

Bigi Pan Management Plan 2013-2023

ANNEX 5: BUSINESS PLAN



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Chapter 1 Introduction

UNDP funded a project proposal called SCPAM (Suriname Coastal Protected Area Management) which runs for 3 years (2011-2014). According to the PRODOC, the project goal is to safeguard the globally significant coastal biodiversity of Suriname. The project objective is to promote the conservation of biodiversity through improved management of protected areas along the Suriname western coast. The objective will be achieved through two components: (1) improving the management effectiveness and efficiency of coastal protected areas; and (2) increasing and diversifying coastal protected area funding.

Coastal protected area managers are ill-equipped to address existing and emerging conservation challenges due to two interrelated barriers: insufficient management capacity and inadequate financial resources. In the context of this project, a multidisciplinary consultancy team consisting of a national team of consultants added with two international consultants was hired to develop the following deliverables, closely interrelated and in an interactive way with both central and decentralized stakeholders: a management and monitoring plan of the Bigi Pan MUMA Area, an economic valuation, a business plan, a training plan and a report on legal and institutional aspects. This business plan is written by the national Finance Expert with contributions from other local team members and the international Finance Expert.

This document represents the business plan as mentioned above with an integrated financing strategy including a government financing strategy. Thus, the business plan has a broader approach than a traditional business plan, in that sense that both revenues generated from within Bigi Pan area and additional sources of funding (government subsidy, donor funds and other sources of funding).

It is important to distinguish between financial mechanisms and funding. Financial mechanisms generate funding. In order to identify potential financial mechanisms that can be used for the Bigi Pan case, various financial mechanisms that are used internationally in this field will be considered and analyzed. We will make use of the framework provided in the report “Incentive and market-based mechanisms to promote sustainable land management - framework and tool to assess applicability” from the Global Mechanism, dated April 2012. We will make an analysis of the viability of the various mechanisms in the Suriname case and more particular, in the Bigi Pan case, taking into account recent experiences.

Finally, we will translate the necessary efforts for management of the area, based on the management and action plan, into two scenario's (minimal and ideal) in terms of investments needed, annual exploitation costs and project these over 3 years of time, and match these with potential sources of funding (including feasibly financial mechanisms resulting from the analysis), resulting in a financing strategy for the management of Bigi Pan.

The business plan finishes with conclusions and recommendations and a short road map for implementation.

Chapter 2 Economic valuation Bigi Pan

2.1 Main conclusions

The economic valuation study for the Bigi Pan area was carried out in order to determine the total economic value (TEV) of the area. This was done by identifying and quantifying the main ecosystem services of the area and expressing these services in monetary terms by means of international benchmarks. Some values could not be determined at this stage due to lack of available data (water storage) but is explained in the report.

The total economic value is determined at USD 1,372 million while the annual value is determined at USD 20,080,000.

It is clear that the BP area stands for significant annual revenues of over 20 million USD annually and that area represents a significant total value which illustrates the need for better management. The actual value must even be higher because some values could not be determined due to lack of data.

2.2 Implications for Business Planning and Financial Mechanisms

The implications of the results of the economic valuation for business planning and financial mechanisms can be summed up as follows:

- The Bigi Pan MUMA generates important economic benefits to many different stakeholders, including local villages and fishermen, Suriname and the World;
- The TEV is significant, amongst others for various current economic activities (fisheries) which illustrates the importance of conservation;
- The TEV justifies (increased) government intervention also in financial terms because of the significant value of the area;
- Recreation (tourism) is only a limited part of the TEV annually; the importance of tourism for creating financial mechanisms should not be overestimated.

Chapter 3 Status quo of financing mechanisms related to nature conservation

3.1 Financial scorecard results PRODOC SCPAM project

During the preparation of the UNDP PRODOC for the SCPAM project, which took place between October 2010 and February 2011, a financial scorecard was filled in in close cooperation with representatives of the ministry of RGB. The results of the scorecard can be found in annex 12 of the SCPAM PRODOC starting on page 93. Please note that the scorecard gives an overview of the entire national system of PA management and not only the Bigi Pan (and other) MUMA's in Suriname. The overall picture is that available funds for nature conservation in general, and in particular for MUMA's, are limited and scattered. The annual expenditure of the GoS to PA management of Suriname as a whole is approx. 1,2 million USD which is very limited considering the number and size of the protected areas in Suriname.

The GoS is contributing through its division of game wardens (part of the ministry of RGB) and RGB staff working on nature conservation. Other sources of funding are SCF (Suriname Conservation Foundation) and WWF being the major players in the field. Overall the picture is that many, mostly small scaled, initiatives are undertaken from many various sources of funding, but an overall strategy and coordinated approach, resulting in bundling efforts and forces, is missing.

