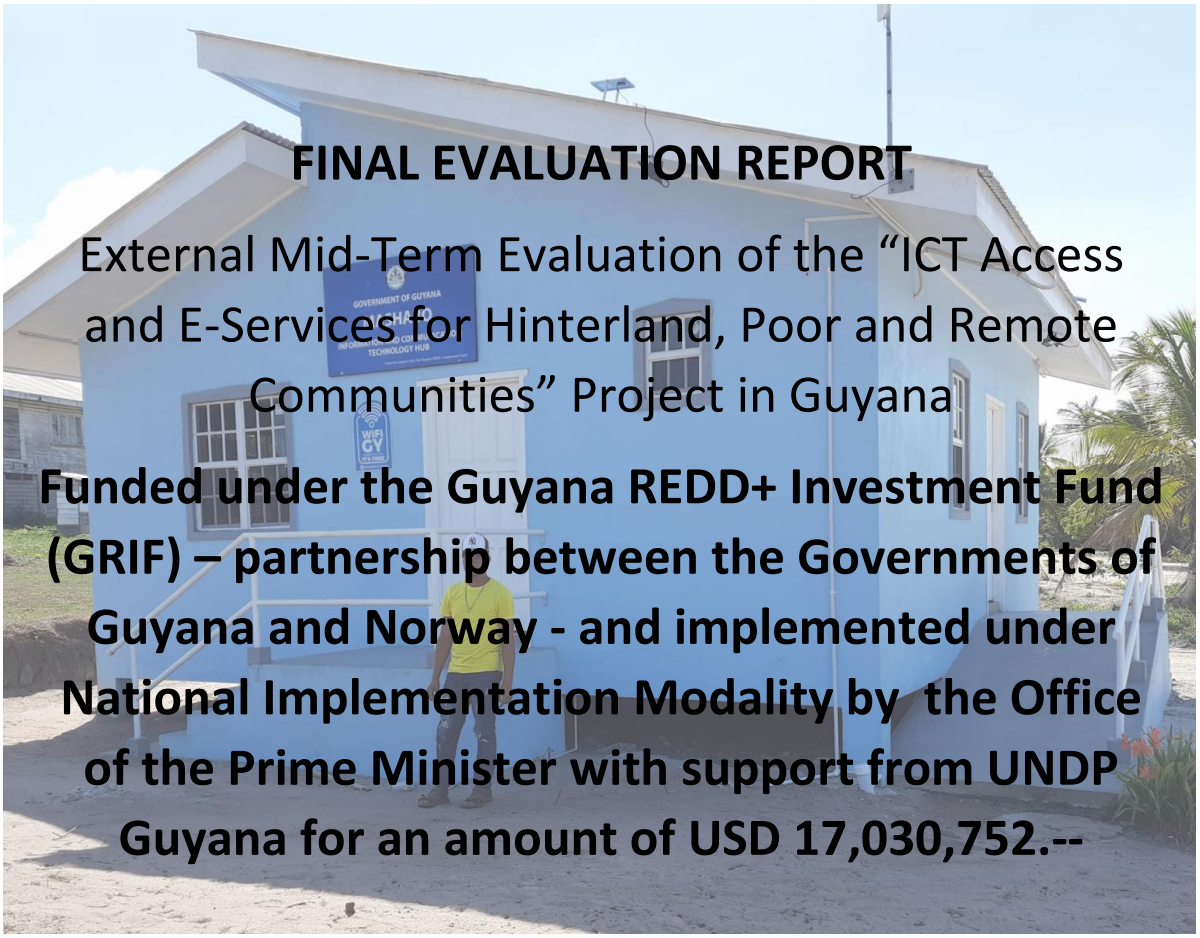
Commissioned by UNDP Guyana



FINAL EVALUATION REPORT

External Mid-Term Evaluation of the "ICT Access and E-Services for Hinterland, Poor and Remote Communities" Project in Guyana

Funded under the Guyana REDD+ Investment Fund (GRIF) – partnership between the Governments of Guyana and Norway - and implemented under National Implementation Modality by the Office of the Prime Minister with support from UNDP Guyana for an amount of USD 17,030,752.--

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In-country field mission dates: 25.09.23-07.10.23

Evaluation timeframe: 31st August to 8th November 2023

Report date: 1st November 2023

Acknowledgements: the evaluator thanks the UNDP and PMU for their support during the in-country data collection, as well as all evaluation respondents for their availability.

Acronyms and abbreviations

AVC:	Amerindian Village Council
CDC:	Community Development Council
CO:	Country Office
CSO:	Civil Society Organisation
DAC :	Development Assistance Committee
FGD:	Focus Group Discussion
GoG:	Government of Guyana
GRIF:	Guyana REDD+ Investment Fund
HPRC:	Hinterland Poor and Remote Communities
HRGE:	Human Rights and Gender Equality
ICT:	information and Communications Technology
KII:	Key Informant Interview
LCDS:	Low Carbon Development Strategy
LVG:	Low Value Grant
MSC:	Most Significant Change
M&E:	Monitoring and Evaluation
NDMA:	National Data Management Authority
MTE :	Mid-Term Evaluation
M&E:	Monitoring and Evaluation
NTC:	National Toshaos Council
OECD:	Organisation for Economic Cooperation and Development
OPM:	Office of the Prime Minister
PMU:	Project Management Unit
SMMEs:	Small, Micro and Medium Enterprises
ToC:	Theory of Change
ToR :	Terms of Reference
UNDG:	United Nations Development Group
UNDP:	United Nations Development Programme
UNEG :	United Nations Evaluation Group

Table 1. Project and evaluation information details

	Project/outcome Information	
Project/outcome title	ICT Access and E-services for Hinterland, Poor and Remote Communities	
Project Number	00094518	
Corporate outcome and output	Equitable access to justice, protection, citizen security and safety reinforced Output: Level of public confidence in delivery of basic services	
Country	Guyana	
Region	South America	
Date project document signed	30th November 2017	
Project dates	**Start**	**Planned end**
	30th November 2017	30th November 2023
Total committed budget	US$ 17,030,752.--	

Project expenditure at the time of evaluation	US$ 9,190,545.—or 54% of total budget
Funding source	Guyana REDD+ Investment Fund (GoG-Norway partnership)
Implementing party[1]	Office of the Prime Minister (OPM)

	Evaluation information	
Evaluation type	Project evaluation	
Final/midterm review/ other	Mid-term	
Period under evaluation	**Start**	**End**
	30 November 2017	30 November 2023
Evaluators	Christian Bugnion de Moreta	
Evaluator email address	cbugnion@suburconsulting.es	
Evaluation dates	**Start**	**Completion**
	31 August 2023	8 November 2023

[1] This is the entity that has overall responsibility for implementation of the project (award), effective use of resources and delivery of outputs in the signed project document and workplan.

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1 Executive summary

This mid-term evaluation (MTE) covers the project "ICT Access and E-Services for Hinterland, Poor and Remote Communities" in Guyana. The project was established for five years and started in November 2017, with an end date in November 2022. Two extensions were approved until the current end date of 30 November 2023. The project outcome is *Livelihoods of HPRCs improved by the provision of public services via the deployment of ICTs* and the outcome was to be achieved through the contribution of four different but complementary outputs. The total project budget was over US$ 17 million and entailed a) establishing the proper policy environment for facilitating the e-government services and related connectivity issues, b) establishing 200 ICT hubs in Hinterland, Poor and Remote Communities (HPRCs), c) providing e-services and information to the HPRCs through the ICT hubs, d) enhanced capacity of HPRCs to access e-services and use ICT. The project is implemented through a NIM (National Implementation) modality, under the umbrella of the Office of the Prime Minister (OPM). A scantly staffed PMU has been working in the OPM and was renewed in July 2021 as a result of the change in government from the 2020 elections.

The evaluation is considered to be an MTE because although now six years have passed since the project started in November 2023, a number of challenges, both external and internal, have reduced the project implementation period to a maximum of three years. However, officially the project closure is 30 November 2023.

The primary purpose of the MTE is to provide an assessment of the project performance, recommend options to improve project implementation and inform decision-making on the continuation of the project. The specific objectives of this MTE are to:

1) Review progress towards the project's objectives and outcomes;
2) Assess the likelihood of the project delivering its intended outputs;
3) Identify strengths and weaknesses in design and implementation;
4) Identify risks and countermeasures as regard sustainability;
5) Identify internal and external challenges, lessons learned and good practices;
6) Identify mitigation measures to ensure relevance and operability of the project.
7) Make recommendations for a follow-up phase of the project.

The scope of the Mid-Term Evaluation is 30 November 2017 to 31 August 2023. The Evaluation is also forward looking in order to provide evidence of results and recommendations regarding the continuation of the project. The primary audience of the report is the OPM, the Guyana REDD+ Investment Fund (GRIF), the Government of Norway and the United Nations Development Programme (UNDP). The evaluation report will allow the OPM and UNDP to meet its accountability objectives but will also be forward looking as a continuation of the project is expected to take place depending on the evaluation findings and the strengths of the evidence presented.

The MTE used a multi-methods approach that included a documentary review and analysis of the project, and which gave rise to the inception report. A two-week in-country data collection phase allowed the evaluation to hold 9 Key Informant Interviews (KII) who participate in the Project Board and were available for discussion during the field visit, from 25th of September to 7th October 2023. In addition, two interviews were held with the UNDP management. Half of the in-country time (one week) allowed the MTE to visit six villages where the ICT hubs were

installed by the project in three different regions, four of which had received an internet connection through the Free e-gov Wi-Fi service provided by the NDMA and paid for by the Government of Guyana (GoG). The site visits were purposely chosen as best- and worst-case situations to leverage learning on good practices in the best cases and lessons learnt in the worst case to avoid similar challenges in the possible extension of the project. The selection was done by the PMU on the basis of the criteria established above. A national holiday on 28th September 2023 limited the number of KII and not all requested KII could be held, notably with the national ICT advisor in the OPM to obtain evidence about the current status of the policy development for ICT in the country. Detailed financials are not available to allow a cost-benefit analysis.

The key findings are:

- The project suffered from any external and internal challenges, which affected project implementation and delayed the original schedule. Almost three years were lost due to these external and internal factors, identified in the body of the report.[2]
- An overly optimistic project design containing various untested assumptions (chief of which regarding the progress of policy adoption and enactment, the pre-existence of buildings to host the ICT Hubs, the level of computer literacy of the communities, the quality of the internet connection, the development of the e-government services, means that substantial delays were faced as the project had to integrate and respond these unforeseen challenges. No strategies were developed to ensure community ownership and financial participation, which fosters ownership.[3]
- Progress on output 1 was done during the first phase of the project, from January 2019 when the PMU manager was recruited, until the second phase started, and a new PMU manager was hired (July 2021). Since then, progress was limited to output 2 (building and installation of the ICT hubs as well as solar panels, including training of hub managers and solar panel technicians) because the rate of implementation was very slow. At present according to the PMU 91 ICT hubs are completed, 30 are in the process of being established (out of a target of 200 ICT hubs, e.g., 60%). 76 ICT hub managers have been trained in three batches, as well as 34 solar panel technicians. To the knowledge of the MTE, there has been no progress on the policy front during the second phase of the project (since July 2021), nor under outputs 3 and 4.[4]
- According to the financial information received from UNDP, the expenditures up to September 2023 amount to almost US$ 9.2 million, versus a total project budget of US$ 17 million. The delivery rate is almost 54% of the total budget amount.

[2] PMU comment: The PMU concurs with this finding. The PMU would have like to see the internal challenges of the period January 2023 to September 2023 highlighted as well. This was submitted and included as part of ToRs for the aspects of operational/IP support. Evaluator comment: addressed in the section 3.4. and 7.3.2.

[3] PMU comment: The PMU concurs with this finding. However, without the support of Government many if not all the AVCs/CDCs will be unable to meet the cost for the maintenance of buildings and equipment. Financial participation will be limited to operational costs only, example office supplies, cleaning etc. The AVC will be unable to cover the cost for bandwidth beyond the 2 years of this project. The GoG through the OPM or the MoAA will include in its national expenditure allocations for this purpose.

[4] PMU comment: A deliberate attempt to prioritise output 2 was made, this was essential to ensure the ability to roll out other aspects of the project particularly the out puts 3 and 4. With the completion of 100 hubs, other critical components of the project can now commence, namely capacity building within these communities.

- The project remains relevant to the communities but at present it is not sustainable. This is due to the fact that everything is provided free of charge, and the costs of connectivity are high, and no strategy was developed to empower the communities to contribute financially to the maintenance of the ICT hubs to ensure they will continue operating after the end of the project. Local ownership should not be taken as given and needs to be further supported by the OPM to contribute to sustainability.[5][6]
- Outcome level results are not yet visible, because the project is still under implementation and many hubs remain to be installed. To achieve the expected outcome, closer supervision and collaboration is necessary with the ICT hub managers and Village Councils and/or *toshao*[7], to develop ownership and financial cost-recovery measures for the post-project period.[8]
- The PMU has been chronically understaffed since the beginning of the project. It currently has eight staff versus fifteen who should be filling the required posts. More ownership and resources should be allocated at the national level to give the means to the PMU to achieve their objectives. The project is management intensive and requires immediate enhancement of the PMU staff and capacity[9].
- No quality assurance or monitoring has taken place in the communities, and the annual reporting does not contain a map of the ICT hubs, so it is essentially lists of villages in which materials are procured and delivered, hubs are established, equipment is installed, and in some cases, connectivity is provided.[10][11]

Under these conditions it is extremely difficult to achieve the higher-level results and at this stage the main key results are the installation of 91 completed hubs, 30 additional hubs under installation, and the training of ICT hub managers and solar panel technicians (76 and 34 respectively). Considering the costs of transportation and enormous logistical challenges involved in reaching these communities located in the hinterland, the establishment of the existing hubs demonstrates a substantial level of effort from the small PMU team tasked with the project implementation.

[5] PMU comment: The Government of Guyana has incorporated into its national expenditures, funding for the maintenance of buildings, other infrastructure and equipment.
[6] UNDP comment: UNDP agrees on the need for sustainability of the project. It is important that, there is clear ownership by the village councils with the Government of Guyana providing financial resources to cover expenses necessary for the functioning of the hubs.
[7] A *Toshao* is a traditional leader in Amerindian villages
[8] PMU comment: Cost recovery can only be done at a minimal, for the purposes of cleaning and printing supplies. The policy if the government has been and will continue to be to provide free support for technical/vocational educational activities and services.
[9] PMU comment: The PMU is currently recruiting the required staffing to fully support its operations. These positions are listed in the attached matrix. The recruitment process will conclude shortly for the new positions of: Administration and Logistical Officer (Project Administrator/ Deputy Project Manager) While vacant positions are currently being filled.
[10] PMU comment: Quality assurance visits have been conducted to several communities over the past few months, findings were important and were used to further strengthen our procedures for maintenance and communication. With the new staff compliment, a dedicated assignment will be in place. Evaluator comment: No evidence of such visits has been provided in documented form to the evaluator, nor any documented monitoring plan shared with the evaluator.
[11] UNDP comment: UNDP will increase monitoring activities to oversee implementation and impact of the project.

