

# WORKSHOP REPORT

## “COST-BENEFIT ANALYSIS FOR CLIMATE ACTION IN SEYCHELLES CAPACITY BUILDING WORKSHOP”

25-27 May, 2019, PROGRAMME COORDINATION UNIT, VICTORIA

### BACKGROUND

Seychelles faces a major threat from climate change. This includes threats to its main economic sectors, tourism and fisheries. It also threatens key human needs like food and water security. The need for climate actions in the country is clear, and some promising activities have been trialled or are underway. Yet much more needs to be done across a range of sectors.

One major challenge is securing buy-in from key decision makers in government, the civil service and business into the need for and utility of such climate actions. In order to facilitate action by leaders, wider buy-in is also needed from the wider public. A related challenge is that many in Seychelles continue to view climate change as a problem that lies in the remote future or doesn't affect them directly. Still another related challenge is that many seem to view climate action as a burden that would undermine their economic well-being and prospects.

One tool that could help address these various challenges is cost benefit analysis. Potentially, it offers a way to assess projects or other investments that delivers headline metrics that are both intuitive and compelling to a wide range of audiences. Simply put, the results of this analysis are expressed in terms of 'bang for your buck'.

While clearly powerful, cost-benefit analysis remains controversial. A key criticism is that it is reductionist, since it only considers monetary values while ignoring other benefits or adverse consequences of the investment. One methodology that seeks to address this criticism is community-based cost benefit analysis (CBCBA). It seeks to incorporate a wide range of benefits and adverse consequences into the quantitative analysis, while also couching its quantitative analysis in context by also gathering qualitative data.

CBCBA offers a possible way to assess climate actions in order to convey the full range of benefits they offer in compelling terms. As such, it could help make the case for scaling up implementation of diverse climate actions across the country. The Ministry of Finance, Trade, Investment and Economic Planning recognised this potential, and requested that the Seychelles GCCA+ project conduct both a study and a workshop on the theme of 'CBCBA for climate action in Seychelles'.

The workshop presented this methodology as a potential tool for government and other decision makers in Seychelles. The workshop content included presenting then discussing three in-depth CBCBA case studies that were conducted in selected climate actions in different sectors in Seychelles.

### WORKSHOP OBJECTIVES

- 1) Present the concept of cost-benefit analysis as a powerful tool of analysis to inform decision making about investments
- 2) Present the community-based cost benefit analysis as a suitable methodology for assessing the viability and significance of climate actions in Seychelles
- 3) Discuss the possible applications of cost-benefit analysis and CBCBA in particular in Seychelles

## WORKSHOP AGENDA

Table 1: Workshop agenda

<b>Session 1: Monday 9:00 – 12:00</b>	
<b>“Introduction to Cost Benefit Analysis, Including for Climate Actions”</b>	
<b>Theme</b>	<b>Description</b>
Icebreaker	Why are you here today? What are your expectations?
Introduction to CBA	Overview of CBA as a decision making tool, its historical origins, and its advantages and disadvantages
Use of CBA in private sector	Discussion of how CBA is typically used in the private sector, to provide perspective and a contrasting case to using CBA for climate actions
Introduction to CBCBA	Introduction to the community-based cost benefit analysis (CBCBA) methodology used in the CBA study on climate actions in the Seychelles conducted by GCCA+
<b>Session 2: Tuesday 9:00 – 12:00</b>	
<b>“Seychelles Study on CBA for Climate Actions: Planning &amp; Data Collection”</b>	
<b>Theme</b>	<b>Description</b>
Icebreaker	Does CBA make sense? Are you comfortable w/ it?
Components of CBCBA	Each of the key components of this methodology is briefly described
Background to this work	Description of government’s request for this work; elaborating the premise that climate action offers opportunities
Other uses in Seychelles	Review of other uses of CBA for climate change in Seychelles
Case study selection	Aims of this process; description of process based on partnership with government counterparts; criteria used; long list of projects
Case study 1: Highland water supply & agriculture	Brief summary of case study: Context, activities; photos, headline findings, discussion of outputs and outcomes
<b>Session 3: Tuesday 13:00 – 16:00</b>	
<b>“CBA Study on Climate Actions for Seychelles: Analytical Process, Findings”</b>	
<b>Theme</b>	<b>Description</b>
Case study 2: Coastal restoration	Brief summary of case study: Context, activities; photos, headline findings, discussion of outputs and outcomes
Qualitative data	Illustrating use of qualitative data: Discussion of the qualitative data gathered and incorporated into the analysis of case study 2
Case study 3: Solar PV for business	Brief summary of case study: Context, activities; photos, headline findings, discussion of outputs and outcomes
Sensitivity analysis	Importance for assessing robustness of BCRs; assumptions tested
Group activity: Data analysis for CBA	Demonstration of data analysis for CBA: Spreadsheet analysis of a climate action based on a case study selected in class using hypothetical data
<b>Session 4: Wednesday 9:00 – 12:00</b>	
<b>“Looking Ahead: Applications of CBA for Climate Actions in the Seychelles”</b>	
<b>Theme</b>	<b>Description</b>
Icebreaker	Does CBCBA make sense to you? Do you have a sense of how to do it?
Group activity on data analysis, continued	Completion of this rapid analysis; using it to discuss issues like the reliability of modelling and the “garbage in, garbage out” problem
Lessons learnt	Lessons learnt from the study on CBA for climate actions in Seychelles

