

MID-TERM EVALUATION REPORT



**“Sustainable Island Solutions in Science, Technology,
Energy and Mathematics” (SISSTEM) Project in ARUBA**

UNDP

September 2023

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Acknowledgments

The consultant would like to thank everyone involved in this evaluation for sharing their time, experience, reflections, and skills and for being the source of information for this Mid Term Evaluation. I am grateful to the UNDP team and the rest of the stakeholders for their openness, availability, and logistical support for making the agenda viable.

Disclaimer

The opinions expressed in this Mid Term Evaluation are the exclusive responsibility of the consultant and do not necessarily reflect those of UNDP.

In case you need more information or clarification, please do not hesitate to contact consultant Jorge Menéndez: jmenendez@oneginconsulting.com

LIST OF ABBREVIATIONS

ANC	Antenatal Consultations
APO	Aruba Project Office
BoQ	Bill of Quantities
CAD	Centrale Accountants Dienst
DOW	Dienst Openbare Werken, Aruba Public Works Department
DTT	Data Tracing and Triangulation system
EC	European Commission
EU	European Union
EDF	European Development Fund
GDP	Gross Domestic Product
GoA	Government of Aruba
ITB	Invitation to Bid
MB	Monuments Bureau
MCO	Multi-country office
NCE	No Cost Extension
PB	Project Board
QS	Quantity Surveyor
ROM	Results-Oriented Monitoring
STEM	Science, Technology, Engineering and Mathematics
SISSTEM	Sustainable Island Solutions through Science, Technology, Engineering and Mathematics
ToR	Terms of reference
TT	Trinidad and Tobago
UA	University of Aruba
UNDP	United Nations Development Program

EXECUTIVE SUMMARY

The Government of Aruba (GoA) understood the need to enhance its human resource capacity in higher education in Science, Technology, Engineering, and Mathematics (STEM) as a key element of its economic and sustainable development policy. They partnered with the University of Aruba (UA) and the private sector to create Sustainable Island Solutions through Science, Technology, Engineering, and Mathematics (SISSTEM) faculty. Aruba received from the 11th European Development Fund (EDF) an allocation of EUR 13,05 million to develop the SISSTEM Programme. The key objective of the SISSTEM programme is that the UA will be able to deliver tertiary-level educational programmes and a research offer with a particular focus on STEM subjects. The United Nations Development Programme (UNDP) and KU Leuven University were selected as implemented partners for the SISSTEM Programme; UNDP is in charge of building facilities and labs, and KUY Leuven University is in charge of the program's academic component. This initiative will contribute to Aruba's growth and sustainability.

The UNDP SISSTEM project (hard component of the programme) design started by focusing on setting up the programme with the construction of required facilities and laboratories to comply with the European Qualifications Framework for this type of university. The project initially included the following elements:

1. Renovation and refurbishment of the Maria Convent in Aruba.
2. Establishment of prefabricated laboratories next to the Convent.
3. Equipment and furnishing of new labs, classrooms, offices and ICT platform for e-learning.

PURPOSE OF THE EVALUATION

The objective of the assignment is to conduct a mid-term evaluation of the project outputs in terms of the following evaluation criteria: Relevance, Coherence, Impact, Effectiveness, Efficiency, Sustainability, and Gender. The evaluation should enable UNDP in the Aruba Country Office, Trinidad and Tobago Multi-Country Office (MCO), the European Union (EU), and other stakeholders to draw lessons learned in order to improve the implementation of the project.

EVALUATION METHODOLOGY

The consultant employed the Data Tracking and Triangulation System (DTT) to collect and validate data for evidence-based recommendations. This approach focused on cause-effect relationships and measured changes in stakeholder perspectives. The evaluation aligned questions with UNDP guidelines and correlated them with evaluation criteria. Activities conducted included desk review of programme documentation, pre-analysis of gaps between programme and practice, development of an inception report, preparation and implementation of remote key informant interviews, data analysis and triangulation using an outcome mapping, and a webinar to present the main findings. The consultant adhered to the UNDP Evaluation Standards and Ethical Guidelines for Evaluation.

PROJECT DESCRIPTION AND ANALYSIS

The SISSTEM project commenced officially on July 5th, 2019, and the initial funding was received on September 3rd of that same year.

The Centrale Accountants Dienst (CAD) identified the University of Aruba (UA) as lacking adequate financial management and procurement capacity for establishing the SISSTEM Faculty and selected the UNDP as the implementing partner due to its recognized expertise, capacity, and strategic arrangements. The crucial UNDP partnerships for this project are with the EU, the UA, and the GoA. The project's governance and management structure is two-fold: the Project Board oversees all decisions related to the hard component of the programme and the Aruba Project Office (APO) supports the design and implementation of the SISTEM project in Aruba.

The SISSTEM project's potential risks were identified through a pre-feasibility assessment. However, the assessment lacked a more cohesive approach, hindering the identification of some challenges that emerged later. In addition, unforeseen risks such as the COVID-19 pandemic and the war in Ukraine had an adverse impact on the project's cost due to global supply chain challenges and resultant price escalation.

IMPLEMENTATION BY OUTPUTS

OUTPUT 1: EFFECTIVE & EFFICIENT MANAGEMENT OF PROJECT.

The project's first phase could have benefitted from more effective coordination and communication, notwithstanding that this phase was also in the middle of the pandemic. After the first tender, the new team brought positive changes, enhancing implementation efficiency and effectiveness through a more collaborative and information-sharing approach and significant improvement in project management.

OUTPUT 2: MARIA CONVENT BUILDING COMPLEX RENOVATED & REFURBISHED AND TWO PREFABRICATED BUILDINGS ESTABLISHED TO HOUSE THE NEW SISSTEM FACILITY AT THE UNIVERSITY OF ARUBA.

In April 2020, ownership of the Maria Convent was transferred to UA through a long-term lease, and BK Consult was engaged as the design firm in June 2020. By November 5, 2020, detailed designs, tender documents, and specifications were finalized, obtaining permits from the Monuments Bureau (MB) and the Department of Public Works (DOW) in December 2020. This design includes relevant changes in the laboratories that affected the effectiveness of the project, as explained below.

The first tender process started in November 2020. The bid opening took place in February 2021, followed by bid analysis, multiple clarifications, and negotiation attempts. However, the bidder withdrew from the negotiations. After the failure of the first tender, the new project team assessed potential solutions for scope optimization and budget alignment and presented to the Project Board the possible solutions. The Project Board opted for scope reduction through a Value Engineering exercise and the division of the project design into three distinct lots to stimulate competition. This decision was fundamental as the cost of the three Lots exceeded the available budget for the construction, and the PB decided to prioritize lot 1, and UA and GoA committed to funding lots 2 and 3.

The re-tender process commenced in January 2022, with the bid opening in March 2022. After negotiations, the contractor submitted a revised offer by September 2022. Due to the Aruba tax regime change, the contractor required an increase of this amount in the contract. UNDP started negotiations with the GoA for the tax exemption; however, the GoA stated that the project would not be tax-exempt. UNDP continued negotiating with the contractor and reached an agreement in December 2022, and the construction commenced in January 2023. By July 2023, project implementation reported 41% completion

in physical work and 29.31% in financial expenditure. The fact that the contract has a fixed price ensures that the renovation will be executed.

OUTPUT 3: VISIBILITY AND AWARENESS RAISING.

The GoA and UNDP collaborated on a communication plan for the SISSTEM project to ensure effectiveness and prevent duplication. Some of the more relevant activities have been a 30-minute video programme that was aired on national television and shared on social media channels. The SISSTEM programme was promoted on social media as a participant project in the Aruba Investment Summit 2021. Through these efforts, the programme gained visibility, fostering awareness and engagement within the community. However, most of the UNDP's accountability activities have focused on the academic part of the programme and not on the Renovation of the Maria Convent.

KEY FINDINGS

Relevance.

Aruba's economy heavily relies on tourism, constituting 21.6% of GDP. The project seeks to provide skilled professionals in crucial fields like biotechnology and climate adaptation. According to the result-oriented monitoring review, the STEM research was positive in putting Aruba and the region on the map in these professional international discussions. The consultant considers the project highly relevant and in line with country and regional (Caribbean area) needs.

Coherence.

UNDP engages in a broad spectrum of projects, varying in complexity and value, ranging from health facilities to infrastructure development. UNDP's commitment to "building back better" provides a guide for incorporating eco-sustainable building practices and promoting sustainable development. UNDP was selected for its expertise and experience in similar initiatives. The programme contributes to Aruba's SDG targets by aiming to enhance vocational skills (Target 4.4) and elevate economic productivity through innovation and diversification (Target 8.2).

Coordination and Cooperation

The roles and responsibilities of each partner and governance and management bodies were well defined in the project document that the parties signed. However, one of the main problems was communication with the partners during the first part of the project, which highlights the importance of the project team having experience in managing multi-partner projects and strong communication skills to convey messages to partners.

Effectiveness and efficiency.

The effectiveness of the project has suffered certain challenges in the implementation process due to several factors closely linked to efficiency. Due to the need for additional funding, the building of the laboratories has been dropped. The main factors causing this situation were:

- Increase in the cost of materials due to the COVID-19 Pandemic and war in Ukraine.
- Delays in the tendering process.
- The small number of bidders (lack of competition).
- Lack of coordination between the architect and the MB during the initial design phase.

- The overambitious project proposed by the architect for the labs, initially planned as prefabricated modules, also impacted the budget.

While some risks were unforeseen, others could have been addressed in a more thorough pre-feasibility assessment. The first tender process showed a gap in the UNDP's knowledge of the Aruba context and a lack of analysis of the small construction market on the island. The evaluator does not consider UNDP procedures to be responsible for the delay, as the re-tender was more efficient. The Resident Representative's increased involvement in the re-tender and experience in construction projects, the support from the procurement unit in Panama and the legal unit in New York, and the expertise and openness of the new project team to inform partners better and to facilitate a more participatory approach in the making of strategic decisions have been key to successfully sign the contract with the contractor for the renovation of the Maria Convent. Even though the project did not achieve all the expected outcomes, the representatives of the GoA and UA feel more satisfied now that the work is ongoing.

Impact.

At this stage of the project, it is difficult to define the impact that the project will have in Aruba. Time will demonstrate if the new STEM educated generations will significantly provide new capacities, sustainable development initiatives, competitiveness, and innovation to the island. The consultant considers that the UNDP project team initially failed to understand that the dimension of the project was far beyond the construction, which limited the opportunity to strengthen the interaction with the project's beneficiaries.

Sustainability.

The project allowed UNDP to demonstrate its expertise in this kind of project in Aruba and become a long-term partner. The project has shown that if UNDP wants to continue working in Aruba, it is necessary to have a team that knows Aruba's specific dynamics and characteristics. Once the project is finalized, the sustainability of the project will depend on UA to keep the campus running. It is important to note that both the University and GoA Aruba have guaranteed the maintenance of the building.

Gender and Inclusion.