1.1 Conclusions

This project is complex and requires devoting substantial time for its management. It has experienced serious challenges, both external challenges (COVID-19 pandemic, change of government and administrative stand-still for seven months after the no-confidence vote, protracted election period) and internal challenges (late recruitment of PMU staff, chronical understaffing of the PMU, insufficient support to the PMU, difficulties with the support provided by the UNDP and in the use of the UN rules and regulations), so that the project has been operating on a stop-and-go basis since its beginning. The second phase with the new PMU team did give an impulse the establishment of ICT hubs, which now reported 91 hubs completed and 30 currently being installed (a total of 121). But other aspects remained overlooked, in particular the policy related matters, while the objectives of the outputs 3 and 4 were overly ambitious and not realistic within the project's context. Connectivity is a government responsibility, and not that of the project, although the project can help to provide connectivity to the ICT hubs. But the wider questions related to policy decisions remain to be addressed.

With such a substantial budget, the project should have been better staffed and supported. Many challenges were reported and help explain why, out of all the project components, only significant progress on output 2 can be reported. There is no question about the relevance and need for the communities to be connected to the internet and have an ICT hub. Extensive and complicated travel to the communities by air, road, various types of boats on rivers and tributaries, have shown that these communities are truly remote and need to have good connectivity in order not to be forgotten and to allow them to maintain a link with the rest of the country and the outside world. More and immediate efforts are warranted to staff and support the PMU, and greater attention to the importance of the policy decisions are warranted.

Most VCs visited are truly interested and want to have and exploit the hubs, but this will not be possible without the provision of good connectivity. This is clear indication for the need of significant financial allocation by the Government of Guyana to aid continuity of the Hubs beyond the ICT project. From a community needs perspective, there is no doubt that for some VCs the installation and connection of the ICT hubs is a potential catalyst for the development. But this will not happen if the GoG doesn't adopt and enact the proper policy decisions. Not all VCs share an equal interest or enthusiasm. To consider the project as a productive investment and ensure community ownership, the project needs to develop a co-funding scheme by the communities to ensure the payment of the ICT hub manager (hence guaranteeing his/her availability for the training of community residents) and the maintenance of the ICT hubs (materials, equipment, spares, etc.). This also requires further support from the project. The alternative will be that the infrastructure and equipped ICT hubs will be established but the outcome and goal of the project will not be reached.

1.2 Strategic recommendations

1. The OPM needs to review the policy environment, with the active support of UNDP, and address existing gaps linked to output 1, regarding the national e-government

strategy and connectivity[12]. It is beyond the scope of the project to enact at this stage the Interoperability Framework although this should be addressed through other means. The project cannot be successful without a government strategy and roadmap regarding e-services for the country.[13]

2. Extend the project for three years at minimum, reduce the scope of the project to ensure: a) computer literacy amongst VCs benefiting from the ICT hubs established b) proper connectivity to the internet with a quality of broadband that serves the needs of the communities c) ownership of the communities through a clear division of roles and responsibilities and cost-sharing financial plans to cater at least for the full-time involvement of the ICT Hub managers during the entire day (instead of only mornings) and ensure higher availability of training and use of the ICT hub. The first year should be used to complete the establishment of all ICT hubs and provide connectivity, while the second and third are essential to build ownership and sustainability for the post project benefits, working on local capacity development and ownership.[14][15]
3. Address with the support of UNDP and NDMA which type of connections need to be provided to the 200 ICT hubs, in line with recommendation 2.a) above.[16]
4. Established a reviewed and more focused project document that reduces the scope of the project to cover both policy environment and establishment and sustainability of the ICT hubs. Update and review the results framework accordingly.
5. The OPM needs to provide all necessary human and financial resources to the PMU to achieve the revised expected results It needs to immediately increase the PMU staff with, in addition to the already accepted posts, the following critical posts: a) deputy project manager b) communications and reporting officer c) community development specialist (backstopping ICT hub managers and VCs)

1.3 Operational recommendations:

1. The PMU needs to revisit its policy development tasks and address existing gaps by either the PMU manager or his deputy to provide the necessary umbrella under which the project operates. UNDP can play a major role in this aspect.
2. Address the issue of connectivity of the 200 ICT hubs, ensuring that the connection can allow the ICT hubs to operate online with sufficient speed and access e-government services and fulfil the needs of the users.
3. Define a clear calendar for when each of the remaining communities will be benefitting from the ICT hub installation (e.g., detailed workplan showing which communities will

[12] UNDP comment: Outside of the ICT Project, UNDP is working with the OPM to facilitate a Digital Readiness Assessment with the overall aim of developing an integrated ICT/digital strategy for the government.
[13] PMU comment: Activities to capture and mitigate these gaps are outlined in the revised project document 2023-2025 Evaluator comment: no revised project document has been provided to confirm this statement.
[14] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025
[15] UNDP comment: The 3-year extension will allow for completion of the project objectives. Given the financial constraints by the GRIF financial balance and time constraint for the government to deliver this mandate, a 2-year extension will allow for full achievement of project objectives.
[16] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

be serviced and when) and another detailed workplan for the provision of the connection to the hubs.

4. A calendar for an official hand-over needs to be established on the basis of the workplan to complete the ICT hubs and to plan an official ceremony transferring ownership and responsibility to the VCs.[17]
5. The PMU needs to communicate its annual workplan to the communities targeted and also more widely share their installation calendar and also the official hand-over calendar (the latter for all 200 ICT hub VCs).
6. The PMU needs to update its communication and reporting capacity through the hiring of a full-time communications and reporting officer. Her/his role is to both create content for visibility purposes about the project and include all social media, as well as to improve the reports produced by the project with the inclusion of dynamic maps that show the 200 ICT hubs location and the progress in the setting up of the hubs and of their connection to the internet. It will also gather success stories regarding the use of the hub in the use of e-government services (where possible) or business development that can be linked to the availability of the hubs' resources provided.
7. Purchase an additional up to date 400 laptops with enhanced Wi-Fi connection capabilities and higher processing speed and free memory, so that the VCs will at least each benefit from 2 laptops in each hub that can be used for more complex and interactive use of the computers. Given the limited lifespan of laptop computers, the cost-recovery scheme at local level should also plan how to replace broken or unusable laptops after the end of the next phase.[18]
8. PMU should have a stock of spares for the ICT hubs during these three years so that the ICT hub manager in each VC can access the replacement parts directly through contacting the PMU. This should be the responsibility of the community development officer (to be recruited) as it allows the OPM to obtain better prices by buying in bulk for the 200 ICT hubs the necessary materials (including paper rims, toner, connection cables, and other materials and spares such as lightbulbs). A survey of the projected needs should be included in the workplan for 2024.
9. UNDP should recruit immediately a monitoring officer that is provides monitoring of the project, something that has not been done until now. As responsible for quality assurance and oversight, the monitoring function should be carried out by UNDP and not the PMU as they are already stretched enough with their own scope of work. The financial cost of the post should be covered by the project budget and the recruitment should follow UNDP's policies and procedures.
10. UNDP also suggested that a programme associate could be dedicated to work with the PMU exclusively to enhance the efficiency of the support UNDP has been providing to the PMU. The post should be financed with project resources as well. This suggestion is strongly supported by the MTE[19].

[17] PMU comment: The modality of the handover will be defined and designed collectively, if any. This handover and its operational functions will have implications to funding allocated and appropriated through the national budget. This will be further explored. A total handover has issues of unaccountability, lack of maintenance, and no supervision and policy guidance. Evaluator comment: not if a sustainability strategy has been developed with the communities for the post project period.

[18] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

[19] PMU comment: same as above

11. Establish a (re-)training workplan for the ICT hub managers and discuss with the VCs the feasibility in each location to introduce co-funding schemes (e.g. for the payment of the ICT hub manager in the afternoon and for the cost-recovery measures in the use of the hubs, to ensure maintenance costs and replacement of supplies during the life of the project, and to contribute to the sustainability of the ICT hub maintenance post project under national budgetary allocations.[20]
12. Hold awareness raising sessions in the VCs where the ICT hubs are not being used with a visual support to show the potential benefits of internet connectivity to the VC and resident population (see lessons learned hereunder). No all communities are equally aware of the benefits of the use of computers and of the internet connectivity. Given the limited level of literacy in some VCs, a visual video support of best practice should be shown to develop interest, use and ownership of the ICT hub.[21]
13. The project (PMU+UNDP) should develop clear written roles and responsibilities for the ICT hub manager and for the VCs.[22]
14. UNDP should commission the compulsory external terminal evaluation of the project at least two months before the end of the three-year phase. In case unforeseen difficulties occur or there is another change in the GoG priorities, there may be a need to consider an additional mid-term evaluation, only if major difficulties that cannot be solved without the involvement of all stakeholders arise.[23]

[20] PMU comment: same as above
[21] PMU comment: same as above
[22] PMU comment: Activities to achieve these recommendations are in progress and will be completed shortly.
[23] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

2 Introduction

The UNDP has hired an independent consultant to undertake the Mid-Term Evaluation (MTE) of the Project: "ICT Access and E-Services for Hinterland Poor and Remote Communities" hereafter referred to as "ICT project". The project started on 1st December 2017 for an initial period of five years until 30th November 2022. The project experienced several challenges, particularly during the year 2020, which impacted the overall implementation timeline of the project. This is further explained in the body of the report. The ICT Project eventually benefitted from two extensions from November 2022 to May 2023 and subsequently from June 2023 to November 2023. The total project budget is USD 17,030,752 funded under the Guyana REDD+ Investment Fund (GRIF) in partnership with Norway and implemented by the Office of the Prime Minister with support from United Nations Development Programme, under direct implementation modality.

This Mid-Term Evaluation is a contractual obligation as outlined in the project document and is included in the UNDP Evaluation Plan. The primary audience of the report is the Office of the Prime Minister, the GRIF, and UNDP. As this is an MTE, it is important to capture the learning from the results achieved to date and from the challenges experienced to formulate recommendations allowing the project to meet its objectives and outcomes by the end of its suggested completion date.[24]

The report is structured according to the UNDP evaluation report template and the UNEG quality standards and consists of ten sections. The executive summary (section 1) is followed by this introductory section 2. The description of the intervention is then presented, as well as the scope and objectives of the evaluation (section 3 and 4). Section 5 details the evaluation approach and methods. Section 6 covers data analysis, and section 7 presents the evaluation findings, by evaluation criteria and according to the Key Evaluation Questions formulated and vetted by the UNDP in the inception report. Conclusions flowing from the findings are contained in section 8, and the ensuing recommendations are in section 9. Finally, section 10 covers the lessons learned.

3 Description of the intervention

3.1 What is being evaluated, who seeks to benefit and what is the issue?

The Government of Guyana (GoG) working closely with UNDP has completed a comprehensive baseline and needs assessment study for Hinterland, Poor and Remote Communities (HPRCs). The study has provided deep insights on the core issues such communities are facing and suggested both technologies and business models that could help bring and sustain the services and information that these communities lacked at the moment of the project design. While the ICT plays a central role in this process, the ultimate goal of the project is to enhance the

[24] Evaluation findings recommend a continuation of the project beyond the completion date of 30th November 2023 as several results have not been fully achieved in this extended timeframe and given the number of challenges and delays suffered by the project during implementation.

sustainable human development of HPRCs while promoting the development of a national green economy.

The Guyanese Hinterland, while sparsely populated, comprises almost 70% of the total area of the country and includes four of its ten administrative regions: Barima-Waini (region 1): Cuyuni-Mazaruni (region 7); Potaro-Siparuni (region 8); and Upper Takutu-Upper Essequibo (region 9) as shown on the map hereunder:

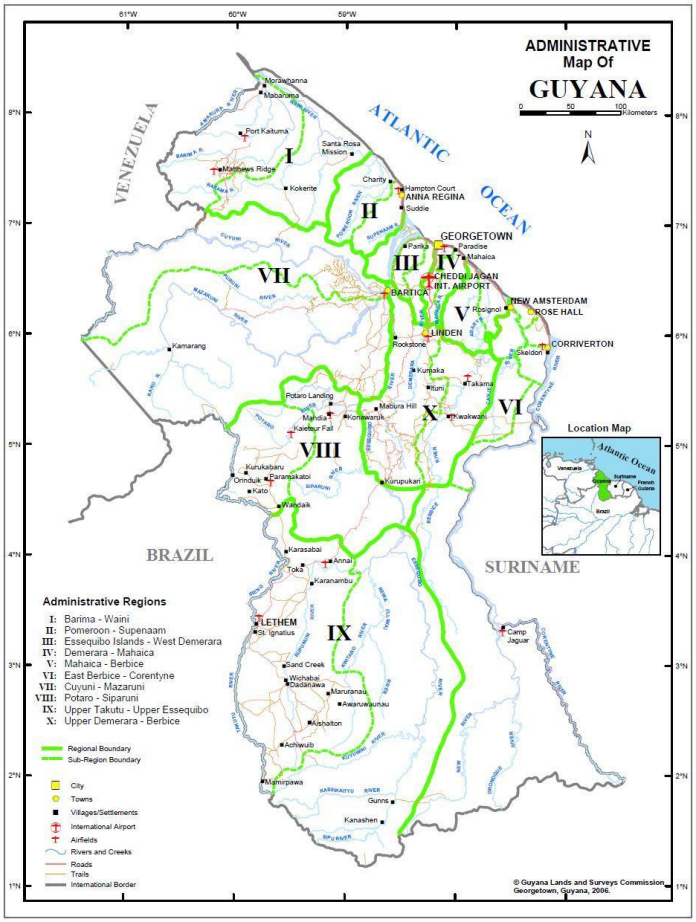

Figure 1. Administrative map of Guyana (downloaded from internet at https://maps-guyana.com/map-of-guyana-showing-administrative-regions)

3.2 Results Framework and Theory of Change

According to the project's 2020 annual report, in July 2019 "the multi stakeholder group met and selected 200 communities"[25] who will benefit from the installation of an ICT hub under the project. The project's outcome is that the livelihoods of the HPRCs improved by the provision of public services via the deployment of ICTs.

