THE BIODIVERSITY FINANCE INITIATIVE

BIOFIN SEYCHELLES

PUBLIC AND PRIVATE BIODIVERSITY EXPENDITURE REVIEW

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Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

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EXECUTIVE SUMMARY

Seychelles is internationally recognized as being one of the world's biodiversity hotspots, having two UNESCO world heritage sites, Aldabra Atoll Group and Vallee de Mai on Praslin Island.

Although the Seychelles archipelago has a total land area of only 540 km^2, their Exclusive Economic Zone (EEZ) is 1.44 million km^2.

More than half of Seychelles' land area is legally declared as Protected Areas; a new initiative, the Marine Spatial Planning (MSP) Project, aims to convert 30% of Seychelles' EEZ into Protected Areas, half of which would be No Take Zones.

Given the Seychelles economy's high dependence on tourism and fisheries, there is an awareness of the need for these industries to be environmentally sustainable.

As such, there has always been a strong willingness to place biodiversity conservation at the forefront of development, although this has not always been converted into effective action.

As illustrated in the Table below, total public expenditure on biodiversity conservation, estimated at US$4.7 million in 2014, represents a mere 2 percent of total public expenditure of US$239.4 million[1] in that same year (both expressed in 2006 constant prices). Nevertheless, it should be underscored that public biodiversity expenditures has increased by an impressive 66.4% between 2011-2015.

Table 1. Overall Biodiversity Expenditures in Seychelles (2006 prices in US Dollars)

OVERALL BD EXPENDITURES SEYCHELLES - 2006 PRICES (US$)				
YEAR	**PUBLIC EXP.**	**NGOs**	**PRIVATE**	**TOTAL**
2011	2,688,501	1,586,512	57,829	4,332,842
2012	2,733,955	1,505,093	59,085	4,298,133
2013	3,449,975	1,627,275	64,304	5,141,553
2014	4,650,771	1,988,186	65,479	6,704,435
2015	4,474,487	No data available	No data available	

It may be argued that the private sector, which derives the most benefit from Seychelles' biodiversity, is the sector that contributes the least to its conservation.

[1] See Table 5 Total Public Expenditure on Page 11

It should however be noted that some of the NGO expenditure on biodiversity may be attributable to the private sector, since many hotels are known to engage NGOs to implement their biodiversity conservation programmes.

Nevertheless, total expenditure by the private sector and NGOs stood at only US$2 million in 2014.

The BIOFIN Biodiversity Expenditure Review (BER) has, for the first time, provided a compilation of such expenditures in Seychelles, not only across key stakeholders in the public sector; private sector and NGOs, but also broken down in terms of major biodiversity management categories, namely mainstreaming, sustainable use, protection, restoration, enabling actions, and access and benefit sharing.

The BER has also shown a time series for such expenditure, in order to depict trends as well as to provide the base for extrapolation of future expenditure in the Business-as-Usual Scenario (BAU).

This Report (BER) also includes a section on 'Revenue from Biodiversity'. Once again, this is the first time that an attempt has been made at estimating such revenues in Seychelles. In a nutshell, Seychelles government may be viewed as earning only a small fraction of the commercial value of its marine biodiversity being exploited (mostly tuna). Direct public sector earnings from tourism-related biodiversity activities are also negligible, although it has not been possible to quantify indirect earnings from tourism related activities such as VAT, CSR, tourism marketing tax and business tax.

Furthermore, the revenues from biodiversity from the two main economic sectors of tourism and fisheries are not being reinvested sufficiently into biodiversity conservation.

The Biodiversity Finance Plan (BFP) will address the Finance Solutions with special focus on tourism, fisheries and biosecurity.

1. INTRODUCTION

The Seychelles has a long history of biodiversity conservation and related finance approaches. The country combines public financing with NGOs, private sector and other support for conservation and sustainable use of biodiversity (BD).

This Report constitutes the first compilation of biodiversity expenditures across the public sector, private sector and NGOs as well as across biodiversity management categories viz. mainstreaming, sustainable use, protection, restoration, enabling actions and access and benefit sharing.

The Report also includes a section on revenues from biodiversity, in particular from the tourism and fisheries sectors (Section 4.4).

Section 4 of this Report comprises of the estimated future funding baseline and a 'business-as-usual' scenario (BAU).

This BAU should provide the platform for the next BIOFIN reports – the Financial Needs Assessment (FNA) with the NBSAP costing, thereby providing the basis for the Biodiversity Finance Plan.

2. METHODOLOGY

2.1 Public Sector Data Collection

Public sector data on biodiversity expenditure and revenue was obtained from the Ministry of Finance, Trade and Blue Economy. It was not possible to obtain biodiversity recurrent and capital expenditure data for years prior to 2011, as such data were no longer available electronically. It was decided to limit biodiversity expenditure data collection to key Government agencies viz. Environment Division of the Ministry of Environment, Energy and Climate Change; Ministry of Fisheries and Agriculture; Survey Unit in the Ministry of Land Use and Habitat; Seychelles Fishing Authority; Seychelles Agricultural Authority; Seychelles Bureau of Standards, and Seychelles National Park Authority.

The breakdown of biodiversity expenditure data into six biodiversity management categories (mainstreaming; sustainable use; protection; restoration; Access Benefit Sharing; and enhancing actions) was obtained via one on one meetings with each of the previously mentioned Government Agencies.

In the absence of Programme Performance Based Budgeting during the years for which data was being collected, BD expenditure was estimated using a coefficient that would reflect the proportion of the Budget Line which was attributable to biodiversity.

2.2 Private Sector and NGO data collection

Private sector and environmental NGO data on biodiversity expenditure were obtained from one-on-one meetings with each private entity and NGO. The private sector entities selected

were only small islands privately owned with hotels, due to their well-known involvement and success stories in biodiversity conservation in the past decades. It was not possible to estimate biodiversity expenditures from other private sector entities given the practical limitations of the project.

2.3 Definition of biodiversity expenditure and attribution of expenditures to biodiversity

If the expenditures contribute directly to one of the following objectives:

- The conservation of biodiversity,
- Sustainable use of ecosystems, species, etc., or
- Fair and equitable sharing of benefits,

Then 100 % of the expenditures was considered as BD expenditure.

In the other cases, based on one-on-one consultations with management and financial staff of agencies, biodiversity expenditure was defined as the proportion of expenditure which was attributable to biodiversity following the BIOFIN guidelines indicated below:

Table 2: BIOFIN Guidelines for Coefficient of attribution to biodiversity expenditures

Coefficients table

Coefficient / Attribution to Biodiversity Expenditure	**"Complete" 100%**	**"Very High" 75-90% (Target 80%)**	**"Medium" 25-75% (Target 50%)**	**"Low but significant" 5 - 25% (20%)**	**"marginal" 1 - 5% (2%)**	**"none or immeasurable" 0%**
Definitions	**Principal Intent** of Organisation / Activity is to accomplish one of three CBD objectives	Main intent at least one of the CBD objectives **coupled to a lessor degree with other related** / supportive intents	One at least one of the CBD Objectives or Aichi Targets coupled with other - non biodiversity related intents / actions in **balanced proportion**	Intent **primarily for non-biodiversity** related activities but have a stated intent for positive BD impacts	**small BD impacts expected from much larger non-BD programs** with at least safeguards in place.	None or immeasurable intent or positive impact on BD
Relation to RIO Markers	**RIO Marker 2**	**RIO Marker 1**				**RIO Marker 0**

The table below shows the percentage of attribution of biodiversity expenditures per category in the different public agencies in Seychelles.

Table 3: Coefficient of attribution to biodiversity used in Seychelles

Institution and budget lines	BIOFIN Categories	% total Recurrent expenditures	% total Capital expenditures
Ministry of Land Use and Habitat			
Budget line Survey	Mainstreaming	2%	0%
Budget line Human resources and financial management	Mainstreaming	1%	0%
Seychelles Agriculture Agency			
Budget line human resources and management	Mainstreaming	20%	0%
Budget line biosecurity services	Protection	100%	
Budget line crop livestock development	Restoration	20%	20%
Budget line Island agriculture development	Mainstreaming	15%	15%
Budget line extension sustainable farming	Sustainable use	15%	15%
Budget line Veterinary services	Protection	100%	100%
Budget line Agriculture planning and management	Mainstreaming	5%	5%
Ministry of Fisheries and Agriculture			
Budget line Ministry secretariats	Mainstreaming	40%	0%
Budget human resources and financial management	Mainstreaming	50%	0%
Budget line Grant funded projects	Restoration and mainstreaming	0 %	100%
Seychelles Fisheries Authority			
Budget line Human Resources Management	Mainstreaming	30%	0%
Budget line Fisheries Management and evaluation	Protection	75%	0%
Budget line Research	Enabling	90%	0%
Budget line Fisheries economic evaluation	Enabling	50%	0%
Budget line monitoring control surveillance	Protection	75%	0%
Budget line management and administration laboratory equipment	Enabling	0%	90%
Budget line management and administration IT equipment	Enabling	0%	10%

Budget line management and administration high tech equipment	Enabling	0%	90%
Budget line EU support fisheries management	Sustainable use	0%	20%
Budget line fisheries research vessel	Enabling	0%	100%
Budget line fisheries research diving equipment	Enabling	0%	100%
Budget line monitoring control surveillance research vessel	protection	0%	100%
Budget line monitoring control surveillance vessel monitoring system	Protection	0%	100%
Seychelles National Park Authority			
All budget lines	Protection	100%	100%
Seychelles Bureau of Standard			
Budget line Fish inspection and quality control	Enabling	50%	0%
Budget line biochemical test services	Enabling	100%	0%
Budget line Standardisation and information services	Enabling	0.50%	0%
Budget line engineering and metrology	Enabling	0%	0%
Budget line Human resources and financial management	Enabling	40%	0%
Budget line high tech equipment	Enabling	0%	100%
Budget line laboratory equipment	Enabling	0%	100%
Department of Environment			
Budget line Minister secretariat	Mainstreaming Enabling, Protection, Restoration	20% 10% 15% 15%	
Budget line Human resources and finance management (20% mainst,11%enabling,13%protection,12% restoration)	Mainstreaming Enabling, Protection Restoration	20% 10% 15% 15%	
Budget line wildlife enforcement and permit (good and services)	Protection	100%	
Budget line wildlife enforcement and permit (wages)	Protection	70%	
Budget line wildlife enforcement and permit (wages)	Mainstreaming	30%	
Budget line Climate affairs, adaptation and information	Enabling	100%	

Budget line DRDM	Mainstreaming	100%	
Budget line Coastal adaptation management goods and services	Restoration	100	
Budget line Coastal adaptation management wages	Restoration	80%	
Budget line Coastal adaptation management wages	Mainstreaming	20%	
Budget line Environmental education sector	Mainstreaming	100%	
Capital expenditures DOE			
Budget line 17-20 Meteo	Enabling		100%
Budget line 1 Fond d'Offay	Protection		100%
Budget line22 DRDM	Mainstreaming		100%
Budget line23-24 Meteo	Enabling		100%
Budget line 25	Mainstreaming		100%
Budget line 26(restoration)	Restoration		100%
Budget line 27(Mainstreaming)	Mainstreaming		100%
Budget ligne 28 Fond d'Offay la digue	Protection		100%
Budget ligne31-37	Restoration		100%
Budget line 40 Nairobi convention	Protection		100%
Budget line41-44	Protection		100%
Budget line 59,63,65,68 Meteo	Enabling		100%
Budget line 69	Protection		100%

With the introduction of Programme Based Budgeting across all Government Departments and Agencies, future data collection on BD expenditure should be greatly facilitated in the future.

2.4 US$ and Constant Prices Conversion

Table 4, below was used for conversion of expenditure and revenue data from current SCR to 2006 constant prices in US$.

