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THE GLOBAL CLIMATE CHANGE ALLIANCE PLUS INITIATIVE



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Case Study Nr. 17 – Seychelles



IMPACT AND SUSTAINABILITY STUDY SEYCHELLES

SEYCHELLES CLIMATE CHANGE SUPPORT PROGRAMME (SCCSP)

CRIS CODE: DCI-ENV/2009/021-555

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List of Acronyms

CC:	Climate Change
CDM:	Clean Development Mechanism
DCI:	Development Cooperation Instrument
DRDM:	Department of Risk and Disaster Management
EIA:	Environmental Impact Assessment
EMPS:	Environment Management Plan for the Seychelles
ENV:	Environment
EPA:	Environment Protection Act
EU:	European Union
EUD:	European Union Delegation
FA:	Financing Agreement
GBS:	General Budget Support
GCCA:	Global Climate Change Alliance
GCCA+:	Global Climate Change Alliance Plus
GEF:	Global Environment Facility
GHG:	Greenhouse gas
GIS:	Geographic Information System
GoS:	Government of Seychelles
IMF:	International Monetary Fund
INDC:	Intended Nationally Determined Contributions
JICA:	Japanese International Cooperation Agency
LED:	Light Emitting Diode
LIDAR:	Light Detection And Ranging
MEE:	Ministry of Environment and Energy
MEECC:	Ministry of Environment, Energy and Climate Change
MEFP:	Memorandum of Economic and Financial Policies
MERP:	Macroeconomic Reform Programme
MHETE:	Ministry of Home Affairs, Environment, Transport & Energy
MHILT:	Ministry of Habitat, Infrastructure and Land Transport
MW:	Megawatt
M&E:	Monitoring and Evaluation
NAO:	National Authorising Office
NCCC:	National Climate Change Committee
NGO:	Non-Governmental Organisation
NMA:	National Meteorological Agency
OO:	Overall Objective
PUC:	Public Utilities Company
PV:	Photovoltaic
ROM:	Result Oriented Monitoring
SAA:	Seychelles Agricultural Agency
SCCSP:	Seychelles Climate Change Support Programme
SDISC:	Sustainable Development Inter-sector Committee
SEB:	Seychelles Energy Board
SEC:	Seychelles Energy Commission
SEEREP:	Seychelles Energy Efficiency and Renewable Energy Programme
SEP:	Seychelles Energy Policy
SERP:	Seychelles Economic Reform Programme

SeyCCAT: Seychelles' Conservation and Climate Adaptation Trust

SIDS: Small Island Developing State

SLTA: Seychelles Land Transport Agency

SNCCS: Seychelles National Climate Change Strategy

SO: Specific Objective

SSDD: Seychelles Sustainable Development Division

SSDS: Seychelles Sustainable Development Strategy

S4S: Sustainability for Seychelles

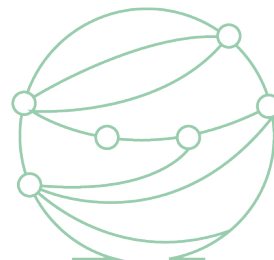
TA: Technical Assistance

TAPS: Technical and Administrative Provisions

TCPA: Town and Country Planning Act

UNDP: United Nations Development Programme

UNFCCC: United Nations Framework Convention on Climate Change



I. Project Details and Outputs Delivered

PROJECT TITLE: Seychelles Climate Change Support Programme (SCCSP) ¹		
CRIS CODE: DCI-ENV/2009/021-555		
AAP YEAR: 2009	DURATION: 60 months ² starting with the signature of the Financing Agreement (FA) ³ (the ROM Report, 2013 indicates 14/7/2010 as actual starting date)	DATE OF COMPLETION: The original implementation period was extended with 15 months, hence the programme ended in May 2014.
TOTAL PROJECT COST: 2,000,000 EUR The total budget was allocated as budget support and no budget provisions were foreseen for TA, or external evaluations.		GCCA ALLOCATION: 2,000,000 EUR Disbursed in three variable tranches : <ul style="list-style-type: none">First tranche of 0.6 M€ fully disbursed in 12/2010;Second tranche of 0.7 M€ fully disbursed in 7/2012;Third tranche of 0.7 M€ fully disbursed in 2014.
AID MODALITY: Direct non-targeted General Budget Support (GBS) ⁴		MANAGEMENT ARRANGEMENTS: <ul style="list-style-type: none">FA with the Republic of Seychelles.Direct Centralised Management
GEOGRAPHICAL COVERAGE: The programme mainly operated at central government level, with some coastal protection projects across the Island of Mahé.		
MAIN STAKEHOLDERS (implementers, beneficiaries): <ul style="list-style-type: none">The Ministry of Foreign Affairs (NAO) was the Contracting Authority.The GBS Committee, set up by the NAO to supervise the EU-funded Seychelles Economic Reform Programme, also coordinated and monitored the SCCSP implementation. The Committee was co-chaired by the NAO and the EU Delegation and included the Ministry of Finance together with all relevant technical ministries and organisations.The Ministry of Environment and Energy (MEE)⁵ had the leading technical role, with certain departments in charge of specific aspects. These departments included the National Climate Change Committee (NCCC), the Seychelles Energy Commission (SEC), the National Meteorological Agency (NMA), the Department for Disaster Risk Management, and the Department for Coastal Adaptation and Management.		

¹ The SCCSP was designed to complement and to reinforce the EU-funded Seychelles Economic Reform Programme (SERP), equally a General Budget Support programme, that aims at mitigating the consequences of the global crisis and at promoting economic recovery of the country by supporting the comprehensive economic reform programme (Memorandum of Economic and Financial Policies – MEFP) launched by the Government of Seychelles in November 2008. Recognising the vulnerability of Seychelles' development model to the threats of CC, it was agreed to complement the 16.5 M € for the SERP with additional funding from the GCCA initiative. It concerns additional variable tranches subject to the same general GBS conditions and monitored by the same revision system.

² With an operational implementation phase of 36 months and a closure phase of 24 months

³ The Financial Agreement was signed in February 2010

⁴ According to the ROM report, 2013: 'the project is classified as General Budget Support, being an additional funding of the Economic Reform GBS programme, although in practical terms it is a SPSP supporting a specific sector strategy'.

⁵ The MEE was newly created in 2012. Previously, environment and energy resorted under the Ministry of Home Affairs, Environment, Transport & Energy (MHETE).

- The NGO “Sustainability for Seychelles” implemented an education and awareness raising project under the SCCSP.
- Indirect beneficiaries: population of Seychelles

GCCA PRIORITY AREA(S):

Mainstreaming Climate Change, Clean Development Mechanism (CDM) / Access to carbon markets, Adaptation, Disaster Risk Reduction

MAIN SECTOR(S):

Energy, Coastal protection, Disaster Risk Management, Climate data, Overall development



OVERALL OBJECTIVE:

To enhance the sustainability of Seychelles' development and economic reforms through mitigation policies and building resilience for adaptation to climate change impacts on the economy and society at large. (FA/TAPS)

SPECIFIC OBJECTIVE(S):

To support sustainable development policies and the implementation of the priority areas of the Seychelles National Climate Change Strategy (SNCCS) in a coordinated effort with other donors. (FA/TAPS)

EXPECTED RESULTS:

As formulated in the FA/TAPS, the SCCSP was expected to enhance the Memorandum of Economic and Financial Policies (MEFP) and to contribute to the effective start-up and implementation of the Government's action plan responding to the 5 objectives of the Seychelles National Climate Change Strategy (SNCCS)⁶, notably actions ranked as short term and high priority. There were two particular results expected:

- An effective mainstreaming of climate change in national development policies and in key sector strategies and action plans (closely linked to the future Environment Management Plan for the Seychelles – EMPS), including building capacity of key stakeholders and building solid steering & monitoring mechanisms.
- A solid institutional and legal framework in the energy sector integrating Clean Development Mechanism (CDM) opportunities, enabling wide participation and investment in renewable energies, innovation and access to / transfer of technology, improved energy efficiency, and the establishment of an active carbon credits market in Seychelles.

Further to the above description of “Expected Results” from the FA/TAPS, also the conditions for eligibility and disbursement of funds, specific to budget support programmes, provide an indication of “Expected Results”.

