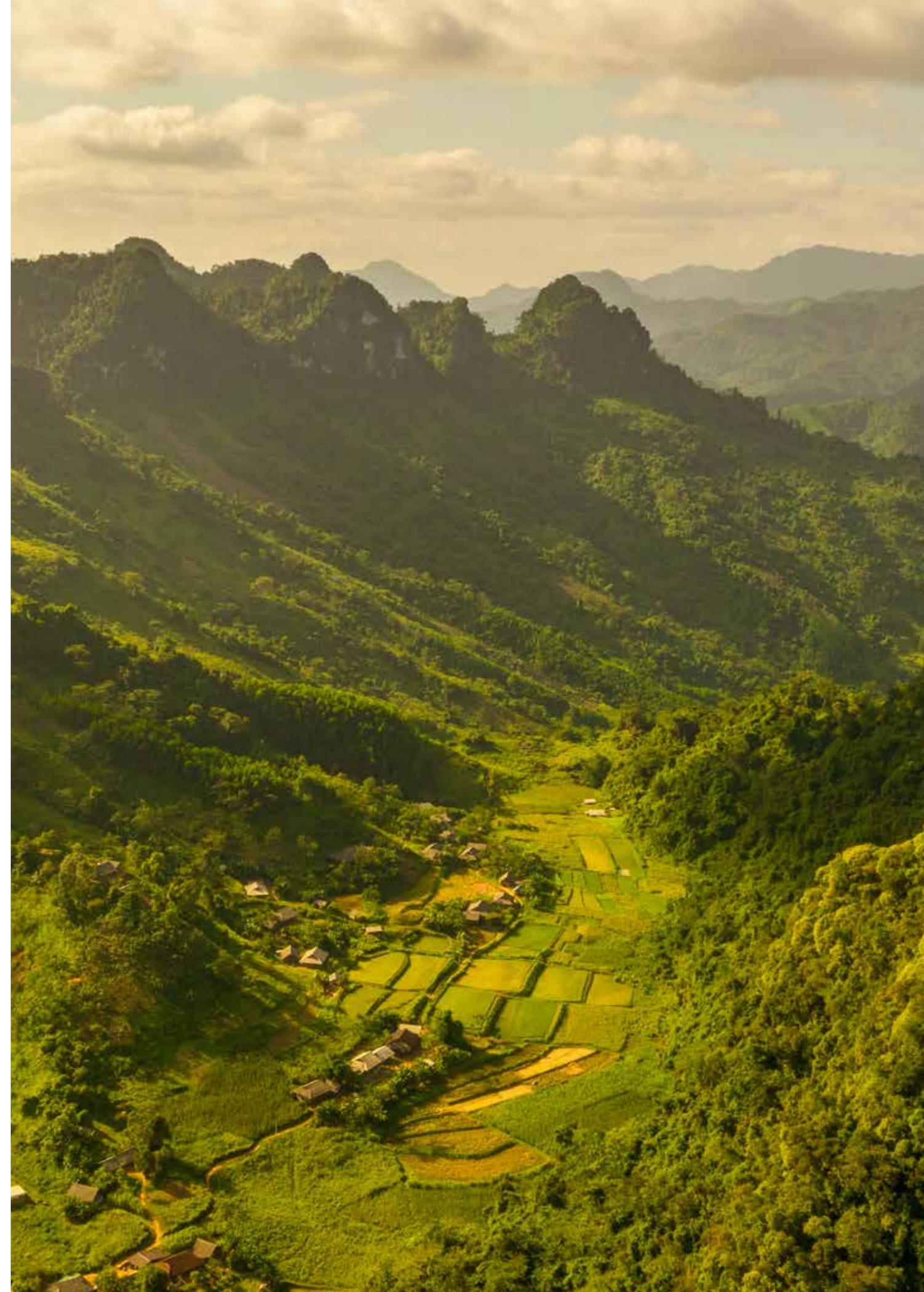
¹⁵ Program to implement the Government's Decree No. 75/2015 / ND-CP dated September 9, 2015 on forest protection and development mechanisms and policies, associated with rapid and sustainable poverty reduction and support for ethnic minorities in the period 2015-2020 (hereinafter referred to as Decree No. 75/2015 / ND)