Table 4: Conversion table for expenditures and revenue data from Seychelles Rupees to 2006 constant price in US$(2006-2015)

Year	CPI Index**	CPI Adjusted	CPI Coefficient	SCR/ US$	CPI & USD Coefficient
2005	45.67			5.5000	
2006	46.4	100	1	5.5190	0.181192245
2007	54.04	116.47	0.858590195	6.7102	0.127952996
2008	88.21	190.11	0.526011257	9.4357	0.055746925
2009	85.97	185.28	0.539723661	13.5814	0.039739914
2010	86.31	186.01	0.537605505	12.0711	0.044536727
2011	91.06	196.25	0.50955414	12.3800	0.041159462
2012	96.34	207.63	0.481625969	13.6944	0.035169556
2013	99.64	214.74	0.465679426	12.0577	0.038620917
2014	100.16	215.86	0.463263226	12.7527	0.036326678
2015	103.13	222.26	0.449923513	13.3096	0.033804435

3. RESULTS

3.1 Overall national budgetary and expenditure snapshot

Government total (capital and recurrent) expenditure has increased from SCR1.75 billion in 2006 to SCR6.3 billion in 2015. However, when converted into real terms (2006 constant prices[2]) and expressed in US Dollars, total Government capital and recurrent expenditure fell from US$317.22 million in 2006 to US$214.37 million in 2015.

Table 5: Total public expenditures in Seychelles rupees and 2006 constant price in US Dollars (2006-2015)

TOTAL PUBLIC EXPENDITURE -SCR'000					
YEAR	**RECURRENT EXPENDITURE**	**CAPITAL EXPENDITURE**	**TOTAL PUBLIC EXPENDITURE**	**Real Public Expenditure (in 2006 USD'000)**	**Inflation rate**
2006	1,513,735	237,000	1,750,735	317,220	1.59%
2007	1,856,172	239,000	2,095,172	268,084	16.47%
2008	2,148,110	312,150	2,460,260	137,152	63.23%
2009	4,005,928	356,400	4,362,328	173,359	-2.54%
2010	2,979,033	747,500	3,726,533	165,968	0.39%
2011	3,007,658	1,202,742	4,210,400	173,298	5.51%
2012	4,376,610	1,142,958	5,519,568	194,121	5.80%
2013	5,412,155	1,384,892	6,797,047	262,508	3.42%
2014	5,400,510	1,190,598	6,591,108	239,433	0.52%
2015	5,159,896	1,181,503	6,341,399	214,367	2.96%

In late 2008, the government implemented Economic and Fiscal Reform Measures with the assistance of the IMF. As part of its agreement with the IMF, Government undertook to reduce public debt from over 130% of GDP to 50% of GDP by 2018.

In tandem, the government also undertook not to further borrow externally without the approval of the IMF. This may explain the relative stagnation of capital expenditure from 2010 onwards, since most capital expenditure in Seychelles has traditionally been funded by external loans and grants.

[2] 2006 was used as the base year in line with BIOFIN methodology and to take into consideration trends both pre- and post-2008 IMF-supported economic reforms including significant exchange rate adjustment.

As part of the IMF supported Reform Measures, Government was also trimmed and a significant proportion of staff were made redundant across Government, Ministries and Departments. This has contributed to the containment of growth in Government recurrent expenditure post the Reform Measures.

During the period 2009 - 2015 the government succeeded in restoring fiscal and monetary stability within the domestic economy, while creating the enabling environment for private sector growth through trade and economic liberalization.

The two key pillars of the economy – tourism[3] and fisheries – have benefited in nominal terms as per table 5 below from such liberalization, including that of air travel access in recent years.

Table 6: Share of tourism and fishery sector in Gross Domestic Product (2009-2014)

SHARE OF TOURISM & FISHING IN GDP					
YEAR	TOURISM		FISHING		TOTAL
	VALUE ADDED (SCR MILLION)	SHARE OF GDP %	VALUE ADDED (SCR MILLION)	SHARE OF GDP %	TOTAL GDP (SCR MILLION)
2009	3,052	26.50%	88	0.80%	11,533
2010	2,936	25.10%	100	0.90%	11,705
2011	3,121	24.70%	114	0.90%	12,609
2012	3,811	26.20%	111	0.80%	14,519
2013	3,852	24.30%	212	1.30%	15,864
2014	4,003	23.30%	183	1.10%	17,199

Consequently, Seychelles' external capital reserves, which were negative in 2008, have resurged to record levels of US$535.5 million at end 2015, equivalent to almost 5 months' imports.

The government is also on track to achieve the above-mentioned debt target, having already reduced public debt to less than 70% of GDP by end 2015.

[3] Although tourism officially account for 23-26% of GDP it should be emphasized that understates the importance of tourism in the domestic economy which due spin-off in secondary industries is estimated to account for at least two thirds of economic activity and employment.

The government has been systematically generating budget surpluses since 2010, although certain key Government owned companies such as Air Seychelles, Seychelles Public Transport Corporation, Public Utilities Corporation, and Seychelles Petroleum Company have been registering losses or capital deficits.

3.2. Baseline Biodiversity Expenditure Review

3.2.1 Public Biodiversity Expenditure Review

Public expenditure data on biodiversity conservation was not available for the period 2006 – 2010. As such this Section analyses such data for the period 2011 – 2015.

Table 7: Total public biodiversity expenditures (capital and recurrent) in Seychelles Rupees (2011-2015)

PUBLIC EXPENDITURE ON BIODIVERSITY (BD) - SCR			
Year	**Total BD Expenditure**	**Recurrent BD expenditure**	**Capital BD expenditure**
2011	65,319,143	50,539,143	14,780,000
2012	77,736,405	50,594,405	27,142,000
2013	89,329,172	68,289,172	21,040,000
2014	123,749,320	78,232,320	45,517,000
2015	132,363,904	76,735,904	55,628,000

Table 8: Total public biodiversity expenditures (capital and recurrent) in 2006 constant price in US Dollars (2011-2015)

PUBLIC EXPENDITURE ON BIODIVERSITY (USD – 2006 CONSTANT PRICES)			
YEAR	**TOTAL BD EXPENDITURE**	**RECURRENT BD EXPENDITURE**	**CAPITAL BD EXPENDITURE**
2011	2,688,501	2,080,164	608,337
2012	2,733,955	1,779,383	954,572
2013	3,449,975	2,637,390	812,584
2014	4,495,402	2,841,920	1,653,481
2015	4,474,487	2,594,014	1,880,473

Public expenditure on biodiversity has more than doubled during the five-year period 2011 to 2015 when it reached an all-time high of SCR132.4 million of which SCR76.7 million was Recurrent Expenditure and SCR55.6 million was Capital Expenditure.

Even when converted to 2006 constant prices and in US Dollars, total public expenditure on biodiversity increased by 66% between 2011 and 2015.

This is also illustrated in Chart 1 and Chart 2 below.

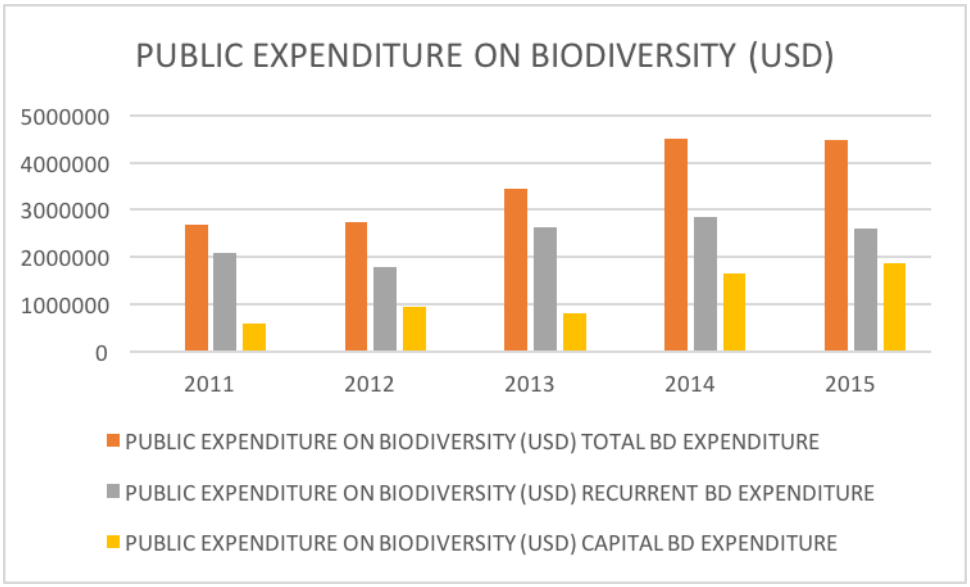


Chart 1: Total public biodiversity expenditures 2011-2015 in 2006 constant price in US dollars

It should be underscored that Public Capital Expenditure on Biodiversity has increased fourfold during the five year period 2011-2015. It should be underscored that all grant funded capital expenditures on biodiversity is implemented by goverment and forms part and parcel of government financial accounting system. While total nominal grant funding has increased from 14,780,000 SCR in 2011 to 55,628,000 SRC in 2015, The share of grant funded Capex has decreased from 81% in 2011 to 22% in 2015, as shown in the table below. This trend is set to continue in the future given Seychelles has been designated as High Income Status Country and is therefore likely to see a decrease in grant funding.

Moreover, it is expected that going forward grant funding for biodiversity will be channeled directly to NGOs instead of government.

Table 9: Total biodiversity public invesmtent in Seychelles Rupees (2011-2015)

PUBLIC CAPEX EXPENDITURE ON BIODIVERSITY (BD) - SCR				
YEAR	GRANT FUNDED (EXTERNALY)	TAX FUNDED (INTERNALY)	TOTAL	% GRANT FUNDED
2011	12,000,000	2,780,000	14,780,000	81
2012	7,325,000	19,817,000	27,142,000	27
2013	6,798,000	14,242,000	21,040,000	32
2014	14,112,000	31,405, 000	45,517,000	45
2015	12,438,000	43,190,000	55,628,000	22

The share of Biodiversity Expenditure in Total Public Expenditure has varied between 1.55% and 2.08% between 2011 and 2015 as illustrated in the Table and Chart below.

Table 10: Share of total public biodiversity expenditures in total public expenditures in Seychelles Rupees(2011-2015)

SHARE OF BIODIVERSITY IN TOTAL PUBLIC EXPENDITURE SCR'000			
YEAR	BIODIVERSITY EXPENDITURE SCR'000	TOTAL PUBLIC EXPENDITURE SCR'000	SHARE (%)
2011	65,319	4,210,400	1.55
2012	77,736	5,519,568	1.41
2013	89,329	6,797,047	1.31
2014	123,749	6,591,108	1.87
2015	132,363	6,341,399	2.08

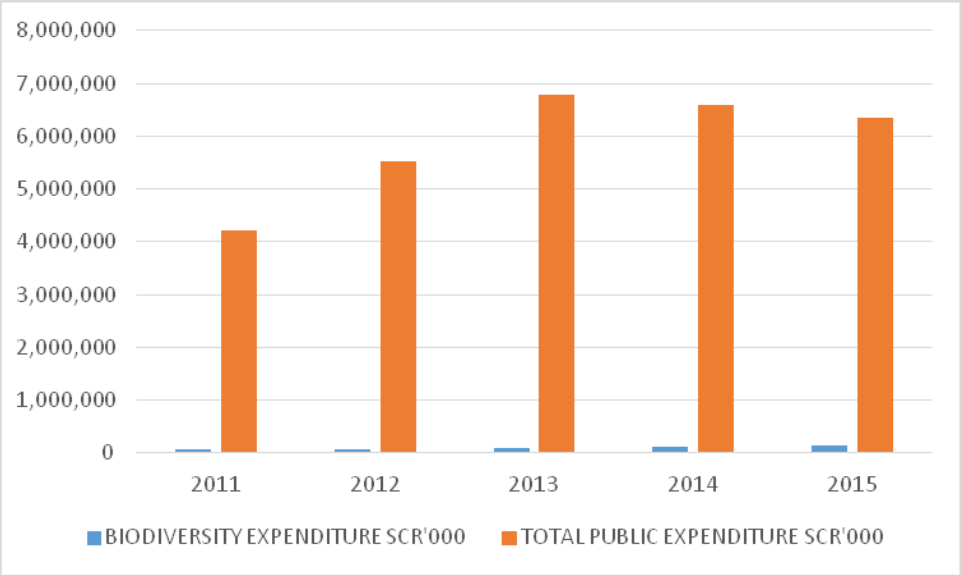


Chart 2: Total public biodiversity expenditures and total public expenditures in Seychelles Rupees (2011-2015)