Generating revenues by PA's (Protected Areas) is currently being applied by Stinasu (Foundation for Nature Conservation Suriname) that operates the Brownsberg park and generates revenues with entrance fees. This foundation flourished in the early days (70's) but recently suffered from poor management and poor maintenance of the facilities. Currently, the government wants to improve the situation and gives subsidies to Stinasu to rehabilitate its facilities. Still, generating revenues for PA management is still a relatively new phenomenon in Suriname. The SCPAM project wants to address this for (3 of) the MUMA's in Suriname. This report focuses on the opportunities for revenue generating in the Bigi Pan MUMA.

3.2 Government funding

According to the financial scorecard, the total level of government funding for PA management in Suriname overall is approx. 1,2 million USD annually. Only a small fraction of this could be allocated to the management of the Bigi Pan area.

Currently there is underspending of the budget of the ministry of RGB which means that there is room for a structural higher level of expenditure of approximately 200,000 SRD annually. We also noted that the ministry of RGB is supporting Stinasu with 1,5 million SRD for rehabilitating the facilities of Stinasu. Government funding is highly dependent on the political will to contribute more to a specific sector or objective. We have noted that the current government is willing to do so in particular cases (Stinasu and Tourism Foundation for promotion of Tourism). Therefore it is needed to "politically sell" the need for government funding of the Bigi Pan

MUMA management and link that with priorities in the MOP2010-2014 and other political priorities (such as the REDD+ – process). This will be discussed later in this business plan.

3.3 Fees for hunting and fishing

Currently, fees are levied for fishing and hunting permits. The revenues related to these fees are transferred directly to the ministry of Finance and thus, it is not possible to use these funds directly for conservation activities, nor for nature conservation in general, nor for nature conservation for particular PA's with a link to the revenues for hunting and fishing in that particular PA. The fact that fees are raised is an argument however to make available (more) government funds for PA management than currently available.

According to the financial scorecard, total revenues (baseline 2009) are: Hunting Permits USD 133,929, Fishing Permits USD 100,000 and Illegal Hunting Fines USD 35,107. The total annual amount of fees for hunting and fishing and fines is USD 269,036. Although not all this revenue is generated in PA's (fishing and hunting permits are also needed outside PA's and cannot therefore be exclusively attributed to the PA's of Suriname) there is an argument to use at least part of these revenues for financing the management of PA's. Administratively and politically it is too complex on the short and mid term to create a system in which revenues and fines related to specific PA's are directly attributed as funding for specific PA's and use these revenues for management. On the short term it does make more sense to use it as an argument for obtaining a higher budget for PA management from the government, to start with the Bigi Pan MUMA.

3.4 Other funding used

For more details regarding the current sources of funding for PA management in general, please refer to the financial scorecard in the PRODOC document. A major source of funding is the Suriname Conservation Foundation that manages an endowment fund which generates revenues used to finance projects and activities for nature conservation. SCF is also able to involve private parties and thus generate extra funds. In the current situation, SCF is a major financing source of activities in nature conservation. It manages a capital of approx. 15 million USD and generates approx. 7% revenue over its investments (fiscal year 2011, source annual report of SCF 2011).

3.5 Short overview of the tax law and system in Suriname

Suriname has a highly outdated tax law dating back from colonial times. It has an income tax for both individuals and companies. Individuals are subject to a progressive rate of maximal 38% and companies pay 36% income tax over the profit. Substantial import duties are levied on imported goods and 8% tax is levied on products and services subject to this tax (based on a list of products and services subject to this tax; for instance accountancy services have to bill their fee + 8% and the 8% has to be paid to the tax authority; some services are free of charge, for instance training services).

Currently various tax reforms are in preparation. The intention is to reform the 8% tax into a genuine VAT (Value Added Tax) system. For this purpose, a commission was installed that is

preparing the necessary reforms. Recently (2011) a high profile Dutch consultancy firm (BMC) was hired to analyze the current tax system and to do recommendations for reforms. This has not yielded any results because the relationship between the government and the firm was stopped. The implementation of the current tax law suffers from lack of quantitative and qualitative capacity and suffers from corruption. For instance, small scale gold miners in the interior are able to carry out their activities without paying (substantive) income tax.

On the short term, no major reforms can be expected in the tax system, except for the VAT system. This shows that implementing (national) financial mechanisms needing new legislation and implementing bodies are not viable on the short term because of both institutional limitations and the lack of drive from the government in actually reforming the current system.

3.6 Tax law reforms currently in preparation

Since about 1,5 years, the government has been working on reforms of the tax system and laws in Suriname. One of these tax law reforms currently being prepared is the implementation of the VAT system in Suriname. Currently, providers of goods and services that are on the list of taxable goods and services are subject to levy 8 or 10% of their revenues and pay this to the tax authority on a monthly basis. A commission has been put in place to change this into a genuine VAT system (Value Added Tax). We have planned a meeting with the director of the tax authority in order to investigate the feasibility of financial mechanisms related to tax. The results will be incorporated in the final draft of this business plan.

3.7 Government finance law reforms currently in preparation

The government is currently also working on a reform of its laws dealing with government finances (in Dutch “comptabiliteit”). It is possible that these reforms relate to financial mechanisms and governmental financial procedures in general. We have not been able to obtain more in depth knowledge about the nature of these reforms but we will try to get more information and include it in the final version of this report.