- General conditions:
In the case of the SCCSP, there were three general conditions, fully shared with SERP. Of specific relevance for the SCCSP was the “Satisfactory progress in the implementation of the SNCCS, the EMPS⁷ and the Energy Policy, and including high level structured policy dialogue on a regular basis covering key sectors and with key stakeholders”.
- The performance indicators (or disbursement conditions) for the three variable tranches (0.6, 0.7 and 0.7 M €):

⁶ The SNCCS aims at minimising the impacts of CC through concerted and proactive action at all levels of society. Its priorities are (1) to increase national understanding of CC, its impacts and appropriate responses; (2) to put in place measures to adapt, build resilience and minimize the country's vulnerability to the impacts of CC; (3) to achieve sustainable energy security, while reducing GHG emissions; (4) to mainstream CC considerations into national policies, strategies and plans; and (5) to build national capacity and social empowerment at all levels to adequately respond to CC.

⁷ Later replaced by the Seychelles Sustainable Development Strategy (SSDS).

First tranche: (i) the SNCCS is in place (approval by Cabinet of strategy and action plan and a steering/monitoring mechanism set up); (ii) the Seychelles Energy Policy is formulated (approval by Cabinet).

Second tranche: (i) The SNCCS is being implemented (operational steering/monitoring mechanism); (ii) CC is mainstreamed in at least three key sectors of the Seychelles Sustainable Development Strategy (SSDS)⁸ 2012-2020 (approval by Cabinet of sector strategies and action plans; steering/monitoring mechanism set up); (iii) a Seychelles Energy Bill is formulated, allowing for CDM projects (approval by Cabinet).

Third tranche: (i) CC is mainstreamed in all key sectors of the SSDS 2012-2020 (approval by Cabinet of sector strategies and action plans; operational steering/monitoring mechanism); (ii) the Town and Country Planning Act (TCPA) and the Environment Protection Act (EPA) are revised in coherence with the SNCCS (amendments to TCPA and EPA Acts approved by Cabinet)⁹; (iii) the Seychelles Energy Act is in force (Energy Act enacted).

OUTPUTS DELIVERED:

- A 5 year action plan developed to implement the National Climate Change Strategy (SNCCS, 2009) with arrangements for empowering the NCCC, establishing a national research council, and strengthening key bodies such as the CC Division of the Ministry of Environment and Energy (MEE), the Seychelles Energy Commission (SEC) and the University of Seychelles (which was recently created in 2009).
- The National Climate Change Committee (NCCC)¹⁰ operational as steering and monitoring body for the implementation of the SNCCS
- An SNCCS performance assessment framework produced, 2014.
- The National Sustainable Development Strategy (SSDS)¹¹ - adopted in December 2011 - with Climate Change as a major chapter.
- A steering and monitoring mechanism for implementing the SSDS in place and operational (2014)
- A national Seychelles Energy Policy (SEP) (2010-2030) developed (approved by Cabinet in September 2010)¹²
- A strategy for renewable energy developed, focusing on wind and solar energy and on waste to energy technologies
- A new Energy Act ¹³ developed and enacted in December 2012.

⁸ The SSDS 2012-2020 is the follow-on strategy of the Environmental Management Plan for the Seychelles (EMPS) 2000-2010. The SSDS is a comprehensive long-term strategy, integrating elements of the SNCCS.

⁹ The need to replace the TCPA by a comprehensive new Physical Planning Act caused delays in the revision/mainstreaming process.

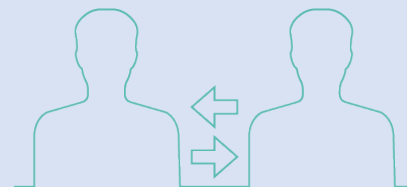
¹⁰ The NCCC was already active before the start of the project. The NCCC had been directing the national climate change response for a number of years, including overseeing the development process of the country's first and second national communications to the UNFCCC. Through an extra-ordinary meeting in October 2010, the NCCC adopted new Terms of Reference to be 'the body to steer and coordinate national climate change programmes and projects', including the SCCSP.

¹¹ The SSDS is a document consisting of two volumes. The first volume contains the overall strategy, sustainable outlook, financial mobilisation and the institutional framework; the second volume contains all thematic programmes with their sector policies, strategic objectives, indicators, timelines and budgets. The SSDS' vision is to realise a knowledge-led and innovation-driven approach to sustainable development that balances the quality of life with the need to conserve the integrity and potential of the Seychelles' natural environment for all generations. The document focuses on 13 themes which relate to environment, economic growth and social equity.

¹² The SEP identifies 3 priority areas for change, which are land transport and consumption and production of electricity (land transport and electricity production counted for 80%+ of oil consumption in the country), and rests on 5 pillars: (1) Setting up a vision for the sustainable development of the energy sector in the medium and long term and embark on a Plan of Action to implement this vision; (2) Improving the Government's knowledge base for developing overarching long-term energy strategies and guide stakeholders in decision-making; (3) Adjusting the existing framework to make it more conducive for both public and private initiatives in the energy sector; (4) Increasing energy efficiency and thereby reducing waste of energy; and (5) Increasing the proportion of renewable energy in the country's energy matrix. The SEP also specifies that implementation will be led by the Seychelles Energy Commission (SEC), under the supervision of the MEE. The SEC was set up in April 2010 under the Seychelles Energy Commission Act.

¹³ The new Energy Act, 2012 repeals and replaces the Seychelles Energy Commission Act, 2010. The new Energy Act aims at modernizing electricity provision in Seychelles and at creating competition in the renewable and clean energy sector, thus ending the monopoly position of the Public Utilities Corporation in producing and supplying electricity. With the new Act a new series of licenses for independent power producers (large scale production for general population), auto-producers (single

- The Seychelles Energy Commission (SEC), in line with the new Energy Act, operational
- Assessment studies to identify appropriate and cost-effective technologies for reducing CO₂ emissions in the energy sector
- Revised Environment Protection Act (EPA) (ensuring coherence with the SSDS), approved in October 2013.¹⁴
- Revised new Physical Planning Act (replacing the Town and Country Planning Act) (ensuring coherence with the SSDS), approved in January 2014^{15 16}
- Series of pilot beach and coastal protection projects implemented across Mahé: rock armouring, site rehabilitation and tree planting (Department for Coastal Adaptation and Management, MEE)
- General public and scholars sensitised on climate change issues (NGO Sustainability for Seychelles)
- Important equipment, including Automatic Weather Stations, supplied to the National Meteorological Authority (NMA)
- Construction plans developed for a new building to house the NMA¹⁷
- Staff of the Department for Disaster Risk Management trained in disaster preparedness and early warning
- Orthophotos for the Seychelles Inner Islands and satellite images for the Outer Islands acquired



producers for own household or business use), co-producers (small scale providers who produce for own consumption and a limited amount for other users) can be introduced. These producers will be exclusively in the 'new energy' and 'clean energy' sectors, such as the conversion of landfill waste to energy, solar energy, wind and wave energy. The Act also extends the powers of the Seychelles Energy Commission (SEC) to become the national electricity regulator and the authority responsible for implementing schemes for renewable energy promotion as well as energy efficiency.

¹⁴ Although this output is linked to one of the SCCSP's performance indicators, the UNDP Seychelles Offices claimed during the field visit that this output had been delivered by them with support from the GEF-financed "Mainstreaming Biodiversity Project"

¹⁵ Idem as footnote 14.

¹⁶ Despite being approved by the Cabinet of Ministers, the New Physical Planning Act has still not been assented due to the National Assembly and the Executive not agreeing on certain aspects of the functioning of the Board of the Planning Authority.

¹⁷ Though plans were developed, the NMA Facility was never built.

II. Analysis of impact

2.1. Impact expected as per logframe objectives and their indicators

As is the case for most projects that are implemented under the budget support modality, the implementation of the SCCSP was not steered by a full-fledged logical framework with an intervention logic and indicators for the achievement of objectives and expected results. Instead, its implementation – including the disbursement of funds – was based on a continued compliance with the standard criteria determining the country's eligibility for budget support and on the achievement of the agreed performance indicators. This set of eligibility criteria and performance indicators is presented in detail above under the section “Expected Results”.