Collaborative stakeholders exist different levels. The MB has partnerships with the Thai Nguyen Forest Protection Fund (VNFF), companies (tourism), farmer associations (district), district extension services, local authorities (commune) and communities. The MB also has “cross-border” collaboration with forest institutions and local authorities of Cho Moi District, Bac Can Province and Bac Son District, Lang Son Province. There is no evidence of direct collaboration or exchange between the PFMB and local social organizations or companies (Nui Coc Tourism Ltd., Thai Nguyen Irrigation Exploitation Ltd). The MB is a member of the Sub-Association for National Parks and Nature Reserves of Thai Nguyen, Bac Kan, Lang Son, and Cao Bang Provinces

Communal authorities (CPC) and village communities can be considered as the most important stakeholders at local level as all national and local policies on forest protection and land management are implemented through the CPCs in cooperation with community forest protection groups. Communal leaders, communal police and military form the taskforce board, which is working under direction of the site on forest protection, forest fire prevention and biodiversity activities.

Conservation challenges and way forward

- Clear and coordinated land-use planning and appropriate timely financing could further improve effective and efficient implementation of the MB’s management mandate which otherwise could be hindered. This furthermore allows for strengthened human and technical capacities, improving both the sites infrastructure and forest protection/conservation performance.
- Improved demarcation would support the achievement of the sites forest protection and conservation objectives and, in combination with livelihood development, clear land-leasing rules and improved protection, could address continued conversion of protection forests as well as counteract persistent issues with encroachment and forest degradation.
- Refinement of policies on permissible activities within defense and security areas of the state (CT229), would potentially reduce existing limitations on development of Eco-tourism activities and contribute to TSPHs economic development.
- Targeting PFES payment rates or linking the disbursement to a better monitored results-based payment approach could allow for increased payments in priority areas, where current payments of VND 300,000/ha/year are perceived too low to offset opportunity costs from potential alternative land-use options for the same areas. Through this, land use conflicts, in particular between the MB and the main ethnic minorities (H’mong & Tay) on preferring non-forest land uses over forest protection could be reduced.
- Based on annually allocated budget (forest protection and PFES fund) from the PPC, forested areas of the MB are contracted to communities and households to engage local communities into forest protection. Several local institutions are established with the assistance of the MB and district FPD as well as forest rangers at communal level. Community representation and involvement is of particular importance in forest protection and forest fire prevention forces in each of the 14 communes.



Part II: Finance

Methodology

The financing assessment was initially conceived as an in-depth, flexible and iterative process. However, due to the restrictions on travel resulting from the global COVID-19 pandemic, this was not possible. It was therefore redesigned as a more structured exercise, based on checklists that can be filled in with PA staff and other key stakeholders.

A 'PA Financing Self-Assessment Tool' (PAFSAT) was developed, to be completed with key stakeholders in and around BNNBP and CTNP. It assesses the overall financial status of the PA in both qualitative and quantitative terms. As well as collecting budget data and other financial information, it assesses the perceptions of PA managers, finance and budget planners, and local communities about PA financing needs, challenges and opportunities (Table 5). The PAFSAT is administered via interviews with three sets of expert stakeholders: PA Management Boards, Finance Departments of VNForest (for centrally-managed PAs) or Provincial People's Committees (for Provincially-managed PAs), and Buffer Zone Commune Authorities. The aim is to get different perspectives on PA financing from the main agencies that are responsible for funding and managing conservation activities in and around the PA.

Table 5: Information collected via the PAFSAT tool

PA Management Boards	Finance Departments	Buffer Zone Commune Authorities
<ul style="list-style-type: none"> Funding flows and composition Funding adequacy and gaps Past and projected future funding trends Expenditure levels and composition Past and projected future expenditure trends Self-generated income levels and composition Past and projected future income trends Mechanisms for income management and retention Financial constraints Financial advantages, opportunities and areas of potential Ideas for improving the financial situation of the PA Strategic documents, plans, by-laws and regulations on PA financing 	<ul style="list-style-type: none"> Total expenditures and proportion allocated to PAs Past and projected future trends in spending overall, and on PAs Process of PA budget planning, requests, approval and allocation PA revenue retention needs and mechanisms PA financial self-sufficiency PA financing constraints PA financing opportunities and potential 	<ul style="list-style-type: none"> Expenditures and funding for biodiversity and nature conservation Total expenditures and proportion allocated to biodiversity and nature conservation Past and projected future trends in spending overall, and on biodiversity and nature conservation Access and adequacy of funding for biodiversity and nature conservation Budgetary priority given to biodiversity and nature conservation Opportunities and potentials to source more funding for biodiversity and nature conservation Community participation in PFES and other income/funding activities associated with the PA, biodiversity and nature conservation Ways in which the PA benefits the local economy and community Ways in which the PA causes costs and losses to the local economy and community Opportunities and potentials to improve the positive financial and economic impact of the PA to the local economy and community

In TSPHNR, the PAFSAT was administered to the PA Management Board, Thái Nguyên Department of Agriculture and Rural Development (DARD) and to Cúc Đường and Sảng Mộc Commune authorities.