As per the project document, the overall goal of the project is "to enhance the sustainable human development of Hinterland Poor and Remote Communities (HPRCs) while promoting the development of a national green economy"[26].

[25] OPM, annual progress report 2020, p. 12. According to the PMU the total population of the 200 communities is close to 198,000 persons.
[26] ICT project document, p. 1

The project is designed with three pillars[27]: 1) Policy Development 2) Access (to both ICTs and public services) and 3) Capacity Development.

The project's outcome is articulated around four outputs, as shown on *Table 2* hereunder, which reproduces the project Results Framework:

Table 2. Results Framework (Source: project document p 17)

Goal	**Indicator**
To enhance the sustainable human development of Hinterland Poor and Remote Communities (HPRCs) while promoting the development of a national green economy	Not applicable at project level
Outcome	**Indicator**
Livelihoods of HPRCs improved by the provision of public services via the deployment of ICTs	*1.# of SMMEs offering or selling services online* *2.# of communities having access to information on sustainable technologies* *3.# of communities preserving local culture et al in digital formats and/or online* *4. Proportion of population accessing basic social services online (disaggregated by gender and age)* *5. Proportion of youth and adults with ICT skills, by type of skill (disaggregated by gender and age)* *6. Proportion of schools with access to: a) internet for pedagogical purposes; b) computers for pedagogical purposes; c) adapted infrastructure and materials for students with disabilities.*
Output	**Indicator**
1. E-government policy environment and legislation strengthened	1.1 Policy documents completed. 1.2. Policy documents approved by GoG. 1.3. Policy documents approved by the legislature if required
2. HPRCs access to ICTs in place	2.1% of people in HPRCs with access to ICTs, disaggregated by age and gender. 2.2. Number of ICT hubs deployed in HPR areas
3. Public e-services and information readily available to HPRCs	3.1. % of people in HPR areas using e-services, disaggregated by age and gender 3.2. Number of online services offered by public institutions. 3.3. % of public institutions with online presence offering access to relevant public information
4. Capacity of HPRCs to use ICTs and access e-services enhanced	4.1. % of HPR people trained in ICT use including relevant ICT platforms, disaggregated by gender 4.2. % of HPRCs locally harnessing ICT access and e-services

The Results Framework include six indicators at the outcome level (in italic font in *Table 2* above) and ten output level indicators. However, the annual progress reports followed a different format

[27]ICT project document, p. 8 .

for reporting on results, where only indicator 2.2. is reported upon, while additional information on each output's components is provided.
Project annual reports use the individual results of completed services or activities (e.g., outputs) as the indicator of progress, and uses an appraisal of "fully, partially, not achieved" to inform about the project's progress. They do not report on outcome level results or the six outcome indicators, but these will need to be included in the terminal evaluation at the end of the project. However, in line with the recommendations of this report, the project could use a different results framework and a revision of its scope if it is extended beyond its current deadline.

The project document did not contain full-fledged theory of change, but one was revised by the evaluation during the inception stage which could be stated as follows:

If e-government policy environment and legislation are strengthened, *provided* policy and legislation are enacted and enforced,

and if HPRCs gain access to ICTs hubs, *provided* all physical works are done, materials are delivered and capacity development for maintenance and users has taken place,

and if public e-services and information become readily available to HPRC, *provided* government pursues its commitment to facilitate the establishment of e-services ,

and if capacity of HPRCs to use ICT and access e-services is enhanced, *provided* communities show ownership and interest in its use,

then livelihoods of HPRCs will be improved by the provision of publics services via the deployment of ICTs, contributing to the enhancement of sustainable human development of HPRCs while promoting the development of a national economy.

Figure 2. Suggested theory of change of the ICT project (source MTE)

3.3 Linkages to national priorities and key partners

Both the goal of the project as well as the expected outcome are aligned to the government's priorities and supports its efforts in the achievement of the Low Carbon Development Strategy. Although there have been political changes during the project implementation, the project remains relevant to the current administration's priorities. Elections are foreseen to take place in 2025. At the design stage the project was aligned with UNDP's Strategic Plan 2014-2017 outcome (Citizen expectations for voice, development, the rule of law and accountability are met by stronger systems of democratic governance).

The project is nationally implemented (NIM modality) through the Office of the Prime Minister (OPM). Originally the project was placed under the Ministry of Public Telecommunications, but with the changes in government because of the 2020 election the project was attached to the OPM. A Project Management Unit (PMU) operated in the OPM and has been staffed since 2019. The National Data Management Authority (NDMA) created in 1983, has the responsibility for improving the delivery of government services to the citizenry through the efficient use of ICT. The NDMA also benefits from the oversight of the OPM and is a partner in the project

implementation, having facilitated the establishment of free e-government Wi-Fi services in several communities under a separate government project. Four of the six communities which were also visited during the evaluation field work benefited from the free Wi-Fi provided by the e-Government project (under NDMA).

3.4 Phase and implementation challenges

The ICT project is currently in its final phase, as it is coming to an end on 30 November 2023. The MTE reviewed the achievements to date, problems and challenges and formulated specific recommendations which included an extension of the project to review and fully achieve its objectives. The two main implementation challenges that affected project implementation were the protracted national election in 2020 and the COVID-19 pandemic. While the first entailed delays for project implementation in the midst of shifting priorities, as there was a seven-month gap linked to the no-confidence vote lost by the government that brought public matters to a standstill, the COVID-19 pandemic which was declared by the World Health Organisation (WHO) in March 2020 affected all countries and required a substantial adjustment of the implementation modalities. With the risks associated to direct person-to-person contact, the relevance and need for the project to provide ICT hubs and benefit from access to the internet was made, if anything, more evident. However, the accumulated delays meant that the project was still far from completing its four outputs.

The staffing of the PMU was from the start minimal, and the first project coordinator indicated staffing constraints in the first available annual report covering year 2020. The current staffing has increased significantly, but the complexity of the project, the logistical and cost considerations related to the outreach to the 200 ICT hub communities, means that a more fully staffed PMU would have allowed a more efficient project implementation. At present the PMU remains understaffed.

The project design was very ambitious. As the project is almost coming to the end of the second extension, it has yet to fully complete output 2, while progress on outputs 3 and 4 are minimal. The design seemed to assume a seamless link between the outputs and that the results of the second output would naturally flow into output 3 and 4. However, the completion of the second output is a prerequisite for the other two outputs, but it is not sufficient. Establishing the ICT hubs does not guarantee connectivity, which is essential to use any sort of internet services. The logistical difficulties and the limited manpower for implementing the project, coupled with the changes in the government as a result of the 2020 elections, means that a substantial amount of time was lost in implementation. All delays experienced on the different fronts put together means that between 2,5 and 3 years of actual project implementation time were lost.

The **scale** of the project is large, with a total budget of over US$ 17 million, and the geographical conditions and logistical constraints to reach the target communities require continued management attention and close supervision. A more incremental approach to the project outputs should have been used to ensure that both outputs 1 and 2 were completed and then focusing the remaining two years on completing outputs 3 and 4. At present, the project timeframe has allowed only to partially complete outputs 1 and 2. At the time of the MTE, the level of expenditures is almost at 54 % of the total budget.

4 Evaluation scope and objectives

The objective of this Mid-Term Evaluation is to provide an assessment of the project performance, recommend options to improve project implementation and inform decision-making on the continuation of the project. The Mid-Term Evaluation has:

1. Reviewed progress made towards the project objectives, captured good practices and success stories and documented lessons learned and recommended measures to improve project implementation.

2. allowed the Office of the Prime Minister (OPM) and UNDP to meet their accountability objectives.

The criteria for this Mid-Term Evaluation are standard evaluation criteria as defined by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) and the United Nations Evaluation Group (UNEG): relevance, coherence, efficiency, effectiveness, sustainability and impact. The evaluation also assessed the cross-cutting normative principles of the United Nations namely regarding the Human Rights Based Approach and the inclusion of Gender Equality as a specific line of inquiry, following the UNEG guidance materials[28].

The specific objectives of this MTE are to:

8) Review progress towards the project's objectives and outcomes;
9) Assess the likelihood of the project delivering its intended outputs;
10) Identify strengths and weaknesses in design and implementation;
11) Identify risks and countermeasures in respect as regard sustainability;
12) Identify internal and external challenges, lessons learned and good practices;
13) Identify mitigation measures to ensure relevance and operability of the project.
14) Make recommendations for a follow-up phase of the project.

The scope of the Mid-Term Evaluation is 30 November 2017 to 31 August 2023. The Evaluation is also forward looking to provide evidence of results and recommendations regarding the continuation of the project. The main evaluation questions are included under each evaluation criterion under section 7 findings.

[28] UNEG, "Integrating Human Rights and Gender Equality in Evaluation, Towards a UNEG guidance", HRGE Handbook, 2011,
http://www.unevaluation.org/document/detail/980
UNEG, "Integrating Human Rights and Gender Equality in Evaluations", August 2014,
www.unevaluation.org/document/detail/1616

5 Evaluation approach and methods

5.1 Evaluation standards, approach and criteria

The Mid-Term Evaluation has followed the United Nations Evaluation Group (UNEG) evaluation norms and standards (2017 revision), and used the UNDP "PME Handbook" established by the UNDP in 2009 and revised in 2011, the UNDP Outcome-level evaluation, a companion guide to the Handbook on Planning, Monitoring and evaluation for development results for programme units and evaluators, December 2011, the UNDG, Results-Based Management Handbook, Harmonizing RBM concepts and approaches for improved development results at country level, October 2011, as well as the updated UNDP evaluation guidelines of 2021[29]. It is carried out under the provisions of the revised UNDP Evaluation Policy of 2019[30].

The Mid-Term Evaluation also adheres to and is a signatory of the UNEG ethical guidelines for evaluation and the UNEG Code of Conduct both of 2008. The approach follows a "utilization-focused evaluation" approach that is described by M. Q. Patton in his book of the same name[31] that continues to be a good practice reference material for the conduct of evaluations. It applies the UNEG HRGE guidance materials from 2011 and 2014 regarding Human-Rights and Gender Equality principles in evaluation.

The criteria for undertaking the assessment are mentioned in Section *3* of the ToR and are the standard criteria used for project evaluations: relevance, coherence, efficiency, effectiveness, impact and sustainability. Originally the definitions of each of the evaluation criteria had been given by the OECD/DAC in its glossary of key terms in evaluation and results-based management in 2002. However, in 2019 the evaluation criteria were revised and updated as follows[32] :

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

Relevance answers the question: Is the intervention doing the right things?

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

Coherence answers the question: How well does the intervention fit?

Efficiency: The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. Note: "Economic" is the conversion of inputs (funds, expertise, natural resources, time, etc.) into outputs, outcomes and impacts, in the most cost-effective way possible, as compared to feasible alternatives in the context. "Timely" delivery is within the intended timeframe, or a timeframe reasonably adjusted to the demands of the evolving context. This may include assessing operational efficiency (how well the intervention was managed).

[29] http://web.undp.org/evaluation/guideline/index.shtml
[30] http://web.undp.org/evaluation/documents/policy/2019/DP_2019_29_E.pdf
[31] "Utilization-focused Evaluation", Michael Quinn Patton, 3rd Edition, Sage publications, 1998
[32] https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm

Efficiency answers the question: how well are resources being used?

Effectiveness: The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. Note: Analysis of effectiveness involves taking account of the relative importance of the objectives or results.

Effectiveness answers the question: Is the intervention achieving its objectives?

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

Impact answers the question: What difference does the intervention make?

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

Sustainability answers the question: will the benefits last?"

5.2 Tools and methodology

The Mid-Term Evaluation used a combination of methods that included:

a) Desk review of available documentation (see list of documents annex 2);
b) 9 Individual Key Informant Interviews (KII) with key project stakeholders in Georgetown, plus two KII with UNDP management (see list of interviews annex 3).
c) Field work in six selected communities with project partners to conduct data collection through:
    - Interviews with village councils and/or *Toshao*[33];
    - Interviews with local population and direct beneficiaries of the outputs, particularly women and youth affected by the project;
    - On-site observation of the six communities in regions 1,2,3 and 7 (see *Figure 1. Administrative map of Guyana* (downloaded from internet at https://maps-guyana.com/map-of-guyana-showing-administrative-regions)

The Mid-Term Evaluation used a purposive sampling strategy given time constraints and the difficulty in accessing remote communities and the logistical challenges it entailed. The field work sample was meant to obtain evidence of progress in three locations within the regions covered by the project:

1. two were best cases where results were fully achieved or where results were significant, to learn what worked and why, and be able to upscale or replicate the model in future interventions.
2. One worst case scenario was identified (Baramita), to learn why in a specific community the expected results were not achieved, identify constraints and bottlenecks to avoid similar problems in a potential extension of the project.

Findings from the field work are therefore not statistically representative of all ICT hubs that have been completed to date. Thanks to the support of the PMU, the evaluator was able to travel to six and not only three communities as per details hereunder: (Source: MTE notes)

[33] A Toshao is the traditional leader of Amerindian villages

Table 3. VCs villages visited and number of people interviewed

Date	*Village*	*Region*	*Population*	*Households*	*Connected*	*People interviewed*
30.9.23	Karrau	7	563	121	Wi-Fi	2 M – VCs 1 M – Hub man. 4 F – 1 M users
1.10.23	Agatash	7	779	279	Wi-Fi	2 F – VCs 1 F – Hub man. 1 F - user
2/3.10.23	Baramita	1	3,500	N/A	No	2 M -. VCs 1 M – Hub man. 1 F – school principal 1 F – head health post
4.10.23	Bethany	2	554	131	Wi-Fi	2 F – VC 1 M – Hub man. 4 F – 2 M residents
4.10.23	Mashabo	2	500	130	Wi-Fi	2 F – VCs 1 M – Hub man. 1 F – dep. Hub 8 F – 2 M residents
6.10.23	Santa Aratack	3	384	67	No	1 M – VC 1 F – Hub man 2 F – assistant Hub 1 F – teacher, 1 F health worker
Total people interviewed (F= women, M= Men)						32 F and 14 M

Note: most VC members interviewed included the Toshao, except for Baramita. The MTE interviewed systematically the VC members and ICT hub managers in all VCs. In some additional information was obtained through two schoolteachers, two health workers, or resident population with which two Focus Group Discussions were held (in Bethany and Mashabo).

