



# LEVERAGING NEW TECHNOLOGIES' IMPACT THROUGH TECHNOLOGY ASSESSMENT SEYCHELLES CONTEXT

Presented by:

Xavier Estico


Director General

Division of Science, Technology and Innovation

Ministry of Investment, Entrepreneurship and Industry

16th November 2022

# OUTLINE

- ▶ Seychelles at a glance
  - ▶ Seychelles Inherent Factors
  - ▶ How can TA help Seychelles to enhance opportunities and minimize the risks associated with new and frontier technologies for sustainable development?
  - ▶ What is Seychelles doing with regards to TA?
  - ▶ TA Stakeholders' workshop outcomes
  - ▶ Where are we in the process?
  - ▶ Challenges faced so far.
  - ▶ Conclusions
- 

# SEYCHELLES AT-A-GLANCE

- ▶ The Republic of Seychelles lies northeast of Madagascar, an archipelago of 115 islands with almost 98,000 citizens, three-quarters of whom live on the main island of Mahé.
- ▶ Seychelles has the highest gross domestic product (GDP) per capita in Africa, at \$12.3 billion (2020).
- ▶ It is highly dependent on tourism and fisheries, and climate change poses long-term sustainability risks.
- ▶ The economic and social shock from COVID-19 on the Seychelles is severe.
- ▶ Economic growth declined significantly in 2020 to -12.9% from 1.9% in 2019 due to the significant disruptions in economic activities, including lower tourism, which plummeted by more than 60%.
- ▶ The fiscal deficit widened to 19.5% of gross domestic product (GDP) in 2020 because of lower revenues and higher COVID-19-related spending.
- ▶ While the immediate priority is containing COVID-19 and recovery from its economic and social impact on the country, a focus on longer term structural issues is also warranted for a strong and resilient recovery.



# INHERENT RISK FACTORS

- ▶ Economic and Social Vulnerability
  - ▶ Biodiversity and Environmental Vulnerability
  - ▶ Energy Security Challenges
  - ▶ Food Security Challenges
  - ▶ Insularity factors
  - ▶ Demographic Challenges
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.


## HOW CAN TA HELP SEYCHELLES TO ENHANCE OPPORTUNITIES AND MINIMIZE THE RISKS ASSOCIATED WITH NEW AND FRONTIER TECHNOLOGIES FOR SUSTAINABLE DEVELOPMENT?

- ▶ The sustainability of the high-income status in the backdrop of global volatility, uncertainty, complexity and ambiguity remains the greatest challenge for Seychelles as a SIDS;
- ▶ Coupled with the above are the inherent risk factors, mentioned in the previous slide;
- ▶ Resorting to the new and frontiers technologies is a **MUST** for sustainable development;
- ▶ However, the transfer of technologies in the priority economic sectors (Agriculture and Energy) without Technology Assessment tool kit remains a risky undertaking; and
- ▶ The limitation of Case Studies on TA in SIDS further enhance the need for collaboration with experts in this discipline.


# WHAT IS SEYCHELLES DOING WITH REGARDS TO TA?

- ▶ TA has never been undertaken in Seychelles.
- ▶ However, a Technology Needs Assessment (TNA) was undertaken the first time in the Energy Sector in 2017 with the assistance of UNEP;
- ▶ The outcomes of the TNA exercise helped Seychelles in developing policy and strategy for Seychelles Energy Transition (*The Seychelles Energy Policy 2010 - 2030* );
- ▶ Recently UNCTAD is working with Seychelles on a two-year TA exercise in: Agriculture and Energy; and
- ▶ The first stakeholders' workshop was successfully completed with the objectives:
  - ▶ To understand better the concept of TA and the methodology to be used in the project;
  - ▶ To identify gaps in TA, especially in the Agriculture and Energy sectors;
  - ▶ To determine the priority areas for TA to be investigated under the project; and
  - ▶ To develop a work plan for the project

# TA STAKEHOLDERS' WORKSHOP OUTCOMES

- ▶ A summary of the workshop discussions.
  - ▶ List of key stakeholders to participate in the TA project.
  - ▶ List of TA priority areas/technologies in the agriculture and energy sectors.
  - ▶ Selection of the priority sector to focus on in the TA project.
  - ▶ Timelines for next activities of the TA project.
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, located in the lower right quadrant of the slide.

# WHERE ARE WE IN THE PROCESS?

- ▶ First stakeholders workshop held in March 2022;
  - ▶ Worked with UNCTAD to develop the roadmap;
  - ▶ Selection and appointment of the TA Steering Committee (SC);
  - ▶ First TA Steering Committee to endorse the Terms of Reference;
  - ▶ Selection of the Experts Group (EG); and
  - ▶ Endorsement of the EG by the SC.
- 



# CHALLENGES FACED SO FAR

- ▶ A delay in keeping at pace with the milestones as set in the roadmap due to:
  - ▶ Organizational power structure;
  - ▶ Due to the above, the decision-making process to support the TA is slow as a result of bureaucratic hurdles and delays;
  - ▶ The selection of the SC members is challenged to demographic factors; a narrow pool of adequate human resources;
  - ▶ Equally so for the EG;
  - ▶ Institutional-arrangement-fit to support the project; and
  - ▶ The lack of awareness at the higher political leadership to support the project.

# CONCLUSIONS

- ▶ In no doubt that TA can greatly benefit Seychelles to reduce the risks associated with transfer of Frontier Technologies in its Transformative Economic Agenda to build a sustainable and resilient economy beyond the Covid-19 pandemic;
  - ▶ However, there is a need for institutional arrangement realignment to enhance the effectiveness of the lead organization (DSTI) on the project; and
  - ▶ Provided the above is taken care of, the project can be delivered as per the roadmap.
- 

**THANK YOU**

**?**