As the 2021 SDG indicators report stated, gender disparities in education are not a main issue in Aruba. Nevertheless, gender was considered during the project implementation. UNDP and UA agreed on a gender equality and social inclusion plan. The plan included training and dissemination for project workers on safety, health, welfare, and Protection from Sexual Exploitation, Abuse, and Harassment (PSEAH). The design of the building considered the accessibility for people with disabilities. Due to the budget restrictions UNDP had with the second tender, one of the most important elements for accessibility, the elevator, had to be taken out of the scope, however, the UA will install it.

LESSON LEARNED

- 1- Contracting staff with experience in managing multi-partner projects and strong communication skills to convey messages to partners is key to the project's success.
- 2- For construction projects, the UNDP team should include a technically qualified engineer with field experience in construction management and construction cost analysis from the beginning of the project to ensure that UNDP has full control of the project.

- 3- Adapting and contextualizing procurement procedures to the context and dynamic of the country is necessary in small countries such as Aruba.
- 4- Support from the UNDP network (country and regional offices), with more experience and expertise in construction projects, is necessary to ensure proper project implementation and show to the partners the UNDP added value.
- 5- The importance of including contingency funds in construction projects and involving partners in the decision process of its use.
- 6- Fluent communication with partners and their involvement is key to the project's success, such as keeping partners informed about the progress of the process, sharing information, actively listening to them, trying to understand their needs and requirements, and managing expectations.
- 7- The importance for the UNDP team to understand and be familiar with the dynamics and characteristics of a small country to ensure a proper project design and implementation.

CONCLUSIONS

The evidence shows that the project is highly relevant and in line with UNDP's mandate and experience. The evaluation has shown the importance of selecting an appropriate management team to implement such projects, as most of the problems suffered during the project's first phase were solved with the arrival of the new project team after the first tender failed. The new project team implemented some changes that the consultant considers fundamental to achieving the project goal; also, the increased involvement and the construction experience of the Resident Representative, the support of the procurement unit in Panama, and the legal unit in New York were key to success in the re-tender.

Although the COVID-19 Pandemic and the war in Ukraine had a negative effect and these risks could not be foreseen, the initial risk assessment did not sufficiently analyze the potential risks and the local context particularities, which finally had a negative impact on the efficient and effective implementation of the project.

At the moment of the evaluation, UNDP has proven its added value and that it has the capacities and capabilities to implement the project, and the evaluator has no doubt that the project will be implemented within the timeframe foreseen in the last extension, December 2024.

RECOMMENDATIONS

- 1- Improving the initial risk assessment by including, for example, in the assessment team persons with clear experience in the sector and in Aruba.
- 2- Ensuring that the project team understands the programme in its entire dimension, not only focusing on the construction aspect to better link the different components and better contribute to the overall goal of the programme. The project team should regularly meet with the other implementing partner of the programme, the KU Leuven University.
- 3- Increase the level of involvement of the GoA and UA in the decision-making process, creating a platform for more regular interpersonal communication beyond the Project Board.
- 4- UNDP should support GoA and UA to find new potential donors for lots 2 and 3.
- 5- Develop a communication plan to inform the stakeholders and the population of Aruba about the project.

EVALUATION REPORT

INTRODUCTION

Science, Technology, Engineering, and Mathematics (STEM) education originated in the early 1990s with the aim to improve science, mathematics, and technology instruction, intending to not only increase literacy in those content areas but also expand existing workforces of scientists and engineers. Some studies emphasized the links between prosperity, knowledge-intensive jobs dependent on science and technology, and continued innovation to address societal problems. As a result, STEM education became the core focus of the national curriculum for many countries to achieve the goal of building and maintaining prosperity via developing their human capital into a productive workforce.

Aruba has embarked on implementing sustainable development as a key pillar of its overall economic development strategy by reducing its dependence on the tourism industry and its use of fossil fuels. In doing so, the Government of Aruba (GoA) has identified the need to enhance its human resource capacity in higher education in STEM and has endorsed the establishment of a group of programs for Sustainable Island Solutions through Science, Technology, Engineering, and Mathematics (SISSTEM) at the University of Aruba (UA).

DESCRIPTION OF THE PROJECT

The Government of Aruba (GoA) understood the need to enhance its human resource capacity in higher education in Science, Technology, Engineering, and Mathematics (STEM) as a key element of their economic and sustainable development policy. The public and private demand for professionals and experts in the areas of innovative biotechnologies, renewable resources, climate change adaptation and mitigation, has shown the existing gap in the capacity of the local workforce to cover those positions and the lack of accessibility to STEM curricula within the national education system.

Within this context, GoA has worked with the UA and private sector stakeholders to create the SISSTEM faculty group. This faculty is expected to enhance STEM capacities at the local level, increase scientific research adapted to the local context, and provide access to high-level education through international and local collaboration. To allow this approach, Aruba has received from the 11th European Development Fund (EDF) an allocation of EUR 13,05 million.

It is expected that the new faculty will facilitate the capacity for Aruba to develop a sustainable and green economy, such as a renewable resources industry, which would become another economic base for Aruba in addition to tourism. The national strategy is aligned with the rationale for the 11th EDF support, which is to help build educational and research capacity that would enable Aruba to become a regional hub for sustainable development.

The key objective of the SISSTEM programme is that the UA will be able to deliver tertiary-level educational programmes as well as a research offer with a particular focus on STEM subjects.

The United Nations Development Programme (UNDP) was selected as one of the two implementing partners for the new faculty expansion. This is expected to secure and make available physical facilities to house the new Bachelor STEM programme, a Master's programme in Sustainability, and a new Research

Institute. The other implementing partner selected was the KUY Leuven University in Belgium, which is implementing the academic component of the programme.

The UNDP SISSTEM project (hard component of the programme) design starts by focusing on setting up the programme with the construction of required facilities and laboratories to comply with the European Qualifications Framework for this type of university.

The project initially included the following elements:

1. **Renovation and refurbishment of the Maria Convent in Aruba**, including architectural protection and the construction of classrooms for between 25-50 students and office space for 25 university staff.
2. **Establishment of prefabricated laboratories next to the Convent**¹. More specifically, 1 chemistry lab; 1 physics lab; 1 bioscience lab; and 1 technical lab for 10 students.
3. **Equipment and furnishing of new labs, classrooms, offices and ICT platform for e-learning**. This shall include specialized equipment for the bachelor programme in bioscience, informatics and data science, and technology and engineering.

One of the key basic principles of the construction and the project implementation is to respect the sustainability approach in the construction, maintenance, and exploitation of the new facilities. Particular attention shall be made to gender equality in the development of the programme and particularly to promote the participation of women in STEM subjects.

PURPOSE OF THE EVALUATION

The objective of the assignment is to conduct a mid-term evaluation of the project outputs in terms of the following evaluation criteria:

Relevance²: The extent to which the intervention objectives and design respond to beneficiaries' global and country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.

Coherence: The compatibility of the intervention with other interventions in a country, sector or institution.

Impact: The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.

Effectiveness: The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.

Efficiency: The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.

Sustainability: The extent to which the net benefits of the intervention continue or are likely to continue.

¹ The laboratories were dropped from the scope, and the documents were amended accordingly, as explained below..

² OCDE definition, see <https://www.oecd.org/dac/applying-evaluation-criteria-thoughtfully-543e84ed-en.htm>

Gender: To what extent the intervention has resulted in progress (or the lack thereof) towards intended and/or unintended results regarding gender equality

The evaluation should enable UNDP in the Aruba Country Office, Trinidad and Tobago Multi-Country Office (MCO), the European Union (EU), and other stakeholders to draw lessons learned in order to improve the implementation of the project.

EVALUATION METHODOLOGY

The consultant utilized an inclusive and empirically proven methodology to collect, analyze and validate data internally called Data Tracking and Triangulation system (DTT) to ensure evidence-based recommendations. Key evaluation questions identify cause-effect linkages that help the interviewee to provide a deeper analytical response to qualitative questions and to measure the real change in the stakeholders' perspectives on the problem, as well as in the way solutions have been proposed and decisions made.

The consultant was very attentive to participants' feedback, revealing unexpected and unintended outputs resulting from program activity. It also focuses on identifying evidence that defines the degree to which planned operational activities, outputs, and outcomes have been achieved.

The questions were also correlated to each evaluation criterion to the extent possible, as defined in the ToR and UNDP Evaluation Guidelines³. Lessons learned were collected, and recommendations were proposed according to the outputs of identifying inclusive answers to existing problems and identification of good practices.

Specifically, the consultant undertook the following activities:

1. Desk review of programme documentation. Key documentation was identified and collected with the support of the UNDP evaluation management team and systemized in a comparative analytical matrix.
2. Pre-analysis of gaps between programme and practice.
3. Development of the Inception report.
4. Prepare and implement remote key informant interviews.
5. Data analysis and triangulation using an outcome mapping and Data Triangulation Tracking Table.
6. A webinar at the end of the process to present the main findings and recommendations of the evaluation.

All data collected was anonymously processed and entered into one central database for easy reference and analysis. The consultant informed every person about the confidential treatment of data. Each individual has a code number only known by the consultant team. The consultant does this in real-time (i.e. daily), so that analysis, triangulation, and identification of information gaps happen continuously

³ See evaluation question in [annex 4](#).

throughout the process and not just after all data has been collected. After collective data is registered, individual notes are destroyed.

The consultant took all reasonable steps to ensure that the evaluation was designed and conducted to respect and protect the rights and welfare of people involved in the project and to ensure that the evaluation is technically accurate, reliable, and legitimate, conducted transparently and impartially, and contributes to organizational learning and accountability.

The consultant used participatory and Do No Harm techniques for assessing attitudes, capacity assessment of partners and local authorities, and collecting lessons learned and perspectives towards change.

The methods to collect, use and report data respected the UNDP's quality and high-profile ethical standards. The consultant adhered to the UNDP evaluation standards and Ethical Guidelines for Evaluation.

PROJECT DESCRIPTION AND ANALYSIS

The SISSTEM project commenced officially on July 5th, 2019. The initial funding amount (first transfer) of EURO 2,689,422.60 was received on September 3rd of that same year.

INSTITUTIONAL ROLES AND RESPONSIBILITIES

According to the Centrale Accountants Dienst (CAD), the UA appears to have insufficient financial management and procurement capacity to manage the establishment of the SISSTEM Faculty. Alternatively, UNDP is considered by the donor as a pillar-assessed international organization considered to have the necessary expertise, capacity, and strategic arrangements to manage resources and provide project assurance to the process. Therefore, UNDP was selected as the implementing partner for this project. The primary UNDP inputs for the project are financial management and the human resource capacities to initiate, manage, and provide oversight to the actions to address the challenge of insufficient space for the new STEM programmes according to EU standards. The management arrangements of the project are governed by UNDP rules and regulations.