Recap: Uses of CBCBA	Informing decision making on climate action; catalyzing change for action
Wider context: Climate action as opportunity	Emerging perspective on climate action as opportunity; discussing how Seychelles can harness this for a brighter future
CBA for climate action in Seychelles: Options	Open discussion about CBA for climate action in Seychelles, including potential uses, obstacles to using this tool, and possible ways forward

## **PARTICIPANTS**

The workshop was attended by between 10 and 14 people on any given day. Most the participants were from relevant government entities, such as the Ministry of Finance, Trade and Economic Development, the Ministry of Local Government, and the Ministry of Tourism. It also included private sector participants. For a full list of participants see Annex 1. The workshop was facilitated and delivered by two consultants to the Seychelles GCCA+ project, namely Charles Donovan (NKE11a) and Jules Siedenburg (KE2).

## **WORKSHOP EXPENSES**

1. Tea and refreshment breaks on all three days and lunch on day two were all covered by the Seychelles GCCA+ project.
2. The Seychelles GCCA+ project also covered the costs of workshop planning and facilitation as well as photocopies
3. The venue was provided by the MEECC Programme Coordinating Unit

## **WORKSHOP DESCRIPTION**

The workshop delivered presentations on various themes, then held question and answer sessions to discuss the content presented. For a description of the various conference themes, see the agenda above. For a thorough summary of question and answer sessions, see Annex 2. For a photo from the final session of the workshop, see Annex 3. For detailed information about the workshop sessions, see the PowerPoint slides of the presentations delivered in Annex 4.

## **WORKSHOP EVALUATION**

At the end of the day, participants were invited to fill in an evaluation form. Thirteen forms were submitted, and the findings are summarized in the table below. Comments are grouped by type, and all bullet points represent specific comments submitted. Numbers in parentheses following each category indicate how many people made a comment on this theme, while numbers in parentheses following each bullet point indicate how many participants wrote a similar response.