The PAFSAT has wider applications than the current project alone. It offers a framework that can be replicated elsewhere and used to compare and aggregate site-level data between PAs, and/or applied to track and monitor change over time. It draws on other existing PA assessment, tracking and scorecard tools that are already in common usage in Viet Nam and worldwide, such as the PA Management Effectiveness Tracking Tool (METT) developed by WWF and the World Bank¹⁶, the PA Financial Sustainability Scorecard developed by UNDP¹⁷, and Protected Area Benefit Assessment Tool (PA-BAT) developed by WWF¹⁸. While including some overlapping information, it can also be applied as an add-on or plug-in, alongside these other tools.



¹⁶ See https://wwf-eu.awsassets.panda.org/downloads/mett2_final_version_july_2007.pdf

¹⁷ See https://www.undp.org/content/undp/en/home/librarypage/environment-energy/ecosystems_and_biodiversity/financial-sustainability-scorecard-for-national-systems-of-pas---2010.html

¹⁸ See <https://wwf.panda.org/?174401/PABAT>

Summary of financing self-assessment

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

*Note: where there is no status/score, that question was not answered by the PA Management Board.

Funding status and trends

In 2020, TSPHNR received total funding of VND 13.35 billion, of which 63% or VND 8.39 billion came from the annual allocation from the provincial budget, VND 4.96 billion was provided as additional state budget for the Target Programme on Sustainable Forest Development, and no self-generated revenues were earned (Table 6). This translates into spending of VND 57.51 million per km².

Table 6: Income & expenditures 2016-20 (constant 2020 VND billion)

	2016	2017	2018	2019	2020
Expenditure					
Capital	-	-	-	-	-
Recurrent	15.59	14.12	12.93	15.76	13.35
Of which:					
Staff costs	7.58	7.40	5.72	4.25	4.41
Office running & maintenance	4.32	2.26	2.53	3.17	0.21
Forest management equipment & activities	2.78	3.36	3.75	4.33	3.76
PFES self-protection	-	0.55	-	-	-
PFES forest protection contracts	0.14	0.55	-	-	-
Other	0.77	-	0.93	4.01	4.96
Total	15.59	14.12	12.93	15.76	13.35
Funding sources					
Budget from Province	14.68	13.01	12.00	11.74	8.39
Budget from target programmes	0.77	-	0.93	4.01	4.96
Budget from PFES funding	0.14	1.10	-	-	-
Total	15.59	14.12	12.93	15.76	13.35
Self-generated income					
Tourism	-	-	-	-	-
PFES	0.14	1.10	-	-	-
Other	-	-	-	-	-
Total	0.14	1.10	-	-	-
Area (ha)	19,913	19,973	19,913	19,913	23,213
Average spending (VND million/km ²)	78.30	70.69	64.92	79.13	57.51

Total funding and expenditures have for the most part remained fairly stable in real terms¹⁹ at around VND 13-16 billion over the last five years, although have fluctuated within these boundaries (Figure 5, Figure 6). While funding from target programmes has increased substantially over the last two years, budget allocations from the Province have been falling steadily since 2016, and in 2020 were only 57% as much as in 2016. Meanwhile, the size of TSPHNR has increased from 19,913 ha to 23,213 ha. This means that, overall, spending per km² has declined by more than a quarter over the last five years, from VND 78.30 million/km² in 2016 to VND 57.51 million in 2020.

¹⁹ In order to adjust for inflation and make the data comparable over time, all figures are expressed as constant 2020 VND. This has been done by applying a deflator based on the average consumer price index for each year.