3.8 Institutional aspects: government foundations and authorities

Typically, many ministries in Suriname work with government foundations as legal bodies for implementing their policies. For instance, the ministry of RGB works with the foundation SBB that implements the forestry legislation. The ministry of Tourism works with the foundation STS (Foundation for Promotion of Tourism in Suriname) that implements (part) of the Tourism Policy of that ministry. In the analysis of legal and institutional aspects it became clear that for the management of Bigi Pan, a newly created dedicated foundation is the best solution. Such a foundation could be funded with government contributions (which is the case with many other government foundations) and could in addition generate own revenues and attract other sources of income. The foundation would thus have a separate administration with a balance sheet and profit and loss account annually. The annual financial report could be subject to an external audit in order to make sure the objectives are met and the funds are managed well.

3.9 Conclusions

Financing for PA management in Suriname is scattered, limited, uncoordinated and diverse. The government spends relatively little on PA management considering the number and size of the various PA's in Suriname. There is a great need for upgrading PA management in general and generate additional funds. Generating funds for (partly decentralized) PA management through PA's is relatively new, except for the Stinasu case. Experience shows that political will and speed for major reforms appeared to be lacking in the past, resulting in slow, delayed or postponed implementation. This will be taken into account in the rest of this report.

Chapter 4 Financial Mechanisms

4.1 Introduction

This chapter gives, based on an analysis of the internationally used financial mechanisms for sustainable land management, feasible options for the short and mid term for the Surinamese case of the Bigi Pan area. The analysis takes into account the feasibility based on practical (recent) experiences.

4.2 Financial mechanisms: summary overview of international good practices in the field

The report of the Global Mechanism “INCENTIVE AND MARKET-BASED MECHANISMS TO PROMOTE SUSTAINABLE LAND MANAGEMENT” dated April 2012, gives an overview of the various financial mechanisms used throughout the world for sustainable land management and stimulate the desired land use and conservation purposes. We analysed the various mechanisms for feasibility in Suriname in general and Bigi Pan more particular and identified various options to be used on the short term and options for mid-long term.

It is important to realize this is an entirely new field for Suriname and implementation of various mechanisms would need political support and new legislation. The (recent) past has shown that Suriname is slow in implementing reforms and new legislations so options that require that are not feasible on the short term (within the framework of the SCPAM project) but some of them have potential on the mid and long term. For the purpose of this report, we only describe and illustrate international good practices that have a potential for Suriname. For the total overview, please refer to the report of the Global Mechanism.

4.3 Financial mechanisms short term

4.3.1 National mechanisms

In this paragraph, we have a look at national mechanisms that can be applied on the short term. According to the feasibility analysis, Mechanism E subsidies has short term potential. In this paragraph, a general description of this mechanism is given and a brief explanation on how to apply this for the Bigi Pan case is provided afterwards.

Mechanism E subsidies

Objective: To transfer public funds to land users or players implementing sustainable activities and practices in the MUMAs, involved in land conservation projects or applying environmentally friendly technologies. To guarantee a larger public objective.

Description: The government provides direct subsidies to those who implement sustainable activities and practices or other environmental technologies (e.g. water treatment plants, energy-efficient light bulbs, soil conservation equipment).

Applications: In the start-up phase of an environmental services market or regulation.

Advantages: Easy to implement. Flexible.

Disadvantages: If the subsidy is not narrowly targeted to only inputs for conservation activities, it is likely to affect activities far beyond its intended scope, thus imposing substantial budgetary costs and creating inefficiencies elsewhere in the economy.

Tends to stick.

Special considerations: It is useful to establish an expiration date at the beginning of the subsidy.

In the Bigi Pan case, the government could provide subsidies for the foundation dedicated to the sustainable management of the Bigi Pan area. The government showed to be willing to subsidize other government foundations with political priority. The subsidy could be in cash and in kind (providing staff and facilities). The following options are all variations of the mechanism of subsidies:

- option: use government staff for staffing the foundation as far as suitable staff is available (for instance, part of the game wardens operational in Nickerie);

- option: government subsidy for covering exploitation costs (GoS contributes significantly to Stinasu and STS for instance); problem is lack of stability/reliability and political influences; an argument for getting GoS funding for BP as a pilot project for more advanced PA management could be linking the BP pilot with the REDD+ process (in this way, the GoS could view the BP project as a pilot for improving PA management which would facilitate the REDD+ process by demonstrating that the GoS is working on improving PA management in Suriname, especially since protection);

- option: look for a (small) contribution from the district fund for covering exploitation costs of the foundation during a few years;

4.3.2 Local mechanisms

Mechanism M marketing labels

Objective: To obtain market access for products and services which are generated in an environmentally sustainable way.