The following Government Agencies were identified as the ones of most relevance with regards to their impact on biodiversity:

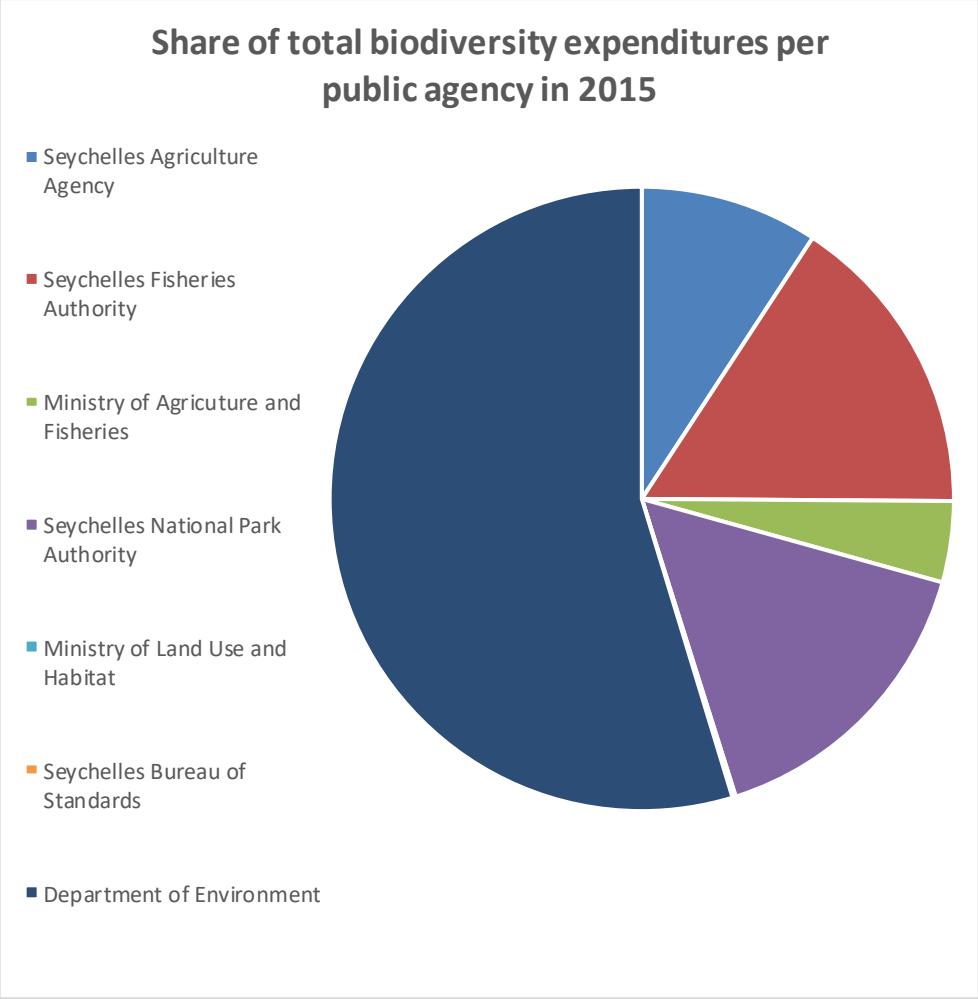
- Division of Environment (DOE)
- Seychelles National Parks Authority (SNPA)
- Seychelles Fishing Authority (SFA)
- Seychelles Agricultural Agency (SAA)
- Seychelles Bureau of Standards (SBS)
- Division of Risk and Disaster Management (DRDM)
- Division of Survey
- Island Development Company (IDC)[4]

[4]IDC is a state-owned parastatal company responsible for the management of most of the Outer Islands of the Seychelles (Platte, Desroches, Marie-Louise, Remire, Desnoeuf, Alphonse, Providence, Farquhar, Coetivy, Cosmoledo, Astove and Assumption) as well as one of the largest of the inner islands (Silhouette). Its' mandate is to provide and manage the facilities and infrastructure of these islands to sustain their ongoing sustainable development.

It was not possible to obtain direct information from IDC, but this was captured by data provided by the NGO, Island Conservation Society (ICS) which manages biodiversity on the IDC (Government owned) islands.

Of the Governement Agencies listed above, the top three viz. DOE, SNPA and SFA account for the bulk of public expenditure on biodiversity.

Chart 3:Share of total biodiversity expenditures per public agency in 2015 in Seychelles Rupees



The expenditure of these three Government Agencies are analysed in the section below and by Biodiversity Strategy in Section 3.1.

3.2.1.1 Expenditure and Capacity Review of DOE, SNPA and SFA

Division of Environment (DOE)

The Division of Environment is the Government agency with the single largest expenditure on biodiversity conservation with recurrent expenditure of SCR30 million and capital expenditure of SCR41 million in 2015 making a total expenditure of SCR71 million or almost half of total public expenditure on biodiversity conservation which stood at SCR146 million in 2015.

Table 11 below shows DOE's Recurrent and Capital Expenditure on biodiversity converted to 2006 Constant Prices and US Dollars.

Table 11: Total recurrent and capital biodiversity expenditures of the Department of Environment in 2006 constant price in US Dollars(2011-2015)

ENVIRONMENT DIVISION - RECURRENT AND CAPITAL EXPENDITURE ON BIODIVERSTITY - USD 2006 CONSTANT PRICES			
YEAR	RECURRENT EXPENDITURE	CAPITAL EXPENDITURE	TOTAL RECURRENT AND CAPITAL EXPENDITURE
2011	894,356	607,102	1,501,458
2012	623,831	223,256	847,088
2013	1,106,924	786,863	1,893,787
2014	1,139,678	1,136,117	2,275,795
2015	999,991	1,405,250	2,405,241

As noted in the above Table, the combined recurrent and capital expenditure of DOE on biodiversity rose in real terms (2006 prices) from US$1.5 million in 2011 to US$2.4 million in 2015.

DOE suffers from lack of capacity especially in terms of implementing the main action plans (Seychelles Sustainable Development Strategy – SSDS, and National Biodiversity Strategy and Action Plan – NBSAP) that have already been approved. The SSDS in particular has been approved since 2013 and has yet to be significantly implemented.

Project Coordination Units (PCUs) were also set up within the Ministry of Environment, Energy and Climate Change to support implementation of donor funded project (GEF/UNDP) Such lack of capacity may have been caused in part by the ambitious trimming of Government agencies as part of the IMF supported fiscal reform measures adopted since October 2008. Yet the PCUs are also semi-autonomous and more significantly, being project and donor dependent, they cannot be permanently institutionalised.

The DOE's effectiveness of its expenditures stands to certainly benefit from the proposed introduction of Programme Performance Based Budgeting that has now been set in motion by the

Government of Seychelles, and which will be implemented across all Government Ministries and Departments by 2017.

Seychelles National Parks Authority (SNPA)

Prior to being set up in 2011 as a separate Government owned entity, the SNPA was part of the Division of Environment.

In 2011, the SNPA was given financial autonomy and was allowed to use its own revenues from national park fees to fund its recurrent expenditure. However, financial autonomy was removed from the SNPA with effect from 2014. Since then, the SNPA has been dependent on an annual recurrent budget allocation from Government, while all of its recurrent revenues have been chanelled to Government's consolidated fund[5].This saw a reduction in total expenditure from 2014 to 2015, although capital expenditure increased during this time.

Table 12: Total recurrent and capital biodiversity expenditures of Seychelles National Park Authority in 2006 constant prices in US Dollars(2001-2015)

SNPA RECURRENT AND CAPITAL BD EXPENDITURES - 2006 CONSTANT PRICES (USD)			
YEAR	RECURRENT EXPENDITURE	CAPITAL EXPENDITURE	TOTAL RECURRENT AND CAPITAL EXPENDITURES
2011	508,606	0	508,606
2012	473,147	0	473,147
2013	577,163	23,404	600,568
2014	574,483	28,335	602,818
2015	533,544	36,171	569,714

The SNPA is believed to be sub-optimally managing the marine and terrestrial parks under its responsibility due, among other things, to lack of capacity and incentivisation. The fact that the SNPA is no longer able to use the revenues it collects from park fees, has not only resulted in possibly poorer revenue collection, but also in a reduced expenditure budget. It is widely believed that the SNPA should be given greater financial autonomy (as was previously the case) and that it should be made more accountable both in terms of financial control as well as its deliverables.

It has also been suggested that Government should consider allowing NGOs and the private sector to increasingly manage the marine and terrestial parks which may not only result in improved efficiency and cost effective use of resources, but also in more innovative funding mechanisms.

[5] Ministry of Finance took the decision to remove financial autonomy from SNPA since it felt the need to exercise improved financial control over SNPA's expenditures.

For example, the terrestrial parks and most notably the Morne Seychellois National Park which accounts for almost 25% of the land area of the main island of Mahe, may be more resourcefully managed by the private sector which may combine eco-tourism (nature trails, restaurant, log cabins) alongside biodiversity conservation.

A case can similarly be made for allowing NGOs to take over some of the park management responsibilities of the SNPA with gouverment oversight. But as outlined in Section 2.2 below as well as in the Policy and Institutional Review (PIR), this would have to be done as part of revisiting the roles and vocation of NGOs moving forward.

It may be argued that in the event of outsourcing management of its parks to the private sector and NGOs, the SNPA would be able to focus on its policy role coupled with its role of regulator.

Seychelles Fisheries Authority (SFA)

The SFA has a relatively large overall budget mostly allocated for fishery management and ensuring sustainable fishing witihn Seychelles' vast Exclusive Economic Zone (EEZ) of 1.4 million km^2.

Table 13: **Total recurrent and capital biodiversity expenditures of Seychelles Fisheries Authority in 2006 constant prices in US Dollars(2001-2015)**

SFA RECURRENT AND CAPITAL BD EXPENDITURES - 2006 CONSTANT PRICES (USD)			
YEAR	RECURRENT EXPENDITURE	CAPITAL EXPENDITURE	TOTAL RECURRENT AND CAPITAL EXPENDITURES
2011	266,000	0	266,000
2012	302,294	0	302,294
2013	479,257	0	479,257
2014	663,668	0	663,668
2015	571,920	0	571,920

The SFA, together with other government agencies and regional fishery institutions, has the mandate to ensure sustainabliity of the demersal and pelagic fish stock specifically within Seychelles' EEZ but also more generally within the southwest Indian Ocean.

As part of the Debt for Climate Change Adaptation Swap signed in December 2015 with the Paris Club, Seychelles has undertaken to proclaim 30% of its EEZ as Marine Protected Areas (MPA), half of which (15%) would be "No-Take Zones". This represents a challenge both in terms of reaching an agreement with the EU Fishing Vessels, and to eventually develop the surveillance capacity to implement the MPA and the No-Take Zones as these would require significant additional financing.

Given the ever evolving climate change and global warming issues, including the current El Nino episode, Seychelles' marine ecosystems have been particularly affected, including with substantial coral bleaching. It remains uncertain to what exent demersal fish species have been affected by these factors.

The Seychelles authorities including the SFA believe that certain demersal species are also being threatened by overfishing. In this connection, they are exploring ways and means to remove fuel and ice subsidies from which the artisanal fishing currently benefits.

3.2.2 Key environmental Non-Governmental Organizations and Seychelles Island Foundation (public trust)

The key environmental Non-Governmental Organizations (NGOs) included in the review are:

Marine Conservation Society of Seychelles, Sustainability for Seychelles (MCCS), Wildlife Clubs of Seychelles, Plant Conservation Action Group, Green Island Foundation (GIF), Nature Seychelles (NS), Island Conservation Society (ICS), and the Seychelles Island Foundation (SIF).

The total expenditure on biodiversity conservation for the major environmental NGOs in Seychelles has increased from SCR12.5 million in 2006 to SCR54.7 million in 2014. However, when converted to US Dollars and 2006 constant prices, total expenditure of key environment NGOs declined considerably from US$2.27 million in 2006 to US$1.28 million in 2009, although it has since resurged to US$1.96 million in 2014.