Table 2: Workshop evaluation responses – Summary from 13 participants

<b>Q1: Please tell us at least one new thing you learned</b>	<b>Q2: What did you enjoy about the workshop?</b>
<p>Comments about concepts</p> <ul style="list-style-type: none"> <li>• Learned about concepts of CBA and CBCBA (3)</li> <li>• Pros and cons of CBA</li> <li>• Benefits not limited to the monetary aspects, but also includes social and environmental aspects (2)</li> <li>• CBA can be done in a way that works for communities</li> <li>• The importance of stakeholder consultations including taking account of views expressed</li> <li>• The usefulness of CBCBA when preparing projects</li> </ul> <p>Comments about how to apply CBCBA</p> <ul style="list-style-type: none"> <li>• How to conduct CBA, but specifically CBCBA (3)</li> <li>• How to apply CBCBA as exemplified by the 3 case studies (2)</li> <li>• How to assess an investment by comparing costs incurred with the value delivered by benefits (2)</li> <li>• How to incorporate social and environmental aspects into CBA to make it more robust</li> <li>• How to calculate a benefit-cost ratio</li> <li>• How to calculate the benefits of a project beyond its lifespan to make it economically viable for investors</li> </ul> <p>Comments about other aspects</p> <ul style="list-style-type: none"> <li>• Empirical knowledge of climate actions in Seychelles</li> <li>• Impact ranking measure of CBCBA methodology</li> </ul>	<p>Comments about the case studies presented (7)</p> <ul style="list-style-type: none"> <li>• The case studies were effective (3)</li> <li>• The case studies brought CBCBA close to home</li> <li>• Very informative, and the use of concrete project examples from Seychelles really helped</li> <li>• How CBCBA was used for local projects that have benefits communities</li> <li>• Hypothetical analysis of a project using Excel in real time</li> </ul> <p>Comments about the presentations / interactions (9)</p> <ul style="list-style-type: none"> <li>• Delivery of presentations was smooth and comprehensive</li> <li>• Very open and interactive discussions</li> <li>• Attendees encouraged to speak freely</li> <li>• Participants were able to contribute and discuss important topics</li> <li>• The level of interaction and engagement of the presenters and also the participants (3)</li> <li>• Nice atmosphere</li> </ul> <p>Comments about the utility of CBCBA (3)</p> <ul style="list-style-type: none"> <li>• The linkage of CBCBA to climate actions, which will eventually help Seychelles with climate actions</li> <li>• How to integrate the ‘community-based’ component into CBA</li> <li>• How Excel can help get a comprehensive view about a proposed intervention</li> </ul>
<b>Q3: What didn't you like?</b>	<b>Q4: How can you apply what you learned in your work?</b>
<p>Comments about insufficient time (5)</p> <ul style="list-style-type: none"> <li>• Too short (3)</li> <li>• Insufficient time for full understanding of process</li> <li>• More time to think about how CBA could apply in Seychelles</li> </ul> <p>Comments about need for learning by experience (3)</p> <ul style="list-style-type: none"> <li>• If you do it yourself you learn, but we didn't have the chance to develop our ‘own’ CBCBA, e.g., in groups</li> <li>• Would have appreciated more time to really work with the tool</li> <li>• Need time to conduct a case study then assess it</li> </ul> <p>Other comments (8)</p> <ul style="list-style-type: none"> <li>• “Nothing” (4)</li> <li>• Could have had a more focus on how to facilitate use of this very important tool</li> <li>• I wonder if people will actually apply CBCBA</li> <li>• Not enough focus on how to capture qualitative evidence such as comments from community members</li> <li>• Workshop venue</li> </ul>	<p>Comments about using CBCBA for planning (8)</p> <ul style="list-style-type: none"> <li>• Using CBCBA to assess projects for national planning purposes</li> <li>• Can use the concepts of CBCBA to inform my observations regarding proposed interventions</li> <li>• Incorporate social issues into project evaluation as an opportunity to capture more benefits</li> <li>• Prioritisation process of projects / programmes (2)</li> <li>• In future economic analysis for my department</li> <li>• Can recommend that CBCBA be used on national projects where this seems relevant</li> <li>• Can use it for analyzing policies</li> </ul> <p>Comments about using CBCBA for project design (5)</p> <ul style="list-style-type: none"> <li>• Incorporate a community-based component into project design</li> <li>• For development of project proposals (3)</li> <li>• When proposing projects for consideration and helping to justify them</li> </ul> <p>Comments about other aspects (3)</p> <ul style="list-style-type: none"> <li>• I will start working on CC-related projects and present them to my superiors</li> <li>• Will discuss what I have learned with my superiors to see if it can be implemented at some stage</li> <li>• Can use these concepts for research/data gathering</li> </ul>

## **CONCLUSION AND RECOMMENDATIONS**

The workshop was deemed useful and enjoyable by the majority of participants, judging by their comments during the breaks and the input they provided via their evaluation forms. Other evidence that supports this conclusion is that many of the participants attended all three days of the workshop and that the question and answer sessions were animated and provided thought-provoking and actionable content (see Annex 2).

A critical question was how this workshop could be built upon, in order to deliver concrete benefits to the country, specifically by fostering wider uptake of climate actions across different sectors. Observations on this theme were provided in Annex 2.