The crucial UNDP partnerships for this project are with the donor (EU), the UA, and the GoA. The project defined a governance and management structure in two dimensions, a Project Board (PB) and a dedicated project management office, Aruba Project Office (APO) with staff to be hired fully dedicated to the project and organized, as illustrated in the figure below. The APO was envisaged as a unit which will support the design and implementation of the SISSTEM project in Aruba, contributing to bringing coherence and streamlining any infrastructure actions financed by the EDF. The Project Board oversees all decisions related to the hard component of the programme; the infrastructure works. The Project Board is the group responsible for making management decisions for a project by consensus and provides guidance when required by the Project Manager, including recommendations for approval of project plans and revisions. Nevertheless, it is important to underline that in order to ensure UNDP's ultimate accountability, the Project Board's decisions shall be made in accordance with standards that ensure management for development results, best value for money, fairness, integrity, transparency, and effective international competition.

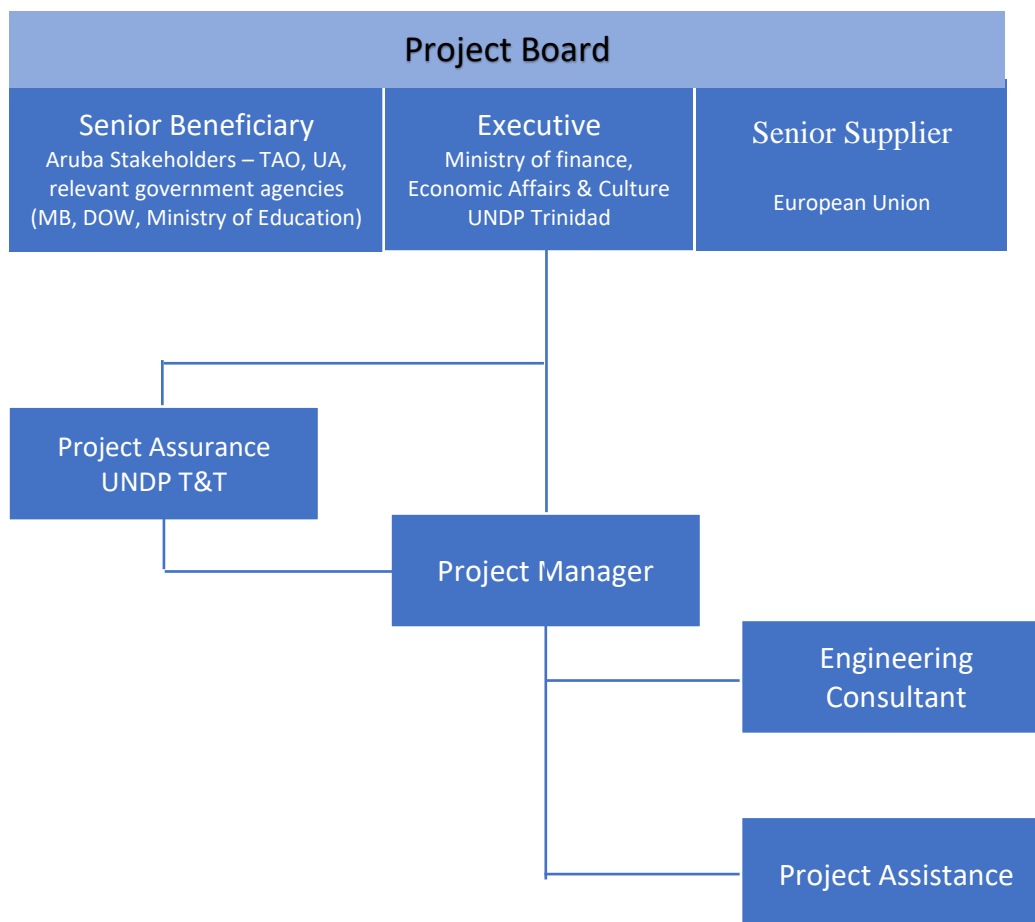


FIGURE 1: PROJECT ORGANIGRAM

POTENTIAL INITIAL RISKS IDENTIFIED

A pre-feasibility assessment of the resources necessary has been carried out, and it concluded that the conditions for the successful completion of the project were sufficient. As part of this assessment the following risks were underlined:

- Maria Convent is a building of historical importance, and its refurbishment had to be implemented in close coordination and collaboration with the Monuments Bureau (MB) of Aruba, in order to obtain the necessary permits as a historical building. In addition, the Department of Public Works (DOW) had to provide the necessary permits related to the new construction of labs. This implied that the works should meet some specific national standards and regulations that the tender had to respect. This means that the project implementation would require specific permits.
- Political willingness and support are key elements for adequate implementation.
- Cost control measures can account for all major unforeseen market fluctuations, and potential currency fluctuations between Euro and Aruban guilder are potential elements of risk for the correct implementation.
- Bureaucratic procedures were also considered as a possible risk.

However, as explained below, this pre-feasibility assessment could have been carried out in a more participatory manner, which would have helped to identify some of the main challenges faced by the project.

COVID-19 PANDEMIC AND UKRAINE'S WAR WERE UNFORESEEN RISKS

The rapidly emerging worldwide coronavirus pandemic, by March 2020, resulted in a significant change in the local context and a decline in the economic outlook for Aruba. Tourist arrivals dropped significantly in two weeks, and nearly all tourists, mostly from the USA and Europe, left when the Government of Aruba announced it would close Aruba's borders by March 26, 2020. The lockdown implied largely the closure of public life, schools, and the private sector, including construction and civil works, with only visits to supermarkets, doctors, pharmacies, hospitals, and filling stations permissible in Aruba. By June 2020, after Aruba was declared coronavirus-free, this was followed by a gradual phased-reopening of the local economy, including the construction sector and airport, but by early August 2020, a second wave of coronavirus saw the number of infections rapidly rising. New measures were introduced to stabilize and lower the number of positive cases. Public life and the private sector continued to operate thus, including the construction sector and logistics/supply sector.

Nevertheless, the SISSTEM project during the strict shelter-in-place was not, according to the UNDP office⁴, affected significantly since the Aruba Project Office continued working from home and, despite this limited mobility, sustained its coordination efforts with local partners and consultant design and supervision firm to maintain the project's momentum and ensure integration of its activities. However, the COVID-19 crisis and the war in Ukraine had a relevant impact on the project's cost due to global supply chain challenges, as we will see later in the document.

IMPLEMENTATION BY OUTPUTS

OUTPUT 1: EFFECTIVE & EFFICIENT MANAGEMENT OF PROJECT

The project document established the need to create a Project office in Aruba to host the project management team. The project manager was hired at the beginning of the project but left the position in August 2021, and a new project manager took the position the same month. The project assistant has been on board since January 2021. In addition, a remote consultant engineer was hired for the project's duration. The Aruba Project Office (APO) was accommodated in a building rented by the UA, and UNDP furnished, and duly equipped the APO, as per the project agreements (Contribution Agreement and Project Document).

In August 2021, the APO was relocated to the UA campus when the UA canceled the rent of the mentioned building.



Photo: Minister Geoffrey Wever, EU delegation and Project Team visit the MC renovation

⁴ Annual report 2019-2020

According to key informants, there was a shift in how the project was managed between the first project team and the second project team. The first period has been cataloged and defined as having limited coordination and communication with partners; it is important to note that during this phase, most of the coordination was online, as face-to-face meetings were not possible due to the COVID-19 Pandemic. A formal complaint was sent to the EU denouncing the lack of communication and the bureaucracy which delayed the process. However, partners recognize that a significant change and improvement in effectiveness and efficiency in implementing and monitoring activities have been produced since the new project manager took responsibility, thanks to a more collaborative and informative approach.

OUTPUT 2: MARIA CONVENT BUILDING COMPLEX RENOVATED & REFURBISHED AND TWO PREFABRICATED BUILDINGS ESTABLISHED TO HOUSE THE NEW SISSTEM FACILITY AT THE UNIVERSITY OF ARUBA

In April 2020, as planned, the ownership of the Maria Convent was transferred to UA in a long-term lease agreement modality, and in June 2020, the design and supervision firm (BK Consult) was contracted.

The detailed design & tender document & specifications were completed by 5 Nov 2020. As planned, the Monuments Bureau (MB) and the Department of Public Works (DOW) issued the required permits on 9 and 26 December 2020, respectively.

The expectation at that time was to commence the construction works by March 2021, according to the annual report and PB minutes. However, as explained below, the tender processes significantly delayed the implementation.

First tender process.

The International Invitation to Bid (ITB) was issued through the UNDP e-tender system on 27 November 2020. An online pre-bid conference was organized by UNDP on 10 December 2020 for partners and potential bidders to present the nature and technical aspects of the project and the source of the funds. Between 9 December 2020 and 10 February 2021, multiple site visits were organized to provide bidders with a better technical understanding of the project. The e-tender was extended three times under the bidders' request, with the last extension up to 26 February 2021.

Finally, the bid opening occurred on 27 February 2021, which was followed by analysis, technical and financial evaluation of the bids, and eight rounds of clarifications requested from the bidders before obtaining approval from UNDP headquarters.

During the 7th PB meeting held on 7 May 2021, a no-cost extension (NCE) for the UNDP SISSTEM project was foreseen to accommodate delays, the agreed 12 months defects liability (DFL) period (and potential re-tendering). UNDP was given the authority, by the Advisory Committee on procurement (ACP) at UNDP headquarters, to enter pre-award negotiations with the lowest, most responsive bidder, which took place from 23 June 2021 to 9 July 2021. These negotiations failed to culminate with a revised bid offer.

As a reaction, UNDP informed the partners and presented several options on the way forward. The PB members agreed to extend the pre-award negotiations, but the Project Manager announced that he was leaving the project. Consequently, the extended negotiations did not take place, and the bidder withdrew their bid on 26 July 2021. It was understood by all the stakeholders that a re-tender would be necessary.

A new Project Manager was onboarded at the end of August 2021. This second Project Manager conducted several technical meetings with the Architect Designer to identify opportunities, such as a scope reduction or a new design, along with potential alternatives that could enable a successful outcome while remaining within the objectives and budget of the project. The following possibilities were presented to the PB members on 10 September 2021, for decision:

- Scope reduction through a Value Engineering exercise or Re-Design exercise.
- Re-tender the new design as one (1) lot or three (3) lots.

After several meetings, the PB agreed to a scope reduction through a value engineering exercise and splitting the design into three (3) separate lots to enhance competition in the bid process. This process required modifications in the design and new permits for construction.

By Nov 2021, the design architect shared the new design, split into three (3) lots:

- Lot 1. Renovation of the Maria Convent (MC) Historic Building.
- Lot 2. Construction of the Tera Nobo Laboratories Building.
- Lot 3. Additional works.



Photo:
EU Ambassador with the general
contractor visit the MC renovation

On 24 December 2021, and based on the PB decision to move forward with the re-tender, a No-Cost Extension (NCE) was submitted by UNDP to the EU Delegation in Guyana for 27 additional months, bringing the end of the project to 31 December 2024. In line with this extension, the Monuments Bureau (MB) also granted an extension of their permit for the renovation of the Maria Convent (MC) building (Lot 1) for two additional years.