The Evaluation was mostly qualitative and worked from the perspective of the Most Significant Change (MSC) approach, to obtain feedback from the different stakeholder groups, using appreciative inquiry. The evaluation focused particularly on any kind of change process triggered by the project implementation, positive or negative, direct or indirect.

KII were done through semi-structured individual interview process. KII notes were coded to ensure respondents´ confidentiality in line with UNEG norms and standards.

The Evaluation used a questionnaire guide (see annex) to ensure comparability and consistency amongst the different respondents who were be interviewed. The KII included open and closed questions, as well as using a five-scale rating to obtain respondents' feedback regarding their perception about the project's results and their level of satisfaction with UNDP. Each rating was

in turn based on a qualitative justification explaining why such a rating was given. Triangulation (e.g., confirmation from three different sources) was used where perceptions were not involved.

The MTE Consultant has not worked in the country previously but has thirty years of evaluation experience and has completed 124 evaluations. He is a vetted expert in the GPN/Express roster for the UNDP as well as a RBM trainer.

6 Data analysis

As indicated in the approach under section *5* the evaluation was largely qualitative. The data collected through KII and documentary review was coded and brought on a spreadsheet collating key data. For numerical data (e.g., perception ratings) standard formulas were used to obtain the median rating. For content analysis, content re-iteration was used and extracted from the spreadsheet. The approach and sampling strategy indicate that the evaluation findings from the field work are not statistically representative, nor can they be generalized.

7 Findings

7.1 Relevance

7.1.1 How aligned to national priorities and SDGs was the project?

The project was implemented under a previous administration and under the UNDP 2014-2017 Strategy Plan. The ICT project was aligned to the government priorities and to the UNDP programme. The project today remains one of the government priorities, as mentioned by the Prime Minister in his speech during the Amerindian Cultural Heritage celebration on 29 September 2023, event attended by the evaluator. Although the government changed since the beginning of the project, the President's One Guyana vision and the vision 2030 are still driving the agenda and the project remains relevant to the needs of the people of Guyana and is also supporting the achievement of the SDGs. GoG´s goal is labelled as "A diversified and resilient productive sector, with emphasis on job creation and support to small-medium businesses; catalytic and transformative infrastructure. SDGs 1, 8, 17"[34] . For the UNDP, the ICT is currently aligned to the Country Programme Document output 1.3: Citizens have increased access to Government services through information and communication technology (ICT) at the national and subnational levels.

7.1.2 How responsive was the project to changes (political, COVID 19, etc.)?

The project did not have any sway over the political challenges that lead to a no-confidence vote which paralyzed the government administration for nearly seven months and led to a protracted election period. As a result of the changes in government, the PMU staffing was revised and a new PMU manager was hired six months after the first one left office, along with other PMU staff (see annex on PMU staffing). During this period the project's progress was very low. In March 2020 the COVID-19 pandemic further affected everyone and the way of doing business changed as person-to-person contacts were no longer authorized. Despite the added work and inevitable delays that the pandemic created, the importance of the project in providing an ICT

[34] UNDP Guyana CPD, 2022-2026, p. 10, RRF

hub connected to the internet for the 200 villages became even more apparent. The pandemic was instrumental in raising people's and politician's awareness on the needs and uses of the ICT hub for several reasons: a) in order to facilitate access to e-government services, b) in order to facilitate access to information, c) in order to remain linked to the rest of the country given the very remote location of many of these communities. During the COVID-19 pandemic the GoG also provided the project's target villages with COVID-19 grants, unearmarked except for an amount of US$ 2 million which was to be spent on the ICT hubs under the current project, the physical construction of which had not been planned or included in the initial project design, falsely assuming that the 200 VC already had the building in which to host the hub.

7.2 Coherence

7.2.1 What is the strategic fit of the project in relation to government policies?

The project was developed under a different administration and the initial assessments conducted under output 1 showed that there was a need for a government e-strategy. Despite the calls for an overall e-services government strategy, the line ministries are each implementing their e-government services based on their developing internal sectoral strategies, but there is not yet a whole of government approach to ICT and e-services, and therefore the overall umbrella of the government to guide the vision and manner to achieve the goal of a Guyana that is full connected and digitalized remains a longer-term endeavour that goes beyond the scope of this project. That said, the project itself clearly represents one of the government policies to provide ICT services to all the population and without excluding anyone, hence the focus on the identification of the 200 villages that are on the list of the 243 currently recognized Amerindian villages in the country in the list of the Ministry of Amerindian Affairs. This is also an important alignment to the UN priority of "Leaving No One Behind" (LNOB) as Amerindian villages are part of HPRCs.

In relation to the selection of the villages, the original project document targeted HPR communities and not exclusively Amerindian villages (i.e., remote and poor communities that may exist but that are not of Amerindian descent were not selected). According to the information leveraged during the evaluation, all the 200 sites are in the list of the currently 243 Amerindian villages of the Ministry of Amerindian Affairs. The evaluator requested the documentation that showed who had made the decision and what criteria had been used to select the villages but has not yet received such information. Most of the Amerindian villages visited are mixed and are not exclusively Amerindian. It is the understanding of the evaluator that the 200 villages selected overlap with the map of land titles that the Amerindian communities possess and that is in the hands of the Ministry of Amerindian Affairs[35]. For the sake of transparency and accountability, it would be useful to obtain the selection criteria and the nominal list of decision makers that chose the target villages. It would be highly beneficial if there could be some kind of document to show there are no remote and poor villages that are

[35]To be an officially recognised Village Council, the village has to possess an official land title. The report uses the term "communities" and "villages" or "VCs" interchangeably, but target beneficiaries are officially Village Councils, e.g., those having been registered and holding a land title. "communities" do not have a land title, nor do "satellites", e.g., smaller groups of dwellings attached to one Village Council.

not Amerindian in the HPRCs, so evidence of not excluding other vulnerable groups is provided, in line with the LNOB programming principle[36].

7.2.2 How well is the project coordinated in relation to other actors?

The project initially was placed under the Ministry of Communications and Transport. With the changes in the administration, it was placed under the Office of the Prime Minister. In absence of a Government e-Services Strategy (recommended in the 2019 assessment under output 1 of the project) the project attempts to coordinate with the most advanced line ministries in the provision of e-services, e.g., Ministry of Health, Ministry of Education, Ministry of Home Affairs. However, it needs to be noted that while good relationships exist at the central level, the articulation and coordination of ICT remains the responsibility of each line ministry. If at the beginning of this project the expectation was that the ICT project was going to provide a platform to bring the different services together, that expectation has not materialized. Line ministries have advanced in their efforts to implement e-government services while the project was struggling to advance in its implementation. It is no longer within the remit of this project to provide such a platform, if ever it had been, and the interoperability framework has not been further developed to the knowledge of the MTE.

NDMA is not developing the government e-services strategy, the responsibility has been placed under the national ICT advisor in the Office of the Prime Minister (OPM). Until there is a policy umbrella to bring together the various e-services, coordination and particularly streamlining the efforts will remain difficult. One major challenge to is provide a good connection that allows the use of the internet at an affordable cost. All four communities visited during the evaluation indicated having a very low level of connectivity, which seriously thwarts the ability to surf the net and access any service. This directly affect the project implementation, and particularly output 3 which relates to the information and provision of e-government services and the development of four prototypes of e-services, which do not seem achievable at present due the issues related to the connectivity and quality of internet services, something that goes beyond the project to address.[37]

While the project can procure and support the connection of the ICT hubs, connectivity to internet services remains a responsibility of the GoG, and not that of a single project. There are broader issues related to bandwidth and costs of internet services that need to be addressed and should be solved after a national e-government strategy and its plan of action have been agreed upon, because this affects all the population, not only those living in the 200 villages in which ICT hubs are being installed.

In terms of project implementation, the governance structure is a Project Board (PB) which includes a comprehensive range of stakeholders, with a good participation of the diverse constituencies, many of which are regional or local representatives. It is quite large and inclusive, but there hasn't always been a quorum attending the PB meetings. One reason was the limitations linked to the COVID-19 pandemic, and the latest PB meeting was suspended as it coincided with the national tragedy in which 20 girls were killed in a fire in a dormitory. The latest PB minutes relate to the last meeting on 25th November 2022, while the PB made two

[36] That said, 43 of the 243 VCs in the list of the Ministry of Amerindian Affairs were not selected to benefit from this project.

[37] Note that the communities visited didn't include any which benefited from V-SAT connection or broad bandwidth. It may be that some of the communities in the 200 VCs can use faster internet services and operate accordingly.

endorsements in March and May 2023, the latter mainly for the extension of the project until 30 November 2023 and approving the corresponding workplan for 2023.

Key Informant Interviews (KII) with PB members show that there is good communication and information sharing among those who can attend the meetings, particularly with the line ministries such as education. Given the logistical and travelling constraints and the costs associated with travel, a few PB members are not always able to attend the PB meetings, especially participants from the provinces or local communities.

7.3 Efficiency

7.3.1 Is the project bringing value for money?

It is very difficult to answer this question because the project remains at midpoint of implementation and has yet to generate visible outcomes and effects since few ICT hubs (25) have been connected out of 91 completed and 30 under installation, according to the PMU. Two critical aspects that need to be addressed in determining the value for money are: one, the cost of logistics and transportation in providing the materials and equipment and two, the use that is being given by the villages to the ICT hub once it is build and equipped and connected.

Under the cost considerations, the difficulty in transporting the equipment, that normally requires a combination of land, sea, river, and sometimes air transportation means that working with HPR communities entails substantial costs. According to the PMU, costs can be four-fold from one easily accessible community to another more remote village. The field visits to six communities have demonstrated how complex and costly internal travel in the country is: on the first day of the field visit it took 4h30 to reach Bartica (region 7), using vehicles twice (once crossing the floating bridge after a one-hour wait) boats twice (1h30) on the way to visiting Karrau and Agatash communities. And these are reportedly easily accessible communities, as compared to most villages in regions 1, 8 and 9 to give an example. The cost of visiting the last of the villages selected for field work, Santa Aratack (one hour drive and 40 minutes of boating time one way) was reported to cost G$ 80,000 for the round trip, equivalent to US$ 400.--.

It is therefore not possible to do a cost-benefit analysis on project expenditures from the perspective of the investments made in establishing the ICT hub, providing the equipment, and connecting the solar panels by community. What needs to be clear is that while the cost of the equipment procured is the same for each village, the costs of construction of the hub (something which was not contemplated in the original project design) can be substantially different. In fact, the GoG gave COVID-19 grants in 2021 to the 200 Village Councils (VC) amounting to US$ 10 million (e.g., US$ 50,000 per VC on average), of which US$ 2 million were to be used for the construction of the ICT hub. Given that the project design has assumed the existence of available buildings in the VC, something which did not always prove true, the project had to incorporate after it had already started implementation specific funding for civil works, which were estimated to cost US$ 25,000 per hub, with a flexibility of going up to US$ 30,000 per hub, within the overall budgetary limitation of US$ 1.7 million under the project.

This proved very critical in the establishment of the buildings that hosted the ICT hubs, since five of the six VC visited by the evaluation were actually built during the project. As this funding had not been foreseen in the project document, it also contributed to delayed implementation as the equipment procured could not be installed without an adequate physical location to host the hub (sometimes simply stored until it could be delivered). The project document did not

provide any specific standards for the ICT hub, but the PMU rightly sought to use common standards in the construction of the ICT hubs, just as the project had to do for the equipment and materials procured.

Regarding the use of the ICT hub by the communities, the evaluation found wide differences across the different hubs visited. The different level of interest and frequency in the use of the ICT hubs does but reflect the profoundly culturally diverse population and village dynamics. As requested in the inception phase, the MTE was keen to visit best-case scenarios as well as worst-case scenarios, both for obvious learning purposes. It comes as no surprise therefore that for some communities visited, the project is bringing value for money, but not to the same level for each VC and not in all cases. For the VCs that have not yet been connected, there are high expectations that the hubs will be highly utilized provided they have a good connectivity. For those that are connected and were visited by the evaluator, the disruption of coverage and low bandwidth means that they are not able to fully use access to the internet. At present none of the VCs visited can use the e-government services foreseen in the project document.

Two aspects may contribute to this: 1). The official hand-over ceremony of the ICT hub to the VC. So far, out of the 91 hubs that have been established, there has not been any official hand over ceremony yet. PMU staff indicates that this is because to have a complete ICT hub connectivity to the internet services need to be ensured. However, the ICT hubs visited during the field work by the evaluator show that the connection is done through the e-government free Wi-Fi services, provided by NDMA, but with an insufficient bandwidth to use internet reliably. While some of the ICT hubs have been connected through V-SAT connection, those visited during the evaluation were using the Wi-Fi provided by the cellular phone companies and paid for by the government. VC interviews showed their high level of satisfaction, but also their concern about the very low bandwidth of the internet connection, severely limiting the use that can be done of on-line search and internet services. The evaluator tried to go on-line in one of the hubs but despite waiting for several minutes was unable to access the requested page (which was google.com). So, one of main issues emerging from the field visits is that VCs are all requesting better connectivity for the internet. 2).The largest part of the VC annual budget comes from government grants: therefore, ownership should not be taken as a given since the project is establishing the ICT hubs free of charge. There are no counterpart funds that must be committed by the VC. In the experience of the evaluator, entirely free project benefits are not conducive to creating ownership.

It is the understanding of the evaluator that so far none of the ICT hubs has been officially handed over to the VC, which means that VC largely consider the GoG to be responsible for the hub until the official ceremony, while they do manage to use the computers to a certain extent in various of the VC visited[38].

7.3.2 Has it been efficiently managed?

The project has had multiple challenges and has a shifting management structure since it started in November 2017. The first Project Management Unit (PMU) staff was recruited on 15th January 2019, initially with one project manager (end of contract 14.01.2021) and one finance specialist

[38] *Nonetheless, a social network post showed one of the project ICT Hub (and a village store and canter) officially handed over to the village council by the Minister of Amerindian Affairs. This is likely to attract further attention from other VCs as those who have a completed installation are awaiting the official hand over from the OPM. It is unclear if and when the OPM coordinated with the Ministry of Amerindian Affairs this ceremony.*

(end of contract 5.09.2021). In May 2019 a procurement specialist was recruited (end of contract 24.05.2021), and three drivers were hired in November 2019 (two with contracts ending November 2022, and one with a contract ending November 2023). During most of the year 2019, the PMU was essentially composed of a skeleton staff of three, including the project manager.