One concrete outcome is that a follow-up activity has already been planned, which builds on the discussions during the workshop about the most relevant uses for CBCBA in Seychelles. Namely, a plan has been agreed with the Ministry of Local Government to hold a one-day workshop for local government officials about using CBCBA as a tool for their project design activities. This is an important development, since district governments have substantial budgetary resources for developing projects in their district, so how they proceed with this work is a critical question for the country. The workshop will first present a simplified version of the methodology, accompanied by a simplified version of the CBCBA methodology. It will then facilitate discussions about its potential use by the Ministry. The concrete prospect is that this methodology could end up being systematically incorporated into project identification and design by local government authorities.

## ANNEX A – REGISTERED WORKSHOP PARTICIPANTS

<b>Name</b>	<b>Affiliation</b>	<b>Gender</b>
Errol Renaud	Seychelles Energy Commission	M
Shirin Pillay-Laporte	Department of Economic Planning	F
Franca Sicobo	Department of Economic Planning	F
Rose-Marie Bargain	Vice President’s Office – Blue Economy	F
Peter Estico	Ministry of Local Government	M
James Mougat	Seychelles National Parks Authority	M
Philomena Hollanda	Tourism Department	F
Lynndine Essack	Department of Early Childhood, Primary and Secondary Education	F
Christelle Hoareau	Mauritius Commercial Bank	F
Vicky Berlouis	Department of Disaster Risk and Disaster Management	F
Kim Schmidt	UNDP (volunteer)	F
Annie Naiken	Public Utilities Corporation	F
Ronny Antat	Seychelles Fishing Authority	M
Sharif Antoine	Seychelles Fishing Authority	M
Peter Sinon	Seychelles Chamber of Commerce & Industry (consultant)	M

## **ANNEX B – POINTS RAISED & KEY EXCHANGES FROM THE VARIOUS Q&A SESSIONS**

### **A. Overview**

Overall, there was excellent engagement from the participants in the capacity building workshop. Questions were raised and discussed not just at the conclusion of sessions, but in between them as well. Many of these questions were points of clarification. Yet others were practical questions regarding issues like how to apply CBA in contexts characterized by major data gaps, which is common challenge facing ‘climate actions’. The answers to this point elaborated on how the Community-based Cost Benefit Analysis (CBCBA) methodology can address such data gaps through gathering fresh evidence, notably via key informant interviews, focus group discussions and direct observation. These explanations were illustrated by referring to the three case studies of climate actions in Seychelles examined using CBCBA under the Seychelles GCCA+ project. All three case studies were also briefly summarised using PowerPoint slides during the training.

In the following text, the exchanges on various themes were summarised in narrative form, to make this content as accessible as possible.

### **B. Political pressures and decision making**

Political pressures or considerations can override other factors in decision making about climate actions. Such dynamics can apply even in situations where the objective basis for action is well-documented and widely recognised. For instance, if a decision maker invests in a project based on a longer-term perspective of benefits accruing over time, they might get harshly criticized for this decision. They may get accused of having wasted the funds spent, if the investment doesn’t deliver tangible benefits in the near term.

One participant suggested that the only way that such a longer-term decision could proceed without attracting criticism would be if it were made by a highly respected individual who could be trusted to make sound decisions based on good judgement and solid evidence. Their decision would be especially likely to enjoy wide acceptance if the project design process involved consultations with diverse stakeholders, including listening to concerns voiced and seeking ways to address them. In such a scenario, both supporters and opponents could claim they had found a way to successfully negotiate, and had managed to find a mutually beneficial solution. If everyone comes out looking good and feeling valued, then the investment can be seen as a shared win which benefits all.

One obstacle to investments in climate actions and other investments that deliver environmental benefits is that political decisions are often focused on near-term outcomes. This can work against projects that incur near-term costs but deliver benefits gradually over time. Such a cost-benefit profile is commonly associated with climate actions, creating an inherent bias against such investments. CBCBA offers a potential solution to this bias by helping decision makers to focus more on longer-term planning, instead of on quick fixes and immediate results. It does so by framing the benefits of such investments in compelling and intuitive terms, specifically in terms of ‘bang for your buck’. These observations underline the suitability of CBCBA to informing and supporting climate actions.