The Technical and Administrative Provisions attached to the Financing Agreement (FA/TAPS) specified the following overall and specific objectives for the programme:

- OO: To enhance the sustainability of Seychelles' development and economic reforms through mitigation policies and building resilience for adaptation to climate change impacts on the economy and society at large.
- SO: To support sustainable development policies and the implementation of the priority areas of the Seychelles National Climate Change Strategy (SNCCS) in a coordinated effort with other donors.

In the absence of clear indicators and targets, we “deduct” from the formulation of the objectives and the broader description of the programme that impact is expected regarding: *(1) effective CC mitigation and adaptation action being planned and undertaken in the country and (2) achievement of the objectives of the SNCCS which coincide with the 5 priorities mentioned above in footnote 6.*

While there is perfect coherence between the SCCSP objectives and the set of budget support eligibility criteria and performance indicators, the latter provides more concrete elements and allows us to further specify expected impact. In doing so, we can add to the expected impact deducted from the objectives as described above the following aspects: *(3) achievement of the objectives of the SSDS; (4) achievement of the objectives of the Energy Policy.*

2.2. Direct and indirect impact as reported in the available documents (desk phase)

FROM THE ROM REPORT:

- As a general conclusion, the SCCSP, despite its serious design flaws, has adequately supported the Government of Seychelles in developing a comprehensive policy and institutional framework for climate change. Because of the design flaws, the potential in added value was reduced and some key issues were not addressed. Stakeholders, however, learned lessons and there is potential for important qualitative improvements with continued support.
- The development and implementation of the energy policy has resulted in the de-regulation and opening of the sector to more operators. The endorsement of the Energy Act, the development of the energy policy and the establishment of the Energy Commission provide an enabling framework for progress towards energy security and reduced CO₂ emissions in the sector.
- In terms of CDM, little has been achieved beyond the key policy basis and the designated authority. Still, some NGO initiatives exist on the voluntary carbon market.
- Beyond assessment of the agreed performance indicators, little meaningful policy dialogue has taken place around the SCCSP.
- Of all expected programme results, less progress has been made in the field of national coordination of climate action.
- The programme design failed to fully recognize (1) the major challenge of inter-sectoral coordination for CC mainstreaming into development and sectoral policies and (2) the existing constraints in institutional capacities. Although the expected results explicitly refer to strengthened capacities and strong steering and coordination mechanisms, the performance indicators did not cover these aspects so that the programme failed to give adequate attention and resources to resolving these constraints. In fact, the design had not been informed by a prior assessment of existing institutional capacities in the relevant sectors. Generally, the SCCSP design did not take into account the institutional realities of the country. To achieve its indicators, the

programme called upon external consultants rather than adopting a slower pace while building local capacity. Further, the lack of a previous institutional appraisal and the failure of correctly assessing the complexity of some policy frameworks, has made the SCCSP pushing an already overburdened government structure into hasty processes.

FROM NEIL BIRD'S REPORT, EVALUATING THE BUDGET SUPPORT MODALITY FOR ENVIRONMENT AND CLIMATE CHANGE PROJECTS:

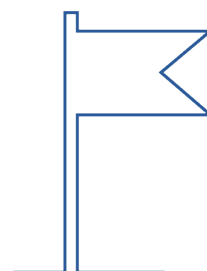
- The programme design takes as its starting point the five priority objectives of the SNCCS, which cover: the advancement of scientific knowledge, adaptation and mitigation actions, the mainstreaming of climate change considerations into national policies and capacity development – all of which would require additional government spending. The programme's expected results then narrowed to focus on (i) the effective mainstreaming of climate change in national development policies and in key sector strategies and action plans; and (ii) a solid institutional and legal framework in the energy sector integrating Clean Development Mechanism (CDM) options to allow for the promotion of renewable energy. However, whether GBS funding, over a short three year implementation period, could satisfactorily address these two major themes could be questioned.
- Available documentation does not record the nature of the policy dialogue between the EU and the GoS. The FA records the intention that 'progress in implementation of the national policy and strategy will be reviewed on a yearly basis through a national forum', but no record of these meetings has been seen.
- The chosen performance indicators all related to the implementation of the national climate change strategy and their attainment suggests that the project has been effective.

FROM THE ACTION FICHE FOR THE FOLLOW-ON GCCA+ PROJECT IN SEYCHELLES:

The SCCSP has been successful in: a) facilitating successful mainstreaming of climate change actions into a national development strategy (SSDS) 2012-2020, b) creating a strong institutional and regulatory framework for a modern energy sector to enable renewable energy and reduce dependency on oil, c) creating incentives and encouraging participation of the private sector in the production of renewable energies. However, the project design did not fully recognize the challenge of inter-sector coordination to mainstream climate change, and was not sufficiently grounded on an institutional assessment recognizing the capacity constraints of the institutions involved, which are key challenges still to be addressed.

ALSO REPORTED AS (DRIVERS FOR) SUCCESSES AND FAILURES:

- Budget support is enhancing local ownership
- A key factor in the programme's success is the strong political support to the programme
- Budget support has provided financial means to the government to implement a number of national CC-related actions but has limited the possibility of involving civil society.
- It would have been useful to have a TA component for institutional and capacity building support in addition to budget support. TA would have compensated for the country's institutional constraints, notably limited / volatile human resources, limited management capacity and lack of coordination.
- Lack of technical expertise in the area of CC mitigation and renewable energy
- Performance indicators linked to legal/institutional processes have revealed problematic due to national complexities and lengthy legal processes.



2.3. Findings from the desk phase and specific issues to be further explored during the field phase

As can be gathered from section 2.2, the available documents do not provide much information on (incipient) impact; they confirm though the effectiveness of the project, hence the achievement of the expected results. Further in relation to available documents and information, it is good to highlight that according to the FA the

government would deliver six-monthly progress reports on the implementation of the national policies (SNCCS, SSDS, Energy Policy) and on progress related to the programme's performance indicators. This reporting would be the co-responsibility of the Ministry of Finance and the Ministry of Environment and Energy. When consulting representatives of these Ministries, the consultant carrying out the field visit should try to get hold of these reports, possibly containing relevant additional information.

It was also mentioned that the NCCC had selected activities for SCCSP's financial support beyond the performance indicators as laid down in the FA. In order to verify/complete our list of "delivered outputs" and to adjust our assessments of impact and sustainability accordingly, the consultant will see representatives of the NCCC and inquire about the complete list of activities that were funded under the programme.

As indicated in the ROM report, all areas described in the SCCSP performance indicators were also supported through a UNDP programme with significant (= by far exceeding the SCCSP budget) GEF funding. When assessing impact, a solid attempt should be made to distinguish between impact generated through GCCA funding and impact generated through GEF funding. The same applies to impact generated in the energy sector, where even more key players and funders were involved, including Abu Dhabi, Sri Lanka, China and Italy.

In the absence of a proper logical framework with clear impact indicators, it will be explored whether indicators/objectives of the SNCCS, the SSDS, the SEP – all guiding policy documents for the SCCSP – can be used in assessing impact.

2.4. Achievement of the logframe indicators at overall and specific objectives levels (direct impact)

As pointed out in the desk-based study, the SCCSP had no logical framework, nor another clear and adequate reference framework against which the impact that has been generated to date could be assessed.

During the field phase, relevant indicators of suggested alternative frameworks (SSDS, SNCCS, Energy Policy) and/or information regarding their level of achievement, could not be identified and/or traced.

Therefore, while acknowledging their weakness for the purpose, it was decided to anyhow adopt the disbursement conditions and as indicators for direct impact.

INDICATOR	LEVEL OF ACHIEVEMENT	EXPLANATORY NOTES
<u>Disbursement condition 1.1:</u> The SNCCS is in place (approval by Cabinet of strategy and action plan and a steering/monitoring mechanism set up)	100%	The Seychelles National Climate Change Strategy was developed and approved. A 5year action plan for the implementation of the SNCCS was developed and approved. A steering/monitoring mechanism was set-up. The mechanism consists in an SNCCS performance assessment framework – developed with programme support – and the National Climate Change Committee (NCCC) mandated to steer and monitor SNCCS implementation by applying the performance assessment framework.
<u>Disbursement condition 1.2:</u> The Seychelles Energy Policy is formulated (approval by Cabinet)	100%	A Seychelles Energy Policy (SEP) – for the period 2010-2030 - was developed and approved by the Cabinet of Ministers in September 2010.
<u>Disbursement condition 2.1:</u> The SNCCS is being implemented (operational steering/monitoring mechanism)	80%	Support was given to the implementation of parts of the SNCCS and its first 5-year action plan. The NCCC monitored the implementation but the comprehensive SNCCS performance assessment framework, especially developed for this purpose, was never operationalised.