Description: Payment for ecosystem services is embedded in a product/service, or a market develops for products produced sustainably. Products are sold to consumers or retailers who prefer to support suppliers that are good environmental managers. For example, the Rainforest Alliance conserves valuable forest land by promoting sustainable farming practices for coffee, cocoa and black tea in Ethiopia, Côte d'Ivoire and Kenya. Another example is the voluntary

partnership agreements that Ghana and the Republic of Congo recently signed with the EU to ensure that timber exports are legally harvested and can be allowed entrance into the EU market. The agreement stipulates that all timber products must be harvested in ways that protect the country's forests. The EU is engaged in negotiations for similar agreements in other countries, including Cameroon, Ecuador, Gabon and Viet Nam.

Applications: Where goods and services in very competitive markets need to be differentiated.

For goods and services with significant environmental impacts.

Advantages: Can generate an added value from otherwise very homogeneous goods and services, such as inputs, commodities and wood products.

Can fetch higher prices on the market.

Provides incentives for and promotes investments (e.g. price premiums, access to particular markets) in environmental protection and adequate land-use management by producers and companies.

Creates environmentally conscious consumer groups that are willing to pay for goods and services that respect environmental (and social) standards.

Disadvantages: May require a credible and established certification system.

Price differences may inhibit or reduce the demand for the environmentally friendly product.

Not useful in non-competitive markets with low purchasing capacity.

This mechanism could be applied on national level with the concept of sustainable tourism (small scaled eco tourism with a price premium. According to the ministry of Tourism, national policy documents regarding tourism are not yet in place although policy documents are in preparation. Therefore it seems more feasible to develop the Bigi Pan tourism product with this concept in mind (product development) and arrange for an entrance fee (price premium) which is used to manage the area. An attempt for creating an entrance fee was already made in the past and failed. Political will at national level is needed (decision of the Council of Ministers).

4.3.3 Additional options for the short term

Additional options that can be applied are the following. Some of them are a variation of the subsidy mechanism, in this case from international donors. The following table gives an overview of additional options:

Option	Description	Variation of mechanism	Remarks
Donor funds	Use donor funds for financing tourism facilities and generate income with lease contract with entrepreneur	Mechanism E subsidies / mechanism C co-finance investments	
Donor funds	Use donor funds for upgrading the area with tourism facilities (trails, entrance building)	Mechanism E subsidies / Mechanism C co-finance investments	
Endowment fund	Create dedicated fund at SCF that generates revenues for BP management costs; funding could come from private parties as a means of compensation, diaspora.	Mechanism E subsidies	Could be part of a biodiversity offset scheme. For instance, Staatsolie could contribute to such a fund as a compensation for its Saramacca operations
Private investment	Look for private investor that is willing to invest in tourism		Private initiative may not take into account conservation objectives

4.4 Financial mechanisms mid and long term

4.4.1 International mechanisms

In this paragraph, 2 international mechanisms are described that have potential in the mid and long term, but cannot be implemented at the short term. These mechanisms are Mechanism G Conservation Banks and Mechanism H Direct Payment for Ecological Services.

Mechanism G Conservation Banks

Objective: To conserve land through bank sale of conservation credits to projects that will have a negative impact on the environment.

Description: Permanently protected private or public land is managed with conservation objectives. Parcels used for conservation purposes are managed by the bank, which sells credits to projects that will have a negative impact on the environment. Each bank then uses the money to protect natural resources, such as water, endangered species, farmlands, natural beauty, forest lands or historical or archaeological sites.

Applications: Ideal where real estate development is booming.

Advantages: Banks may specialize in building a portfolio of land for conservation purposes, reducing the overall cost. Flexible.

Disadvantages: This approach is complicated; it may generate opposition from parties that do not like the concept of compensation.

Impacts may occur in areas not covered by the mechanism.

Intensive use of information. Not functional in small economies without well-established banking systems.

Mechanism K Direct Payment for Environmental Services (REDD+)

Objective: To compensate those who generate positive externalities by changing their land use or production methods.

Description: The users of environmental services pay the providers directly. For example, a hydropower generator interested in minimizing erosion and siltation pays upstream farmers who implement SLMPs. In Costa Rica, a tax on gasoline provides funds that are used to pay forest owners who commit to preserving their forests.

Applications: Very useful when a concrete environmental impact could be avoided by adopting certain practices.

Advantages: Flexible implementation, as transactions are between private agents.

Proper incentives for land conservation.

Public relations benefits spillover to the markets for traditional goods and services.

Disadvantages: Can be temporary, short-term enterprises.

Currently, Suriname is preparing a proposal to the World Bank to finance further steps towards implementing REDD+ in Suriname. This shows that Suriname is open to this mechanism but implementation on national level will take several years. Therefore this mechanism has high potential on the long term. The Suriname proposal does not emphasize further conservation measures and activities but focuses more on sustainable exploitation of resources and regulating this exploitation in a better way. There are a few elements that link more clearly to the Bigi Pan (and other coastal MUMA's) such as protection of surface water resources, reforestation and protection of mangroves and promotion of ecotourism. In the future a Climate Fund might be set up which manages funds from (international) climate funds for the purpose of compensation of stakeholders and financing projects, which could be beneficial for the Bigi Pan case.