Figure 5: Expenditure

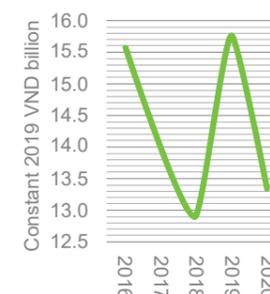


Figure 6: Income*

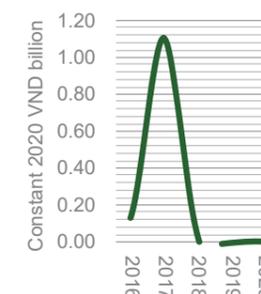


Figure 7: Staff costs as % of expenditures

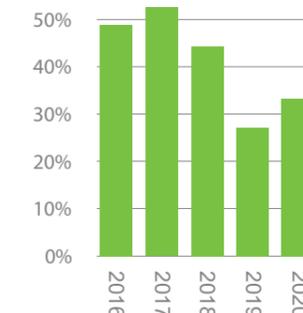
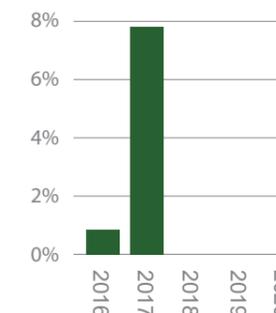


Figure 8: Income* as % of expenditures



*Refers to self-generated income (i.e. not budget provided from Province or target programmes)

Aside from the government budget, TSPHNR does not benefit from any externally-funded projects. It was stated that, because TSPHNR is located in a military zone, it is not possible to receive international funding. The only self-generated income earned by TSPHNR is from PFES. This makes a very minor contribution: earnings are recorded only in 2016 and 2017, worth just 0.9% and 7.8% of PA expenditures (Figure 8). While staff costs continue to dominate spending, their contribution to total expenditures has decreased slightly over the last two years (around 30%) as compared to the period 2016-18 (44-52%) (Figure 7).

This funding is adequate to cover a good level of PA management and conservation activities, although still leaves some gaps. The greatest funding gaps are for developing and building an environmental education centre, improving and renovating the forest patrol line, and increasing local community income by supporting sustainable livelihoods.

Both the amount of funding and its adequacy to meet management needs are perceived to have improved a little over the last five years. The range (diversity) of funding sources has however stayed the same. PA managers expect that all of these aspects will improve over significantly the short-term.

In 2020, TSPHNR expenditures totalled VND 13.35 billion. Over the last five years, PA managers perceive that expenditures have increased a little overall, showing a significant rise for spending on awareness, education and buffer zone communities, and a small incline for infrastructure, protection/enforcement, fire prevention, forest management and rehabilitation. Expenditures on staff salaries and PFES are however thought to have stayed the same. Over the short-term, it is expected that all categories of expenditure except for tourism will increase.

Most spending is projected to increase significantly, including awareness, education, buffer zone communities, protection/enforcement, fire prevention, forest management and rehabilitation, and PFES.

In 2020 TSPHNR earned no self-generated income, and has not done so since 2017 (solely from PFES). There has been no improvement in income generation over the last five years, and is not expected to be so in the future.



Constrains and enabling conditons for sustainable financing

The most severe financial constraint in TSPHNR is perceived to be its location in a military area. This places many limitations on both the activities that can be carried out, and the (non-government budget) funding sources that can be accessed. Because there are no self-generated revenues, TSPHNR faces a lot of budgetary pressure, and it is extremely difficult to move towards a situation of financial independence or self-financing. This means that there a number of funding challenges. An additional constraint is that PA staff have no expertise or qualifications in sustainable finance.

TSPHNR relies on just one source of funding: the government budget. There are currently many public spending pressures. Financial planners from Thái Nguyên DARD also underlined that, aside from salary, the budget to TSPHNR has been declining every year. It was further stated that the current economic and fiscal challenges posed by COVID-19 mean that budget allocations may decrease more over the next few years, and there will be pressures to reduce costs and introduce cost-saving measures.

PA managers do however think that PA funding is given some political and policy priority and attention when government budgets are planned and allocated. The budget is also relatively secure and stable, and explicit efforts are made to ensure that PA spending is cost-effective. PA funding is usually received on time, and the norms used to calculate (and request) different categories of costs are for the most part realistic. It was however pointed out that the cost norm for planting is only VND 30 million/ha, which is inadequate for the difficult conditions in the area – due to the limestone mountain landscape, the cost of labour and transportation costs is much higher than in plain areas. Another challenge is that funding is only guaranteed for forest protection, and the PA lacks budget for biodiversity research and conservation activities.

Currently, there is no management plan for TSPHNR, and no PA financing or business plan.

Key financing opportunities

PA managers see there to be considerable potential for ecotourism. The landscape is exceptionally beautiful (mountains, waterfalls, springs, etc.). Representatives from Thái Nguyên DARD also reinforced this point, suggesting that TSPHNR could benefit from learning from the experiences of Ba Vì National Park, and developing similar facilities.