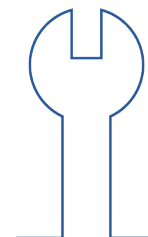
<u>Disbursement condition 2.2:</u> CC is mainstreamed in at least three key sectors of the Seychelles Sustainable Development Strategy (SSDS) 2012-2020 (approval by Cabinet of sector strategies and action plans; steering/monitoring mechanism set up)	80%	<p>The SCCSP supported the development of the SSDS with a dedicated section on CC and CC mainstreaming in the other sections. A mechanism for steering and monitoring the implementation of the SSDS was developed but never operationalised due to budgetary constraints.</p> <p>By facilitating the meetings of the National Climate Change Committee (NCCC), the main coordinating body in the Seychelles for climate change planning and action and a multi-stakeholder platform, the SCCSP has created the opportunity for sharing CC-related information across the different sectors and the awareness that climate change considerations need to be integrated in all national policies, strategies and plans. SCCSP also contributed to some extent¹⁸ to the revision – focused on CC mainstreaming and proofing - of legislation for the planning and environmental protection sectors.</p>
<u>Disbursement condition 2.3:</u> A Seychelles Energy Bill is formulated, allowing for CDM projects (approval by Cabinet)	100%	<p>A new Energy Bill was developed and approved by the Cabinet of Ministers in November 2012.</p> <p>The new Bill established the Seychelles Energy Commission (SEC) and the Seychelles Energy Board (SEB) mandated to make provisions for all electricity related activities while promoting the production of energy from renewable sources, energy efficiency measures, participation in the global Clean Development Mechanism, and a sustainable energy supply system.</p>
<u>Disbursement condition 3.1:</u> CC is mainstreamed in all key sectors of the SSDS 2012-2020 (approval by Cabinet of sector strategies and action plans; operational steering/monitoring mechanism)	60%	Idem as disbursement condition 2.2
<u>Disbursement condition 3.2:</u> The Town and Country Planning Act (TCPA) and the Environment Protection Act (EPA) are revised in coherence with the SNCCS (amendments to TCPA and EPA Acts approved by Cabinet)	80%	<p>During the revision process, it was decided to replace the Town and Country Planning Act (1972) by a Physical Planning Act. A Physical Planning Bill, coherent with the SNCCS and the SSDS was developed and approved in January 2014. However, this new Physical Planning Bill has not been enacted to date, and hence not in force. This blockage is due to a dispute between the National Assembly and the Executive concerning the provisions for the Planning Authority under the new Bill/Act.</p> <p>The revised Environment Protection Act (EPA), ensuring coherence with the SNCCS and the SSDS, was approved in October 2013. The new Environment Protection Act came into force on the 5th of September 2016. The new Act strengthens the control of activities on the coastal zone especially with regards to development and pollution.</p>
<u>Disbursement condition 3.3:</u> The Seychelles Energy Act is in force (Energy Act enacted)	100%	The new Energy Bill was enacted in December 2012.

¹⁸ It is known that the SCCSP has been somehow involved in the preparation of these Acts; the extent of this involvement is however not clear due to conflicting information obtained.

2.5. Achievement of the overall and specific objectives (direct impact, exceeding the scope of the indicators)

OVERALL OBJECTIVE (FA/TAPS): To enhance the sustainability of Seychelles' development and economic reforms through mitigation policies and through building resilience for adaptation to climate change impacts on the economy and society at large.

Achievement: "1" (>75%)



EXPLANATORY NOTE:

The desk and field findings confirm that the SCCSP indeed facilitated the development and implementation of mitigation policies and contributed to building resilience against CC effects, thereby enhancing the sustainability of Seychelles' development and economic reforms.

On the mitigation side, the energy sector was given a new policy and legislative framework with a clear focus on renewable energy, energy efficiency and better involvement of the private sector. Another priority issue under the new framework concerns energy security, or permanent and widespread access to energy. Apart from a reduction in GHG emissions by the energy sector, enhanced energy security and a more prominent role of the private sector in energy production and supply will have positive effects on Seychelles' development and economy.

On the adaptation side, SCCSP supported achievements such as increased coastal protection (through the pilots), CC mainstreamed policies and legislation, strengthened capacities of the National Meteorological Authority and the Department for Disaster Risk Management, will all promote and contribute to the country's sustainable development.

Also the improvements to the institutional framework for overall CC response, mitigation and adaptation alike, are believed to have positive effects on the sustainability of the country's development.

Nevertheless, as a Small Island Developing State (SIDS), the country is very vulnerable to the effects of CC and building adequate resilience, while also endeavouring a green and sustainable development, remains a huge challenge. In other words, the SCCSP has certainly contributed to increasing resilience and reducing GHG emissions but only to a certain (limited)¹⁹ extent, with the Seychelles still a long way to go.

SPECIFIC OBJECTIVE (FA/TAPS): To support sustainable development policies and the implementation of the priority areas of the Seychelles National Climate Change Strategy (SNCCS) in a coordinated effort with other donors.

Achievement: "2" (between 50 and 75%)

EXPLANATORY NOTE:

Based on the outputs delivered, one can say that the funds provided through the SCCSP have been used for activities that directly support sustainable development and - more specifically - implementation of the 5 priority areas of the SNCCS. On the other hand, it must be understood that the limited budget of the programme only allowed a very partial contribution to overall sustainable development and to the SNCCS objectives. Further to this, it could be gathered from stakeholder interviews during the field visit that many of the outputs are the result of joint efforts and financing. For example, UNDP ran at the same time an important CC programme in the country with many commonalities with the SCCSP. With the very limited reporting and information available, it results impossible to make clear statements on the exact share of the outputs that can be attributed to the SCCSP.

Score "2" has been assigned since the implementation of the SNCCS was not formally coordinated, not with donors and not amongst the various line ministries. A budget support programme, fully steered by the Seychelles government, should have been able to perform better in this respect.

¹⁹ No figures available.

- Priority areas of the **SNCCS** were addressed in a wide array of sectors, as indicated in the paragraphs below.

PRIORITY AREA 1: INCREASING NATIONAL UNDERSTANDING OF CLIMATE CHANGE, ITS IMPACTS AND APPROPRIATE RESPONSES



The SCCSP contributed towards the achievement of this objective through:

(1) The purchase of 3 automatic weather stations and their installation on the Islands of Farquhar, Amirantes and Silhouette.

The stations are fully integrated in the weather data collection network of the National Meteorological Agency (NMA). The extension of the network allowed the NMA to collect near-real time weather information for 3 additional islands, to produce more accurate weather forecasts and to apply a better parametrisation of climate change models for the Seychelles. In turn, these improvements allowed a more effective management of disaster risks by strengthening the early warning systems. Further, the additional data could be added to (and confirmed) the already existing evidence that climate is

changing in the Seychelles. The increased understanding of climate and climate change at national level thanks to the extra data is also reflected in the improved quality of the country's reporting to the UNFCCC, particularly with regard to the accuracy of the national climate projections presented in the Vulnerability and Adaptation Assessment section of the country's Third National Communication.

(2) The conduct of an extensive education and awareness raising programme, in schools as well as for the general public.

The programme included the re-printing and distribution of "*A citizen's guide to climate change*" booklet which covered climate change, climate change impacts, adaptation and mitigation options; the organisation of workshops in post-secondary schools to introduce students and their lecturers to climate change and its relevance to their sector (e.g. agriculture, construction, health, etc.); TV and radio spots on climate change; workshops for children to introduce them to climate change; street drama, etc. Some of the materials used then are still being used today. The campaign focused on water conservation, energy efficiency and green economy as adaptation/mitigation options.

The campaign helped the population to better understand what climate change really means, drawing their attention to noticeable changes in the local environment and explaining the measures that can be taken to adapt to these changes. The campaigns have resulted in people effectively taking risk-reducing measures such as installing water storage tanks, avoiding stagnant water around their houses as these provide ideal breeding places for pests (mosquitoes), replacing old light bulbs by more efficient LED devices, and using energy efficient electric household appliances.