A proper management of the Bigi Pan area in an innovative way, with multiple source of funding, could function as a showcase for Suriname in the REDD+ process. This could also pave the way for government support and funding for Bigi Pan management, highly needed in the start up phase. In the long term, REDD+ revenues could be (partly) used for further upgrading of MUMA management in general and Bigi Pan in particular. However, it has to be noted that at this stage the outcome of the REDD+ process and its potential benefits for Bigi Pan are highly uncertain and cannot be counted upon.

4.4.2 National mechanisms

In this paragraph, two mechanisms on national level are explored, namely Mechanism F Taxes and tax breaks and Mechanism L Conservation concessions.

Mechanism F Taxes and tax breaks

Objective: To discourage current practices by taxing the activities which generate environmental bad practices.

Description: Environmental or green taxes levied on bad practices that can be used to correct or modify existing land-use practices. Schemes such as the Green Dot in Germany impose a payment per unit of packaging to encourage reductions in solid waste. Charges on the effluents from domestic and industrial water users in Colombia and Costa Rica will finance water clean-up projects and reduce effluents at the source. China's soil erosion control fees charge developers for environmental damage. Some states in Brazil allocate value-added tax (VAT) revenues according to environmental criteria through an "ecological VAT".

Applications: Funds generated by the environmental or green taxes levied on bad practices may finance efforts to correct and modify existing land-use practices.

Potential for solving land degradation issues.

Reducing environmental pollution.

Advantages: In broad application, can be used to favour or discourage many different activities. At an optimal level, a tax can correct market failures.

Can promote research and development for clean technologies and environmentally friendly practices.

Disadvantages: Introduces distortions in the economy that may have impacts beyond the targeted activities.

Governments may perceive them as an easy way to collect funds, and overlook their economic function.

Tax levels may not be optimal.

Requires an efficient control policy, which may not exist if government is weak.

Typically, internationally taxes on water fees and/or gasoline are used for this purpose. Since raising costs of these primary needs is politically very sensitive in Suriname, this is not a feasible option on the short term. However, it is worth to investigate this further in the perspective of the tax reforms currently prepared. For this purpose further investigations will be done and the results will be incorporated in the final version of this report.

Although tax reforms appear difficult to implement and raising taxes is politically not feasible when elections are near (2015), this measure has still potential on the long term. It will require institutional capacity building (at the level of tax authority) and tax reforms.

A variation on this mechanism is to include a small tax on every plastic bottle sold and introduce a return premium. For this action, the 2 Surinamese bottlers have to cooperate; one is willing to cooperate (Fernandez) but the other one is not (Rudisa). Rudisa is currently also politically linked to the current government coalition. Still, introducing a small tax on environmentally unfriendly plastic bottles and introducing a return premium will generate funds for PA management on 1 hand and reduce waste on the other hand (plastic bottles have value whereas they currently don't have value).

Mechanism L Conservation concessions

Objective: For conservation purposes. One party provides another with a concession to use a territory for conservation processes.

Description: One party provides another with a concession to use a territory for conservation processes.

These work in the same way as forestry or mining concessions, guaranteeing that the land will be protected, at least during the period considered.

Applications: Useful for conserving large tracts of land, including idle lands.

Advantages: Takes advantage of the capacities of each participant. Most concessions are granted to NGOs specializing in conservation activities.

Owner is compensated financially.

As private agreements, they are simple and quick.

Disadvantages: As private endeavours, they can be temporary.

Using the land in a traditional way may be much more profitable than giving the concession.

There is already 1 example in Suriname of this mechanism, namely foundation Stinasu, that holds the Brownsberg Nature Reservation Concession. The land is issued to this (government)

foundation which generates revenues by means of entrance fees and exploiting tourist facilities. A similar approach could be used for Bigi Pan, since a major part of the area is still not issued and could be issued to the foundation (to be created) that manages the area. This would ensure that no future land in the MUMA area will be issued to new parties and ensure conservation of the currently not issued part of the area.

The Stinasu model for PA management, which allocates a certain amount of land issued by the GoS to a foundation that manages the area, while generating funds with eco tourism, was quite successful in the 60/70s; more lately, the operations were less successful due to poor management; illegal gold miners seriously damaged parts of the area and the image of the organization is damaged. The GoS made funds available recently to improve the situation in terms of rehabilitating the facilities. As already mentioned, this model could be applied to BP for the amount of land currently unissued; however since the land is owned by a wide variety of land users);

It is an option to regenerate Stinasu to a successful organization that generates revenues not only for conservation of its own area but it may even generate revenues with which income for funding of other PAs can be financed; there is potential there since the site is owned by the foundation and the foundation owns various assets / sites that could generate substantial revenue that can be used for a wider purpose than the site managed by Stinasu itself (which is a PA with a stronger status than the BP MUMA). For instance, part of Stinasu revenue could be added to dedicated endowment funds for particular PA's managed by SCF.