The largest institutions in terms of expenditure are Seychelles Island Foundation; Island Conservation Society; and Nature Seychelles, representing around 80% of the total biodiversity expenditures by this group of institutions.

As shown in Chart 4 below, Seychelles Island Foundation has the largest expenditure, with around SCR28 million in 2014 representing 50% of the total biodiversity expenditure of this category of institutions.

The Island Conservation Society and Nature Seychelles represent respectively 16% and 13% of the total biodiversity expenditure for this category of organization.

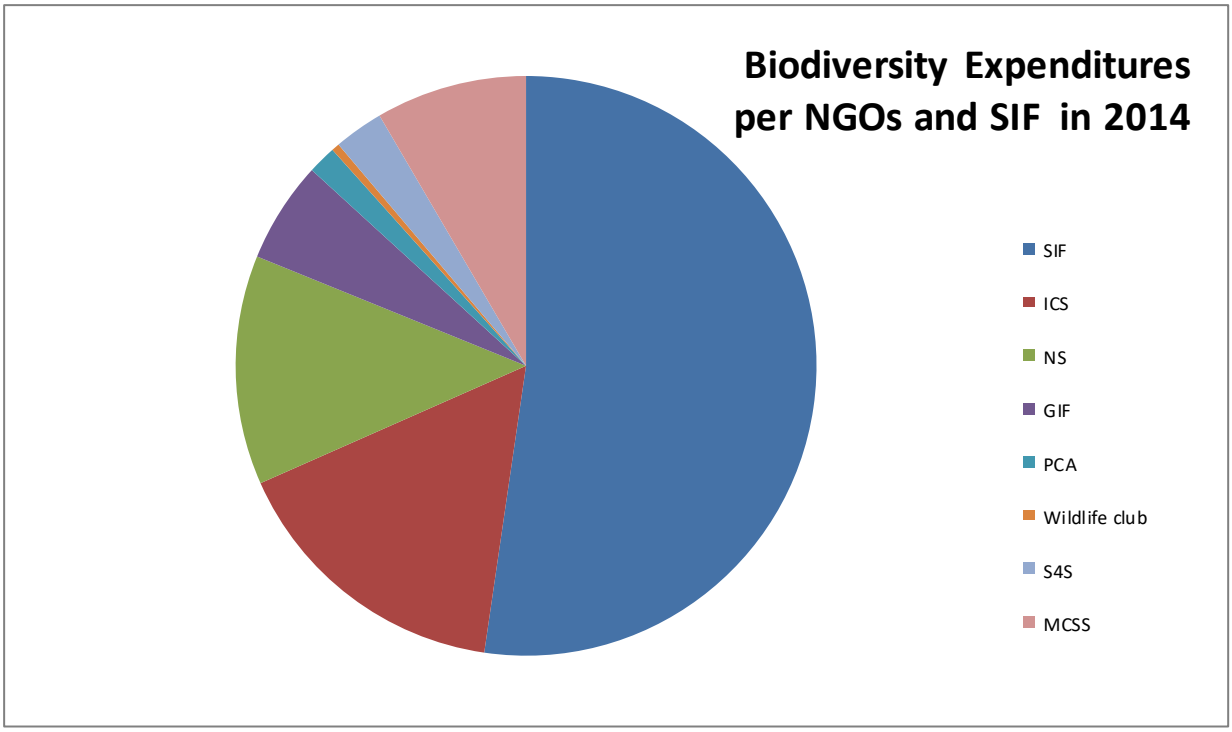


Chart 4: Share of total biodiversity expenditures per non-governmental organization and Seychelles Island Foundation 2014

The main institutions (SIF, ICS and NS) are managing protected areas and private islands and are generating revenue mostly from visitors (entrance fees, users' fees, landing fees, etc.). In 2014, total funding available to NGOs generated by the institutions themselves amounted to 77%. Donors' contributions represented only 20% of the total funding available to NGOs and SIF. Government and private sector support represents respectively 13% and 16% as shown in the table and chart below. On the other hand, smaller NGOs not managing any sites are highly dependent on donor support.

Table 14: Non-governmental organization total revenue per source of funding in 2006 constant prices in US Dollars

NGOs total revenue per source of funding-2006 PRICES (USD)					
YEAR	**DONOR**	**GOVT**	**OWN REVENUE**	**PRIVATE SECTOR SUPPORT**	**TOTAL**
2006	323,477	0	1,883,281	67,947	2,274,704
2007	511,693	0	1,718,225	47,982	2,277,901
2008	130,434	0	904,789	21,184	1,056,407
2009	103,843	2,583	1,153,746	18,479	1,278,652

2010	142,666	2,895	1,267,174	20,487	1,433,221
2011	262,487	2,675	1,302,210	19,139	1,586,512
2012	239,522	2,286	1,247,107	16,178	1,505,093
2013	249,414	2,703	1,358,743	16,414	1,627,275
2014	375,574	26,010	1,526,866	31,713	1,960,163

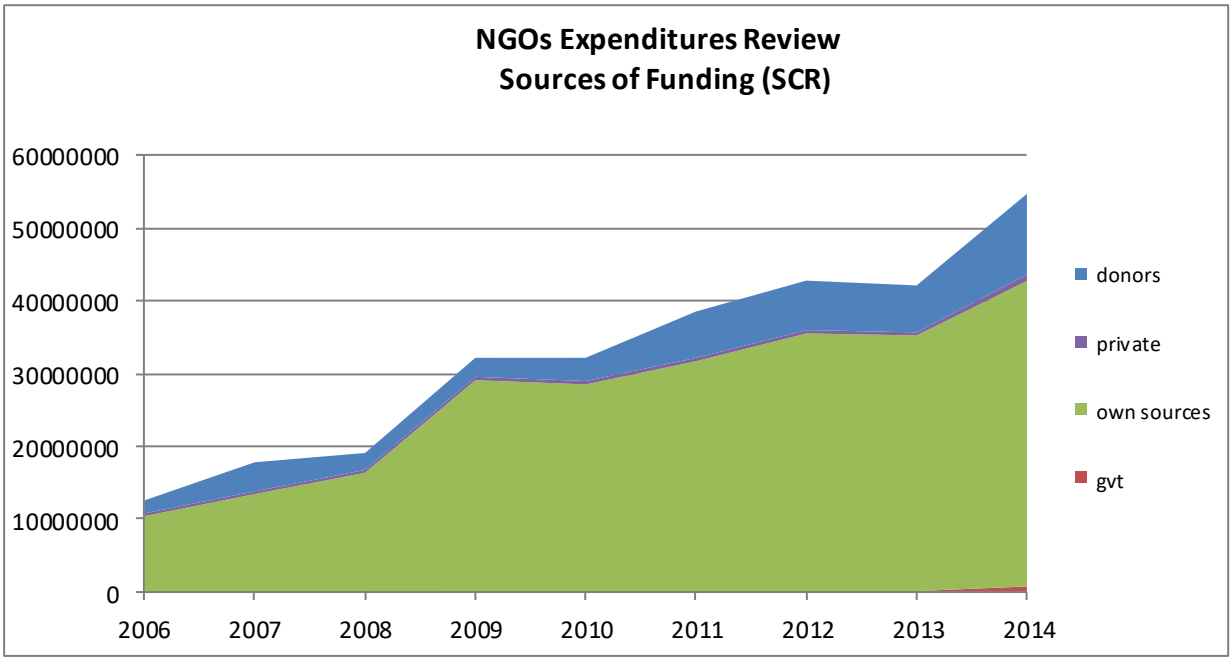


Chart 5: Non-governmental organization total revenue per source of funding in Seychelles Rupees

A financial analysis of the National Protected Areas System was carried out within the framework of protected areas finance project funded by the GEF/UNDP. Some of the results are presented in the table below. Diverse institutions are involved in the management of Protected Areas (public sector including parastatals, and NGOs)[6] and the estimated level of expenditures per ha of protected areas varies from US$11 to US$3,384 (SCR132 to SCR40, 608)[7] reflecting the diversity of situations in terms of management effort of the protected areas and financial needs for a basic and optimal management scenario. Basic[8] and optimal management costs were calculated using guidelines developed by the Global Environmental Facility for the financial sustainability scorecard.

[6] Refer to BIOFIN Policy and Institutional Review (PIR)
[7] Exchange rate 1 USD=12SCR
[8] Basic management costs refer to the minimum cost required to maintain the biodiversity in the protected area as per baseline. Optimal management costs will allow an improvement of the biodiversity in the protected areas compare to the baseline.

In general, smaller PAs cost much more to manage on a per ha basis due to fixed costs and the geometric relation between area and border circumference – as an area gets larger the border gets relatively shorted, and borders are costlier to manage than core areas.

Table 15: Average expenditures and financial needs per ha of protected areas in US dollars in 2015

Parameter of analysis	Seychelles National Park Authority	Department of Environment	Seychelles Island Foundation	Island Conservation Society	Nature Seychelles	Green Island Foundation
Total surface managed by each Institution (ha)	6,499	23	43,399	78,266	155	3,454
Of which, surface of NEW PAs managed by each institution (ha)	152	0	0	73,293	0	3,454
Average expenditure per hectare	$194	$1,059	$47	$11	$3,384	$111
Basic needs per hectare	$413	$1,535	$43	$32	$3,474	$142
Optimal needs per hectare	$653	$1,819	$65	$47	$4,467	$179

3.2.3 Private Sector Biodiversity Expenditure Review

There are three small private islands (Fregate, Bird and Cousine) with hotels which are actively involved in biodiversity conservation. These islands are not using the support of environmental NGOs to carry out biodiversity conservation activities but are managing conservation actions themselves. All the other private islands (North and Denis) and islands under IDC management are using NGO support and expenditures are reflected within the expenditure review of the NGOs. This is the case as well for the main hotels on Mahe and Praslin involved in biodiversity conservation.

The biodiversity expenditures for small private islands not using NGO support have been estimated as shown in the Table below. In real terms, such expenditures have declined from US$170,321 in 2006 to US$65,479[9] in 2014.

[9] Caution should be exercised in interpreting trends from such shallow figures. When broken down , these may be explained by greater initially on eradication of alien invasive species (eg cats and rats) requiring less expenditures in subsequent years on maintenance and protection.

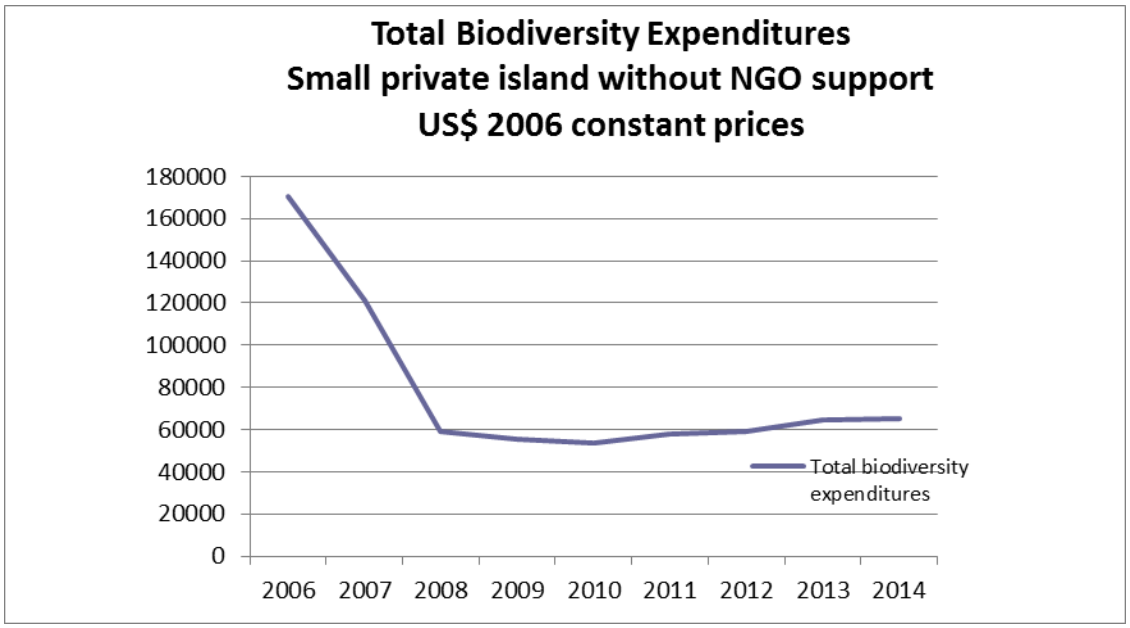


Chart 6: Total biodiversity expenditures in small Private Island without NGO s support in 2006 constant prices US dollars (2006-2014)

3.3 Biodiversity Expenditure Review by Major Strategy Group

During the biodiversity expenditure review, the five following categories were used to categorize biodiversity expenditures as per BIOFIN workbook: a) biodiversity mainstreaming b) sustainable use; c) protection; d) restoration; e) access and benefits; and f) enabling strategies

The table below shows the relation between the Aichi Targets and the BIOFIN categories.