PRIORITY AREA 2: PUTTING IN PLACE MEASURES TO ADAPT, BUILD RESILIENCE AND MINIMIZE THE COUNTRY'S VULNERABILITY TO CC IMPACTS

The SCCSP contributed to this area through the implementation of a series of pilot beach and coastal protection projects across Mahé Island. More specifically, rock armouring was carried out at Marie Anglaise and Anse a la Mouche; rivers were desilted, especially in the Victoria area; culverts and drains were constructed at Anse Aux Pins, Au Cap, Cascade, Pointe Larue, La Digue and Praslin; and trees were planted across the rehabilitated areas.

To date, the culverts at Anse aux Pins and Au Cap appear to have adequately dealt with the problem of flooding in the area as no major flooding has been recorded since 2013. The construction of drains at Anse Aux Pins, Cascade, Pointe Larue, La Digue and Praslin has effectively helped to reduce the risk of coastal flooding during periods of heavy rainfall by improving the speed and efficiency of water drainage at these coastal plateaux. The more frequent desilting of major rivers reduced the high risk of flooding in Victoria and has given a greater sense of security to businesses operating in Victoria, particularly those that are located next to the rivers. The various protection measures have reduced beach erosion along different parts of the coast of Mahé Island and helped in the safeguarding of property and important coastal infrastructures. At Mare Anglaise and Anse a la Mouche, for example, the measures have been instrumental in protecting the coastal primary road that runs through these two sites. At Anse a la Mouche,

the coastal protection works have also enhanced the recreational area that the degraded beach offered through the establishment of a small park that is now used by locals for picnics. The effectiveness of the different approaches that were applied by the pilots in different areas was analysed and documented. Successful approaches such as rock armouring are now being replicated whereas unsuccessful ones such as beach nourishment have been discontinued.

PRIORITY AREA 3: TO ACHIEVE SUSTAINABLE ENERGY SECURITY, WHILE REDUCING GREENHOUSE GAS EMISSIONS.

This is probably the area where the SCCSP has most contributed and generated the greatest impact. The SCCSP has been instrumental in the development of a new institutional framework, adjusting thereby the national energy sector in terms of enhanced sustainability, increased access and reduced carbon footprint. Key elements of this framework include the Seychelles Energy Policy (SEP) (2010-2030), the new Energy Act (2012) and the Seychelles Energy Commission (SEC). While the country had not been able to reduce its GHG emissions between 1995 and 2000, the renewable energy projects that are currently implemented by the SEC and private sector companies are believed to have good potential to assist the country in lowering the rate of increase.

PRIORITY AREA 4: TO MAINSTREAM CLIMATE CHANGE CONSIDERATIONS INTO NATIONAL POLICIES, STRATEGIES AND PLANS.

The SCCSP supported the development of the SSDS with a dedicated section on CC and CC mainstreaming in the other sections. A mechanism for steering and monitoring the implementation of the SSDS was developed but never operationalised due to budgetary constraints. By facilitating the meetings of the National Climate Change Committee (NCCC), the main coordinating body in the Seychelles for climate change planning and action and a multi-stakeholder platform, the SCCSP has created the opportunity for sharing CC-related information across the different sectors and the awareness that climate change considerations need to be integrated in all national policies, strategies and plans.



The SCCSP also contributed to the revision – focused on CC mainstreaming and proofing - of legislation for the planning and environmental protection sectors. Specifically, it concerned the revision of the Environment Protection Act (EPA) and the preparation of the Physical Planning Bill, replacing the outdated Town and Country Planning Act (1972). The revised EPA (2016) empowered the MEECC in the area of enforcing environmental legislation and increased the importance of coastal protection, prescribing therefore a stricter control on coastal development. The Physical Planning Bill, on the other hand, has had no positive impacts to date as the Bill is still not enacted. The new Bill generated an institutional conflict on mandates and missions. This delay in bringing the new Physical Planning Act into force, severely hampers the work of the Planning Authority, particularly with regard to the control of illegal constructions and the application of higher penalties for breach of regulations.

PRIORITY AREA 5: TO BUILD CAPACITY AND SOCIAL EMPOWERMENT AT ALL LEVELS TO ADEQUATELY RESPOND TO CLIMATE CHANGE.

The SCCSP contributed to capacity building, particularly through institutional strengthening, in various sectors. Examples include:

- (1) A 5 year action plan to implement the Seychelles National Climate Change Strategy was developed, including arrangements for the empowerment of the NCCC, the establishment of a national research council, and the strengthening of key agencies such as the CC Division of the Ministry of Environment and Energy, the Seychelles Energy Commission and the University of Seychelles (created in 2009).
- (2) The purchase of a large format printer for the CC Division, which is being used for printing large scale maps as tools during discussions and decision making processes.
- (3) Staff of the Department for Disaster Risk Management was trained in disaster preparedness and early warning. Though it was reported during the field phase that the trainings had been limited and that the support of the SCCSP could not be confirmed, the Department has been quite active ever since. Twenty six District Disaster Risk Management and Contingency Plans were developed in 2018, one for each of

the 25 districts of the Seychelles and an additional one for Silhouette Island. These contingency plans provide important tools for quick action at district level in case of disaster.

(4) The SCCSP financed the purchase of orthophotos for all of the Seychelles Inner islands and satellite images for the Outer Islands. They enabled the government to produce updated maps of infrastructures and natural features (topography, rivers, wetlands, beaches), providing an important baseline against which future changes can be measured. The orthophotos have also been used to develop flooding scenarios for different intensities of rain, thereby allowing to identify the areas that are most at risk. Further, the orthophotos were used when preparing the maps for the contingency plans, mentioned above. An observed drawback and “lost opportunity” related to the orthophotos was that they principally focused on the terrestrial areas, not fully covering the fringing reefs around the islands.

(5) The SCCSP also supported the development of costed plans for the construction of a new building to house the NMA on Ile Soleil. In spite of the plans being available, the construction never started due to budgetary constraints. The period of validity of the plans has now expired and the plans need to be re-submitted to the Planning Authority if and when the construction is to go ahead.

- The programme also contributed directly to the visions of the **Seychelles Energy Policy (2010 – 2030)**.

VISION 1: THE ENERGY BASE WILL BE DIVERSIFIED. IN THE LONG TERM, ENERGY SUPPLY WILL BE 100% BASED ON RENEWABLES.



The SCCSP indirectly contributed to the diversification of the country's energy base through supporting the establishment and operation of the SEC which has since played an instrumental role in drafting the new Energy Act (2012) that provides the legal framework for this diversification (Liquefied Natural Gas and renewables such as solar, wind). It must be noted that the previous energy act only covered energy from fossil sources.

The programme also supported the development of the Strategy for Renewable Energy, as part of the Seychelles Energy Policy (2010-2030). The Strategy aims at a share of 15% of renewable energy by 2030, strongly focusing on solar energy. To date, the Strategy has had effect as individuals and private companies increasingly invest in photovoltaic technologies in order to reduce their monthly electricity bill.

VISION 2: ENERGY SUPPLY IN SEYCHELLES WILL BE BASED ON BOTH PUBLIC AND PRIVATE PARTICIPATION AND OWNERSHIP

As above, the contribution of the SCCSP to the attainment Vision 2 is mainly through its support to the SEC and the SEC's subsequent work on the new Energy Act (2012). Article 59 of this Energy Act sets out a legal framework for the government to enter into power purchase agreements with independent power producers that can supply electricity generated from renewable sources. As such, the Energy Act (2012) has significantly democratised the country's energy sector by lifting the monopoly of the Public Utilities Company (PUC) for electricity production on the main islands.

2.6. Signs of indirect impact

A number of indirect impacts were observed and/or discussed during the country visit, including:

- The creation of the Seychelles Energy Commission has led to more emphasis being placed on renewable energy and energy efficiency.
- Revision of the EPA has resulted in the strengthening of the EIA Regulations and empowerment of the MEECC to enforce environmental legislations.
- The entering into force of the new Energy Act has resulted in the private sector (local and international) investing in renewable energy projects.
- The coastal defence works have in some places generated space for the development of recreational areas (e.g. Anse a la Mouche)
- There is an increased use of orthophotos for environmental mapping, especially by students doing university dissertations and thesis.
- The orthophotos that were purchased, have been used in other technical studies on climate change risks (mapping of flooding for the Island of La Digue, undertaken by the GCCA+ follow-on project).