To ensure the appropriate Bill of Quantities (BoQ), UNDP contracted a Quantity Surveyor (QS) to conduct an independent cost analysis. The QS prepared a detailed BoQ and provided an independent cost estimate, which was aligned with the one prepared by the design architect. However, both estimates exceeded the available budget for the construction works. This was communicated to the PB members by the UNDP Project Manager on 3 May 2022. Therefore, the PB decided to prioritize lot 1, and UA and GoA took the challenge to find additional funding for lots 2 and 3.

Second tender.

After UNDP presented the new design at the PB meeting on 6 January 2022, the members of PB agreed to launch the second tender advertisement the next day. Necessary budget changes were also presented and agreed upon at this meeting to accommodate the new timeline.

The second Invitation to Bid (ITB) was issued through UNDP's e-tender system on 7 January 2022. After again some extensions requested by bidders, the bid opening took place on 18 March 2022. Two bidders

presented an offer, but only one passed the technical evaluation. The negotiation process, which was adopted in the form of a Value Engineering (VE) exercise, started in June 2022 and only ended in September 2022, resulting in a significantly reduced offer but still above the allocated budget.

The PB agreed to fully engage the contingency budget line to cover the rehabilitation works of Lot 1 and to extend the works implementation period from 12 to 14 months. Based on the architect's comments and endorsement, the bidder, Albo Aruba, submitted its final revised offer to UNDP on 28 September 2022, which showed a slight increase over the offer previously presented to the Project Board. The increase was a result of the architect or the beneficiary (UA) not endorsing some of the bidder's proposals during the Value Engineering (VE) exercise. The UNDP Project Manager updated the Department of Economic Affairs, Commerce and Industry (DEACI) and EU about the situation on 10 October 2022 via email. Subsequently, the UNDP Advisory Committee in Procurement (ACP) approved the signature of the works contract on 27 October 2022.

On 21 November 2022, Albo Aruba informed UNDP that, in order to sign the contract, they needed to be reimbursed an estimated US\$ 160,000 by the project for any change in tax legislation that could affect the updated offer, due mainly to the decision from GoA to increase taxes from the 6 % to 7 % by Jan 2023. The next day, UNDP PM informed the partners via email about the situation, and the UNDP Resident Representative (RR) held different meetings at the ministerial level to discuss the tax exception. Such meetings concluded that the project would not be tax exempted by the GoA, and UNDP should keep negotiating with the contractor and that the project would bear the cost increase. Finally, the main partners, UNDP, UA and GoA, took the decision that such an amount would be deducted from the supply of furniture and ICT equipment. On 13 December 2022, the contract for the rehabilitation of the Maria Convent building between Albo Aruba and UNDP was signed, and the site was successfully handed over to the contractor on 15 December 2022. The supervision & monitoring UNDP engineer was onboarded as of 2 January 2023. This has allowed UNDP to have greater control and monitoring of the activities being carried out by the construction company.



Photo: Site handover from the UNDP, AU and GoA to the contractor. December, 2022

The new approach of tendering in lots was essential to successfully sign a contract with a constructor for the renovation of Maria Convent; if the project had been tendered as a whole, it would have been very likely that the tender would have had the same result as the first tender.



Photo: Groundbreaking Ceremony. February, 23

Construction of Lot 1. Renovation of the Maria Convent Historic Building

On 12 January 2023, the kickoff meeting of the construction works for the rehabilitation of the Maria Convent Building was held, with the presence of Albo Aruba, MB, UA, and UNDP. The groundbreaking ceremony event took place on 6 February 2023 and was attended by the main authorities of Aruba. To date, the implementation of the project is moving forward smoothly and as per the programme of work progress. In July 2023, 41% of the physical work was implemented, and financial progress was 29.31%.



Photo: Renovation of Maria Convent

Based on the information provided by the key interviews, the level of progress of the project, and the fact that the contract has a fixed price, the consultant has no doubt that the renovation will be completed and that no additional funds will be required.

OUTPUT 3: VISIBILITY AND AWARENESS RAISING

The Government of Aruba prepared a consolidated visibility and communication matrix to ensure consistency and avoid duplication. A visibility & communication plan for SISSTEM was prepared and aligned both with the project document and communication & visibility requirements for EC-funded projects to ensure project coverage.

UNDP's budget to support communication was limited to printing fact sheets, project updates, disseminating work completed through the media, and collecting high-resolution images. Most of the activities were implemented by the GoA as they have the larger communication budget:

- The Government of Aruba prepared a 30-minute video program which was aired on national television and shared on social media presenting the SISSTEM project to the public as part of the country's economic development plan. Partners presented the project and their respective roles. (January 2021) <https://www.facebook.com/GabineteWeverCroes/videos/1579883629067124/> (Papiamento and English spoken)
- UNDP. SISSTEM was promoted on social media as a participant project in the Aruba Investment Summit 2021, which was hosted by DEACI online. (June 2021)
<https://hopin.com/events/aruba-investment-summit-2021>
<https://www.facebook.com/UNDPTT/photos/a.179069955577488/1952011858283280>
- Current SISSTEM faculty members, particularly female Bachelor students & PhD researchers-lecturers, were featured on UNDP Multi-Country Office social media (Facebook & Twitter) for International Day of Women and Girls in Science, speaking about their careers in STEM and encouraging other girls and women (February 2022).
<https://www.facebook.com/UNDPTT/photos/a.179069955577488/2146916565459474>
<https://twitter.com/UNDPTT/status/1492136703791927305>

It is important to note that most of the UNDP's accountability activities have focused on the academic part of the programme, not the UNDP's project.



Photo: UNDP Facebook Post

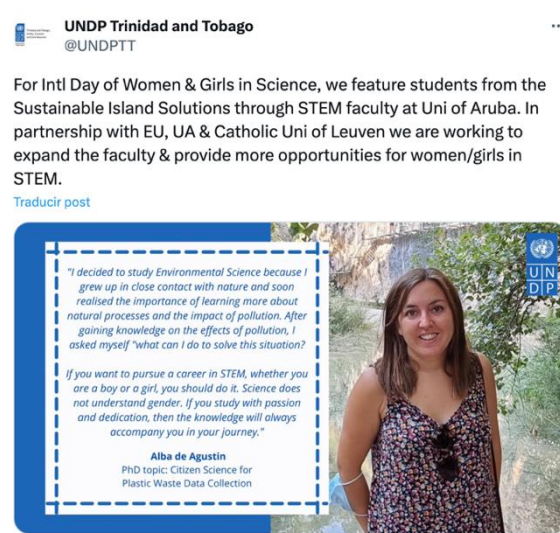


Photo: UNDP Twitter Post

FINDINGS BY EVALUATION CRITERIA

This section is organized by evaluation criteria:

RELEVANCE

The economy of Aruba relies highly on tourism income; according to the Tourism Satellite Account, this sector corresponds to 21,6% of GDP, which represents a heavier dependency compared with other small island states⁵.

The GoA understands the challenge of achieving a more diversified economy and has decided to invest in enhancing STEM capacities at the local level to increase scientific research adapted to the local context and provide access to high-level education.

The new campus to host the SISSTEM programmes provides a good framework to attract new businesses different from tourism. The project aims to build the necessary facilities to provide the local and regional population the opportunity to access tertiary studies without the need to leave the country and to respond to the demand for professionals and experts in the area of innovative biotechnologies, renewable resources, climate change adaptation, mitigation, etc. This will assist in the reduction of the existing gap in the local workforce to cover those positions and the lack of accessibility to STEM curricula within the national education system.

GoA expects that the new Faculty will facilitate the capacity for Aruba to develop a sustainable and green economy, such as a renewable resources industry which would become another economic base for the country. The national strategy is aligned with the rationale for the 11th EDF support, which is to help build educational and research capacity that would enable Aruba to become a regional hub for sustainable development.

According to the result-oriented monitoring review, the STEM research was positive for putting Aruba and the region on the map in these professional international discussions. The impact on the market of having new UA graduates available is still to be proven. It will be important not only to know if the offer will cover the demand but also the quality of new human resources.

The consultant considers the project highly relevant and in line with country and regional (Caribbean area) needs.

COHERENCE

UNDP supports work of different types (e.g., the building of health facilities, schools, rural or urban roads, water treatment plants, etc.) and of varying degrees of complexity and value. Many of these works entail activities requiring specialized expertise and pose a variety of financial, legal, social, environmental, reputational, health, and safety risks and liabilities disproportionate to the value of the project. UNDP aims to provide the highest level of care and diligence in managing these risks to ensure performance in accordance with the terms of the contract, that the Works are further to and in accordance with its mandate and with the Strategic Plan, and that the Works add value to all stakeholders⁶. UNDP

⁵ Aruba SDG indicators, 2021.

⁶ Guidance note: construction works policy, UNDP, <https://popp.undp.org/document/guidance-note-construction-works-policy>

involvement in works should seek to provide a “*Build Back Better*” objective using the best international practices and support the strategic direction of UNDP in shifting to more eco-sustainable construction to contribute to achieving sustainable development.

UNDP was selected to manage the project based on the organization’s solid knowledge of Aruba and small island-states in the Caribbean and vast experience in implementing large and medium-sized funded infrastructure projects in the region, a recent example of which is the Hannah Thomas Hospital in Barbados. The UNDP regional office considers that they can be a good partner for this kind of project, fulfilling an existing gap, particularly in Aruba.

The programme is seeking to increase the number of people with expertise and technical skills for innovative sustainable development available in Aruba and able to work on STEM related projects in the Caribbean small island-states, which is in line with the SDGs, in particular the goals to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

The project also contributes to the achievement of the following SDG targets in Aruba:

- Target 4.4: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship.
- Target 8.2: Achieve a higher level of economic productivity through diversification, technological upgrading, and innovation, including through a focus on high value-added and labor-intensive sectors.



Picture: Sustainable Development Goals (SDG)

COORDINATION & COMPLEMENTATION.

The roles and responsibilities of each partner and governance and management bodies were well defined in the project document that the parties signed. Nevertheless, during the implementation and particularly with the first project manager hired by UNDP, there were evident situations of lack of communication and coordination. This was clearly perceived by the GoA and UA representatives, who, besides the PB meetings, felt they did not have the opportunity to participate actively in the decision-making process.

This situation lasted for one and a half years and included a formal complaint from GoA against UNDP procedures' and their long duration. The EU response to this complaint has been that :

1. UNDP passed institutional compliance assessments, therefore UNDP rules & procedures apply.
2. GoA & UA participate in the Project Board to ensure transparency.
3. Programme management by UNDP should be ensured at all times.

From the analysis of key informants' interviews, the consultant concludes that the main problems were how the communications were managed by the first project team. It is important to note that during this phase, most of the coordination was done online, which has a negative impact on communication. This situation positively changed with the introduction of the new project team.