When the project manager finished his contract in January 2021, a new project manager was hired six months later, in July 2021 (end of contract November 2023) and a project administrative assistant in August 2021 (end of contract October 2022). In August an IT assistant was hired (end of contract May 2023, resigned March 2023) and a procurement officer was hired in September (end of contract November 2023) as well as a project engineer (end of contract May 2023, resigned April 2023). Additionally, a finance officer was recruited in September (end of contract September 2022, discharged February 2022). In November an electrician was hired (end of contract November 2023, resigned in August 2023) and in December a project Engineer was hired (end of contract November 2023). During 2022 in May an electrician was hired (end of contract November 2022, discharged) and in August another electrician was hired (end of contract November 2023) as well as an Information Technology Assistant (end of contract May 2023, resigned March 2023). In October an administrative assistant was hired (end of contract November 2023). Finally in 2023, two drivers were hired in January (end of contract November 2023, one resigned Augst 2023), in March a clerk of works was hired (end of contract November 2023) and a finance officer was recruited in May 2023 (end of contract November 2023). In total there have been 21 persons hired to work for the PMU since the beginning of the project. (see annex 5 for the full list).

The PMU is currently staffed by only eight persons at the time of the evaluation out of fifteen identified and approved posts. Six staff did not have their contracts renewed, five resigned before the completion of their contract, and two were dismissed for breach of contract. This shows how difficult it is for the PMU to be able to correctly manage and implement the project with such an unstable and small staff. As mentioned, given the logistical challenges to reach the 200 VCs the project is highly management intensive and requires constant travels. The PMU needs critical support to ensure efficient management, and this necessarily means that the PMU should urgently have the additional following positions in addition to the ones already endorsed (but not yet filled) by the project board: a) Deputy project manager and b) Communications and reporting officer, c) community development specialist (providing direct support to ICT hub managers and VCs). A successful project implementation and efficient project management requires a stable, skilled and fully staffed PMU.

The PMU has rightly chosen to focus on the completion of the output 2. They could not do more and had to place their efforts in the establishment, construction and installation of the ICT hubs. This came at a cost given the PMU's limited human resources but much more can be done to improve communication and the quality of the reporting. There needs to be a proper map of the 200 VCs under this project in the annual reports, showing clearly the evolution and using different colours for those under construction, those completed and not connected, those completed and connected, and so on. Better and clear visual information is needed regarding the project progress and a Management Information System (MIS) should have been put in place at the onset of the establishment of the PMU with dynamic maps to show progress.

Planning for the implementation should also be more clearly documented. It is certain that the installation of 200 hubs can only be done gradually. However, to be accountable to the citizenry of the VCs, it is important for the PMU to give their annual planning so that communities know what and when to expect the project to come to their location. Some of the VCs that have not

yet been covered are asking some of the VCs that have a hub why they have not benefited yet from the project[39]. The project likely needs to implement its activities in clusters in one or two regions at the time, but the VCs that will be serviced and the order in which they will be serviced should also be established in the annual plans, so that all VCs know what to expect from the project.

Reporting can also be improved, by highlighting the changes that the project is bringing to the VCs that have benefited from a completed installation (more in the effectiveness section hereunder), rather than providing lists and no information on outcome level results (e.g., the changes produced by the project for the communities).

Regarding the financial management of the project, the information received from the UNDP indicates that the delivery rate is almost at 54% of the total project budget as of the end of September 2023.

By output the expenditures are as follows (Source: UNDP)

Table 4. Project financial expenditures

Financial report from 1.11.2017 until 30.09.2023	**Expenditures in US$**	**percentage of expenditures**	**% of total budget US$ 17,030,752**
Output 1 policy	710.038,01	7,73%	4,17%
Output 2 ICT access	6.175.826,79	67,20%	36,26%
Output 3 e-gov services	3.562,53	0,04%	0,02%
Output 4 capacity development	255,19	0,00%	0,00%
Output 5 management	2.300.862,57	25,04%	13,51%
total expenditures	**9.190.545,09**	**100,00%**	**53,96%**

The above table shows that two thirds of the expenditures are related to the output 2 (or 36% of the total project budget) while project management costs 25% of the expenditures (or 13.5% of the total project budget). There has been some investment at the policy level under phase 1 of the project before the change in government with 7.7% of the expenditures under output 1 and negligeable investments in outputs 3 and 4 (both amounting to 0,04% of the project expenditures, of 0,02% of the total project budget).

7.3.3 How well was the project designed?

The project design contains several assumptions which did not prove correct and further complicated and delayed implementation. The assumption that buildings to host the hubs were available did not prove true. Five of the six VCs visited needed to identify a construction site to host the hubs. The project had to review the budget and allocate a specific component for the civil works up to US$ 30,000 per hub which was initially absent. Another assumption of the project design was that VC residents are computer literate. Interviews with the six communities indicate that most, if not all adults, have a smart phone. Certain people also have tablets, while a very low number (estimated at 5% of the population) has a computer. Some have received the computer through government projects (e.g., for example, one family one laptop project) but it did not include training in the use of the computer, or it does not mean that the recipient is knowledgeable in the use of the computer software. Others, like the Toshaos, receive a laptop

[39] As reported to the evaluator during field interviews

from the Government as head of their communities. Others, like the teachers, also have laptops but in the communities visited many were out of order. So, there are few computers available, but even fewer people who are used to operate a computer and know how to use the MSOffice software provided. Computer literacy should not have been taken as a given, as the MTE met few people who know how to operate a computer and use the MSOffice applications in the communities visited. Another untested assumption was that the connection to the internet automatically assured that the quality of the connection allowed users to navigate the web and use e-government services because sufficient bandwidth was available. In the four VCs visited by the evaluator, the quality is unreliable, and speed of the connection is too low to be able to work online. Cell phones have better connection and a faster speed than the computers, given distance to the cell towers, and the technical specifications of the ICT hub laptops, which are at the lower end of the spectrum among the currently available computers on the market today (it needs to be remembered that the specifications were done in 2019, and that technology changes and advances very rapidly, so laptops provided are currently outdated).

The project design also assumed that Government e-services would be able to work together with the ICT project, but each ministry has its own workplan and strategy, and without the overall e-government strategy to coordinate the efforts, an interoperability framework, a cyber security strategy, and other related aspects covered in the initial e-gov assessment made under the phase 1, it remains difficult to expect closer coordination between the project and the line ministries.

The project did not sufficiently contemplate the need for a strong and fully staffed PMU as the project is very challenging and requires intensive management efforts. The initial design for the PMU is not sufficient to ensure proper project implementation, particularly if the objective is not only to establish and install the hubs and connect them, but also to ensure the ownership of the communities and the sustainability of the efforts to have VCs own the hubs and use them for their benefit.

The project design was overly ambitious and did not take into consideration the lead time to start a project. Experience suggests that the first year of the project is needed to put the structures in place, recruit the staff, procure the materials and make the necessary implementation plans. No such lead time was built into the project design.

It is also necessary to develop a theory of change (ToC) for the project implementation, that explains how the project will achieve the objectives and through which efforts. The ToC is a roadmap or strategy towards the project's outcome, while the results framework indicates what the expected results will be.

7.4 Effectiveness

7.4.1 What are the key results of the project?

The project has despite its challenges managed to build or equip 91 ICT hubs fully and 30 are being installed out of the 200 target villages (this figure has been provided by the PMU as the current status of the project implementation, given there has not been any other documented progress report after the 2022 annual report). Out of the 121 ICT hubs built and equipped or under establishment, at least 25 have also been connected to the internet (currently 30 according to the KII with NDMA). In the absence of supporting documentation to triangulate this finding, there have been two types of connection made under the project, both provided by the

NDMA: 1) a limited number of V-SAT connections (approximately 15, started in 2019) and b) a Free E-gov Wi-Fi service outside of this project through selected service providers, yielding a total of approximately 130 connections to the hinterland according to NDMA (of which 15 are covering ICT Hubs under this project). Without a map or monitoring report to show the evolution of the ICT hubs building, equipment and connection, it is challenging to find evidence sustaining the reported figures. The MTE can only indicate that four of the six communities visited during the field work had been connected, all through the free Wi-Fi E-gov project by NDMA, but none seemed to have a sufficiently strong and reliable signal to allow a significant use of internet services.

The MTE requested a map of the location and status of the hubs. UNDP provided four .tif format maps that show the location of the 200 VCs, but they do not show regional limits nor are they numbered. There are more triangles and dots that the name of the VCs, so it is not possible to verify the number of VCs that are covered under these maps. It would appear that 62 VCs are mentioned in the map of completed ICT hubs (although there are more triangles than names in the map), but it is not clear how many there are in total. The same limitation applies to the other maps shown hereunder. The MTE to have a better understanding of the coverage of the ICT hubs has added the region's boundaries (in red in the maps hereunder) so that it is more evident in which regions the VCs have benefited from the project.

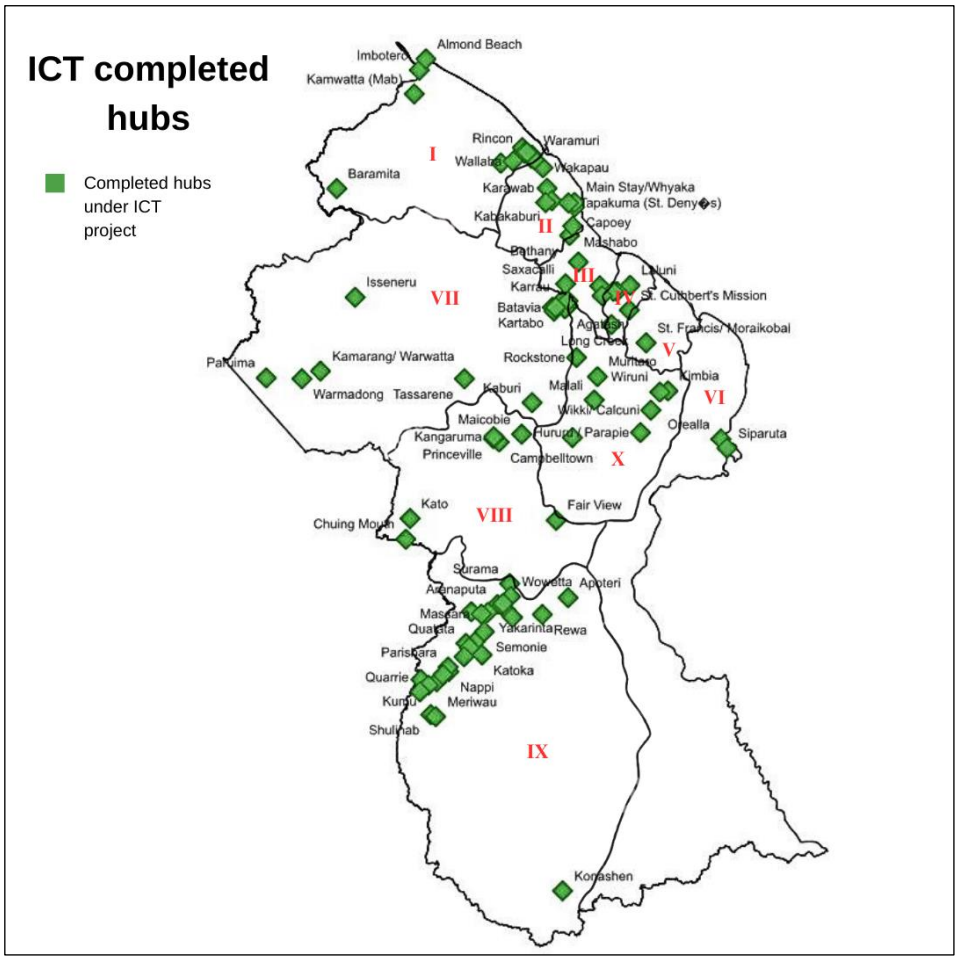

Figure 3. Completed ICT hubs map (Source UNDP, modified to add regional boundaries by MTE)

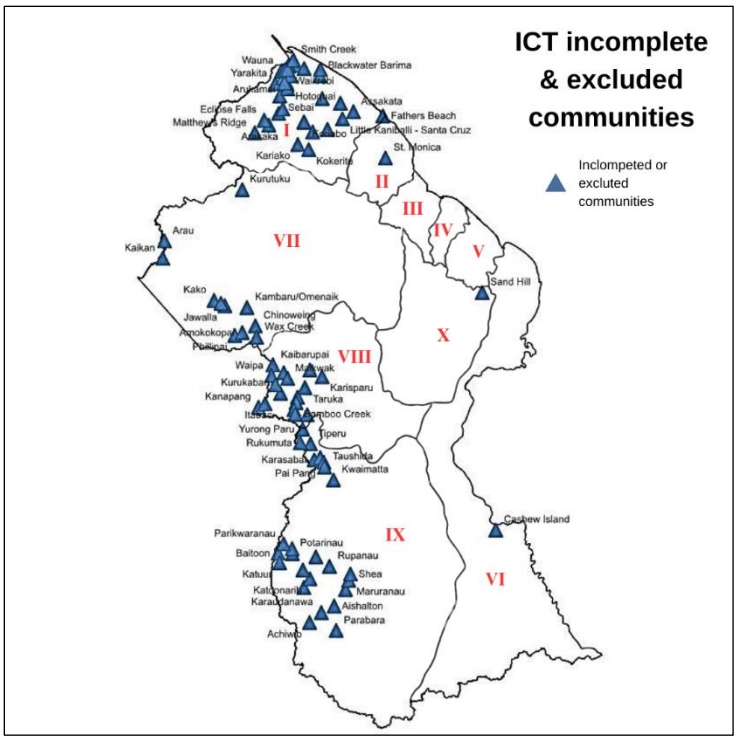

Figure 4. Incomplete hubs under implementation

This figure is challenging because it mixes incomplete hubs with excluded communities. There should be a different colour for the ones not yet completed but in the process of being established, and the VCs that have been excluded (and which should number 43 according to the list of the Ministry of Amerindian Affairs).