- Data from the automatic weather stations have helped in the improved calibration of regional climate models.
- Data from the automatic weather stations have helped in the strengthening of the disaster early warning system.

2.7. Conclusions on direct and indirect impact generated by the project and discussion on factors for success and failure:

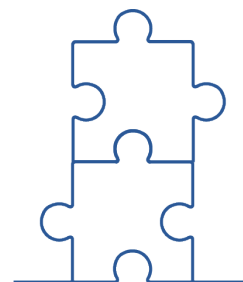
Overall, the SCCSP has had direct and positive impact on the people of Seychelles, their natural environment and their CC mitigation efforts. The direct and indirect impacts have been felt more profoundly in the Energy Sector. With the establishment of the Seychelles Energy Commission, the country has been provided for the first time with a regulator for this sector who has a more holistic view on the sector and takes account of the requirements and possible roles of the different stakeholders. The enactment of the Seychelles Energy Act (2012) created a legal framework (1) for Independent Power Producers to participate in electricity production and sell it to the government through power purchase agreements and (2) for individuals to install their own PV system and feed the produced electricity in the national electricity grid. This new framework has resulted in substantial private investment in the sector, by individuals as well as companies. These private investments and the subsequent increase in production of renewable energy, effectively contribute to the achievement of the country's 15% renewable energy target by 2030.

Also the awareness raising campaigns generated major impacts and made people change certain behaviour. Specifically, people have become more conscious on what they can do at household level to be better prepared for the effects of CC and to reduce their carbon footprint. These behavioural changes are made evident by the many households that installed a water tank to ensure continuous water supply and that purchased energy saving lighting and household appliances, reducing thereby their electricity bills. While one cannot claim that the observed changes are entirely due to the SCCSP, it is safe to say that the programme's awareness campaigns have contributed to these positive changes.

The construction of culverts and drains and the regular desilting of rivers, especially in the Victoria area, have played a major role in reducing the risk of flooding during periods of heavy rains. Thanks to the financial support of the SCCSP, the Drainage Task Force has been able to properly assess the situation and to design structures that are appropriate for addressing the existing threats.

The main successes of the SCCSP are in the creation of a legal framework that allows the implementation of new measures, that acts as deterrent for certain actions with negative consequences on the environment or climate. Very important in the programme's success is the fact that all activities and initiatives were driven by confirmed needs which resulted in outputs that are relevant and of direct use.

The main factor that hampered the achievement of good results and the generation of impact in this programme is related to the conflicts around institutional roles and mandates when developing the new legal framework for Physical Planning.



III. Analysis of Sustainability Levels

3.1. List of services, systems and products that were established/delivered under the project and that should have been maintained (based on the outputs delivered):

- The SNCCS and associated action plan are still guiding climate action in the country
- The National Climate Change Committee (NCCC) still operational as steering and monitoring body for the implementation of the SNCCS and using the SNCCS performance assessment framework
- The SSDS still guiding sustainable development action in the country
- The steering and monitoring mechanism for SSDS implementation still operational
- The Seychelles Energy Policy (SEP) and Strategy for Renewable Energy still guiding action in the energy sector
- The Seychelles Energy Commission (SEC) still operational
- Protective structures at different coastal locations across Mahé still standing and functional
- Automatic Weather Stations and other equipment supplied to the Department of Meteorology still in use for improving CC adaptation
- Orthophotos and satellite images acquired for respectively the Seychelles Inner and Outer Islands being used for better responses to CC effects

3.2. Information and comments on sustainability aspects from the available reports (desk phase):

Only one reference to (potential) sustainability was found in the available documents, more specifically in Neil Bird's report regarding the use of the budget support modality for environment and climate change projects. The report mentioned: "The programme design takes as its starting point the five priority objectives of the SNCCS, which cover: the advancement of scientific knowledge, adaptation and mitigation actions, the mainstreaming of climate change considerations into national policies and capacity development – **all of which would require additional government spending**. The programme's expected results then narrowed to focus on (i) the effective mainstreaming of climate change in national development policies and in key sector strategies and action plans; and (ii) a solid institutional and legal framework in the energy sector integrating Clean Development Mechanisms (CDM) to allow for the promotion of renewable energy. However, whether GBS funding, over a short three year implementation period, could satisfactorily address these two major themes could be questioned."

3.3. Summary findings from the desk phase and specific issues to be further explored during the field phase:

Only very little information is available on sustainability.

Based on more detailed information collected during the field mission, the list of services, systems and products that were established/delivered under the programme and that should have been maintained, might require adjustment.²⁰

Otherwise, the standard guidelines for sustainability analysis will be applied.

3.4. Results of the sustainability analysis (as per table)

9 items were checked for their sustainability. Information could be collected for all 9.

The sustainability scores of these 9 items are as follows:

²⁰ This adjustment has been done in the present report.

- 2 items (22%) scored 1, meaning that they were fully sustained and expanded/improved
- 5 items (56%) scored 2, meaning that they were fully sustained in a “status quo” situation
- 1 item (11%) scored 3, meaning that it still exists but with quality and/or coverage issues
- 1 item (11%) scored 4, meaning that it disappeared or lost its functionality

Evidence was found through direct observation for 2 items (22%) and through reporting by reliable sources for 7 items (78%).

3.5. Conclusions on the sustainability aspects and discussion on factors for success and failure

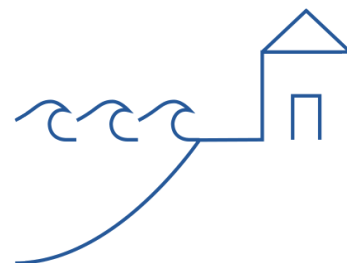
OVERALL CONCLUSION:

Analysis of the 9 programme outputs that were supposed to be maintained and continued by the beneficiaries, demonstrates a good level of sustainability with over 75% of the concerned outputs fully sustained (scores 1 + 2).

The outputs delivered in the energy sector marked “1” for sustainability. The Seychelles Energy Policy has given direction to numerous initiatives in the sector, with emphasis on activities that contribute to the country's renewable energy production capacity and to energy efficiency. Also the energy policy framework was expanded with the preparation of an Energy Efficiency Policy. The mandate of the Seychelles Energy Commission (SEC) – established under the SCCSP – was significantly broadened through the Energy Act (2012). Being allocated an important operational budget, SEC has been able to grow in number of units and staff. During the implementation period of the SCCSP, the SEC was seen as a very important institution as the country was looking at ways to reduce its energy bill.

The coastal protection and flood mitigating projects (score “2”) were also seen as important to the government as people tended to complain a lot about the damages and risks.

The institutions that received the automated weather stations (score “2”) and the satellite imagery and orthophotos (score “2”) have intensively used these equipment/materials. The degree of usefulness of equipment and materials that are supplied through donor-funded support projects can be enhanced through prior consultation of the intended users, ensuring that they are compatible with the receiving institution's tasks, physical environment, capacities and already available equipment. As can be expected, some materials lose their usefulness over time and must be regularly replaced or updated. For the SCCSP, this is the case with the orthophotos.



On the other hand, the analysis indicated poor sustainability with regards to:

(1) The institutional framework that was set up with SCCSP support for the implementation and monitoring of the Seychelles Sustainable Development Strategy (SSDS), but never made operational. Though outside its main scope, the SCCSP became involved in the area of sustainable development through its elaboration of a major climate change section for the new strategy. Being part of the process, the SCCSP also assisted in the development of a steering and monitoring mechanism for the implementation of the SSDS.

This steering and monitoring mechanism was never made operational due to IMF-imposed reductions in government staff. Still, many of the measures and activities that had been planned under the SSDS have been implemented by the concerned line ministries and agencies, though without overall coordination. Further, the SSDS (2012-2020) has recently been replaced by “Vision 2033” and the Seychelles National Development Strategy (2019-2023), indicating that sustainable development is still high on the political agenda.

(2) The failure to make the Seychelles National Climate Change Strategy (SNCCS) performance assessment framework – developed with SCCSP support – operational, reportedly due to budgetary constraints. Currently, the SNCCS is still guiding climate action in Seychelles and the follow-on GCCA+ project is developing a new assessment framework for climate change.