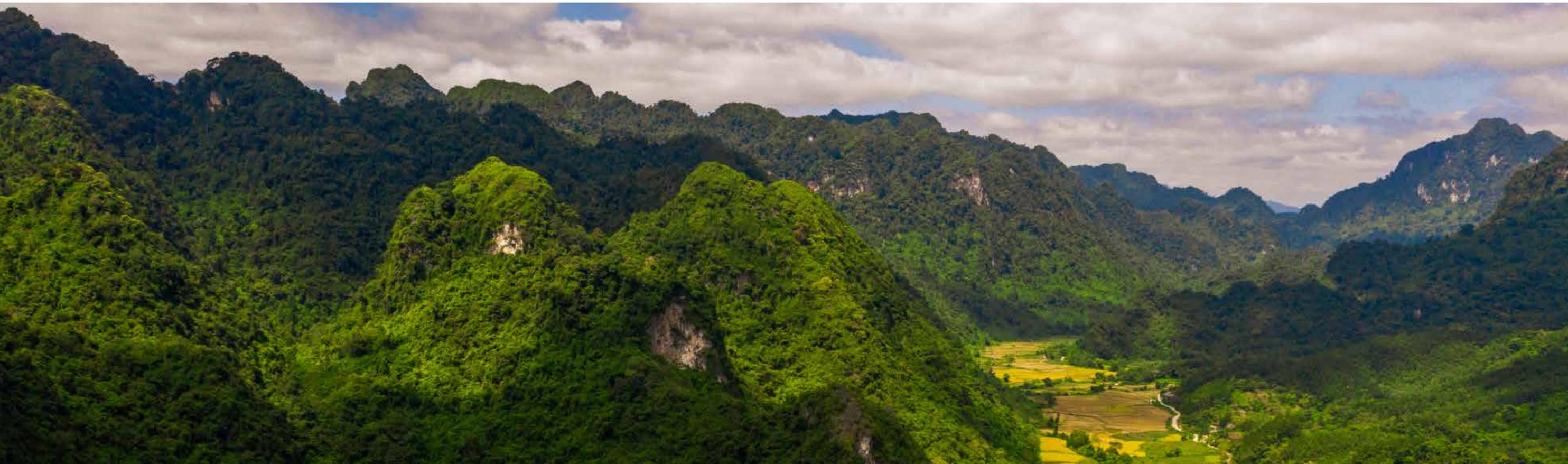
In addition, developing medicinal plants collection and marketing could provide a valuable source of income for local communities. Thái Nguyên DARD proposed the idea that budget should be requested from the Department of Science and Technology for developing medicinal plant research, harvesting and cultivation – and this could serve as a source of income for the PA Management Board, as well as for local communities.

Financing for biodiversity conservation in the buffer zone

Neither of the communes interviewed have undertaken or participated in any biodiversity or nature conservation projects – either those carried out with TSPHNR, or those funded by government, NGOs, international organisations, private sector, etc. The communes also do not receive any funding or in-kind support from the PA. In Cúc Đường Commune, the only available funding for forest protection is the standard budget allocation of VND 40 million per hamlet, provided from the District. This is used in Cúc Đường Commune for constructing houses and public buildings, and buying radio equipment. Sảng Mộc Commune makes no allocation for biodiversity conservation.

The total annual expenditure of Cúc Đường Commune is between VND 3-4 billion, including small construction works, salaries and social security payments. This does not include any budget allocation for biodiversity or nature conservation, as this is the responsibility of the TSPHNR Management Board. Biodiversity conservation is not considered a budget priority for the commune. There are however opportunities and potentials for the commune to source more funding for biodiversity conservation – for example through medicinal plants. This is under development. Currently, the only nature-based source of income that is operating for the local people is Acacia plantations. There are no PFES contracts with local community members. While Sảng Mộc residents also do not participate in PFES, a few households have signed forest protection contracts which pay VND 400,000/ha.

In Cúc Đường Commune, a major challenge arises from the fact that TSPHNR is located in a military area. This means that local communities cannot receive certain benefits – for example, when Samsung donated products, these were unable to be shared. Tourism projects also cannot be carried out by the local community. Both Cúc Đường and Sảng Mộc Communes also reported that there are overlaps between local lands and the area put under Thần Sa Nature Reserve – this incorporates local households' production forest areas. This cut of local people's access to their own trees, which they were no longer able to harvest. There was a loss of income. So far, this land issue has not been resolved, because it is very difficult to remove land from a nature reserve, once it has been legally gazetted.



SITE PROFILE

Than Sa Phuong Hoang Nature Reserve

Management, governance and finance

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