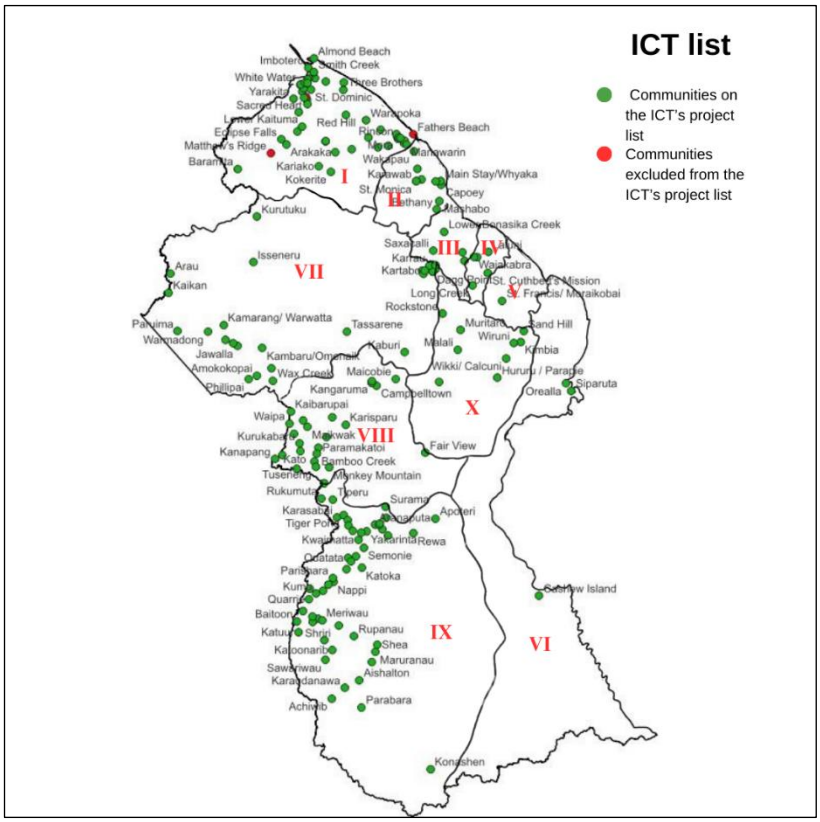

Figure 5. ICT communities project list (green) and excluded communities (red)

It is unclear to the MTE how the excluded communities on this map relate to the communities in *Figure 4* above. The MTE expects the comments to address and answer this question.

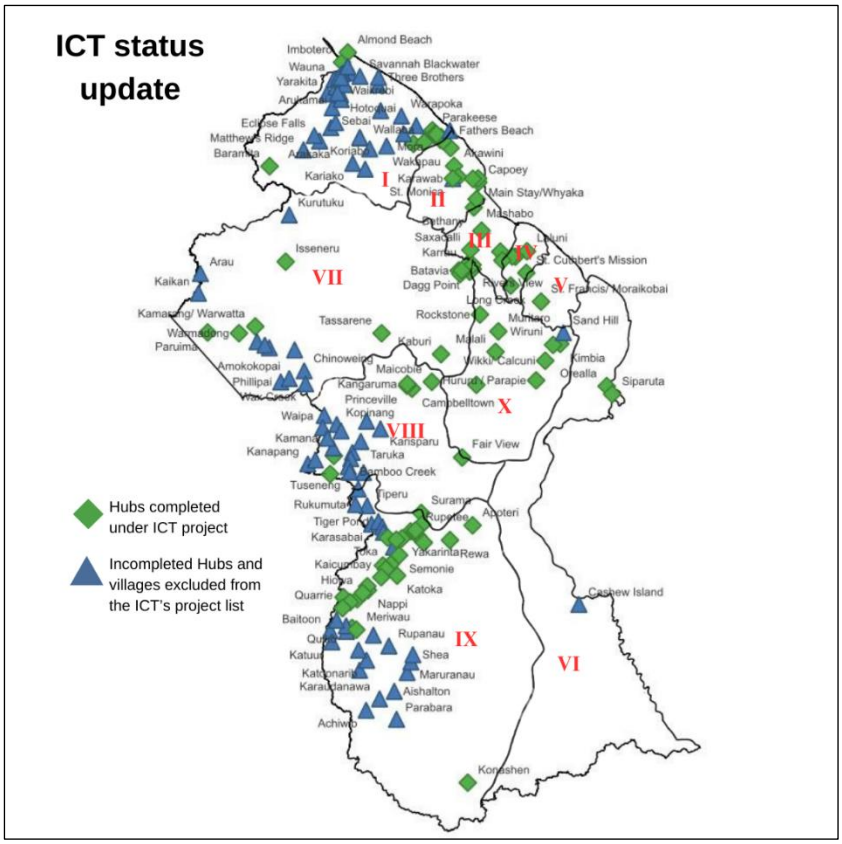

Figure 6. ICT status update

Again, the number of dots and triangles do not add up to the number of VCs that are named on the map but are not numbered. Pending further information, the MTE is using the figures of 91 hubs completed and 30 being installed.

The results of the project since its beginning indicate that :

Output 1 has produced two assessment reports, one for NDMA capacity assessment and one for the ICT mapping of public institutions. Both were undertaken by a Norwegian firm, NRD, and the final reports were delivered although there were some issues about the quality of the assessments regarding the draft reports, which vetted work from the consultancy team done between April and November 2020 as indicated in their report . These assessments were made in 2019 before the change in Government, and to the knowledge of the evaluator, have not been used since. According to the ICT mapping of public institutions report, the " Digital Governance Roadmap for Guyana was elaborated by Estonian e-Governance Academy (eGA) and NDMA in 2018."[40] There does not seem to be an updated Government Strategy after the change of Government. It was reported that the development of a whole of government (WoG) E-government strategy is now placed under the responsibility of the national ICT advisor working at the office of the Prime Minister. The evaluator did not have the opportunity to hold a meeting with this person and confirm the status of the WoG E-government strategy, but anecdotal evidence suggests that line ministries are developing their own strategy, without an overall policy umbrella to coordinate the effort of the various ministries. Considering the difficulty in

[40] NRD and NDMA final report, version 1.2., 20.8.2021, p. 12

obtaining reliable broadband connections and their high costs, it is unclear how the government proposes to address the huge connectivity challenge that affects a large part of the ICT hub villages. Connectivity is a GoG responsibility which goes beyond the scope of the ICT project or the capacities of the NDMA. The ICT project can help provide connectivity but cannot establish the overall strategy and specifications under which connectivity should be provided to the people of Guyana.

According to the last available progress report for year 2022, no progress was made on the *national e-government strategy and implementation roadmap* (indicator 1.4), on the *National Government Interoperability Framework* (indicator 1.5), on the *Cybersecurity, broadband and open-source strategy* (indicator 1.6). But line ministries have not stayed idle and have pursued their own internal strategies, seemingly working in parallel more than in coordination with the other line ministries.

Output 2 is where the bulk of the efforts was placed since the new PMU team took over in July 2021. It is now reportedly at 121 hubs built, equipped and installed, or under installation, of which between 25 and 30 have been connected to the internet. This relates to indicator 2.1 *Select and deploy appropriate and affordable ICT infrastructure in HPRCs, including ICT hubs*. Under indicator 2.2. *Develop technical capacities required to run and maintain new ICT infrastructure, software and applications*, including the training of 200 ICT managers, 30 ICT technical, 30 solar PV technicians, the project reported 76 ICT hub managers trained in three batches (September 2022, January 2023, March 2023) and 34 solar PV technicians. Regarding indicators 2.3. *Design comprehensive technical documentation for newly deployed ICT infrastructure and software*, and 2.4. *Develop training and skills building guides on the management, use and maintenance of newly added ICT infrastructure*, the activities had not been started. This is mainly because the PMU is chronically understaffed, with a team of 15 persons on paper but a current staff of only 8 persons, just over half of what is needed. A choice had to be made and indicator 2.1 focused the efforts to deploy the ICT hubs as soon as possible, but there was no capacity left to address the other indicators.

According to the 2020 annual project progress report, under the first phase of the project and the first PMU team 15 hubs were to be established and 72 communities were provided with internet and solar power. According to the list published in the report, 13 communities have V-SAT installation completed in 2019, although it is unclear whether this means that these communities already had a building identified for the installation of the ICT hub and benefitted from an early connection. None of the villages visited by the MTE had a V-SAT connection, so it is not possible to speak about the functionality of the V-SAT in this report given the absence of any feedback regarding their use.

Regarding the activities under output 3 and output 4, these have not been started to date for two obvious reasons: 1) if the PMU is unable to complete output 2, it cannot move to output 3 and 4 because these can only take place when the ICT hubs are completed and connected. 2) The reliance and speed at which internet is currently available through the E-Gov free Wi-Fi is too slow in the four villages visited to allow using internet to access government services or to develop businesses. It is logical therefore that nothing was done under those two outputs since the new PMU team took over.

Even if the government changed since the start of the project, some of the building blocks that are necessary to allow the hubs to be owned and used, and not merely established and connected, require further efforts from the project stakeholders, particularly uncovered aspects

under output 1 and the output 2. It is the view of the MTE that to succeed in building community ownership and use of the ICT hubs, policy considerations under output 1 remain to be addressed, while the project should be more realistic in the objectives it can be expected to achieve. Since no V-SAT village connection was visited, it is not possible to see if these have been able to use the internet services as initially expected in the project document. What the MTE has seen is a wide difference in capacities and interest from the different villages visited. Some have not yet been connected, others have been but are unable to use the internet due to its slow speed (note that computer specifications are showing a slower connectivity than that available through the cellular phones), and maybe some are able to use the internet to access e-government services. In any case, there is no "one size fits all" and the project must be tailored to recognize the different speed of ownership and use of the ICT hubs by the communities, at least with three different levels: A) basic use of computers, typing, windows environment. Most village residents except for teachers have limited computer skills. They need capacity development to ensure they can use the computers, as a pre-requisite to accessing internet services. B) those who have some level of knowledge of computers, Windows and MSOffice applications, and that require further training to be considered as potential internet users over the short to medium term. C) those who are fully computer literate and can resolutely access internet services and resources. In addition to those three levels, it is important to identify which VCs have the sufficient connectivity to use internet services and focus the capacity development efforts first and foremost on these villages, provided they do exist.

The MTE also asked the nine KII respondents to rate, on a scale of 1 being minimum and 5 maximum, their perceptions regarding a) the results of the project and b) their satisfaction with the support provided by UNDP. The results are presented in the table hereunder. Results are coded to maintain the confidentiality of the respondents, in line with UNEG norms and standards.

Table 5. Ratings regarding the project's results and satisfaction with UNDP support (source: KII notes, coded by the MTE)

ratings 1 to 5	a) Results	b) UNDP
5	0	1
4,5	1	0
4	1	1
3,5	2	1
3	2	3
2	1	2
N/A	2	1
Average	**3,36**	**3,19**

The ratings show that perceptions vary greatly among the respondents. For those who rated a 2 (low rating), for the results it is based on the overall expected results of the four outputs versus the current partial achievement in the establishment of the ICT hubs. Conversely, the respondents that provided a 4 and 4,5 rating underlined the major challenges faced by the project during implementation and considered that, given the context, the results were already significant, albeit partial. The overall rating is a slightly better than average (average=3,0) rating of 3,36. A similar process was followed to inquire about the level of respondent's satisfaction with the support from the UNDP. Again, a diversity in the responses show the different perceptions, from one respondent giving the maximum rating, one giving a high rating (4,0) and

two providing a low rating (2,0). Reasons for the high ratings we that these respondents did not encounter problems when dealing with UNDP, versus two respondents who indicated that a number of challenges in obtaining the support and the continuity of the support justified a low rating of 2, signalling the need for improved support performance. Nonetheless, overall, a similar rating, slightly higher than average, was given to the UNDP with an average of 3,19.

This indicates that for the KIs both the project implementation and UNDP can improve to complete the objectives of the project.

The findings of the MTE after visiting six of the 200 VCs are the following:

a) ICT hubs have been built (5 of six visited) or allocated for hosting the ICT hub and have received the equipment as foreseen in the project document, essentially, per hub: 20 HP laptop computers, 1 coloured printer with supplies, one monitor, 2 fans, and solar panels where no electricity was available.
b) Most VCs are happy to have received the ICT hub, but two have not yet been connected. Those connected claim that the speed of the connection is too low to use the internet.
c) ICT hub managers have a challenging position. They do not have written and clear terms of reference that spell out their responsibilities. They are all CSO (Community Service Officers) who receive a stipend for their half-day given to the community services in the morning. As a results, most hubs are only opened during mornings, when people are at work and children are at school, so there is limited use that is made of the hub. Good examples were found in one VC where the ICT hub manager received a stipend to train the VC population in the afternoon after providing an additional stipend to ensure his presence at a time when most of community residents can use the hub (afternoons). Similarly, some VCs also have one or two additional CSO providing support to the ICT hub manager. Ownership by the VC of the ICT hub is necessarily linked to the preparation, support and reliability of the ICT hub manager to provide access and training to the ICT hub users. The project must more clearly details roles and responsibilities of the ICT hub managers, ensure they are paid by the VC as a proof of ownership, something that will maximise the availability and use of the ICT hub services.
d) Some VCs are aware that the ICT hub has the potential to support economic development for their community, provided reliable and sufficient potent internet services are provided when the hub is connected. On the negative side, one of the VC visited seemed to have limited interest in the ICT hub and the computers had not been used since they had been put in place (Baramita). A discussion with VC and the ICT hub manager and the *Toshao* and line ministries representatives such as the school principal is needed to ensure the access to the hub when needed and work out the proper modalities. This may be in part due to their low awareness of the potential project benefits and low computer literacy skills.
e) All VCs are eagerly awaiting the official hand-over ceremony. It is not clear who oversees the ICT hub during the interim phase between the moment the hub is installed and equipped, and the moment where the official hand over will be done by the OPM. Again, a written document outlining roles and responsibilities of the VCs should also be provided. The MTE understands that none of the ICT hubs has yet officially been handed over: for an official handover ceremony, the ICT hub must be connected, as foreseen in the project document. However, the planning in the way the project is implemented and the lead time for such events (official ceremony) are not documented. Annual workplans should contain the details of the planning including the names of the

communities where project implementation will take place during the course of the year. Some of the villages who have not yet received any information but are within the list of the 200 target villages are reported to have asked those VCs who have the ICT hub when they would be receiving theirs. It is important to ensure transparency in the process of the project implementation to ensure accountability and that the selection of the villages that have established ICT hubs responds to technical considerations (e.g., cluster of several VCs to minimize the cost and in one or two regions at a time only) rather than other factors.

f) There has been no monitoring of the project progress, and the communications and reporting needs an immediate attention. While monitoring should be a function of the quality assurance and oversight role of the UNDP, communications and reporting needs urgently a skilled communications and reporting officer to be hired in the PMU, to provide greater visibility and better information about the results achieved by the project, not only in terms of the activities and outputs, but also on the process of ownership and capacity development of the VCs where the ICT hubs have been developed, including any spin-offs for business or regarding the e-government services, to contribute to their sustainability.