The fact that the SCCSP was implemented as a non-target budget support programme resulted in positive effects such as good national ownership and full integration into national administrative and financial structures, but due to the lack of a clear and well-defined intervention framework, overall implementation was flexible but less focused and disciplined.

FACTORS ENHANCING SUSTAINABILITY:

- Providing support in sectors that receive high importance at national scale
- Providing solutions to genuine problems of high priority
- Purchase of adequate, compatible and needed equipment / materials, with the technical specifications confirmed by the receiving institution

FACTORS HAMPERING SUSTAINABILITY:

- Budgetary constraints

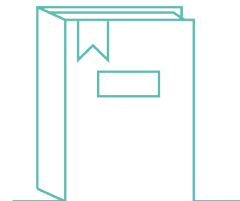
IV. Additional elements

4.1. M&E Practice

M&E ACTIVITIES THAT HAVE TAKEN PLACE:

As with most projects that are implemented under the budget support modality, the SCCSP had no framework for M&E. Still, the achievement of the agreed general and specific conditions for disbursement was monitored. This was done by the GBS Committee, set up by the NAO to supervise the EU-funded Seychelles Economic Reform Programme (SERP) to which the SCCSP was complimentary. The Committee was co-chaired by the NAO and the EU Delegation and included the Ministry of Finance together with all relevant technical ministries and organisations. The SERP and the SCCSP shared the general conditions for budget support eligibility as well as the revision system. In terms of external monitoring:

- A ROM mission was conducted in 2013.
- The SCCSP was one of the case studies under the global review of EU experiences, best practices and lessons learned in the field of environment and climate change through the aid modality of budget support. This review was conducted in November 2014.



% OF BUDGET ALLOCATED TO M&E THAT HAS BEEN USED:

The SCCSP had no budget allocated to M&E.

ADDITIONAL M&E REPORTS THAT HAVE BEEN COLLECTED:

No additional M&E reports were available and were collected during the field phase.

4.2. Contributions to GCCA+ knowledge management and communication

PROJECT-SUPPORTED RESEARCH AND RESEARCH FINDINGS:

None. No interesting links with the scientific community were developed as part of the SCCSP implementation.

COMMUNICATION MATERIALS:

Lots of communication materials were produced on adaptation to climate change. Many of these materials are still in use today.

4.3. Opportunities for scaling up (future GCCA support activity)

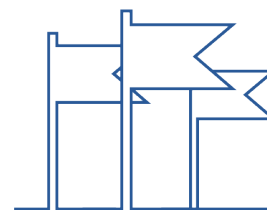
- More education and awareness campaigns about climate change and how to adapt to the effects of climate change.
- Capacity building for people working in the construction industry; they should be trained in the use of methods and techniques that reduce the CC-induced risks of damage.
- Support to conduct CC-related vulnerability and risk studies in different parts of the country, including high resolution mapping of risk profiles, the preparation of a sensitivity atlas and mapping of community CC adaptation needs and preparedness
- Capacity building in hydrology (modelling, water-related risks for disasters)
- Training in remote sensing and in the development of GIS databases
- Further investments in coastal management measures and ecosystem based adaptation to climate change in coastal and mountain areas.

- Formal courses in climate change education for teachers and development of teaching materials for climate change.
- Strengthening of energy audits in government buildings and companies that have high energy use.

4.4. Climate Finance – evidence of funding mobilised from public and/or private local sources

There are a number of cases in the Seychelles where funding for CC-related activities was mobilised from local sources. It concerns funding for:

- The installation of a one MW solar farm on Romainville Island. (renewable energy sector)
- The Grid Connected Rooftop Photovoltaic Systems Project co-financed by the Government of Seychelles for an amount of 6 million USD. (renewable energy sector)
- A project to develop, finance and operate a 4MW floating grid-connected photovoltaic plant. (renewable energy sector)
- The set-up of the Seychelles' Conservation and Climate Adaptation Trust (SeyCCAT) partly financed through debt restructuring arrangements with the Club of Paris. (climate adaptation)



V. Sources of Information

DOCUMENTS COLLECTED AND CONSULTED FOR THE DESK PHASE ANALYSIS:

- **Programming documents**
 - ♦ Action Fiche, 2009
 - ♦ Financing Agreement, with annexes including TAPS but no logframe, 2009 (signed 2/2010)
- **Progress reports**
 - ♦ Disbursement Decision for the first variable tranche, 2010
 - ♦ Note to the Disbursement Decision for the first variable tranche: assessment of reports on progress provided by the EUD, 2010
 - ♦ Disbursement Decision for the second variable tranche, 2011
 - ♦ Disbursement Decision for the third variable tranche, 2014
- **Monitoring and Evaluation reports**
 - ♦ ROM report, 2013
 - ♦ Review of EU experience, best practices and lessons learned in the field of environment and climate change through the aid modality of budget support, chapter Seychelles, Neil Bird and Fabrice Ferrandes, November 2014.
- **National Policy and Legislative documents**
 - ♦ Seychelles National Climate Change Strategy, November 2009
 - ♦ Seychelles Energy Policy, 2010-2030, 2010
 - ♦ Seychelles Sustainable Development Strategy for 2012-2020 – Volume 1 and 2, 2011
 - ♦ Seychelles Energy Act, 2012

ADDITIONAL DOCUMENTS COLLECTED AND CONSULTED DURING THE FIELD PHASE:

- ♦ Draft Seychelles National Climate Change Policy
- ♦ Seychelles National Development Strategy, 2019 – 2023
- ♦ Report on the implementation of the Global Climate Change Alliance budget support programme.
- ♦ The Assessment of Grid Absorption Capacity, Grid Code, Feed-In Tariffs and Model Power Purchase Agreements for Renewable Energy Systems (Final Report)
- ♦ Republic of Seychelles Project for the Formulation of a Master Plan for Development of Micro Grid in Remote Islands (2016), Japanese International Cooperation Agency (JICA).
- ♦ Least-Cost Power Development Plan for Seychelles: Development of electricity demand forecast assumptions for reference and sensitivity scenarios, The World Bank.
- ♦ Seychelles Coastal Management Plan, 2019 – 2024.
- ♦ Climate Change Curriculum Guide for Primary and Secondary Schools in Seychelles, 2019

RELEVANT WEBSITES

- <http://www.env.gov.sc/>
- <http://www.sec.sc/>
- <http://www.s4seychelles.com/>

CONTACTS OF STAKEHOLDERS COLLECTED DURING THE DESK PHASE:

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■ **Others**

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PERSONS CONTACTED DURING THE FIELD PHASE:


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- ♦ Mr. Tony Imaduwa, Chief Executive Officer, Seychelles Energy Commission (timaduwa@sec.sc)
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- ♦ Mr. Peter Brinn, Team Leader, Seychelles GCCA+ (Component A), (pjbrinn@gmail.com)
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- ♦ Ms. Vicky Berlouis, Senior Disaster Management Officer, Department of Risk and Disaster Management (vberlouis@drdm.gov.sc)
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- ♦ Cynthia Adrienne, Senior GIS Officer, GIS Section, Ministry of Habitat, Infrastructure and Land Transport (MHILT) (cadrienne@mluh.gov.sc)
- ♦ Xavier Sham-Laye, Senior GIS Officer, GIS Section, Ministry of Habitat, Infrastructure and Land Transport (MHILT)