Table 16: Aichi Targets of the Convention on Biological Diversity and BIOFIN expenditures categories

Biodiversity mainstreaming and sustainable use strategies	**Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society **Target 1**: Awareness of the values of biodiversity **Target 2**: Integration of biodiversity values into development and poverty reduction strategies, and into national accounting and reporting systems **Target 3**: Removal or reform of harmful incentives and subsidies and application of positive incentives **Target 4**: Implementation of plans for sustainable production and consumption **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use **Target 5**: At least halve the rate of loss of all-natural habitats, including forests and reduce degradation and fragmentation **Target 6**: Sustainably harvest and manage fish and invertebrate stocks and aquatic plants **Target 7**: Sustainably manage agriculture, aquaculture and forestry and ensure conservation of biodiversity. **Target 8:** Reduce pollution, including from excess nutrients **Target 9**: Prevent, and control or eradicate, prioritized invasive alien species **Target 10**: Minimize the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems
Protection strategies	**Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity** **Target 11**: Protect at least 17 percent of terrestrial and inland water, and 10 percent of coastal and marine areas, and create well-connected systems of protected areas and other effective area-based measures **Target 12**: Prevent the extinction of known threatened species and improve their conservation status **Target 13**: Maintain the genetic diversity of cultivated plants and domesticated animals and of wild relatives, and develop and implement strategies for minimizing genetic erosion and safeguarding their genetic diversity
Restoration strategies	**Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services** **Target 14**: Restore and safeguard ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being **Target 15**: Enhance ecosystem resilience and the contribution of biodiversity to carbon stocks through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems
ABS strategies	**Target 16**: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.
Enhancing implementation strategies	**Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building** **Target 17**: Parties develop, adopt and begin implementation of updated NBSAPs **Target 18**: Integrate traditional knowledge of indigenous and local communities with the full and effective participation of indigenous and local communities **Target 19**: Improve and share knowledge relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss **Target 20**; Mobilize financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020

3.3.1 Public sector

As shown in the chart below, most of the public expenditure on biodiversity is accounted for by Protection Strategies, followed by Restoration, Mainstreaming, Sustainable use and Enabling Strategies. Biodiversity Expenditures related to Access and Benefit Sharing were negligible.

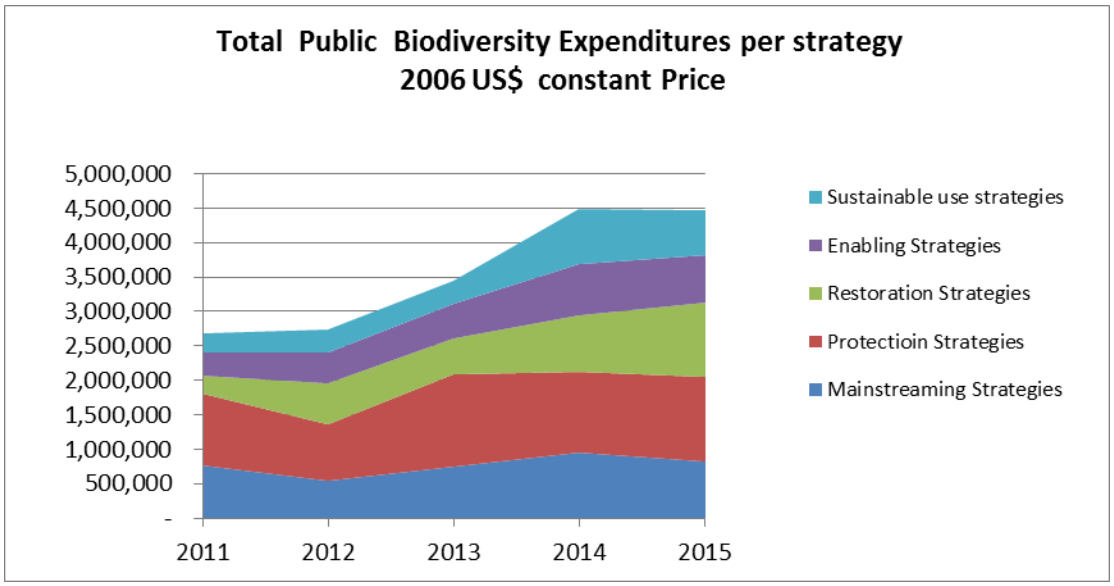


Chart 7 :Total public biodiversity expenditures per strategies in 2006 constant prices US dollar (2011-2015)

Three key Government Agencies including the Department of Environment (DOE), Seychelles Fishing Authority (SFA) and Seychelles National Parks Authority (SNPA) account for the bulk of Public Expenditure on Biodiversity.

Table 17: Total Biodiversity expenditures of the Department of Environment per category in 2006 constant prices US dollar (2011-2015)

DEPARTMENT OF ENVIRONMENT - RECURRENT AND CAPITAL EXPENDITURE ON BIODIVERSITY - USD 2006 CONSTANT PRICES					
YEAR	**MAINSTREAMING**	**PROTECTION**	**RESTORATION**	**ENABLING**	**TOTAL**
2011	612,283	325,611	244,143	319,421	1,501,458
2012	417,010	136,264	54,991	238,822	847,088
2013	609,001	428,546	467,867	388,374	1,893,787
2014	741,702	242,287	793,646	498,160	2,275,795
2015	607,348	305,175	1,023,875	468,844	2,405,241

Table 18: Recurrent biodiversity expenditures of the Department of Environment per category in 2006 constant prices US dollar (2006-2015)

DEPARTMENT OF ENVIRONMENT – RECURRENT EXPENDITURE ON BIODIVERSITY - USD 2006 CONSTANT PRICES					
YEAR	**MAINSTREAMING**	**PROTECTION**	**RESTORATION**	**ENABLING**	**TOTAL**
2006	492,257	768,052	368,402	215,979	1,844,690
2007	304,810	523,967	222,871	129,272	1,180,920
2008	177,812	267,849	128,528	78,321	652,509
2009	111,771	150,769	76,339	48,043	386,922
2010	145,597	162,976	83,407	65,666	457,647
2011	270,660	170,234	157,708	295,754	894,356
2012	196,391	133,626	54,991	238,822	623,831
2013	343,096	144,412	231,043	388,374	1,106,924
2014	343,417	153,141	211,838	431,283	1,139,678
2015	171,811	214,985	210,743	402,452	999,991

Table 19: Capital biodiversity expenditures of the Department of Environment per category in 2006 constant prices US dollar (2011-2015)

DEPARTMENT OF ENVIRONMENT - CAPITAL EXPENDITURE ON BIODIVERSITY - USD 2006 CONSTANT PRICES					
YEAR	**MAINSTREAMING**	**PROTECTION**	**RESTORATION**	**ENABLING**	**TOTAL**
2011	341,624	155,377	86,435	23,667	607,102
2012	220,619	2,638	0	0	223,256
2013	265,905	284,134	236,823	0	786,863
2014	398,286	89,146	581,808	66,877	1,136,117
2015	435,536	90,190	813,132	66,392	1,405,250

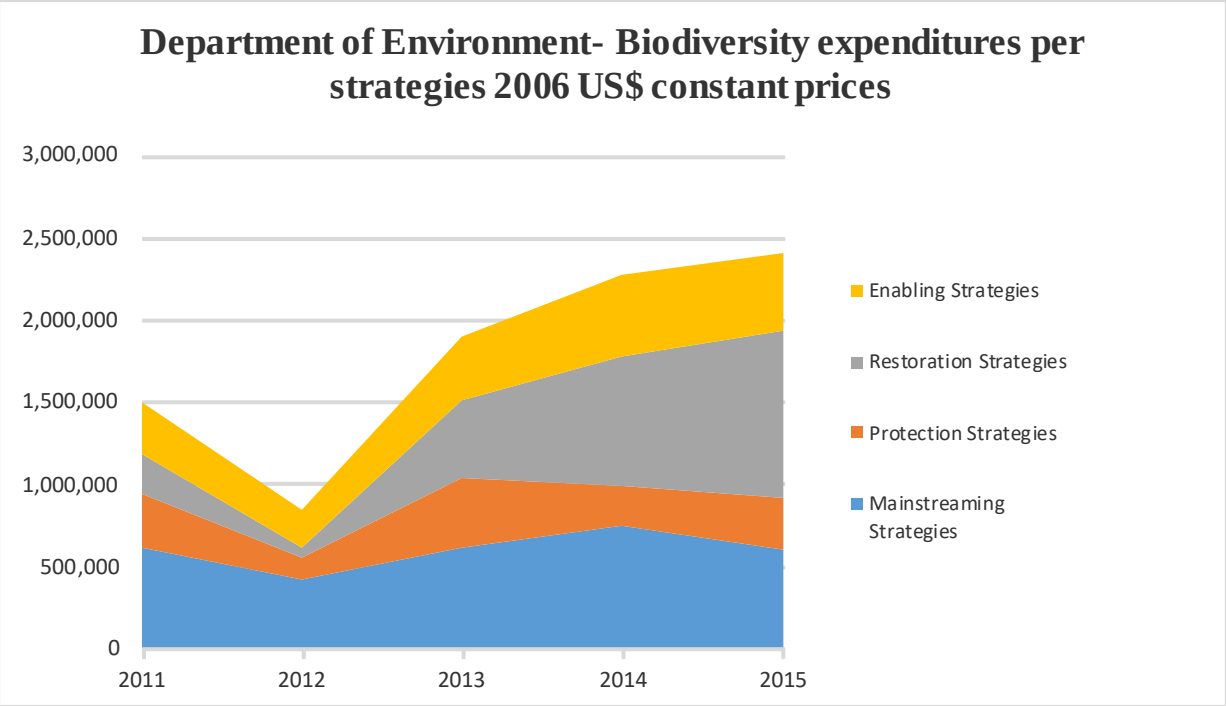


Chart 8: Total biodiversity expenditures of the Department of Environment per category in 2006 constant price US dollar (2011-2015)

As shown in Chart 8 above, the Department of Environment has over the years shifted its expenditure from biodiversity strategy, to increasingly towards Restoration and Enabling Strategies moving away from a role of an implementation agency in the field towards a facilitator and regulatory role.

In the case of the Seychelles Fishing Authority, Sustainable Uses Strategies accounted for almost half of total expenditure on biodiversity in 2015, the rest being spent on Enabling and Protection Strategies as shown in Chart 9 below.