Photo: Bi-weekly Site Meeting (UNDP, UA, MB and Contractor)

The government's level of involvement could have been more relevant if, from the beginning, the participation in supporting technical and operational aspects was formally agreed upon in the project document. It is also true that GoA could have used other mechanisms to advocate for this participation, including the possibility to terminate the contract as a last resort.

At the moment of this evaluation, the situation of coordination and communication is much better, and all the partners are satisfied with the collaboration level.

This shows how important it is in a multi-partner project that the project team, in addition to technical skills, have strong communication skills to convey messages to partners and feel involved in all project phases.

EFFECTIVENESS AND EFFICIENCY

The effectiveness of the project has suffered certain challenges in the implementation process due to several factors closely linked to efficiency; therefore, for practical reasons, the report analyses both criteria together.

The specific objective of the SISSTEM project to be implemented by UNDP is to provide support to the faculty set-up of the programmes, including research facilities and laboratories that comply with the European Qualifications Framework for Universities of this nature, including:

- **Renovation and refurbishment of the Maria Convent in Aruba**, currently owned by the Government of Aruba. This includes architectural protections, construction of multi-functional classrooms for between 25 to 50 students, and office space for 25 staff.
- **Establishing prefabricated laboratories** next to Maria Convent for 1 chemistry lab, 1 physics lab, 1 biosciences lab, and 1 technology lab equipped for at least 10 students and 1 instructor.

- **Equipping and furnishing of these labs, offices, classrooms, and an ICT platform for e-learning.**
This includes specialized equipment for the proposed bachelor's programme in Bio-environmental science, Informatics and Data Science and Technology and Engineering, and corresponding furnishings as well as furniture for offices and classrooms, and a research, dissemination, and repository system consisting of 40 computers, server capacity, and software.

Currently, the renovation and refurbishment of Maria Convent works are ongoing. At the same time, the laboratories will not be completed by the project, and the construction of the laboratories will depend on new funding to be raised by the GoA or the UA.

According to the risk analysis done during the project implementation, the main factors causing this situation were:

- Increase in the cost of materials due to the COVID-19 Pandemic and war in Ukraine.
- Delays in the tendering process.
- The small number of bidders (lack of competition) – the small number of constructors in Aruba that meet UNDP requirements.
- Lack of coordination between the Architect and the Monuments Bureau during the initial design phase, which could have saved time.
- The overambitious project proposed by the architect for the labs, initially planned as prefabricated modules, also impacted the budget.

The UNDP guiding principles for construction establish that quality management is an integral part of contract management for works, and adequate provisions are to be made for the required resources in the project budget.

While some risks were reasonably unexpected and less probable, such as the COVID-19 Pandemic and Ukraine's war on global supply chains, the other factors could have been considered and identified in the pre-feasibility assessment before the project started and concluded that the conditions for successful completion of the project were sufficient. This assessment was not profound enough and did not adequately revise the potential risk scenarios in the tendering process and project management. This led to revising the risk matrix several times during the process.

UNDP was selected to manage the project based on the organization's solid knowledge of Aruba and small island states in the Caribbean and vast experience in implementing large and medium-sized funded infrastructure projects in the region. However, the tendering process showed a gap in the organization's knowledge of the Aruba context and a lack of analysis of the small construction market on the island, where everybody knows each other. Only two bidders presented an offer, and finally, the negotiations failed. This is a predictable situation that could have been managed differently. A more cohesive approach and more open-minded attitude to understanding local reality would have reduced the first tendering process. The evaluator does not consider UNDP procedures to be blamed solely for the delay, as the second tender was more efficient, while essentially, the procedure remained the same. The real change was the involvement of the UNDP TT office, the support from the procurement unit in Panama and the

legal unit in New York, and the expertise and openness of the second project manager to inform partners better and to facilitate a more participatory approach in the making of strategic decisions. For example, dividing the tender into three lots. While the management focus, in the beginning, was on following the procedures and having a limited collaborative and informative approach, since August 2021, the second project manager focused on finding solutions in a participatory and educative manner. Training bidders in the first and second tenders on how to participate in tenders was a good approach, that UNDP should include in all the tender process. Nevertheless, a good and in-depth technical analysis and development of guidelines about how to make the procedures in small islands more efficient seem important. Aspects such as the repeated extension requests from bidders should have been considered as a sign of alert that something was wrong. The final situation where only one bidder met the requirements left UNDP in a poor position to negotiate the price and conditions with the contractor.

As recognized during the key informants' interviews, coordination with the architect remained an issue and ended by presenting an over-ambitious design of laboratories above the project budget capacities. This is something that both the first project manager and the Monuments Bureau should have monitored more closely and controlled. The initial project team showed weak technical capacities and lacked more consistent support during the first tender from the UNDP TT office to ensure the quality of the process. There is no evidence that any request for support was made by the first project manager but considering the relevance of the project and the opportunity for UNDP to open a new collaboration line, a more thorough human resource selection process and more proactive monitoring should have been necessary.



Photos: Before (left) and after (right) of a room renovation

From the project management costs perspective, the budget ended up not being enough, which forced the UNDP Aruba office to reduce costs.

Even though the project did not achieve all the expected outcomes, the representatives of the GoA and UA feel more satisfied now that the works are ongoing, and the GoA has committed to providing solutions to the lack of equipment and laboratories by using local existing capacities. It is therefore expected that planned results may be achieved in the future with other resources. In addition, UNDP reported at the last PB meeting that the tax increase was initially estimated at US\$160,00 and now is known that it would not be more than \$60,000; the savings UNDP will added to the budget line for purchasing furniture and equipment. All of the problems identified above led to adjusting the budget several times, affecting the effectiveness and efficiency of the project implementation.

IMPACT

At this stage of the project, it is difficult to define the impact that the project will have in Aruba. The project has to be considered primarily from the holistic sustainable development perspective, not only from the construction point of view. Time will demonstrate if the new STEM educated generations will significantly provide new capacities, sustainable development initiatives, competitiveness, and innovation to the island.



Photo: Student University of Aruba

The consultant considers that the UNDP project team initially failed to understand that the dimension of the project was far beyond the construction, which limited the opportunity to strengthen the interaction with the project's beneficiaries.

SUSTAINABILITY

The project was an opportunity for UNDP to demonstrate its expertise in this kind of contract in Aruba and to become a long-term partner. While partners are content that the works are ongoing, they are not so satisfied with the process. It will be up to UNDP to first learn from the experience, decide if and how they would like to work in Aruba (setting up a dedicated office locally or from Trinidad and Tobago), which capacities and resources will compromise in this regard, and finally make the necessary changes to demonstrate to the GoA that UNDP is a reliable partner who can work in a collaborative and participatory manner. The project has shown that if UNDP wants to continue working in Aruba, it is necessary to have an office and a team that knows Aruba's specific dynamics and characteristics.

Once the project is finalized, the sustainability of the project will depend on UA to keep the campus running. It is important to note that both the University and GoA Aruba have guaranteed the maintenance of the building and are committed to keeping it in good condition, as the people interviewed confirmed.

GENDER AND INCLUSION

As the 2021 SDG indicators report stated, gender disparities in education are not a main issue in Aruba, as figures show a balanced status. Nevertheless, gender was considered during the project implementation. UNDP and UA agreed on a gender equality and social inclusion plan. The plan included training and dissemination for project workers on safety, health, welfare, and Protection from Sexual Exploitation, Abuse, and Harassment (PSEAH).

The design of the building has considered the accessibility for people with disabilities. Due to the budget restrictions UNDP had with the second tender, one of the most important elements for accessibility, the elevator, had to be taken out of the scope, however, the UA will install it.



Photo: Female worker working in the renovation of Maria Convent

KEY FINDINGS

The mid-term evaluation identified the following key findings:

- The project is highly relevant and in line with country and regional (Caribbean area) needs.
- The programme contributes to Aruba's SDG targets by aiming to enhance vocational skills (Target 4.4) and elevate economic productivity through innovation and diversification (Target 8.2).
- The effectiveness of the project has suffered certain challenges in the implementation process due to several factors closely linked to efficiency. Due to the need for additional funding, the building of the laboratories has been dropped. The main factors causing this situation were:
 - Increase in the cost of materials due to the COVID-19 Pandemic and war in Ukraine.
 - Delays in the tendering process.
 - The small number of bidders (lack of competition).
 - Lack of coordination between the architect and the MB during the initial design phase.
 - The overambitious project proposed by the architect for the labs, initially planned as prefabricated modules, also impacted the budget.
- The project architect took some of the relevant technical decisions, and UNDP did not adequately verify their effects on the budget, for example, the labs' design.
- The project allowed UNDP to demonstrate its expertise in this kind of project in Aruba and become a long-term partner.
- One of the main problems was communication with the partners during the first part of the project, which highlights the importance of the project team having experience in managing multi-partner projects and strong communication skills to convey messages to partners.
- The pre-feasibility assessment has not identified the main challenges that the project faces. The assessment lacked a more cohesive approach, hindering the identification of some challenges that emerged later.
- The Resident Representative's increased involvement in the second tender and experience in construction projects, the support of the procurement unit in Panama and the legal unit in New York, as well as the skills and capabilities of the new project manager, allowed them to adapt and contextualize the UNDP procurement process to successfully sign the contract with the contractor for the renovation of the Maria Convent.



Photo: EU Ambassador with UNDP, UA, GoA and MB visit the MC renovation

- The UNDP project team initially failed to understand that the dimension of the project was far beyond the construction, which limited the opportunity to strengthen the interaction with the project's beneficiaries.
- Due to the lack of funds for the implementation of the labs, UNDP has left the responsibility to the GoA and the AU to raise funds to finalize the laboratories, which is an important part of the programme's success.
- The UNDP's accountability activities have focused on the academic part of the programme and not on the UNDP project.

LESSONS LEARNED

- *Contracting staff with experience in managing multi-partner projects and strong communication skills to convey messages to partners is key to the project's success.*
- *For construction projects, the UNDP team should include a technically qualified engineer with field experience in construction management and construction cost analysis from the beginning of the project to ensure that UNDP has full control of the project.* By leaving the technical part to a local external entity (i.e., the architectural consulting firm), UNDP lost control of it, as the external entity has taken some of the relevant decisions, for example. the design changes in the laboratories.
- *Adapting and contextualizing procurement procedures to the context and dynamic of the country is necessary in small countries such as Aruba.* The second tender shows that the UNDP procurement process is appropriate; however, it is necessary to have a team that can adapt and contextualize the tender process to the specific characteristic of a small county such as Aruba.
- *Support from the UNDP network (country and regional offices), with more experience and expertise in construction projects, is necessary to ensure proper project implementation.* The support of the UNDP regional offices and other UNDP Country Offices was essential to carry out the activities necessary to achieve success in the second tender and show to the partners the UNDP added value.
- *The importance of including contingency funds in construction projects and involving partners in the decision process of its use.*
- *Fluent communication with partners, including the KU Leuven University, and their involvement is key to the project's success,* such as keeping partners informed about the progress of the process, sharing information, actively listening to them, trying to understand their needs and requirements, and managing expectations.
- *The importance for the UNDP team to understand and be familiar with the dynamics and characteristics of Aruba to ensure a correct formulation and implementation of the project.* The project showed that the first UNDP team failed to understand the dynamics of Aruba adequately. Therefore, it is necessary for future projects that those involved in design, formulation, and implementation are familiar with Aruba's internal dynamics and characteristics.