Annex to the report: Sustainability Analysis

NR	DESCRIPTION OF SYSTEM/SERVICE/PRODUCT TO BE SUSTAINED	SCORE	EVIDENCE	EXPLANATORY NOTES
1	The SNCCS and associated action plan are still guiding climate action in the country.	2	R	The Seychelles National Climate Change Strategy (2009) is still the main framework document guiding climate action in the Seychelles. Some of the proposed climate actions are reinforced as part of the country's Intended Nationally Determined Contributions (INDC). A Climate Change policy was drafted in 2019 and is awaiting approval by Government. The main measures and directions under the new policy are still aligned with the SNCCS.
2	The National Climate Change Committee (NCCC) still operational as steering and monitoring body for the implementation of the SNCCS and using the SNCCS performance assessment framework	3	R	The National Climate Change Committee is operational and is now combined with the Steering Committee of the follow-on GCCA+ project so that the committee members do not get overburdened with attending lots of meetings dealing with closely related issues. The NCCC has membership from a wide array of sectors and institutions. Meetings of the NCCC take place every quarter and minutes are produced after each meeting. A general observation is that the NCCC is active when there are projects to implement such as the National Communications to the UNFCCC and is dormant when there are no projects. The performance assessment framework for the SNCCS was never put in place and has not been used to assess the performance of the SNCCS. An assessment framework is however being developed at present under the follow-on GCCA+ project.
3	The SSDS still guiding sustainable development action in the country	2	R	The SSDS (2012 – 2020) was not commonly referred to by governors and development practitioners, despite the fact that many programmes and activities that had been identified and prioritised under the strategy have been implemented by line ministries and agencies. The SSDS has now been replaced by the Vision 2033 and the Seychelles National Development Strategy (2019 – 2023), which is the first of three 5-year strategies to guide Seychelles' development up to the year 2033.
4	The steering and monitoring mechanism for SSDS implementation still operational	4	R	The SSDS was approved in 2011 and its coordination was supposed to be overseen by a Seychelles Sustainable Development Division (SSDD), established under the Ministry of Environment, Energy and Climate Change. In addition, a Sustainable Development Inter-sector Committee (SDISC) was supposed to be set up to act as vehicle for wider consultations and exchange of information and views on sustainable development and its implementation. At that time, the Seychelles had started implementing its Macroeconomic Reform Programme (MERP) under the supervision of the International Monetary Fund (IMF) which insisted on reducing government staff. As a result, these bodies were never set up and the implementation of the SSDS was never coordinated nor monitored. Despite the fact that the SSDS itself was not coordinated, many of the planned measures and activities were implemented under the responsibility of the concerned line ministries and agencies.
5	The Seychelles Energy Policy (SEP) and Strategy for Renewable Energy still guiding action in the energy sector	1	R	According to the Principal Secretary for Energy and Climate Change, the Seychelles Energy Policy was adopted in September 2010. The Chief Executive Officer of the Seychelles

				<p>Energy Commission was however not sure whether the policy has been officially endorsed by the Government since he never received a finalized version from the authors.</p> <p>Still, the content of the SEP is being implemented with a strong emphasis placed on renewable energy and energy efficiency. Some examples of completed and/or ongoing renewable energy projects are: a wind farm, established in 2013, with 8 wind turbines and a total peak output of 6 MW; the installation of a photovoltaic systems for electricity generation on various outer islands (e.g. Aldabra, Alphonse); a solar farm on Romainville Island with an expected production of 7 million kilowatt hours per year; and a 3.5 MW floating photovoltaic system in the lagoon at Providence. Energy efficiency was addressed by the Seychelles Energy Efficiency and Renewable Energy Programme (SEEREP). The objective of SEEREP was to encourage the adoption of energy-efficient home appliances, LED-based lighting equipment and solar water heaters in the domestic residential sector through favourable financial conditions provided under agreements with the commercial banks. A specific Energy Efficiency Policy has been under preparation since 2018.</p>
6	The Seychelles Energy Commission (SEC) still operational	1	D	<p>The Seychelles Energy Commission (SEC) is still operational and has grown in terms of number of staff and mandate. The SEC became operational in 2010 with 2 staff members. In 2020, the SEC counted 4 units dealing with regulations and 2 units dealing with policy issues. The Energy Act (2012) greatly broadened the mandate of the SEC. Specifically, the Act assigns responsibilities to the SEC in the areas of electricity supply, production of renewable energy, energy efficiency, Clean Development Mechanism, tariffs and charges, consumer protection rights, issuance of licenses and permits among others related to energy use in the Seychelles.</p>
7	Protective structures at different coastal locations across Mahé still standing and functional	2	D	<p>A number of coastal rehabilitation, coastal protection and flooding mitigation projects were implemented as part of the SCCSP.</p> <p>At Mare Anglaise (North Mahé) and at Anse à la Mouche (West Mahé), rock armouring was used to protect the coastal road from the impact of increased wave action and a receding shoreline. When the two sites were visited in January 2020, the coastal defences were found to be in place and functional. At Mare Anglaise, the waves were hitting directly against the rock armouring at high tide. Further along the shores of Beau Vallon, the effect of beach erosion could clearly be seen. At certain areas the beach had undergone chronic degradation what resulted in the waves getting progressively closer to the coastal road. At Anse à la Mouche, the rock armouring had secured the coastal road. A green zone behind the rock armouring had developed and was being used for picnics by locals.</p> <p>As flood mitigation measures, desilting of the main rivers and widening of drains in Victoria to minimize flooding during heavy downpours had been undertaken. Despite the continued practice of desilting the rivers in Victoria, there are signs of a current acceleration of the siltation processes, making a more frequent desilting necessary. Flood mitigation infrastructure (culverts and drains) built at Anse aux Pins, Au Cap, Pointe Larue, Cascade, La Digue and Praslin Island were found to be in place, still functioning and relatively well maintained. The large culverts at Anse Aux Pins and Au Cap were reported to have effectively dealt with storm water as - since the flooding caused by the cyclone Felleng in 2013 - no other major floodings had occurred in these areas thanks to the protective infrastructure. On the other hand, the drainage that was built on the coastal plateau of La</p>

				Digue Island was found to be inadequate to handle the volume of water deposited during periods of very intense rainfall. In that area, a more extensive network of drains would be required to enable effective drainage during periods of heavy rainfall.
8	Automatic Weather Stations and other equipment supplied to the Department of Meteorology still in use for improving CC adaptation	2	R	<p>The SCCSP had funded the purchase of three automated weather stations and one HP Plotter.</p> <p>The weather stations were installed on the islands of Farquhar, Amirantes and Silhouette. During the field visit, it was reported that all three stations are still in place and functioning well. Also the HP plotter was seen to be functional at the Climate Change Division and is used for printing large format maps facilitating discussions and decision making.</p> <p>The 3 weather stations have allowed the National Meteorological Agency (NMA) to expand its data collection network and to get near real time data on the weather from islands for which previously very limited data were available. The NMA and the Department of Risk and Disaster Management (DRDM) integrate data from the automatic weather stations into the disaster early warning system. As such, additional data from additional weather stations enhance the performance of the country's early warning system. Data collected from the automated weather stations are also shared with national sector agencies that need them and with international agencies that run climatological models, contributing to an improved weather forecast for the Seychelles and the outer islands. The data have also been used in the calibration of regional climate models.</p> <p>Though the coverage of automatic weather stations in the country is seen to be still very limited, the current government's budget does not allow to purchase more of this costly equipment.</p>
9	Orthophotos and satellite images acquired for respectively the Seychelles Inner and Outer Islands being used for better responses to CC effects	2	R	<p>Orthophotos and satellite images were acquired in 2011 as part of the SCCSP.</p> <p>They are still being used by the Ministry of Habitat, Infrastructure and Land Transport (MHILT) as well as by other GIS centers e.g. within the MEECC, the Public Utilities Corporation (PUC), the Seychelles Land Transport Agency (SLTA) and the Seychelles Agricultural Agency (SAA) for a variety of purposes.</p> <p>As the orthophotos came with Light Detection And Ranging (LIDAR) data, they could also be used for flood mapping and for the identification of areas with high risks of landslides. These orthophotos form the basis of the MHILT webGIS interface, allowing public access to spatial data such as land contours, location of rivers, roads, etc. which has proven to be very useful for development planning.</p> <p>Despite the fact that the orthophotos are still in use, they have been described as being almost obsolete, especially in areas with a high level and speed of development. The MHILT is now experimenting with the use of specially equipped drones to collect the type of data that were previously only available through orthophotos. As reported by the MHILT, data collection through drones is less expensive, versatile, and more adaptable. A particularly attractive feature of using drones is the fact that it can be deployed at a much higher frequency allowing data to be collected at more frequent intervals and in real time when required.</p>



This **Impact and Sustainability Assessment of the Seychelles Climate Change Support Programme (SCCSP)** (2009/021-555) is one of the 22 case studies that were conducted to feed into the overall **EU GCCA/EU GCCA+ Impact and Sustainability Study**.

This case study report provides a summary list of outputs delivered, a detailed analysis of ex-post impact and sustainability levels as well as additional information on the project's M&E practices, on the available knowledge and communication products, on scaling-up opportunities and on ex-post climate finance mobilised from local public and private sources.

All reports are available on www.gcca.eu/resources

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