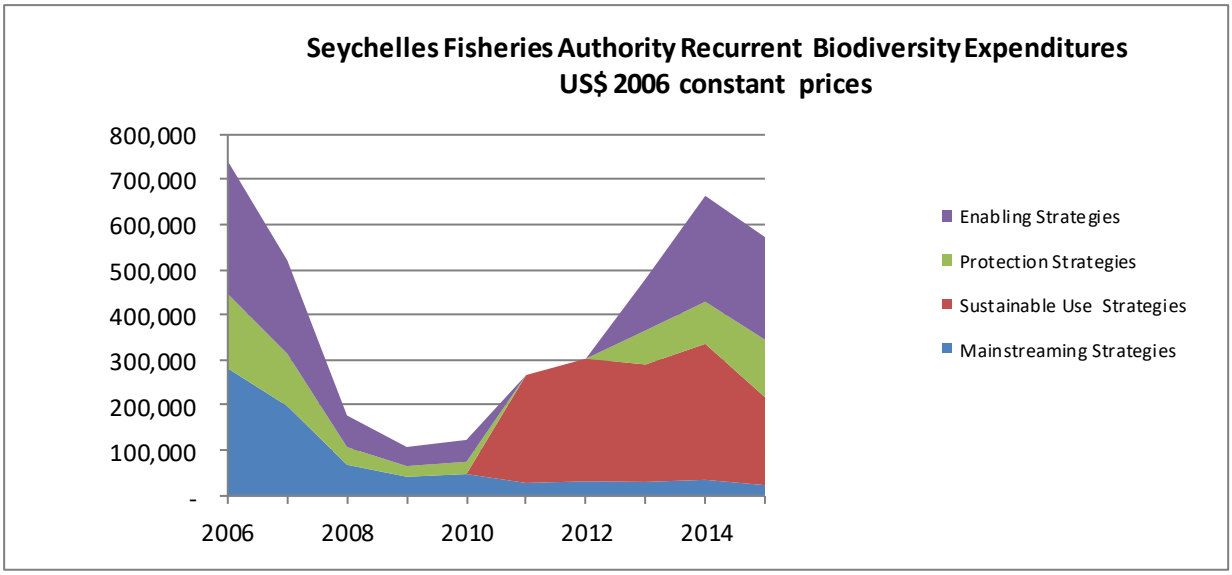


Chart 9: Recurrent biodiversity expenditures of Seychelles Fisheries Authority per category in 2006 constant price US dollar (2011-2015)

The Seychelles National Parks Authority (SNPA) dedicated all of its Budget towards Protection Strategies as shown below.

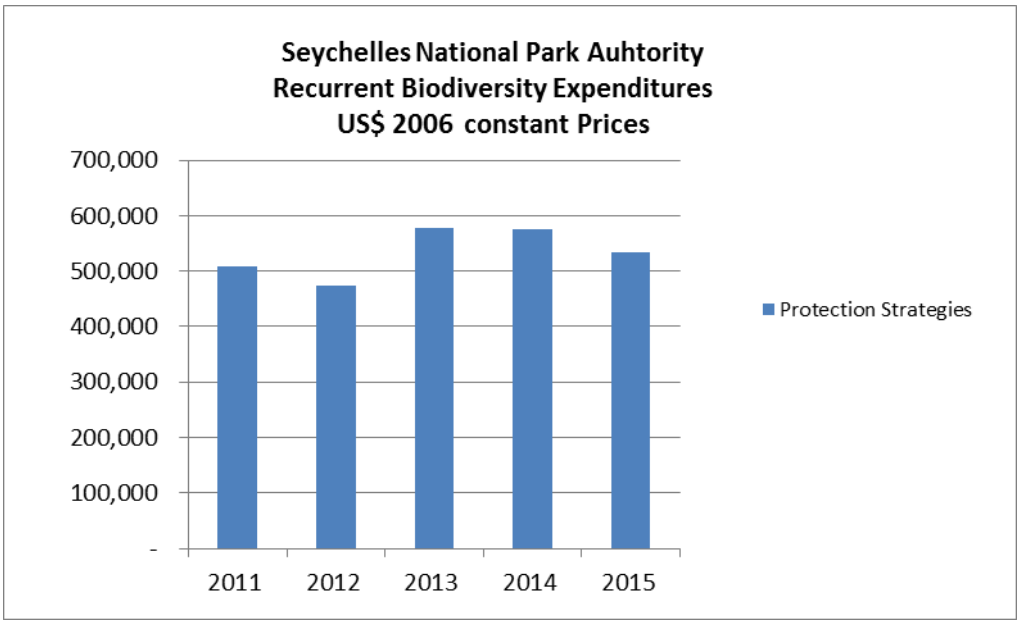


Chart 10: Recurrent biodiversity expenditures of Seychelles National Park Authority per category in 2006 constant price US dollar (2011-2015)

3.3.2 Key Environmental NGOs and the Seychelles Island Foundation (public utility trust)

Key NGOs and SIF are focusing mainly on protection and restoration strategies as they are managing gazette protected areas. In 2014, 63% of the total biodiversity expenditures are for protection strategies and 22% are for restoration strategies, representing 85% of the total activities as indicated in the table and graph below.

Table 20: Total biodiversity expenditures of the Non-Governmental Organization per category in 2006 constant price US dollar (2006-2015)

NGO EXPENDITURE REVIEW PER BD STRATEGY - 2006 PRICES & US$					
Year	**Mainstreaming strategies**	**Restoration strategies**	**Protection strategies**	**Enhancing strategies**	**Total**
2006	47,654	142,959	2,048,599	35,492	2,274,704
2007	36,211	466,967	1,753,946	20,777	2,277,901
2008	19,846	127,940	904,789	11,000	1,063,575
2009	17,645	142,259	1,110,724	8,023	1,278,652
2010	42,043	222,570	1,154,619	13,990	1,433,221
2011	283,033	237,763	1,035,345	30,371	1,586,512
2012	300,602	219,445	968,388	16,657	1,505,093
2013	315,957	325,254	957,493	28,571	1,627,275
2014	269,886	437,405	1,261,174	19,720	1,988,186

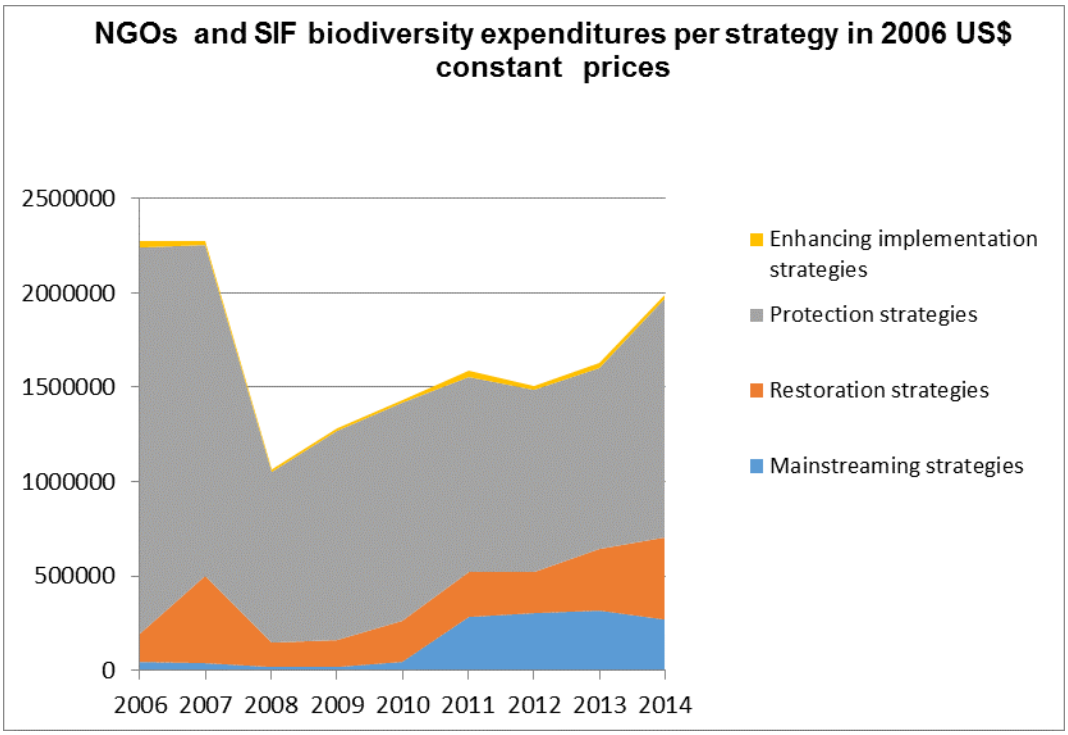


Chart 11: Total biodiversity expenditures of Non-Governmental Organization and Seychelles Island Foundation per category in 2006 constant price US dollar (2011-2014)

3.3.3 Private sector

Small private islands with no support from NGOs

The small private islands with no support from NGOs are mainly focusing on restoration of island ecosystems and protection strategies representing respectively, in 2014, 20% and 80% of their biodiversity conservation activities as shown in the graph below.

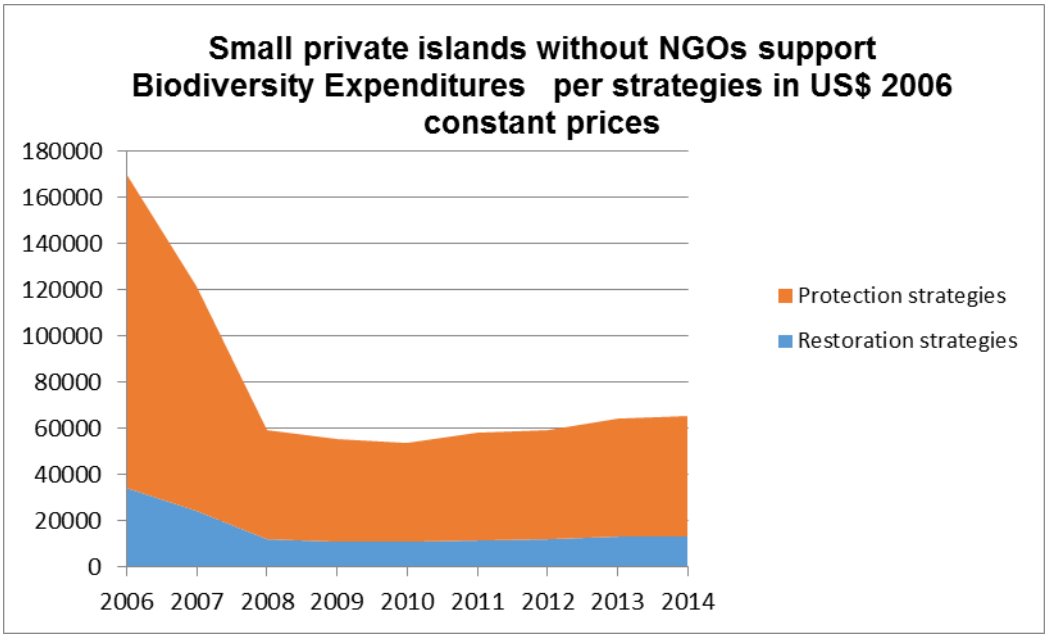


Chart 12: Total biodiversity expenditures of small private islands without NGO s support per category in 2006 constant price US dollar (2006-2014)

Private Companies

There are a range of other private companies that may be contributing to biodiversity finance but have not provided specific details of their level of financing. These include tour operators, hotels that are managing their hotel landscape for a combination of tourism and biodiversity (e.g. Ephelia), fishing companies taking extra precautions to avoid damaging the environment, water companies seeking to protect the watersheds upon which they are dependent, and more. There is also an effort on Praslin to produce more coco de mer for both commercial and biodiversity benefits.

3.4 Public Sector Revenue from Biodiversity

Total Public-sector revenue from biodiversity dependent activities has varied between US$5-8 million (in 2006 constant prices) during the five-year period 2010 to 2015, having reached a peak of US$7.8 million in 2011.[10] These revenues are predominantly made up of license fees, entrance fees and sales of biodiversity products.

[10] These are revenues which are directly generated from such biodiversity activities and do not include other revenues such as VAT and other taxes. However, in the case of fisheries related activities, it should be noted that these are mostly exempted from all forms of taxation.