4.5 Conclusions

A government foundation (for details, please refer to the report on legal and institutional matters) will be created for the management of the Bigi Pan MUMA. This foundation will be able to manage the funds that they generate themselves (entrance fee), government funds and other donor funds.

On the short term, two mechanisms could be applied: Mechanism E Subsidies and Mechanism M Marketing Labels (Sustainable Tourism with entrance fee). Subsidies could be provided by the government, both in kind (providing staff and/or facilities) and in cash. Political will could be mobilized by linking the Bigi Pan MUMA as a showcase for the REDD+ application Suriname is currently preparing (REDD+ is a high political priority) and the fact that the MUMA currently generates revenue for the government (hunting and fishing fees and fines) that justify a structural government contribution. Also the outcome of the economic valuation demonstrates the need for government intervention.

In addition to government funds, national and international donor funds could be mobilized for investments needed in infrastructure and equipment. Part of touristic infrastructure could generate permanent revenue by means of leasing the infrastructure to an entrepreneur that exploits the facility. Potential international donors, with help from local chapters of organizations

such as WWF or Conservation International, could be organized around an investment plan and raise the necessary funds. Commercial and family links with the Netherlands could provide access to a potentially large market that is not being tapped now. Local private sector companies should also be part of this group.

Finally, a specific endowment fund managed by SCF could be created for the purpose of covering (part of) the exploitation costs of the BP MUMA. This fund could be fed for instance by national companies with a green policy (for instance DSB) and Staatsolie as a compensation mechanism for their activities in Saramacca. On the long term it could even be fed by revenues generated by Stinasu.

On the mid and long term, as a parallel action, other options could be explored, together with creating political support to do so. A small tax could be levied on every plastic bottle including a return premium. Another important option is to issue the unissued part of the BP MUMA to the foundation, which ensures future protection of a major part of the BP MUMA, as mentioned above for the conservation concessions mechanism.

5 Costs of implementation of the management plan

5.1 Introduction

In this chapter, the management and action plan will be translated into financial terms. This will be done in two scenario's, namely a minimum variant and an ideal variant. For both scenario's, investment needed (for equipment, infrastructure) will be identified and a multi-annual projection of costs and revenues will be given. Since it takes time to generate revenues with a protected area and institutional arrangements have to be in place, the financing of the management activities will be with government support on the short term. On a longer term it is hopefully the case that the BP MUMA generates sufficient funds by means of the various mechanisms explained in chapter 4, that only limited government budget support is needed.

5.2 Scenario 1: minimum variant

The costs and revenues for the foundation are worked out in 2 scenarios. For both scenarios, the following salary cost assumptions apply:

Annual salary costs for:	SRD
Director	65.000
Game warden	35.000
Assistant game warden	22.000
Monitoring	35.000
Administrator	45.000
Marketing and promotion officer	35.000
Education officer	35.000
Secretary staff	24.000

We also assumed for both scenarios that the monthly fee for a board member is 750 SRD (according to national guidelines), that we have 600 users active in the area that are willing to pay 750 SRD annually and that all staff will be insured for health at an annual premium of SRD 2500.

For a minimum scenario, the following table shows the necessary investments, the depreciation period and the annual depreciation, that will be used in the overview of costs and revenues:

	Description	Amount	Depreciation period	Depreciation
1	Aluminium sea boat		10	0
2	Checkpoint	100.000	25	4.000
3	2 boat motors	20.000	5	4.000
4	Warden equipment	12.800	3	4.267
5	Infrared Goggles		5	0
6	2 motor bikes	0	5	0
7	Communication equipmer	5.000	5	1.000
8	Measurement equipment	5.000	5	1.000
	Total annual depreciation			14.267

When we apply a minimum level of staff for implementing the management plan, the following financial overview shows up:

Cost category	Number	SRD	Revenues	SRD
Director	1	75.000	GoS in kind	150.000
Research coordinator	1	35.000		
Game wardens	3	105.000	GoS in cash	119.017
Assistant game wardens	5	110.000	Entrance fee users	450.000
Monitoring staff	1	35.000	Entrance fee tourists	120.000
Secretary	1	24.000	Research fee	5.000
Administrator	1	45.000	Endowment fund SO	0
Marketing and promotion officer	1	35.000		
Education officer	0	0	Ad hoc donors	100.000
Health insurance staff	14	33.750		
Board member fees	5	45.000		
Depreciation		14.267		
Maintainance costs		8.000		
Communication costs		8.000		
Monitoring costs		300.000		
Fuel costs		30.000		
Training costs		20.000		
Office costs		8.000		
Other costs		8.000		
Miscellenious		5.000		
		944.017		944.017

5.3 Scenario 2: ideal variant

The following table shows the needed investment and annual depreciation for an ideal scenario:

	Description	Amount	Depreciation period	Depreciation
1	Aluminium sea boat	75.000	10	7.500
2	Checkpoint	100.000	25	4.000
3	2 boat motors	20.000	5	4.000
4	Warden equipment	24.000	3	8.000
5	Infrared Goggles	17.500	5	3.500
6	2 motor bikes	30.000	5	6.000
7	Communication equipment	25.000	5	5.000
8	Measurement equipment	15.000	5	3.000
	Total annual depreciation			41.000