### **C. Core assumptions underlying CBCBA**

One theme that came up in discussions was the question of the assumptions underlying any given CBA study, including those conducted using the CBCBA methodology.

One key assumption is the 'time horizon', or estimated duration of project benefits. This assumption can strongly affect benefit-cost ratio (BCR) findings. This follows because some types of project benefits take time to manifest and tend to increase gradually over time, notably those associated with activities that secure environmental rehabilitation to restore ecosystem services. Such activities are common components of 'climate actions'. A longer time horizon creates more scope to incorporate such benefits into the BCR calculations. Conversely, a shorter time horizon might miss a large proportion of these benefits. The time horizon selected is thus a critical question for CBA. The core assumptions used when applying the CBCBA methodology should be 'empirically determined'. For instance, the anticipated duration of project benefits should be based on the assessments of local experts and other key informants, as well as any available documentary evidence.

Another key assumption is the discount rate applied. Again, this can strongly affect BCR findings and should be based on objective evidence insofar as possible. For climate actions, this typically means using the discount rate applied by the central government of the host country.

In sum, given the strong impact that assumptions can have on the quantitative findings obtained, it is critical that these assumptions are carefully selected and firmly grounded. This means having a firm, verifiable basis for the core assumptions selected, and including these as a core component of the resulting analysis.

#### **D. Climate action as an opportunity for Seychelles**

Various climate actions involve technologies or approaches that are simply better than their 'climate blind' alternatives, and hence promise to deliver major co-benefits, in addition to CC objectives like climate adaptation or climate mitigation. Examples include a business switching to solar PV as an energy source, a household purchasing an electric vehicle, and a farm adopting drip irrigation. Yet there may be a major competitive edge to be gained from being an early mover vis-à-vis such actions, particularly for a country that relies heavily on its tourism industry, and hence on attracting clients over and above myriad other competing destinations.

Climate actions are particularly important for Seychelles, given the country's potential as a destination for green or ecotourism, and its image as a leader in sustainable development and environmental management. It follows that maintaining and enhancing the country's reputation as a green leader should arguably be a key driver for investment decisions in the country.

On the one hand, this image is an opportunity that can be further developed and harnessed. On the other hand, it creates risks, especially if the reality of how Seychelles is developing doesn't match the image of itself the country has projected, for instance via international trade fairs. This combination of potential added gains or potential significant losses places a premium on identifying and implementing priority climate actions. In concrete terms, such actions can increase revenues from key sectors such as tourism and fisheries, while also helping secure the sustainability over time of these revenue streams.

It is critical that key decision makers in Seychelles are aware of these intertwined opportunities and threats. Yet they may also need help identifying concrete avenues to secure these gains and avoid these losses. That is, they may need help identifying priority actions, as well as understanding how to assess their significance for the country. CBCBA can help them address such challenges.

While CBCBA may help identify priority projects and generate evidence to support their implementation, such investments may be constrained by the wider policy environment. One problem is that government

policies can be poorly harmonized, creating conflicting policy signals. Another problem is that communication and coordination between different branches of government often falls short.

### **E. Strengths and limits of CBCBA**

CBA is interesting because it's well-aligned with human nature and how people already function. After all, we size up the relative merits of different competing options, including by comparing prices.

One strength of CBCBA is that it captures the project lifetime, and thus gives a sense of its full impact over time. This can help make the case for projects with strong environmental components and/or impacts, since benefits linked to the environment often emerge only gradually. Tree planting offers an example of this, where the main costs occur up front but benefits are only realized over time. This characteristic of CBCBA is one of the reasons it is well suited to assessing climate actions, since many climate actions have strong environmental aspects.

Another benefit of CBCBA is that it ensures the project identification and design process takes account of a wide range of considerations, based on the various observations raised by the stakeholders consulted. As such, it can help project designers to think "outside the box" and consider factors that they might otherwise have neglected.

One issue raised was the limits of CBCBA. Clearly, this methodology is applicable in various contexts where conventional CBA would not work well. This follows because CBCBA can help address data gaps and hence generate solid evidence on the significance of an investment in a particular context. Yet there are some types of investments where CBA is arguably not appropriate. An obvious example is health care. If a decision must be made whether or not to build a new hospital, conducting CBA to inform this decision would have to include calculations about the value of avoided deaths or injuries. Obviously, that would be a troubling way to discuss such delicate matters, and as such CBA is arguably not an appropriate tool for informing such decisions.