Table 21: Total public biodiversity revenue in 2006 constant price US dollar (2010-2015)

	USD '000; 2006 CONSTANT PRICES[11]					
DESCRIPTION OF REVENUE	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
LICENSE FEES:						
Annual EU Fishing License fees	4,160	2,434	1,980	2,063	1,702	1,464
EU Fishing License: Vessel Fee	-	1,457	890	551	766	1,258
Non EU Fishing Licence Fees	-	1,262	2,468	1,885	1,455	2,026
Local Fishing License Fees	3	2	3	3	3	22
SUB -TOTAL	**4,164**	**5,156**	**5,342**	**4,502**	**3,925**	**4,770**
SEYCHELLES FISHING AUTHORITY						
Fish Inspection	-	25	19	25	23	27
EEZ Application Fee	-	8	10	49	9	
Aqua Culture Concession	-	1	1	2	3	2
Inspection of Sea Cucumber	-	15	3	2	1	1
Management Fee Sea Cucumber	-	60	189	112	58	71
Seaman Fishing Protocol	-	-	-	202	47	34
SUB TOTAL		**108**	**222**	**392**	**141**	**136**
SEYCHELLES AGRICULTURAL AGENCY						
Import/Export Certificates	**3**	**3**	**3**	**3**	**3**	**2**
SNPA						
Sale of Marine Park tickets		307	334	454	522	544
Coco-de-mer		19	5	7	3	4
Hotel Contribution - Marine Park Fees		19	20	15	16	21
Mooring fees		13	14	13	12	15
Forestry Products		45	37	28	26	20
SUB TOTAL		**403**	**410**	**516**	**580**	**603**

[11] Source: Ministry of Finance, Trade and Blue Economy (2016)

MINISTRY OF ENVIRONMENT, ENERGY AND CLIMATE CHANGE						
Tree Felling	2	1	1	4	2	1
Sale of Coco de mer tag	-	19	18	11	17	9
Purchase of Coco de Mer	32	2	-	-	-	-
Botanical Gardens- Entrance fees	90	100	81	30	85	67
Sale of Plants	7	5	1	2	2	-
SUB TOTAL	**131**	**128**	**101**	**47**	**106**	**77**
DIVIDENDS INCOME:						
Indian Ocean Tuna	**2,563**	**1,991**	**1,130**	**849**	**270**	**348**
TOTAL REVENUE FROM BIODIVERSITY	6,861	7,788	7,207	6,309	5,025	5,936

It is important to note that the revenue generated by the Seychelles Agriculture Agency, the agency responsible for implementing biosecurity services within the country, generated only 3,000 USD in 2014 for the delivery of import/export certificates. This is an important measure to control the introduction of alien invasive species, one of the main threats to biodiversity.

The volume of external trade in Seychelles was SCR6,878 million for export and SCR14,555 million for import in 2014. As such, biosecurity services are currently highly subsidized by the government of Seychelles and likely the level of inspection capacity is far lower than the country requires due to its island ecology and the economic risks of invasive alien species. A cost recovery system could potentially be introduced.

The two single largest sources of such revenue have been Fishing License Fees and Dividends from the IOT canning factory in which Government has 40% equity. Taken together, these two sources of revenue have accounted for more than 80% of total public-sector revenue from BD dependent activities.

Retained earnings in Seychelles from industrial fishing are only a small fraction of the overall value of 278,000 MT of tuna landed and transshipped in Seychelles in 2013.

Based on the value[12] of US$85.4 million (2006 prices) of the Imports of 77,600 MT of Frozen Tuna by the IOT Canning Factory in 2013, it is estimated that the 278,000 MT of Tuna landed and transshipped in Seychelles was valued at US$305.9 million (2006 prices).

Consequently, retained earnings in 2013 (directly generated) from industrial fishing at US$5.3 million were estimated at a mere 1.73% of the value of tuna landed at US$305.9 million.

In the case of dividends paid to Government of Seychelles by IOT Canning Factory for their 40% equity in the company, even in 2012 and 2013 when these were still much more than in

[12] Source: SFA Annual Report 2013

subsequent years, they represented 2.54% and 1.09% respectively of IOT's gross income as shown in the table below.

Table 22: Dividend paid to the government for canned tuna export by the Indian Ocean Tuna in 2006 constant price US dollar (2012-2013)

IOT TUNA CANNING FACTORY IMPORTS AND EXPORTS[13]		
	USD '000 – 2006 CONSTANT PRICES	
	2012	**2013**
EXPORTS OF CANNED TUNA	119,965	163,289
IMPORTS OF TUNA	75,497	85,396
NET EXPORTS OF TUNA (NOT INCLUDING OTHER COSTS)	44,468	77,893
DIVIDENDS PAID TO GOVT.	1,130	849

Although it has not been possible to estimate total public-sector revenue from tourism activities which are dependent on biodiversity, it could be argued that Seychelles' entire tourism industry is highly dependent on BD.

Whereas in the case of fisheries, the public-sector revenues are generated directly from BD activities, there are much less revenues obviously generated directly from BD activities in the case of tourism. As seen in the previous table further above, such direct public sector revenues[14] from tourism related activities varied between US$511,000 and US$680,000 in the period 2011 – 2015.

However, tourism is responsible for much more significant indirect public-sector revenues by way of VAT and other taxes as illustrated further below.

At national level, the tourism industry was responsible for receipts of US$158.4 million in 2013 and US$148.9 million in 2014 (all at constant prices)[15].

Furthermore, it is known that tourism and its secondary industries contribute relatively more to Seychelles GDP and employment than the industrial fishing sector.

[13] Source: SFA Annual Report 2013
[14] Mostly Tourism Related Revenues from SNPA and MEECC
[15] Source: Central Bank of Seychelles (these are tourism receipts via the commercial banking system)

Table 23: International Travel and Tourism (2010-2014)

INTERNATIONAL TRAVEL AND TOURISM[16]					
	2010	2011	2012	2013	2014
Passenger traffic					
Total Visitor Arrivals ('000)	174.5	194.5	208.0	230.3	232.7
Visitor arrivals by:					
Mode of Transport					
Air	173.5	193.5	206.6	229.6	231.9
Sea	1.1	1.0	1.5	0.7	0.8
Purpose of visit (%)					
Holiday	89.8	90.5	92.1	92.5	92.5
Holiday/Business	0.3	0.2	0.1	0.1	0.2
Business	5.6	3.3	2.9	3.5	3.6
Transit/other	4.3	6.0	4.9	3.9	3.7
Region of residence (%)					
Europe	75.4	73.8	69.0	68.7	66.0
Africa	12.8	12.6	12.0	11.9	12.1
Asia	8.9	10.6	15.0	16.0	18.2
Oceania	0.6	0.6	1.0	0.7	0.8
America	2.3	2.4	3.0	2.7	2.9
Leading Markets (%)					
France	20.1	20.2	15.5	15.5	13.9
Italy	14.7	13.2	11.2	9.5	8.5
Germany	12.2	12.2	13.5	14.5	15.4
UK & Eire	7.1	6.9	5.4	5.5	5.4
South Africa	6.0	5.4	5.9	5.8	5.4
Tourist nights ('000)	1,815	1,938	2,060	2,349	2,373
Average length of stay (nights)	10.4	10.0	9.9	10.2	10.2
Expenditure Sources *(Rupees Million)*					
Central Bank report estimates	2,451	2,570	4,260	4,138	4,148
Visitor survey estimates (1)	2,565	2,661	2,868	2,547	2,681

In terms of revenue, Government perceives significant VAT, CSR and Marketing Tax across the entire tourism industry as shown in the Table below.

[16] **Source:** National Bureau of Statistics Survey of departing visitors at Seychelles International Airport

Table 24: Estimated public revenue from the tourism sector in Seychelles Rupees (2014-2015)

ESTIMATED GOVERNMENT REVENUE[17] FROM TOURISM - SCR'000		
	2014	**2015**
VAT DOMESTIC	1,010,571	979,137
ESTIMATED VAT FROM TOURISM (80%)	808,457	783,310
TOURISM MARKETING TAX	40,194	47,139
TOTAL CSR	83,983	80,448
ESTIMATED CSR FROM TOURISM (50%)	41,991	40,224
TOTAL REVENUE FROM TOURISM	890,642	870,673

The total revenue generated by the Seychelles National Park Authority was estimated in 2014 to be US$603,000 at constant price, of which 90% where generated from the sale of marine parks entrance tickets. SNPA revenue represents 10% of the total direct biodiversity revenue of the government. The total number of paying visitors of SNPA in 2012 was 62,205. Entrance fees are currently US$10.

The total number of visitors in the Seychelles in 2014 was 232,700. Quarterly surveys conducted by the Seychelles National Bureau of Statistics with international tourists estimated that in 2015 between 38% and 56% of tourists visited marine parks and/or Morne Seychellois (NBS, 2016). Visitor arrivals are also expected to grow by 10% in 2016.

National terrestrial parks are not now generating tourism related revenue. There is substantial potential for SNPA to increase its revenue base by increasing the number and the quality of tourism services provided within the national marine and terrestrial parks, provided this is done sustainably.

[17] Source: Ministry of Finance, Trade and Blue Economy

4. Estimated future funding baseline under a 'business-as-usual' scenario

As per the National Development Strategy (NDS), the National Budget is expected to grow from SCR5.7 billion in 2015 to SCR7.1 billion in 2019. Since no forecast is available from the NDS for 2020, it has been assumed that the National Budget will grow by a further 5.6% (the average for the period 2016 -2019) to reach SCR7.5 billion in 2020[18].

Table 25: Total National Budget forecast in Seychelles Rupees (2015-2020)

Total National Budget Forecast [19]		
	SCR Million	
Year		% variation
2015	5,704	
2016	6,197	8.6%
2017	6,613	6.7%
2018	6,504	-1.6%
2019	7,082	8.9%
2020	7,479	5.6%

In estimating biodiversity public expenditure for the period 2016 – 2020, it has been assumed that the share of the national budget allocated to biodiversity will remain constant as defined in the National Development Strategy.

In the case of biodiversity expenditure by NGOs and the private sector, it has been assumed that these will grow at an estimated 3% per annum during the period as per the assumption in the National Development Strategy.

As indicated in the table and graphs below, overall BD expenditure (in USD at constant prices) is not expected to grow significantly between 2015 and 2020 in the "business as usual scenario". Overall BD expenditure is expected to grow from USD6.4 million in 2015 to USD6.8 million in 2020 in real terms.

Government BD expenditure is expected to grow from USD4.5 million in 2015 to USD4.9 million in 2020 in real terms, while BD expenditure by NGOs would actually fall from USD1.91 million in 2015 to USD1.86 million in real terms in 2020.

[18] This forecast does not take account of ODA receipts per se, but due to Seychelles high income status such ODA receipts are becoming increasingly insignificant and are unlikely to affect overall forecast.
[19] Source: National Development Strategy 2015-2020.These forecast figures are reviewed annually and reflect economic performance as well as the debt repayment schedule.

As for private sector BD expenditure, these would remain insignificant, dropping marginally from USD62,760 in 2015 to USD61,101 in 2020 in real terms.