In the table shown underneath, the annual costs and revenues are shown in an ideal scenario:

<u>Cost category</u>	<u>Number</u>	<u>SRD</u>	<u>Revenues</u>	<u>SRD</u>
Director	1	75.000	GoS in kind	250.000
Research coordinator	1	35.000	District	100.000
Game wardens	5	175.000	GoS in cash	352.500
Assistant game wardens	10	220.000	Entrance fee users	450.000
Monitoring staff	2	70.000	Entrance fee tourists	120.000
Secretary	1	24.000	Research fee	5.000
Administrator	1	45.000	Endowment fund SO	0
Marketing and promotion officer	1	35.000		
Education officer	1	35.000	Ad hoc donors	250.000
Health insurance staff	23	57.500		
Board member fees	5	45.000		
Depreciation		41.000		
Maintenance costs		10.000		
Communication costs		10.000		
Monitoring costs		600.000		
Fuel costs		52.000		
Training costs		20.000		
Office costs		10.000		
Other costs		10.000		
Miscellaneous		10.000		
		<u>1.579.500</u>		<u>1.527.500</u>

5.4 Financing the 2 scenarios

5.4.1 Government funding

It is clear that government funding is needed to cover part of the exploitation costs and bridge the period during which the endowment fund is fully realized with a total amount of 1 million USD. Arguments for doing so are the REDD+ process, for which purpose the BP could function as a showcase, the significant economic value of the area and the fact that various fees and fines that currently go to the ministry of Finance are in fact generated by the BP area.

Government funding could come from the central government and the local government. It is recommended that the local government also contributes financially to the costs of the management of the MUMA since they will also be in the board. Government funding from the central government could be transferred to the foundation, while the foundation reports back to the ministry about the expenditures (this is to be arranged in the statutes of the foundation and specific subsidy arrangements regarding the government contribution). In this way, a government contribution can be achieved without the bureaucratic procedures that are involved with spending government funds within the ministry itself. It calls, however, for good financial management at the level of the foundation and accounting for the expenditures by the foundation as well. A system of internal control needs to be in place and has to be incorporated in the legal structure (statutes, agreements etc.).

Similar arrangements could be made for the contribution of the decentralized government.

5.4.2 Donor funding and endowment fund for BP

The endowment fund should be set up during a couple of years, resulting in a total value of 1 million USD, which would sustain a structural contribution to the annual exploitation costs of the foundation. To bridge this period, GoS contribution will be needed.

Especially for monitoring activities, ad hoc project based contributions could be obtained from a selected list of (international) donors such as UNDP, WWF, CI, IDB and other relevant organizations.

5.4.3 Business development

In order to increase the level of self generated income, efforts should be made to increase the number of tourists coming to Bigi Pan. Currently the estimated number of visitors is 6,000 annually. With dedicated marketing and promotion efforts and investments making the area more attractive to visit, it should be possible to increase this number to 12,000 annually. Even though the overall level of tourism to Suriname is limited and a large number of incoming tourists are related to friends and family, it should be possible to attract more visitors from the annual number of incoming tourists.

In order to achieve this, the tourism product of Bigi Pan (and in a broader sense Nickerie) should be developed and marketed. The foundation for Tourism Promotion (STS) is willing and able to assist in international promotion of Bigi Pan and Nickerie.

It is also important to realize that, given the small scale of tourism in Suriname in general, and to Bigi Pan in particular, tourism cannot be the only source of revenues for the management of Bigi Pan. The level of income can be increased with dedicated product development and marketing efforts, but most likely will not generate sufficient income to manage the Bigi Pan area.

In order to generate revenues from incoming tourists, it is recommended to introduce an entrance fee per incoming tourists. Also other (local) users of the area could be asked for a (reduced) entrance fee (fishers and hunters for instance) since they also benefit from the area. In order to make this possible, a decision of the government is needed. Previous attempts to introduce such a fee failed due to lack of political support.

The exact height of the fee needs to be determined and should differentiate between local users and tourists. Local users could for instance pay an annual fee linked to an entrance pass while tourists should pay a day fee at the moment they enter the area. The exact amounts need to be determined but for the calculations we used 20 SRD for tourists and 750 SRD annually for users of the area (number of users estimated at 600). The final decision depends on considerations regarding available sources of funding, discussions with stakeholders locally.

Currently, a few tour operators organize regular tours to the Bigi Pan area, working together with local service providers. Additional income from tourism could be generated by means of creating facilities for tourists with donor funds, managed by the foundation and leased back to entrepreneurs that actually exploit the infrastructure. A facility located at the small bay where an existing basic camp is already in place (Bonbush) could make the area more attractive for visitors. Birdwatching facilities and facilities for overnight stay could be created there.

5.5 Financial projection for 5 years for both scenarios

In this paragraph, both scenarios will be worked out in a 5 year period, taking into account annual inflation, an annual increase of the funds from the endowment fund, a slow growth in entrance fees and international donors and a slow decrease in GoS funding.