CONCLUSIONS

The purpose of the programme is to create the SISSTEM faculty to enable international and local collaboration to enhance STEM capacities at the local level, increase scientific research adapted to the local context, and provide access to high-level education. This requires that partners in the programme understand its holistic approach and cohesive dimension and ensure they share their organizational capacities, experience, and added value through a collaborative commitment, focusing on achieving this overall goal. The present evaluation analyses the mid-term implementation of one of the key components of the programme, the construction of the required facilities, and the provision of the equipment to allow the SISSTEM campus to deliver tertiary education. One of the conclusions is that the UNDP team in Aruba did not adequately understand this dimension, which was too focused on the construction, meeting the procedural requirements, and managing the project in isolation rather than searching for collaborative and locally adapted joint solutions-driven approaches.

The evidence shows that the project is highly relevant and in line with UNDP's mandate and experience; UNDP respondents provided several examples of similar projects implemented by UNDP in other countries.

The evaluation has shown the importance of selecting an appropriate management team to implement such projects, as most of the problems suffered during the project's first phase were solved with the arrival of the new project team after the first tender failed. The new project team implemented some changes that the consultant considers fundamental to achieving the project goal, such as:

- A more collaborative approach with the rest of the project partners.
- Dividing the tender into three lots.
- Involving the Trinidad and Tobago Multi-Country Office and regional experts from Panama (procurement) and New York (legal) in the tendering process and negotiations.
- Contract a UNDP engineer to oversee, control and monitor the execution of the project and not leave it in the hands of external organizations.

Also, the Resident Representative's increased involvement in the re-tender and experience in construction projects have been key to successfully signing the contract with the construction company.

Although the COVID-19 Pandemic and the war in Ukraine had a negative effect and these risks could not be foreseen, the initial risk assessment did not sufficiently analyze the potential risks and the local context particularities, which finally had a negative impact on the efficient and effective implementation of the project. This led to implementation delays, misunderstandings of the capacities of the local market and contractors to meet UNDP technical requirements, and the complexity of working in small islands.

At the moment of the evaluation, UNDP has proven its added value and that it has the capacities and capabilities to implement the project, and the evaluator has no doubt that the project will be implemented within the timeframe foreseen in the last extension (with a new project completion deadline of December 2024). However, it took too long for UNDP to identify the problems, and this delay had consequences, such as modifying the initial plan and reducing the construction only to the Maria Convent

renovation. This left the GoA and UA in the situation of finding new solutions for sourcing the laboratories and the equipment.

RECOMMENDATIONS

- 1- *Improving the initial risk assessment by including, for example, in the assessment team persons with clear experience in the sector and in Aruba*

In the UNDP guidelines for construction works, UNDP is advised to assess the risks and possible scenarios carefully. The preliminary assessment did not provide a complete image of potential and probable risks based on the particular context of Aruba. Many delays and implementation problems were predictable and should have been identified clearly before the project started. Some of them are a small construction market, high costs, inflation, and the potential lack of capacity to meet all the technical requirements. The assessment should have studied if rules & regulations are indeed doable/feasible/approachable in the local context. Make use of local knowledge (of social sensitivities, etc.)

- 2- *Ensuring that the project team understands the programme in its entire dimension, not only focusing on the construction aspect to better link the different components and better contribute to the overall goal of the programme.* The project team should regularly meet with the other implementing partner of the programme, the KU Leuven University.

- 3- *Increase the level of involvement of the government of Aruba and UA in the decision-making process, creating a platform for more regular interpersonal communication beyond the PB.* This could be in the form of:

- a. Providing updates during lengthy UNDP procurement procedures, even if there are no content-related updates, or sharing more details of the UNDP procurement procedures to create understanding.
- b. Inviting public works directly to give comments during the PB meetings or occasionally meeting in person to collect possible feedback.
- c. Including in the tender evaluation panel as observers.
- d. A more participatory and stronger project management team selection process.

- 4- *UNDP should support GoA and UA to find new potential donors for lots 2 and 3.*

Although the GoA has committed the funds, it is important to highlight UNDP's experience and knowledge of international donors, which could greatly help the GoA and the UA in the search for potential international donors.

- 5- *Develop a communication plan to inform the stakeholders and the population of Aruba about the project.*

Although some communication activities have been carried out, the consultant considers that in the last phase of the project, UNDP, in coordination with UA and GoA, should carry out more communication activities, including also activities of the UNDP part of the programme. UNDP has a

lot of experience in communicating with the population about its activities, and these activities will also serve to build the capacity of the Government of Aruba and the University of Aruba.

ANNEXES

ANNEX 1. EVALUATION TERMS OF REFERENCE

*“Sustainable Island Solutions in Science, Technology, Energy and Mathematics”
(SISSTEM)*

Location: Home based (Virtual)

Type of Contract: Individual Contract Post

Level: International Consultant Languages

Required: English Starting Date: March 2023

Duration of Contract: Three months from March 2023 to May 2023 (estimated 20 working days)

1. Background and Context

Aruba has embarked on implementing sustainable development as a key pillar of its overall economic development strategy through reducing its dependence on the tourism industry and its use of fossil fuels. In so doing, the Government of Aruba (GoA) has identified the need to enhance its human resource capacity in higher education in Science, Technology, Engineering and Mathematics (STEM) and has endorsed the establishment of a group of programmes for Sustainable Island Solutions through Science, Technology, Engineering and Mathematics (SISSTEM) at the University of Aruba (UA). The key objective of the SISSTEM programme is that the UA will be able to deliver tertiary level educational programmes as well as a research offer with particular focus on the STEM subjects.

The SISSTEM programme will result in an increase in the number of persons with expertise and technical skills for innovative, sustainable development in Aruba, in the Caribbean as well as in other Small Island Developing States (SIDS).

The United Nations Development Programme (UNDP) has been selected as one of the two implementing partners for the new faculty expansion, which will secure and make available physical facilities to house the new Bachelor STEM programme, a master's programme in Sustainability and a new Research Institute. Such programmes will be implemented by the other implementing partner, the KU Leuven University.

According to the 11th European Development Fund (EDF), the overall objective of the SISSTEM programme is “to increase the number of people with expertise and technical skills for innovative sustainable development available in Aruba and able to work on STEM related projects in the Caribbean small island-states”. The proposal for the SISSTEM Faculty is expected to address this by establishing an enhanced national offering of tertiary level education in STEM which can be connected to the Aruban economy more directly and in real time and allowing for the tailoring of STEM programmes to the SIDS context thereby strengthening the ability of graduates to qualify for and pursue careers on island.

In addition, the objective of the GoA's current sustainable development policy, is the development of a sustainable 'green' economy through reduction of Aruba's dependence on: (i) the tourism industry and (ii) the use of fossil fuels. It is expected that the new Faculty will facilitate the capacity for Aruba to develop a sustainable and green economy such as a renewable resources industry which would become another economic base for Aruba, in addition to tourism. The national strategy is

aligned with the rationale for the 11th EDF support which is to help build educational and research capacity that would enable Aruba to become a regional hub for sustainable development.

The specific objective of the SISSTEM project to be implemented by UNDP, is providing support to the faculty set-up of the programmes including research facilities and laboratories that comply with the European Qualifications Framework for Universities of this nature. This includes:

- i. Renovation and refurbishment of the Maria Convent in Aruba currently owned by the Government of Aruba. This includes architectural protections; construction of multi-functional classrooms for between 25 to 50 students and office space for 25 staff;
- ii. Establishing prefabricated laboratories next to Maria Convent for 1 chemistry lab, 1 physics lab, 1 biosciences lab and 1 technology lab equipped for at least 10 students and 1 instructor;
- iii. Equipping and furnishing of these labs, offices, classrooms and an ICT platform for e learning. This includes specialized equipment for the proposed bachelor's programme in Bio-environmental science, Informatics and Data Science and Technology and Engineering, and corresponding furnishings as well as furniture for offices and classrooms, and a research, dissemination and repository system consisting of 40 computers, server capacity and software.

2. Expected Output(s)

- Output 1: Effective and Efficient Management of the Project.
- Output 2: Maria Convent Building Complex renovated/refurbished and two (2) prefabricated buildings established to house the new SISSTEM Facility at the University of Aruba.
- Output 3: Visibility and Awareness Raising.
- Output 4: Monitoring and Evaluation.

Within this context, UNDP is seeking to recruit an Evaluation Expert to carry out an independent evaluation of the final project results.

3. Evaluation Purpose, Scope and Objectives

The objective of the assignment is to conduct a mid-term evaluation of the project outputs in terms of their: relevance; impact; effectiveness; efficiency; sustainability; gender; theory of change or results/outcome map; stakeholders and partnership strategy. The mid-term evaluation should also provide recommendations for any improvements that can be made for the continuation of the project.

The evaluation should enable UNDP in Trinidad and Tobago Multicounty Office (MCO), the European Union (EU) and other stakeholders to draw lessons in order to improve the implementation of the project. A Results Oriented Monitoring (ROM) exercise.

Initiated by the EU was conducted at the end of 2022 by an external expert. Based on the conclusions, it is expected that the Evaluation Expert will provide some practical recommendations on how to improve project implementation.

The Evaluation Expert will work under the direct supervision of the SISSTEM ProjectManager based in Aruba. The project team and UNDP Trinidad & Tobago MCO will provide administrative and logistical support as needed.

In order to achieve the above objective, the main tasks of the Evaluation Expert are:

- a. Desk Review Phase: Conduct a comprehensive desk review of relevant project-related documents and draft and submit an inception report, with appropriate methodology to be applied during the evaluation, as well as the work plan and any technical instruments to be used during the course of the assignment, while being guided by the set of evaluation questions as presented below.
- b. Interviews: Undertake interviews with relevant stakeholders.
- c. Draft Report: Draft a first draft evaluation report. The evaluation report must include, but not necessarily be limited to, the following sections:
 - Title
 - Table of contents
 - List of acronyms and abbreviations
 - Executive summary
 - Introduction
 - Description of the evaluation methodology
 - Evaluation scope and objectives
 - Evaluation methodology
 - Data analysis
 - Key findings
 - Conclusions and recommendations
 - Lessons learned
 - Report annexes
- d. Final report: Based on the draft report and the comments provided by UNDP and the European Union (EU), the Evaluation Expert will produce a final report. The final report provides the complete content of the report as per the main outline proposed above. Upon completion of the draft final report, UNDP and other stakeholders will provide additional feedback. The final report will be completed by the evaluator 5 days after UNDP provides the feedback.

The following evaluation criteria and related evaluation questions are proposed for the evaluation process; however, these can be expanded and modified by the Evaluation Expert in consultation with UNDP.