### **F. The 'community-based' component of CBCBA**

All major projects included in the national budget have some form of CBA, such as calculating the Net Present Value or the Internal Rate of Return. Within the Ministry of Finance, Trade, Investment and Economic Planning, such calculations are a key basis for recommending project approval. Yet what's typically missing is the "community-based" part, whereby project design includes wide consultations with affected stakeholders.

In tourism development, the "community-based" aspects of potential investments have not typically been given sufficient attention. This has often been associated with a pattern whereby opposition to the project emerges once it is being implemented, since that is when many local stakeholders first get a chance to express their views. Their concerns commonly focus on social and environmental impacts of the project, since these factors can be neglected during project identification and design. Another area of potential concern is whether the project creates local jobs or delivers other local economic benefits. If such factors are not incorporated into project design, however, then the resulting project may fail to minimize adverse impacts or harness key synergies. Such shortcomings and complications could however have been avoided if only the project identification and design process were more effective and inclusive.

A related benefit of following a formal process of stakeholder consultations and project design, for instance by applying CBCBA, is that it can help ensure that project design and funding decisions are firmly grounded.

For instance, following such a procedure could avoid situations where activists from outside the area come to project consultation events and succeed in shutting down a project due to their criticisms, in ways that may diverge from local concerns. The question of who to consult for a given project investment can be decided at the outset, rather than leaving things to whoever shows up to a consultation event or makes the most noise about their concerns.

Fostering wider use of CBCBA would require a change in culture regarding how investments are determined. As things stand, many projects are funded via district budgets despite only minimal consultations with the affected communities. The national politicians, for their part, could think that they will be helping themselves if they foster wider use of CBCBA, since then government won't have to feel like they are shoving a project down the community's throats, since it would already reflect their concerns and enjoy their consent.

### **G. Options for applying CBCBA in Seychelles**

Whether a potential project or other investment is being spearheaded by government, the private sector or an NGO, if it will be sited in a district, then local stakeholders will want to know how it will affect them. They will also be keen to share their questions and concerns. Clearly, CBCBA could help ensure that such factors are taken into account, given its emphasis on soliciting input from a wide range of key stakeholders.

Such consultations are highly significant in Seychelles, since once people have a chance to share their views and be heard they are much more likely to come to an agreement. The key is for them to feel like they were respected and their voice was heard, even if the ultimate decision goes against the views they expressed. One caveat is the importance of speaking to a range of different stakeholders, to ensure the project designers don't simply consult with those who share a certain viewpoint.

One group in Seychelles for whom CBCBA could be particularly useful is the officials in charge of project and programme development and design, such as the project officers from the various ministries. District administrators (DAs) and their staff are another obvious group of target users. District offices have budgetary resources with which to develop projects for their district, making them obvious target users.

One problem that district administrations face is that the projects they develop can end up being controversial, with some local stakeholders unhappy and concerns or objections being raised within the National Assembly. Such conflicts and disagreements are unfortunate, and can complicate the process of making investments to address priority concerns.

CBCBA could help minimize such problems by soliciting input from a wider range of stakeholders, and thus ensuring that funded projects and programmes are well designed. In short, applying CBCBA could ensure that the design process takes account of the various ways in which local stakeholders would be impacted. It could also help identify suitable investments and decide between competing investment options. It could also help identify those who are likely to benefit, as well as those who may suffer adverse impacts.

If DAs used CBCBA to inform their project identification and selection decisions, this could ensure their proposed projects are based on thorough consultations, and hence have already been 'validated' in a sense before being presented to the National Assembly. Such a process could help avoid nasty surprises emerging at a later stage, due to certain stakeholders being unhappy with the investment decision, or the process whereby it was taken. The politicians in the National Assembly would also like this, since then they would get fewer questions and complaints about projects and programmes implemented in their district.