Basically, the idea is that in the first years the government contribution plays a major role in order to cover the time needed to make the arrangements for the entrance fee, set up the necessary structures, set up the endowment fund and gradually fund it with the necessary funds. Also an increase of visitors to the Bigi Pan will be projected due to marketing efforts attracting more visitors. This will be worked out in a financial projection for 5 years to be included in the final version of the report.

5.6 Conclusions

The major sources of funding are the Government of Suriname (GoS), entrance fees, an endowment fund specifically for Bigi Pund and international donors funding activities on project basis. The endowment fund could be funded from private companies and if possible other sources (diaspora – international donors – companies with a green policy within and outside of Suriname and biodiversity offset for instance for the Staatsolie operations in Saramacca MUMA). This will take a couple of years to achieve the total needed amount of 1 million USD needed to sustain the annual financing of the exploitation costs of the MUMA.

In the first couple of years, government funding will be a major source of funding in order to cover the start up period and buy time to put in place other mechanisms (entrance fee, endowment fund, marketing efforts to attract more visitors, attract donor funds).

6 Conclusion

6.1 Recommended strategy and mechanisms for the short term implementation

For the short term, the following mechanisms could be applied: subsidies from the GoS and international donors, creating an endowment fund specifically for BP and managed by SCF to create a structural source of income for the foundation and last but not least an entrance fee for both tourists and users of the area, while gradually increasing the number of tourists by means of product development and marketing efforts.

At the same time, efforts must be made to improve the financial stability of protected areas in general.

6.2 Recommended strategy and mechanism for mid term

In addition to the mechanisms to be applied for the short term, it is important to work on a tax based system in order to generate more funds for PA management. Also REDD+ could come into play in the future as a potential source for financing PA management in general, and Bigi Pan in particular, although it is important to emphasize that the outcome and benefits of the REDD+ process are highly uncertain at this stage.

Since various tax reforms are planned by the government and implementation is a slow and politically sensitive process, hindered by limited institutional capacity, this is not feasible on the short term, but still worth working on in order to create more funds for the mid and long term. We will investigate the potential that could be included in the currently proposed tax reforms and include the results in the final version of this report.

6.3 Key elements of financial strategy

The table below shows the key elements of the financial strategy and the actions to be taken for further implementation.

Strategic component	Objective
Legal, regulatory and institutional (LRI)	Put in place the foundation with adequate governance structure, pass legislation needed for entrance fee and make available government funding for the start up period
Strategic actions	
LR1	Set up foundation with adequate governance structure (draft statutes available)
LR2	Make regulations allowing for entrance fee at BP MUMA
LR3	Make financial commitments and agreements for government financing for the start up period

Strategic component	Objective
Business planning and tools	Foundation is management in a business oriented way, using planning tools and cost effectiveness (this is also incorporated in the statutes).
Strategic actions	
BP1	Capacity building (please refer to training plan) for management in a business oriented way.
BP2	Incorporate accounting and audit systems in the management structure (both financially and in terms of performance indicators).
BP3	Identify and implement cost saving opportunities.

Strategic component	Objective
Tools for Revenue Generation	Foundation is increasingly able to generate revenues and less dependent on donor and government funds
Strategic actions	
RG1	Entrance fee for both tourists and users is implemented
RG2	Marketing and product development efforts in order to attract more visitors to the area (from 6,000 to 12,000 annually). Make use of the support of STS for promotion of BP internationally.
RG3	Set up and raise funds for endowment fund managed by SCF (continues process but start capital of 1 million USD needed). Seek contributions from companies with green policies for this purposes (within and outside Suriname). Specifically target State Oil company for compensation for their activities in the North Saramacca MUMA.
RG4	Follow the REDD+ process in Suriname and ensure that future revenues benefit BP as well since the management of BP links to the objectives of REDD+ (for instance mangrove protection and eco tourism) as well.
RG5	Follow tax reform efforts in Suriname and establish a link with funding of PA management (GoS contribution, contributing to endowment fund)

Strategic component	Objective
Government funding	Foundation obtains government funding to cover the start up phase (first five years)
Strategic actions	
GF1	Political support for government funding is created, for instance by linking the BP case to the REDD+ process, to demonstrate the value of the area by using the economic valuation report and the fact that the area generates funds already for the government (permit fees etc.)
GF2	Get a subsidy commitment in writing for the first 5 years from the GoS.

GF3	Use the fact that the foundation will have a well developed governance structure (statutes) as a unique selling point as compared with other government foundations.
Strategic component	Objective
Donor funds	Foundation receives donor funds on project basis and receives capital for endowment fund
Strategic actions	
DF1	Establish a network of national and international donors that are willing to contribute to the activities of the foundation.
DF2	Apply for funds on a project basis; develop and use a network of consultants for this purpose.
DF3	Raise funds for the particular purpose of the endowment fund since this is a sustainable source of income for the foundation.

Appendix: feasibility analysis of financial mechanisms