4. Relevant Evaluation Criteria

Key questions suggested:

Relevance

- Is the project relevant for the main beneficiary?
- Has the initiative tackled the key issues?

Coherence

- To what extent is the initiative in line with the UNDP mandate, national priorities and the requirements of targeting women, men and vulnerable groups?
- To what extent is UNDP support relevant to the achievement of the SDGs in the country?
- To what extent was the method of delivery selected by UNDP appropriate to the development context?

Effectiveness

- To what extent has progress been made towards outcome achievement?
- What have been the key results and changes attained for men, women and vulnerable groups?
- Have there been any unexpected outcome-level results achieved beyond the planned outcome?

Efficiency

- Have resources been used efficiently?
- Have efforts for integrated approach been made appropriately?
- To what extent have the UNDP project implementation strategy and execution been efficient and cost-effective?
- To what extent was the project management structure as outlined in the project document efficient in generating the expected results?

Sustainability

- Will the project results last in time?
- Are there jeopardizing aspects that have not been considered or abated by the project actions?
- Has ownership of the actions and impact been transferred to the corresponding stakeholders?
- Do the beneficiaries have the capacity to take over the results of the project and maintain and further develop the results?
- Which measures to ensure sustainability have proved more effective?
- Are there any social or political risks that may jeopardize sustainability of project outputs and the project contributions to country programme outputs and outcomes?

Impact

- Is there evidence of long-lasting desired changes?
- Has the initiative influenced policy making at different levels?
- Has the project impacted the desired target actors?
- To what degree has the project contributed to the development taken place with regards the overall project objectives?

Evaluation

- Can the project be evaluated credibly?
- Were intended results (outputs, outcomes) adequately defined, appropriate and stated in measurable terms, and are the results verifiable?
- Are there monitoring systems in place?

Gender

- What effects were realized in terms of gender equality, if any?
- Were women and men distinguished in terms of participation and benefits within the project?

The response to the above questions should be followed by specific short- and long-term recommendations that could be undertaken by UNDP and other stakeholder.

- ✓ These analyses have to be done for each output and for the overall project.
- ✓ The evaluator is responsible for refining the evaluation methodology, evaluation questions, carrying out the evaluation and delivering to UNDP a draft report and a final report.
- ✓ The key stakeholders, those involved in the implementation, those served or affected by the project and the users of the evaluation should be involved in the evaluation process.
- ✓ Finalize the evaluation report, including incorporation of feedback from UNDP and the EU.

5. Methodology and Evaluation Ethics

The Evaluation Expert may employ any relevant and appropriate quantitative or qualitative methods it deems appropriate to conduct the project final evaluation. Methods should include desk review of documents; interviews with stakeholders, partners, and beneficiaries; use of questionnaires or surveys, etc. However, a combination of primary and secondary, as well as qualitative and quantitative data should be used. The Evaluation Expert is expected to revise the methodological approach in consultation with key stakeholders as necessary. The Evaluation Expert should present both quantitative data and qualitative findings and data.

The Evaluation Expert is expected to hold interviews and meetings with relevant staff of UNDP, the EU, and partners, and beneficiaries and is expected to share the list of interview questions for interviewees to be conducted beforehand and receive feedback and clearance from UNDP.

The suggested methodology should be compatible with the UNDP approach to evaluations as described in the '[UNDP Evaluation Guidelines](#)'. The Evaluation Expert is expected to use its findings and expertise to identify the lessons learned, and to propose recommendations for improving the project's future efforts toward achieving the expected results.

This evaluation will be conducted in accordance with the principles outlined in the UNEG '[Ethical Guidelines for Evaluation](#)'. The consultant must safeguard the rights and confidentiality of information providers, interviewees, and stakeholders through measures to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The consultant must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The

information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses with the express authorization of UNDP and partners.

6. Other Requirements

All records from the evaluation (*e.g., interview transcripts or summaries*) must be provided to the UNDP Project Manager. All quantitative data collected by the evaluation team must be provided in an electronic file in easily readable format agreed upon with the UNDP Project Manager. The data should be organized and fully documented for use by those not fully familiar with the project or the evaluation.

7. Deliverables/Payment schedule

Deliverable 1: Inception report including details of the methodology, questionnaire, list of interviewees and work plan.

Timeline: 1 week after signing of the contract (*estimated 4 working days*) Percent Payment : 20%

Deliverable 2: Completion of meetings and interviews including data gathered and synthesized and production of 1st draft Evaluation Report. The evaluation report should include the following:

- Executive summary. The executive summary should be 3-5 pages in length and summarize the purpose, background of the project being evaluated, main evaluation questions, methods, findings, conclusions, and recommendations and lessons learned (if applicable).
- Introduction.
- Description of the evaluation methodology. The evaluation methodology shall be explained in the report in detail. Limitations to the evaluation shall be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (e.g., selection bias, recall bias, unobservable differences between comparator groups, etc.).
- Analysis of the situation with regard to outcome, outputs, resources, partnerships, management and working methods and/or implementation strategy.
- Assessment and analysis of the efficacy of operational procedures utilized.
- Key findings.
- Conclusions and recommendations for the future project implementation.
- Annexes including
 - Itinerary.
 - List of persons interviewed.
 - Summary of field visits.
 - List of documents reviewed.
 - All tools used in conducting the evaluation, such as questionnaires, checklists, and discussion guides, including client online survey and/or questionnaire (if any) used and summary of results.

- The Evaluation Scope of Work.
- Any other relevant material that supports evaluation findings and recommendations.
- Sources of information properly identified and listed.
- Disclosure of conflicts of interest form from the evaluator, either attesting to a lack of conflict of interest or describing existing conflict of interest.

Timeline: 4 weeks after signing of the contract (*estimated 14 working days*) Percent of Payment: 70%

Deliverable 3: Production of the Final Evaluation report, including incorporation of feedback from UNDP and the EU.

Timeline: 6 weeks after signing of the contract (*estimated 2 working days*) Percent of Payment: 10%

Activity	Timeline	Estimated working days	Percentage Payment
Deliverable 1. Inception report including details of the methodology, questionnaire, list of interviewees and work plan	1 week after signing of the contract	4 working days	20%
Deliverable 2: Completion of meetings and interviews including data gathered and synthesized. Production of 1 st draft Evaluation Report	4 weeks after signing of the contract	14 working days	70%
Deliverable 3: Production of the Final Evaluation report	6 weeks after signing of the contract	2 working days	10%

8. Timetable

Activity	Weeks					
	1	2	3	4	5	6
Deliverable/Output 1: Inception report	X					
Deliverable/Output 2: Completion of meetings and interviews, including data gathered and synthesized		X	X	X		
Deliverable/Output 4: Production of the Final Evaluation report					X	X

ANNEX 2. LIST OF DOCUMENTS REVIEWED

1. GENERAL DOCUMENTS

- 1.1 Mid Term Evaluation - SISSTEM Project
- 1.2 UNDP_Evaluation_Guidelines
- 1.3 2020 Ethical Guidelines for Evaluation
- 1.4 UNDP-Trinidad and Tobago CPD 2022-2026 – Approved
- 1.5 UNDP Social and Environmental Standards_2019 UPDATE
- 1.6 UNDP Accountability framework
- 1.7 FINAL_SDG-IWG-INDICATORS-2021_REPORT
- 1.8 UNDP Quality Assessment of Decentralized Evaluations 2022-06
- 1.9 OECD Applying Evaluation Criteria Thoughtfully
- 1.10 EU Decision Art 68 - 2021

2. PROJECT DOCUMENTS

- 2.1 Project Document
- 2.2 Amendment Project Document
- 2.3 UNDP SISSTEM Project Board Meetings Minutes
 - 2.3.1 PB meeting minutes 18 Jun 2020
 - 2.3.2 PB meeting minutes 19 Nov 2020
 - 2.3.3 PB meeting minutes 7 May 2021
 - 2.3.4 PB meeting minutes 16 Jul 2021
 - 2.3.5 PB meeting minutes 27 Jul 2021
 - 2.3.6 PB meeting minutes 16 Sep 2021
 - 2.3.7 PB meeting minutes 11 Nov 2021
 - 2.3.8 PB meeting minutes 6 Jan 2022
 - 2.3.9 PB meeting minutes 12 May 2022
 - 2.3.10 PB meeting minutes 16 Sep 2022
 - 2.3.11 PB meeting minutes 2 Mar 2023
 - 2.3.12 PB meeting minutes 4 May 2023
 - 2.3.13 PB meeting minutes 6 July 2023
- 2.4 Property Loan Agreement Maria Convent building
- 2.5 Donor Agreements – Contribution Agreement
- 2.6 Donor Agreements – Addendum
- 2.7 Tender Documents (ITB)
- 2.8 Contractor's Contract
- 2.9 Annual Progress Reports (UNDP to EU)
 - 2.9.1 Annual Report Oct 2019 Sep 2020
 - 2.9.2 Annual Report Oct 2020 Sep 2021
 - 2.9.3 Annual Report Oct 2021-Sep 2022
- 2.10 Lessons Learned
 - 2.10.1 Lessons Learned 2022

- 2.10.2 Lessons Learned Feb 2023
- 2.11 Results-Oriented Monitoring (ROM)
 - 2.11.1 ROM Monitoring questions
 - 2.11.2 ROM Report 20230124
 - 2.11.3 EU ROM review debriefing
- 2.12 Work progress photos up to 30 June 2023
- 2.13 Weekly Progress Reports (Albo to UNDP)
 - 2.13.1 01 Week-Day Report
 - 2.13.2 10 Week-Day Report
 - 2.13.3 11 Week-Day Report
 - 2.13.4 12 Week-Day Report
 - 2.13.5 13 Week-Day Report
 - 2.13.6 14 Week-Day Report
 - 2.13.7 15 Week-Day Report
 - 2.13.8 16 Week-Day Report
 - 2.13.9 17 Week-Day Report
 - 2.13.10 18 Week-Day Report
 - 2.13.11 19 Week-Day Report
 - 2.13.12 20 Week-Day Report
 - 2.13.13 21 Week-Day Report
 - 2.13.14 01 Weekly Progress Report
 - 2.13.15 02 Weekly Progress Report
 - 2.13.16 03 Weekly Progress Report
 - 2.13.17 04 Weekly Progress Report
 - 2.13.18 05 Weekly Progress Report
 - 2.13.19 06 Weekly Progress Report
 - 2.13.20 07 Weekly Progress Report
 - 2.13.21 08 Weekly Progress Report
 - 2.13.22 09 Weekly Progress Report
- 2.14 SISSTEM - Risk Assessment - Mar 2022
- 2.15 Monument Bureau's Permits
- 2.16 DOW Permits
- 2.17 Micro-Algae Plant Facility List Laboratory and Office Furniture.
- 2.18 Programme of Requirements with UA Comments 2020
- 2.19 List laboratory items
- 2.20 Visibility- Communications Actions Summary - SISSTEM
- 2.21 Grievance Mechanism - UNDP letter to neighbours
- 2.22 Meeting of the Project Steering Committee
 - 2.22.1 Minutes 3rd SCM SISSTEM Sept 16th 2021.
 - 2.22.2 Minutes 4th SCM SISSTEM Oct. 5th 2021.
 - 2.22.3 Minutes 5th SCM SISSTEM Oct. 3rd 2022.