It is the perception of the MTE that many of the challenges and delays could have been avoided through better oversight and commitment from the project stakeholders. There has been an excessively positive outlook on the results without understanding how management intensive such a complex project is, and considering that several of the planning assumptions did not materialize. There is no question that the installation of the ICT hubs and internet connectivity for the 200 VCs is a must and that such an effort is truly critical to the development of these VCs. However, the project must now provide sufficient support and resources to achieve the objectives, which should be revised to be more realistically achievable by the end of the project extension.

7.4.2 To what extent are the outcomes achieved?

According to the project document, the intermediate project outcome is that "Livelihoods of HPRCs improved by the provision of public services via the deployment of ICTs"[41]. This outcome has not been achieved because the MTE did not find evidence that the necessary policy decisions were enacted to ensure a level of connectivity that allowed communities to access the government services, over and beyond what the ICT hub project was able to achieve in terms of physical installation of the hubs and the provision of the necessary equipment.

As explained above, the main results from the project have been focused on output 2. Which is the building and installation and equipment of the ICT hub, currently reported to stand at 60% of the target (e.g., 121 hubs out of 200 planned), of which 7.5% are reported to be connected to the internet (e.g., 15 hubs out of 200 planned). There has to the knowledge of the MTE been no further progress on the policy side under output 1, since the change in government administration. As a result, the overall policy umbrella is not available, and this is one area where UNDP should be more closely involved to facilitate the development of the proper policies to sustain the efforts made under output 2 of the project. Without the proper policy environment and the necessary enactment of the policies through the corresponding action plans, and in particular the outputs 1.4, 1.5. and 1.6. mentioned above, the project will only be about infrastructure installation but will not lead to the expected outcome. It is therefore critical to

[41] ICT Project document, signed 30.11.2017, p. 10

ensure the use by the communities of the hub installations that supporting policies are developed, adopted and enacted. If not, this will only be a project that invested in infrastructure and equipment, but there will be no human development and no applicability by the communities because the internet connection will not allow the VCs to access government services or other internet services.

Achieving outcome level results also means an urgent and critical attention to the elements of output 1 which have been left behind. To the knowledge of the MTE, there has been no new policy development since the new government took office.[42] The other aspect required to ensure outcome level results is the ownership and the capacity development of both ICT hub managers and the VCs. Less attention has been placed on the necessary follow-up and support for the soft components of the project. To reach the outcome, the VCs must show ownership of the ICT hubs and contribute to their maintenance and use. And this also means that sustainability plans must be developed, including the corresponding budgets, to ensure that both the currently volunteer ICT hub managers (who are all CSO and receive as government stipend for a half-day during the week in the morning) will show interest and willingness to train and provide support to the users in both the MSOffice applications and in using internet and exploiting the related opportunities. The level of preparation of the ICT hub managers needs to be propped up, because some of the ones that were interviewed indicated a limited level of technical and digital knowledge, so there should be a defined training of trainers programme that sets out the parameters in the training that is being given, both in the management of the hub (something that is already taking place) but also in terms of the hub manager's computer and internet skills, so that they are empowered to assist the communities as necessary provided proper internet connectivity can be assured.

The other aspect related to community ownership is a complex one. In the context of Guyana, the VCs are largely tributary of the GoG to receive (unconditional) grants for their communities. This creates a dependency on the GoG for funding and creates a form of patronage. As the project provides all the components free of charge, there is no obligation for the VCs to provide any sort of counterpart funding or investment in the ICT hubs. Therefore, it costs nothing to say yes to the installation of the hub, even if it is not being used (e.g., Baramita). To avoid unproductive investments, the VCs should have a clear and defined responsibility in the maintenance of the hubs by financially contributing to their functioning and maintenance. This means that a) the ICT hub manager should be paid by the VC to be available in the afternoon to do his training to community residents, because that is the time when schoolchildren and adults can be available, and at present the MTE saw that one VC was actually able to provide a financial support to ensure the presence of the ICT hub manager in the afternoon, even though their VC is not yet connected to the internet, thereby showing an early sign of ownership of the project and good preparation for when the ICT hub will be connected to the internet. As mentioned, the computer literacy level in the communities visited is low and people must be trained in the basics. Defined roles and responsibilities for the VCs should include the payment to the ICT hub manager to be available in the afternoon according to the use and demand for training and for using the ICT hub's resources.

Finally, the issue of paying the connectivity is a complex one. If the VCs continue to pay for the connection after the end of the project from the government grants they receive, (with conditional grants to pay for the connection, just as was done with the GoG´s COVID-19 grants

[42] A meeting was requested with the national ICT advisor at the OPM but could not be confirmed to triangulate this information.

for which a part of the grant was to be used conditionally for the installation of the ICT hub under this project), it will only continue their dependency on government funding. Ideally and if it can be afforded, the VCs should try to obtain from their own resources and not through government grants the means to pay for the connection[43]. ICT hubs have the potential to operate on cost recovery basis. Even in one community where the connection is not yet made, the use of computers and printing of materials is rightly made against a small fee to cover maintenance and product replacement (e.g., for photocopies, paper and toner). The MTE however has no means to estimate the potential for cost recovery given that the communities visited did not benefit of broadband connectivity to take full advantage of what the internet access can offer to the users. In addition to the government services, two of the communities visited have the hope to develop tourism and agriculture when the hubs will be connected.

7.4.3 To what extent is the project goal achieved?

In line with Results Based Management (RBM), there is a progression between the attainment of the outputs, which contribute to the achievement of the outcome, which in turn support the overall project goal. As the outcome is not yet achieved, it is not possible to achieve the project goal which is a longer-term vision of what the outcome will be leading to. The ultimate goal of the project is "to enhance the sustainable human development of HPRCs while promoting the development of a national green economy".[44]

This goal can only be achieved over the long term and beyond the life of the project. But the outcome level is the results level at which the project should be committed to delivering, in line with RBM principles.

7.4.4 What are examples of good practice?

Good practices were identified in the project implementation both at PMU and at VC levels.

At PMU level, the use of local resources and contractors where and when available means that both the costs for the construction of the ICT hub were lower than if the contractors had to come from other regions, particularly considering the exorbitant transportation costs in the country in relation to people's income level. In addition, this stimulates the economic activity in the community. It is therefore a good practice as, unlike for equipment procured, the money is invested in the local economy of the VC.

Another good practice is that this project is complex and requires continuous management efforts. With only half of a full PMU staffed, the project manager and the PMU staff are spending much time in the communities, with little time left to care for other equally important aspects such as communications and reporting, or following up on the policy front, but with not enough capacity or time to ensure those aspects are fully covered. A deliberate choice was made with such a small PMU to focus on the establishment of the ICT hubs, but other aspects of project management require further support to be fully addressed. The PMU staff has shown to have a job description but function with multiple tasks and also travel to the communities, because they all need to do some multitasking given the PMU limited human resource capacity.

[43] While in the communities visited a large part of the VC annual funding is composed of government grants, there is a capacity in all communities to generate revenues based on the income generating and economic activities of the community, e.g., mining or logging, although the extent to which their revenues are sufficient to cover an ICT connection is unknown. This should also be discussed with each VC to see how and if they could assume connectivity costs post project.

[44] ICT hub project document, op. cit., p. 1

At the VC level, in the communities visited, it was evident that the capacity of the Toshao and of the VC has a direct incidence on the quality of management in the village, and that includes the management of the ICT hub. In one community the VC was able to secure the presence through the payment of an additional stipend of the ICT hub manager to ensure his presence during the afternoon which is when the hub is busiest.

In another small community ten residents are reported to be using the hub, mainly for typing and printing reports. Yet in another community visited four schoolchildren were being trained to use Windows and MSOffice (the hub was connected but the signal too weak to use the internet). Three were girls and one was a boy. In the communities visited the first programme that is used is MS Word to prepare documents and reports.

And finally in one community they attempt to run the hub on cost recovery basis to maintain and replace the products (paper, toner, etc.).

This shows that most communities have a strong interest in having a functional ICT hub that is connected to the internet. There are expectations that this will lead not only to better government services but also to develop livelihoods and economic activities in the villages.

7.4.5 What capacities have been developed as a result of the project?

Capacity development can take place at two levels in the project: for the PMU and for the villages.

For the PMU, while the project is management intensive and provides a good learning ground for future complex projects that deal with community development, it is unclear that substantive capacity development is taking place, since staffing has been unstable and unreliable. There is no indication that the PMU staff will remain at the service of the GoG when the project is over, so whatever capacities have been strengthened may not remain in the OPM at the end of the project. To work along the established procedures, PMU staff have been trained by the UNDP regarding their rules and regulations, so that the PMU staff are aware of the United Nations procedures.

For the other stakeholders at national level, line ministries or policy makers, there has not been any specific capacity development target although there could be if the output 1 components are newly addressed, and UNDP provides technical support to the policy environment.

At the VC level, some capacity enhancement has taken place, first and foremost in the training of the village hub managers (76 trained to date) and solar technicians (34 trained to date). The MTE could evidence that all ICT hub managers interviewed had been trained, while not all VCs had a solar technician identified or trained. In one VC, the solar technician who was trained had left the village.

At village level, another level of capacity development is taking place now in, at least, part of the 121 ICT hubs established or under completion. In those VCs genuinely interested in using and exploiting the ICT hubs, computer literacy classes, sometimes simply learning to use a keyboard and typing on a computer, are taking place, leading to the capacity development of the resident population and schoolchildren. This is an important pre-condition to being able to exploit the opportunities offered by the hub, since there is limited computer literacy in the VCs visited.

7.4.6 What were the key challenges and shortfalls experienced during project implementation?

The list of challenges and shortfalls is extremely long and explains why the project has an implementation life of a maximum of three years, off and on, while the rest of the time since November 2017 was lost due to delays on various fronts and unforeseen challenges.

Challenges leading to the delays were both external and internal. The external challenges were not within the remit of the project to address: first the no-confidence vote at the end of 2018 which paralysed government for seven months, second the COVID-19 pandemic that seriously affected and limited travel and gatherings, thirdly the change in government administration as a result of the 2020 elections, which led to a change in the staffing of the PMU after a period in 2021 (January until July) where there was no PMU manager. All together this amounted to a substantial loss of implementation time for the project, and the change in government and the COVID-19 pandemic also generated a shift in government priorities, although the project has remained a declared priority for the current government, and it is repeatedly mentioned by government officials that the project will deliver the 200 ICT hubs as promised to the selected villages.

Over and beyond the external challenges, the project also experienced internal challenges: the first, and overly optimistic project document which did not contemplate the gradual steps necessary to reach the outcome. It took for granted that communities possessed building in which to establish the ICT hubs, something that was proved a wrong assumption. Five of the six villages visited by the MTE had to build the structure to establish the ICT hub and receive the equipment and the software. Second, it assumed that the policy decisions would be taken and enacted to move forward with the complex question of ICT connectivity, cybersecurity, interoperability framework across the GoG (under output 1). Since the change in government, there has been to the knowledge of the MTE no further progress in developing the necessary policies, chief of which a national e-government strategy. Connectivity is essential to provide the means to an end and allow communities to use the internet services for e-government and other uses. None of the communities visited were able to use their connected ICT hub for such as purpose given the low bandwidth of their service providers (all under the NDMA Free e-gov Wi-Fi) but the MTE did not visit the communities that benefited since 2019 from the V-SAT (satellite connections) also provided by the NDMA. However, connectivity is a national challenge that must be addressed at the highest level and is not within the remit of the project to solve. At best the project can support these efforts, but they must be spearheaded by the GoG. Another aspect that was overlooked is the level of computer literacy of the HPRCs. To use internet and access e-government services, the communities must know how to use the computer. This assumption did not prove correct, as most of the residents interviewed indicated no or little computer literacy. Many (e.g., younger schoolchildren) are learning how to type and use the Windows environment, and there are very few individuals with the skills to navigate the internet and take advantage of the services offered by surfing the web. So, capacity development of the communities is a critical aspect if the ICT hubs are expected to be used in the future, and the training in computer literacy was insufficiently contemplated in the project design and the implementation.

The staffing of the PMU has remained consistently below the necessary levels for a project so complex and with such a broad geographical scope. Its chronic understaffing indicates limited ownership by the primary stakeholders to provide the means to reach the project outcome and seem to indicate that an excessive focus is placed on just building and installing the ICT hubs, and the rest would simply happen without further efforts. This is again an untested assumption, and it is evident that to build community ownership more intense and sustained efforts in

collaboration with the ICT hub manager and VCs are necessary to ensure computer literacy and usefulness of the hubs.

The MTE is not an ICT expert but the specifications of the procured material, in particular the laptops, seem to be quite outdated in terms of capacity, processor speed and internet Wi-Fi connection protocols, as compared to the laptops that are currently in use today.

High staff rotation has affected both the PMU and the UNDP. With the arrival of a new Resident Representative, a new opportunity to work more closely with the PMU is offering itself and will allow closer support to the PMU, and improved monitoring and oversight of the project results.

7.4.7 Has the project incorporated the UN programming principles in its implementation (HRGE, LNOB) and if so, have they leveraged specific results?

The selection of 200 villages which are part of the HPRC, as mentioned in the project document, indicates that these are amongst the most vulnerable communities. All 200 villages are on the list of the 243 Amerindian villages at the Ministry of Amerindian Affairs, although some are not exclusively Amerindian but have a mixed population, as can be expected as population movements are dynamics and villages grow or shrink as part of migration strategies and opportunities to attract additional residents, for those villages that are growing. If one of the purposes of the support to these HPRC is to provide them with an opportunity to avoid migration through the potential that the internet services offer, not only to access government services but to use the resources for economic development, it can be a powerful tool to avoid migration towards the larger villages or cities or moving towards coastal areas looking for economic opportunities. The selection of the 200 HPRC are therefore clearly aligned with the Leave No One Behind (LNOB) programming principle of the UN, as these communities are generally difficult to reach given their remoteness, and the high transportation costs associated with the travel to these communities, that normally requires at least two types of transportation, by road and river, or in some cases by air, further contribute to their isolation. The only aspect that the MTE was not able to clarify is whether in addition to the 200 Amerindian villages covered by the project, there are other villages in the HPRCs that are not on the list of the 243 Amerindian villages and run the risk of exclusion. This should be addressed in the feedback to this MTE report.