Table 26: Projection of Biodiversity Expenditure as per Business as Usual in 2006 constant price US dollar (2011-2020)

	Projection of Overall BD Expenditure USD - 2006 Constant Prices			
Year	**Overall expenditures**	**Overall expenditures GVT**	**Overall expenditures NGOs**	**Overall expenditures private sector**
2011	4,332,842	2,688,501	1,586,512	57,829
2012	4,298,133	2,733,955	1,505,093	59,085
2013	5,141,553	3,449,975	1,627,275	64,304
2014	6,549,066	4,495,402	1,988,186	65,479
2015	6,442,893	4,474,487	1,905,646	62,760
2016	6,792,257	4,792,618	1,935,883	63,756
2017	6,674,374	4,758,013	1,855,260	61,101
2018	6,461,880	4,545,519	1,855,260	61,101
2019	6,722,254	4,805,893	1,855,260	61,101
2020	6,843,568	4,927,207	1,855,260	61,101

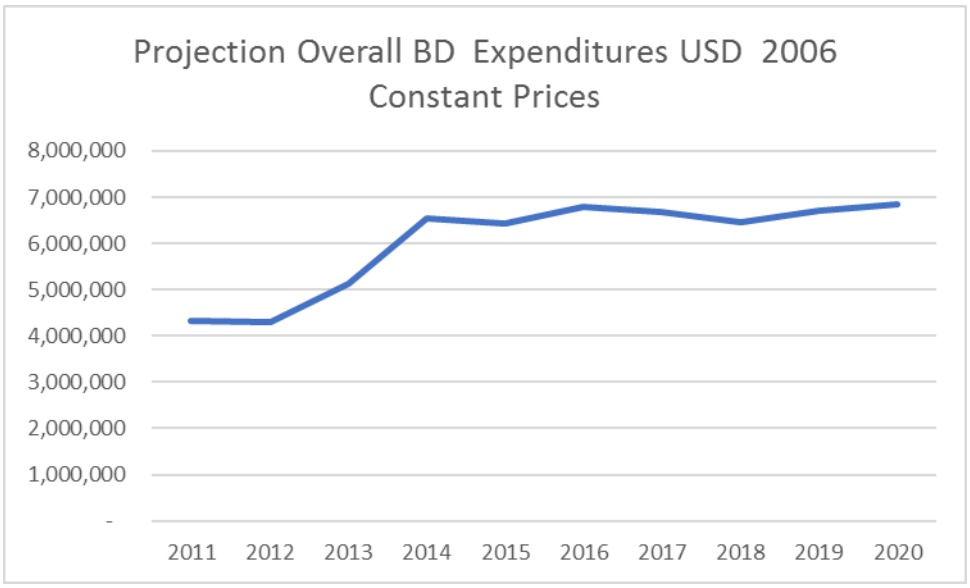


Chart 13: Projection total biodiversity expenditures in 2006 constant price US dollar(2011-2020)

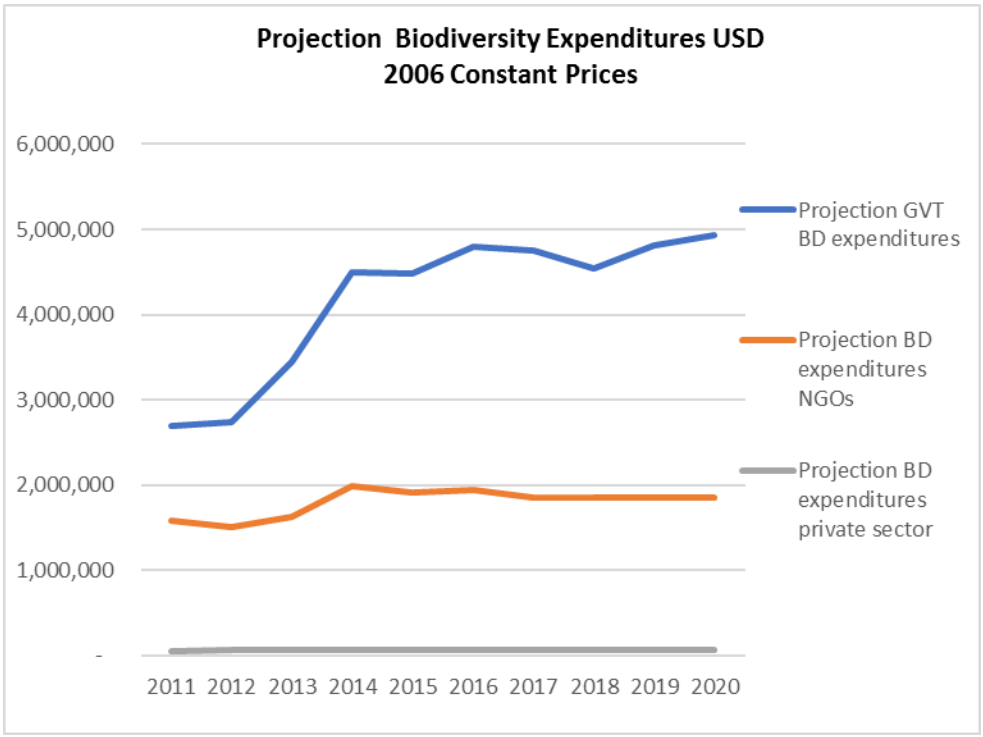


Chart 14: Projection biodiversity expenditures of public, private and non-governmental organizations (2011-2020) in 2006 constant price US dollar

5. Conclusion and Recommendations

5.1 Public Sector

5.1.1 While Government remains by far the single largest source of funding for biodiversity conservation, the BER has shown that public sector BD expenditure represents less than 2% of total public expenditure. Yet biodiversity has been and will remain the pillar of Seychelles' economy.

5.1.2 This very low level of public sector expenditure on BD has to be further reconciled with the fact that the capital expenditure component of total public-sector BD expenditure was previously largely grant funded, but has become increasingly internally funded by government from tax and other domestic revenues. This internally sourced funding accounted for 82% of total expenditures in 2015. Since then, Seychelles has attained High Income Country Status and will consequently find it increasingly difficult to mobilize grant funding from external sources. Consequently, this Study recommends that Government should not only increase its overall BD expenditure, but to also ensure that it remains sustainable by finding ways and means of ensuring relevant stakeholders within the private sector assume an increased ownership of investment in biodiversity conservation in Seychelles.

5.1.3 This BER has been the first attempt in Seychelles to estimate expenditure on biodiversity (tagging). It was a tenuous exercise insofar that data on actual BD expenditure had to be estimated using coefficients in the absence of Programme Performance or Result Based Budgeting. Nevertheless, the coefficients used for attribution of indirect BD expenditure for key Government agencies were derived from consultative meetings and BIOFIN guidelines. The introduction of Result Based Budgeting across all the public sector from 2017 onwards should greatly improve the quality of BD expenditure data.

5.1.4 It should be emphasized that, as a party to the Convention on Biological Diversity (CBD), Seychelles is required to regularly submit BD expenditure and BD Financial Needs Assessments to the CBD. As such, the BER has made it possible for Seychelles to comply with this international requirement in 2017. The BIOFIN methodology, if replicated in the future, can assist future reporting by Seychelles to the CBD on expenditure and financial needs.

5.1.5 It is recommended that the BER be carried out regularly and that such tagging of BD expenditure be institutionalized, not only for purposes of complying with the CBD and other international reporting requirements, but for national monitoring and policy making purposes.

5.1.6 The BER went further than simply carrying out the review of expenditure. The study also addressed and estimated, wherever possible, public sector revenue from biodiversity. This allowed for the conclusion that the key economic sectors of tourism and fisheries, which benefit the most from Seychelles' biodiversity, actually contribute marginally to biodiversity management in terms of direct revenues.

5.1.7 The Study showed that the fisheries sector (both industrial and artisanal) contribute negligibly towards public sector revenues, other than the revenues received under the EU-Seychelles Fisheries Agreement and the dividends from the IOT canning factory.

5.1.8 The fisheries sector is almost always exempted from payment of business tax, trades tax and VAT. While, at the same time, the fisheries sector is are largely subsidized either directly, as in the case of artisanal fisheries (fuel and ice subsidies), or indirectly by facilities including research (SFA) and quay and other onshore facilities. It is therefore being recommended that Government reviews the contribution that both the industrial and artisanal fisheries make towards public sector revenues, and that these be adequately re-invested in BD conservation.

5.1.9 The Study has shown that although the tourism sector does not by and large contribute towards BD, it contributes to the national fiscus by way of VAT, Trades Tax, Marketing Tax, CSR, and business / income tax. The importance of this revenue should support the case for increased government investment in biodiversity.

5.1.10 In the case of biosecurity the revenues are totally misaligned with the cost of the necessary biosecurity services provided to inspect merchandise imports and exports. While the recent setting up of the National Biosecurity Agency is a welcome development, it should not remain an effectively powerless institution, but it should be endowed with resources and capacity to adequately implement the Biosecurity Act with the special aim of preventing IAS in Seychelles. This could be supported with a revision of the fees and licenses for imports.

5.1.11 The fees collected by the SNPA should be increased and better administered. However, there is a need for SNPA to simultaneously improve the quality of the management of both the marine and terrestrial parks under its responsibility. Any increase in revenue collection by the SNPA should be re-invested in national PAs since it was illustrated in this exercise, as well as a related study, that there is a considerable shortfall in actual expenditure compared with the optimal amount required for protection.

5.1.12 Linked to the above point, the role and financial plan of the SNPA should be reviewed to strengthen the management of marine and terrestrial parks under its responsibility.

5.2 NGOs

5.2.1 There are two categories of NGOs in Seychelles involved with biodiversity conservation: a first category such as Nature Seychelles, ICS and SIF which are quasi financially autonomous since they can collect fee revenues from visitors; and a second category comprising the remaining NGOs which depend on donor or CSR funded projects.

5.2.2 Other than Nature Seychelles; ICS and SIF, the other Seychelles environment NGOs typically either carry out activities associated with donor funded small projects or activities on behalf of local private sector stakeholders such as hotels.

5.2.3 Since the introduction of the Corporate Social Responsibility (CSR) Tax in 2013, a number of hotels have made use of the 50% of such CSR taxes which they may use to sponsor eligible activities (environment, sports, culture, community) to fund their own or third party biodiversity programmes by outsourcing to local NGOs. This has been a most welcome development for these NGOs since it provides a much more reliable source of income compared with the donor funded small projects.

5.2.4 Donor funded projects will however remain an important source of additional income for local NGOs. In fact, local NGOs have been lobbying for donors to channel less funds via the public sector but to rather engage them directly. The NGOs case is substantiated in part by the lack of capacity within key public-sector stakeholders, especially the Division of Environment (DOE). The DOE has not been able to timely implement the Seychelles Sustainable Development Strategy (SSDS) which was approved in 2012, at least in part due to lack of capacity. The DOE has also been increasingly relying on GEF / UNDP and other donor funded Project Coordinating Units (PCUs) to implement a number of activities under its responsibility.

5.2.5 NGOs are poorly supported by Government and other than the special rate of business tax, they are subject to payment of all other taxes similar to that applicable by the private sector.

5.2.6 This Study has stressed the important role of NGOs with regards to BD conservation in Seychelles and recommends that NGOs should be better supported to play an even greater role in this regard including the possibility of co-managing protected areas. Government should also consider financially supporting NGOs which serve the wider national interest.

5.3 Private Sector

5.3.1 This Study has focused on key private sector entities, namely hotels, engaged in BD conservation. As such, it has not been possible within the scope of this Study to gather BD expenditure and revenue data across all the private sector, but based on local knowledge and expert opinion it is understood that BD expenditure by private sector other than hotels is marginal.

5.3.2 Even in the case of hotels, there are only very few that have a comprehensive BD programme commensurate with the size of their operations. So far, it is almost exclusively the small island resorts that have developed and invested in their own BD programmes without relying on the public sector. It is for this reason that this Study focused on such island resorts for purposes of compiling BD direct expenditure data for the private sector.

5.3.3 In the case of the hotels on the main islands of Mahe, Praslin and La Digue that are involved in BD conservation, such hotels are outsourcing to NGOs to manage their BD programmes. As such, the BD expenditure of these hotels are captured under BD expenditure of NGOs in order to void double counting.

5.3.4 There is a need to create greater awareness among Destination Management Companies (DMCs), hotels, guesthouses, and other tourism operators of their critical dependence in the long term on achieving environmentally sustainable tourism. Furthermore, such operators also need to be made more aware of the marketing edge that biodiversity conservation could provide not only for them individually, but for Seychelles as a destination.

5.3.5 It is being further recommended to review the various fiscal and other incentives with a view to rewarding private operators that invest in biodiversity for example by linking the ongoing Seychelles Sustainable Tourism Label to the fiscal incentives; by increasing the

percentage of BD expenditure that is deductible from business tax; and encouraging greater use of the Corporate Social Responsibility (CSR) tax that businesses may retain for funding biodiversity. Conversely, the case may be made for sanctioning tourism operators that do not meet the criteria for the Seychelles Sustainable Tourism Label not to benefit from the tax incentives. In cases where private operators engage in practices which are harmful to BD, they should not only have their tax incentives suspended but the fines should be increased significantly. Such operators should be made to understand that their harmful practices are not only doing damage to biodiversity in their vicinity, but to Seychelles' image as a destination, and increasing future government financing needs for biodiversity restoration.

5.3.6 Finally, this Study recommends that various ways and means are explored to better assess BD expenditure across the entire private sector. In this respect it is being proposed to identify key private sector umbrella organizations such as Seychelles Chamber of Commerce and Industries, Seychelles Hotel and Tourism Association, Seychelles Boat Owner Association which could be used to collect data on BD expenditure in line with the methodology used in this Study.