ANNEX 3. A LIST OF KEY INFORMANTS INTERVIEWED

Nº	Name	Position	Organization
UNDP			
1	Mr. Ugo blanco	Resident Representative	UNDP
2	Mr. Gerardo Noto	Former Resident Representative	UNDP
3	Ms. Ablavi Gladys Gbegnedji	SISSTEM Project Manager	UNDP
4	Mrs. Sharifa Ali-Abdullah	Assistant Resident Representative	UNDP
5	Ms. Beverly Charles	Operations Manager	UNDP
6	Ms. Vidmara Geerman	SISSTEM Project Assistant	UNDP
7	Mr. Hugo Barrillas	Regional Procurement Advisot	UNDP
Dept of Economic Affairs Commerce and Industry, Government of Aruba (DEACI)			
8	Mrs. Maria Dijkhoff-Pita	Deputy TAO Aruba / Director	DEACI
9	Mr. Humphrey Vrolijk	Policy Advisor	DEACI
EU - donor			
10	Mr. Rajesh Majeed	Programme Manager Cooperation	European Union Guyana Delegation
University of Aruba			
11	Mr. Sander Görtz	Project Manager	University of Aruba
12	Mr. Eric Mijts	Coordinator Academic Foundation Year/Project Dev. Team SISSTEM	University of Aruba
13	Mr. Patrick Arens	Business Manager	University of Aruba
14	Mrs. Viola Heutger	Rector	University of Aruba
Monuments Bureau			
15	Mr Ryan Alexander	Restoration Architect	Monuments Bureau
16	Mr. Raul Gei	Deputy Director / Restoration Architect	Monuments Bureau
Katholieke Universiteit Leuven			
17	Prof. Dr. Nadine Buys	Programme focal point	Katholieke Universiteit Leuven

ANNEX 4. EVALUATION QUESTIONS

In total, around 16 individuals have been identified for semi-structured interviews.

- UNDP management and staff.
- Project management and staff.
- EU as the donor.
- Dept of Economic Affairs Commerce and Industry, Government of Aruba (DEACI).
- Monuments Bureau.
- University of Aruba.
- Katholieke Universiteit Leuven

Generic Questions for all Interviews to be Selected Depending on the Informant.

- Could you explain how you are being involved in the project?
- Do you consider the project to be relevant for Aruba?
- Do you consider the rehabilitation of the MC to be relevant for the University of Aruba?
- Do you consider the project and programme are aligned in terms of priorities, approaches, and indicators with the SDGs?
- Do you think this project and programme will contribute to Aruba's improvement in achieving the SDGs?
- Do you consider this project is in line with the UNDP mandate?
- Do you consider this project is in line with the Aruba Government's priorities?
- Do you consider that the procedure of tendering by lots has been adequate? If not, How do you think this should have been done?
- Do you consider that progress has been made toward achieving the results?
- Do you think the results will be achieved?
- Have there been any unexpected outcome-level results achieved beyond the planned outcome?
- Do you consider that the project is being implemented in a timely manner?
- Do you consider that UNDP has used resources efficiently?
- Do you consider that UNDP has used an integrated approach?
- Has the project strategy and implementation been effective and cost-efficient?
- Have UNDP's procurement procedures for this project been adequate?
- Have UNDP's procurement procedures been used appropriately?

- Do you consider that the project team has been able to achieve the objectives at a minimum cost?
- Has the monitoring system been adequate to allow for efficient use of resources?
- Do you consider that the benefits of the project investment will continue after the project is completed?
- What is needed to achieve the long-term sustainability of the project?
- Do you consider that risks and opportunities have been adequately identified in the project?
- Do you think the University of Aruba will use the infrastructure? Are they adequate for the needs of the University?
- Do you think the project will contribute to long-term change?
- What measures have been implemented to ensure a gender approach and PSEAH?
- What recommendations would you give to improve the implementation of the project?
- What did you learn from your experience with the Project?
- What are the main lessons learned from the project?

ANNEX 5. EVALUATION MATRIX

Evaluation indicators and corresponding questions in the instruments	Judgement criteria	Methodology	Main Sources of Information
Relevance			
<p>Is the project relevant for the main beneficiary?</p> <p>Has the initiative tackled the key issues?</p>	<p>Evidence from multiple sources, supported with data, on the needs of the main beneficiaries.</p> <p>Extent to which the project is aligned in terms of priorities, approaches, and indicators for SDGs.</p> <p>Extent to which the project will enable Aruba to improve its SDGs.</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews UNDP Trinidad & Tobago MCO, UNDP Project Office, University of Aruba, Government of Aruba, and other stakeholders</p>	<p>Project Documents</p> <p>University of Aruba Strategy</p> <p>SDGs Aruba Report</p> <p>Interviews notes</p>
Coherence			
<p>To what extent is the initiative in line with the UNDP mandate, national priorities and the requirements of targeting women, men and vulnerable groups?</p> <p>To what extent is UNDP support relevant to the achievement of the SDGs in the country?</p> <p>To what extent was the method of delivery selected by UNDP appropriate to the development context?</p>	<p>Extent to which the project documentation and other documentation are aligned with international commitments (e.g., SDGs), national priorities and UNDP priorities.</p> <p>Extent to which the lot tendering process was most appropriate.</p> <p>Extent to which the project contributes to the achievement of the SDGs in Aruba.</p> <p>Mapping and analysis of key partners' involvement.</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews UNDP Trinidad & Tobago MCO, UNDP Project Office, University of Aruba, Government of Aruba, Contractor SDGs focal point in Aruba, and other stakeholders</p>	<p>Project Documents</p> <p>UNDP Trinidad and Tobago Multicountry Office Programme Document</p> <p>UNDP Website</p> <p>SDGs Aruba Report</p> <p>Interviews notes</p>
Effectiveness			
<p>To what extent has progress been made towards outcome achievement?</p> <p>What have been the key results and changes attained for men, women and</p>	<p>Extent to which targets have been achieved (or not).</p> <p>Explanations for performance/under-performance.</p>	<p>Documentation review & analysis.</p>	<p>Project Documents</p> <p>Interviews notes</p>

<p>vulnerable groups?</p> <p>Have there been any unexpected outcome-level results achieved beyond the planned outcome?</p>	<p>Degree of satisfaction of the target group representatives.</p> <p>Evidence of the accessibility of the vulnerable groups.</p> <p>Evidence of external factors' influence on Project results, disaggregated by factor.</p> <p>Timeliness of delivery of Project components compared to anticipated timelines.</p> <p>Extent of any delays incurred, and reasons for this.</p>	<p>Semi-structured interviews UNDP Trinidad & Tobago MCO, UNDP Project Office, University of Aruba, Government of Aruba, Contractor, and other stakeholders</p> <p>Systems analysis of management strategies</p>	
Efficiency			
<p>Have resources been used efficiently?</p> <p>Have efforts for integrated approach been made appropriately?</p> <p>To what extent have the UNDP project implementation strategy and execution been efficient and cost-effective?</p> <p>To what extent was the project management structure as outlined in the project document efficient in generating the expected results?</p>	<p>Extent to which the tendering process has succeeded in ensuring that resources are used efficiently.</p> <p>Extent of monitoring of UNDP procurement processes for efficient use of resources</p> <p>Extent to which the project team has been able to achieve objectives at minimum cost.</p> <p>Extent to which the use of monitoring systems allows for efficient use of resources.</p>	<p>Systems analysis of management strategies</p> <p>Financial analysis</p> <p>Documentation review & analysis.</p> <p>Semi-structured interviews of UNDP Project Office staff, University of Aruba staff, Government of Aruba, Contractor, and other stakeholders</p>	<p>Project Documents</p> <p>Interviews notes</p>
Sustainability			
<p>Will the project results be sustained over time?</p>			

<p>Are there jeopardizing aspects that have not been considered or abated by the project actions? we</p> <p>Do the beneficiaries have the capacity to take over the results of the project and maintain and further develop the results?</p> <p>Which measures to ensure sustainability have proved more effective?</p> <p>Are there any social or political risks that may jeopardize sustainability of project outputs and the project contributions to country programme outputs and outcomes?</p>	<p>Extent to which any benefits of the Project's investment will continue after the end of the project.</p> <p>Mapping of diverse risks and opportunities, and expert assessment of their probabilities.</p> <p>Extent to which the University of Aruba will use the infrastructures and in new degrees.</p> <p>Extent of measures implemented to ensure sustainability.</p> <p>Context and stakeholder analysis.</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews UNDP Project Office staff, University of Aruba staff, Government of Aruba, Contractor, and other stakeholders</p>	<p>Government of Aruba information</p> <p>University of Aruba documents</p> <p>Newspapers and Aruba reports</p> <p>Project Documents</p> <p>Interviews notes</p>
Impact			
<p>Is there evidence of long-lasting desired changes?</p> <p>Has the initiative influenced policy making at different levels?</p> <p>Has the project impacted the desired target actors?</p> <p>To what degree the has the project contributed to the development taken place with regards the overall project objectives?</p>	<p>Extent to which any benefits of the Project's investment will contribute to long-term changes.</p> <p>Mapping of impact of the project in the main actors (University of Aruba and Government of Aruba)</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews UNDP Project Office staff, University of Aruba staff, Government of Aruba, contractor, and other stakeholders</p>	<p>University of Aruba documents</p> <p>Project Documents</p> <p>Interviews notes</p>
Evaluation			
<p>Can the project be evaluated credibly?</p> <p>Were intended results (outputs, outcomes) adequately defined, appropriate and stated in measurable terms, and are the results verifiable?</p>	<p>Extent of access to documentation and interviews to evaluate the project.</p> <p>Quality level and definition of the project result</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews of UNDP</p>	<p>Project Documents</p> <p>Interviews notes</p>

Are there monitoring systems in place?	<p>Analysis of whether the indicators are SMART and suitable for the monitoring of the project.</p> <p>Degree of quality of the monitoring and tracking system in place</p>	Project Office staff, University of Aruba staff, Government of Aruba, contractor, and other stakeholders	
Gender			
<p>What effects were realized in terms of gender equality, if any?</p> <p>Were women and men distinguished in terms of participation and benefits within the project?</p>	<p>Evidence of clear strategies of addressing women equality</p> <p>Extent of participation of men and women in the project</p> <p>Extent of benefits for men and women to be achieved by the project</p>	<p>Documentation review & analysis.</p> <p>Semi-structured interviews of UNDP Project Office staff, University of Aruba staff, Government of Aruba, contractor, and other stakeholders</p>	<p>University of Aruba documents</p> <p>Project Documents</p> <p>Interviews notes</p>