In order to harness these benefits, the local officials involved in project identification and design need training in CBCBA. This is a possible concrete follow up activity to the present capacity building workshop that should be explored. If a new training were developed for these officials, it should ideally be done using a streamlined version of the CBCBA methodology, since these officials will have limited time to conduct such assessments. If such a training could be conducted this would be very useful but targeting the most relevant staff will be key.

A related question is who would conduct CBCBA studies in Seychelles. In theory, the DAs could conduct CBCBA for projects in their district, but in practice this may not be realistic. The DAs could however support this process. The analysis would instead be conducted by the project officers within each ministry, namely those from its project unit. One mechanism that could be developed would be for DAs to be able to ask project officers whether they have conducted CBCBA, in cases where a project is sited in their district. When a CBCBA was requested, the DAs could then offer to assist with this process. They could also require that this process includes all the stakeholders most affected by the project, and help with identification of these key stakeholders. One way to identify these stakeholders is to ask which groups are most affected by the project, then to focus on them.

Another question that was raised concerned the feasibility of conducting CBA to inform each potential investment in a climate action. Obviously this would be unrealistic, since the costs and difficulty of going through this process before every decision would be excessively burdensome and costly. Yet this is also not needed. Many problems faced recur in various places in roughly similar ways. For instance, one participant reported how landslides were becoming a common problem in Seychelles due to poor selection of building sites coupled with heavy rainfall events. In such a case, it would be sufficient to do just one CBCBA case study, which could then inform the responses to this same problem in different situations. This solution of applying the lessons from one locality to others only works if the two problems are broadly comparable. While imperfect, it offers a practical and realistic way to apply CBCBA to problem solving in a country like Seychelles with limited government resources to address such challenges.

One big challenge facing Seychelles is that decisions about climate actions often involve winners and losers, which can pose a problem. Simply put, those set to lose out from a new technology or approach may resist this innovation, which can lead to the relevant investments not being made. For instance, a solar PV project might not end up going ahead despite the technology being strong because existing entities involved in energy production may see this as a threat. For instance, SeyPec has five oil tankers, which represent a huge sunk cost, so it would be understandable for them to want to recoup this investment by ensuring these assets remain useful over time.

Arguably the solution to such questions about 'winners and losers' is to ensure that key decision makers clearly see the big picture, namely what could be gained from these investments and how they could represent a competitive advantage over time for the country. Such big picture thinking could include exploring how those individuals who lose out from such changes could be offered opportunities to become part of the new directions taken.

The danger is that Seychelles is making such changes slowly relative to some other countries, e.g., Costa Rica, namely by relying on external donations from partners to make proactive, 'climate smart' investments rather than being proactive in how Seychelles spends its own resources. One example is that many businesses in Seychelles would like to switch to 100% renewable energy, but at present they are prevented from doing so.

## **H. Deciding which type of CBA to conduct**

In cases where decision makers choose to use CBA to inform investment decisions, they must determine which type of CBA to apply. The three case studies of climate actions conducted in Seychelles were analysed using the CBCBA methodology. Yet there are other options as well which may be more appropriate in different situations.

One basic question is whether the analysis can be done on a project or investment that already exists, which would mean conducting 'ex-post' (i.e., after the fact) CBA. This approach has the strength of allowing the analysis to assess actual observed outcomes. Another basic question concerns the time and resources available to conduct the analysis. If the analysis can examine an investment that already exists and was made at least a two years ago, then CBCBA may be a suitable approach. Yet even here, one must ask whether the added 'CB' component brought by this methodology, namely the 'community-based' perspective, is significant for the investment in question.

The three case studies examined by the GCCA+ study offer examples of using CBCBA for investments that were already made and for which the 'community-based' aspects were significant. During the capacity building workshop, a fourth example was rapidly assessed based on invented data, in order to show what a rapid CBA without the 'community-based' components might look like. The case study examined was the country's electric vehicle rebate scheme, in order to assess the benefit-cost dynamics of extending this scheme for a further five years. In this example, it was deemed that the 'community-based' aspects were not fundamental, such that conducting a rapid analysis without these aspects would nonetheless be useful, despite being much simpler than conducting CBCBA.

**ANNEX C – PHOTO FROM THE FINAL SESSION OF THE WORKSHOP**



## **ANNEX D – POWERPOINT PRESENTATIONS DELIVERED AT WORKSHOP**