As regards to the Gender Equality programming principle, the project is largely gender blind in its design, with no specific attention given to women empowerment and no data disaggregation in the little documented information available. That said, the components of the project (for example, policy development) are not necessarily easily engendered. The most important aspect related to gender equality is the fact that the MTE could witness that women are key players and actors in the village dynamics, often holding key positions such as that of *Toshao*, while many of the resident population interviewed were women. Similarly, the selection of ICT hub managers was mindful to include women. Users of those ICT hubs are reportedly more women than men, because men are traditionally at work, away from the village (e.g., mining, logging, etc.) so most of the users are reported to be women. During the visit to an ICT hub where five schoolchildren were present, four were girls and one was a boy. It does seem that although not embedded in the project, the project is gender responsive in the sense that the community dynamics already reflect the active role of women in village matters.

Regarding disability, although there were no reported disabled in the VCs visited, the technical specifications for the construction of the hub included a ramp to access the building for those that were built during the project implementation (e.g., except for Baramita since the ICT hub is located on the top floor of the VC building).

7.5 Impact

7.5.1 Have people's lives been affected by the project?

It is too early to speak of an impact of the project since it is yet to be completed and only a small part of the 200 villages have been connected, often with a low bandwidth that does not allow an extensive use of internet services. The early emerging effects of the project are two-fold: one the one hand, for those VCs that have shown a true interest in the project, the ICT hubs are being used albeit not for internet services: uses include printing, photocopying, and learning the skills of computer use, in some cases preparation of reports. So, an initial level of capacity development is taking place in specific communities, but remains to be structured and expanded to all target villages by more proactively including VCs in the process and making the VCs more aware of the benefits it may receive through the project, to build their ownership. The second effect is that expectations are high, in some of the villages visited, that the connection to the internet will allow them to make an intensive use of the internet and develop some of their business, such as tourism and agriculture (as reported by some of the residents interviewed in the villages visited). The key to fulfilling these expectations is that both sufficient capacity development takes place to ensure computer literacy and use and that the connectivity is sufficient to make a constructive and effective use of internet services.

7.5.2 To what extent has the project changed the way communities operate?

In the communities visited there is no change in the way the communities operate yet, but the use of the ICT hub by providing material in working order such as the laptop computers and the printer allows some level of use to be made, notably for the preparation of reports, making photocopies, and other administrative task. So, it is already of some support to the community, although only after connectivity issues are solved and a reliable access to internet is provided can the communities generate a change in the way they operate. At present the project provides a limited support but does not influence yet the way the communities operate. But the potential to do so exists.

7.5.3 What has changed as a result of the project?

As mentioned above, there is limited change that has taken place because the project is still work in progress and many results remain to be achieved. The noticeable changes have been reported in the above section.

7.6 Sustainability

7.6.1 How strong is the national ownership of the project at national and local level?

This is probably, in view of the MTE, the key issue for the success of the project beyond the period it is being funded for. Since the project is expected to benefit from a new phase to continue its on-going efforts to achieve its expected results, a critical issue will be to ensure sustainability beyond the life of the project. At national there was initially at the start of the

project a strong ownership. With the COVID-19 and change in government, a new PMU team was brought in. But until 2021 the actual implementation of output 2 was slow to start. At the national level with the new PMU the main effort was focused on the implementation of the 200 ICT hubs. While this was a logical area of focus, there does not seem to have been any progress on the policy environment, which is critical to ensure sustainability of the benefits after the end of this and other existing ICT projects. While there have been repeated declarations about the importance of the project, the chronic understaffing of the PMU and the lack of progress on the policy environment raises a question about the level of national ownership. Indeed, the concern seems on delivering the hardware of the project (e.g., building/establishing the ICT hubs, equipping them, providing an internet connection) but insufficient resources and attention have been given to the other aspects (policy development and enactment, and local capacity development and ownership).

The GoG should be mindful of the fact that sustainability of the benefits after the end of the project rest partly on its ability to provide the proper policy environment and enact the corresponding decisions, in particular through the provision of a WoG e-government strategy and roadmap for digital services provided by the government administration. A key question is how ICT hub connection costs will be paid for after the end of the project. At present the government is providing all services free of charge, but to ensure sustainable benefits, the project must develop community ownership and an ability to pay for the connection. Further funding from the government grants to the communities to pay for the connection is not conducive to local ownership.

Development experience indicates that it is good practice to request a co-funding or some form of economic contribution to develop local ownership.

At the local level, as all components of the project are provided free of charge, there is no required contribution by the communities. As a result, the risk is that some communities may have accepted to have the ICT hub installed because it costs them nothing, but there is limited ownership, and therefore the use of the ICT hub and the generation of benefits may be compromised (e.g., Baramita would seem to be an example from the six communities visited, where local ownership simply does not appear to be very strong and where the ICT hub has not been used to date). To develop local ownership the roles and responsibilities of VCs should be clearly established from the start (including for the period from the moment the hub is completed until the official hand-over ceremony takes place) and a financial contribution should be requested. The MTE suggests that during the remaining period of the project at least the stipend/salary for the ICT hub manager should be covered by the VCs (ensuring availability during the afternoon, so the ICT hub can be used not only during the morning, which is when the CSOs who are the hub managers are normally present at the hub). This is possible if there is a cost-recovery scheme for the use of the ICT hub. When at the end of the project all the official hand-over and provided broadband connections can be ensured for the hubs, there is a potential to leverage higher revenues through expanded use of the ICT hubs, including for businesses. But this will only be possible with a reliable and fast connection to the internet. Without such a connection, it is doubtful that local ownership will develop, and the sustainability of project benefits is in jeopardy.

7.6.2 What are the threats and opportunities affecting project sustainability?

Good intentions are not enough to ensure sustainability. Some co-funding or co-financing arrangements for the management of the ICT hubs should be found, as at present everything in the project is provided free of charge, which does not contribute to developing ownership.

Without local ownership, benefits will not be sustainable. There are several major challenges or threats faced by the project are clearly : 1) development, endorsement and enactment of the proper policy environment and corresponding action plans, in particular regarding the issue of connectivity in the country. 2) the speed at which internet services are offered. If there is no broadband connection and the connectivity remains as it is for those hubs visited that use the Free e-Gov Wi-Fi with a low bandwidth, there can be virtually no productive use of the computers. 3) computers specifications and the built-in Wi-Fi protocol to connect to the internet are outdated. Laptop computers have a limited lifespan, and after five years since they have been procured, it may be necessary to ensure a sizeable backup of up-to-date laptops that can be used to replace those installed when they are no longer usable. 4) Local ownership is a key to sustainability, and if the project extension covers the development of local ownership through closer interaction with the ICT hub managers and the VCs, it may allow the VCs to reach a certain level of independence in the maintenance and management of the ICT hubs which will contribute to the sustainability of the benefits after the end of the project. This is why the MTE recommends the hiring of a community development/management expert, whose primary task will be to provide support and oversight, and find solutions for the installed ICT hubs, working with ICT hub managers and VC members and *Toshaos.*

8 Conclusions

This project is complex and management intensive. It has experienced serious challenges, both external challenges (COVID-19 pandemic, change of government and administrative stand-still for seven months after the no-confidence vote, protracted election period) and internal challenges (late recruitment of PMU staff, chronical understaffing of the PMU, insufficient support to the PMU, difficulties with the support provided by the UNDP and in the use of the UN rules and regulations), so that the project has been operating on a stop-and-go basis since its beginning. The second phase with the new PMU team did give an impulse the establishment of ICT hubs, which now reported 91 hubs completed and 30 currently being installed (a total of 121). But other aspects remained overlooked, the policy related matters, while the objectives of the outputs 3 and 4 were overly ambitious and not realistic in the project's context. Connectivity is a government responsibility, and not that of the project, although the project can help to provide connectivity to the ICT hubs. But the wider questions related to policy decisions remain to be addressed.

With such a substantial budget, the project should have been better staffed and supported. Many challenges were reported and help explain why, out of all the project components, only significant progress on output 2 can be reported. There is no question about the relevance and need for the communities to be connected to the internet and have the ICT hub. Extensive and complicated travel to the communities by air, road, various types of boats on rivers and tributaries, has shown that these communities are truly remote and need to have good connectivity in order not to be forgotten and to allow them to maintain a link with the rest of the country and the outside world. More and immediate efforts are warranted to staff and support the PMU, and greater attention to the importance of the policy decisions are warranted.

VCs show that most are truly interested and want to have and exploit the hubs, but this will not be possible without the provision of good connectivity. From a community needs perspective, there is no doubt that for some VCs the installation and connection of the ICT hubs is a potential catalyst for the development. But this will not happen if the GoG doesn't adopt and enact the

proper policy decisions. Not all VCs share an equal interest or enthusiasm. To consider the project as a productive investment and ensure community ownership, the project needs to develop a co-funding scheme by the communities to ensure the payment of the ICT hub manager (hence guaranteeing his/her availability for the training of community residents) and the maintenance of the ICT hubs (materials, equipment, spares, etc.). This also requires further support from the project. The alternative will be that the infrastructure will be created but the outcome and goal of the project will not be reached.

This MTE is not meant to put the blame on anyone, but there has generally been insufficient support at all levels to ensure the success of the project. More needs to be done in the future if there is a commitment from the OPM to ensure that the project will reach its intended results. UNDP has also a major role to play in the support to the policy development and in the monitoring of the project, to provide the quality assurance and oversight needed.

Because of the inadequate and overly ambitious design, the project has created expectations that have not been met. Outputs 3 and 4 should no longer be considered at this stage, and the project should focus on a) review the policy environment and address existing gaps b) completing the installation of the hubs c) providing connectivity to the hubs d) developing ownership and sustainability in the VCs by working more closely with the ICT hub managers and VCs. A realistic objective for the extension of this project is to achieve a certain level of computer literacy for the population of the villages where hubs are installed, develop cost-recovery models of management for the ICT hub, and testing the access to e-government services in selected locations where the internet connection allows this to take place (e.g., not in those communities visited because of the low bandwidth). This was in fact part of the four prototypes envisaged under output 3 of the project document, that, if feasible, could be maintained.

The project needs higher ownership from all stakeholders involved and a renewed commitment to results, providing the necessary support to the PMU to ensure the expected results will be met and facilitate stronger management and implementation of the project with the support of a deputy project manager and key additional staff.

It is the opinion of the MTE that an additional three years will be necessary to achieve a significant result: the first year will entail the completion of the ICT hubs up to the 200 target villages, providing internet connections, and the adoption of the required policies, while years two and three will ensure the capacity development at the local level which may provide higher ownership and sustainability from the potential benefits of properly connected ICT hubs, and the enactment of the policies that will support these efforts. The alternative is for the GoG to bankroll the costs of the ICT hub and the internet connection, something that is not conducive to local ownership and may be seen as a form of patronage.

The project targets are well within the UN programming principles of Leave No One Behind. The communities are indeed in the hinterland, and many are very remote and poor, and run a serious risk of exclusion if they cannot benefit from good internet connectivity and do not develop computer literacy.

In terms of gender equality, the project is not gender responsive in its design. However, the visits to the communities show that mostly women are involved in the use and management of ICT hubs and that there is reportedly a higher number of women users of the hub, so that there is no apparent risk of discrimination or exclusion in terms of gender equality, particularly because at the local level women play a prominent role in the village dynamics: many are *toshao* or village councillors, and there has been no evidence of exclusion in the communities visited. Rather the

impression is that women are closely involved, and many times lead the communities. Disability has been incorporated to the extent possible in the project, with building specifications for the ICT hubs that include a ramp to facilitate access to disabled persons.

9 Recommendations

9.1 Strategic recommendations

1. The OPM needs to review the policy environment, with the active support of UNDP, and address existing gaps linked to output 1, in particular regarding the national e-government strategy and connectivity[45]. It is beyond the scope of the project to enact at this stage the Interoperability Framework although this should be addressed through other means. The project cannot be successful without a government strategy and roadmap regarding e-services for the country.[46]
2. Extend the project for three years at minimum, reduce the scope of the project to ensure: a) computer literacy amongst VCs benefiting from the ICT hubs established b) proper connectivity to the internet with a quality of broadband that serves the needs of the communities c) ownership of the communities through a clear division of roles and responsibilities and cost-sharing financial plans to cater at least for the full-time involvement of the ICT Hub managers during the entire day (instead of only mornings) and ensure higher availability of training and use of the ICT hub. The first year should be used to complete the establishment of all ICT hubs and provide connectivity, while the second and third are essential to build ownership and sustainability for the post project benefits, working on local capacity development and ownership.[47][48]
3. Address with the support of UNDP and NDMA which type of connections need to be provided to the 200 ICT hubs, in line with recommendation 2.a) above.[49]
4. Established a reviewed and more focused project document that reduces the scope of the project to cover both policy environment and establishment and sustainability of the ICT hubs. Update and review the results framework accordingly.
5. The OPM needs to provide all necessary human and financial resources to the PMU to achieve the revised expected results It needs to immediately increase the PMU staff with, in addition to the already accepted posts, the following critical posts: a) deputy project manager b) communications and reporting officer c) community development specialist (backstopping ICT hub managers and VCs)

[45] UNDP comment: Outside of the ICT Project, UNDP is working with the OPM to facilitate a Digital Readiness Assessment with the overall aim of developing an integrated ICT/digital strategy for the government.
[46] PMU comment: Activities to capture and mitigate these gaps are outlined in the revised project document 2023-2025 Evaluator comment: no revised project document has been provided to confirm this statement
[47] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025
[48] UNDP comment: The 3-year extension will allow for completion of the project objectives. Given the financial constraints by the GRIF financial balance and time constraint for the government to deliver this mandate, a 2-year extension will allow for full achievement of project objectives.
[49] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

9.2 Operational recommendations:

6. The PMU needs to revisit its policy development tasks and address existing gaps by either the PMU manager or his deputy to provide the necessary umbrella under which the project operates. UNDP can play a major role in this aspect.
7. Address the issue of connectivity of the 200 ICT hubs, ensuring that the connection can allow the ICT hubs to operate online with sufficient speed and access e-government services and fulfil the needs of the users.
8. Define a clear calendar for when each of the remaining communities will be benefitting from the ICT hub installation (e.g., detailed workplan showing which communities will be serviced and when) and another detailed workplan for the provision of the connection to the hubs.
9. A calendar for an official hand-over needs to be established on the basis of the workplan to complete the ICT hubs and to plan an official ceremony transferring ownership and responsibility to the VCs.[50]
10. The PMU needs to communicate its annual workplan to the communities targeted and also more widely share their installation calendar and also the official hand-over calendar (the latter for all 200 ICT hub VCs).
11. The PMU needs to update its communication and reporting capacity through the hiring of a full-time communications and reporting officer. Her/his role is to both create content for visibility purposes about the project and include all social media, as well as to improve the reports produced by the project with the inclusion of dynamic maps that show the 200 ICT hubs location and the progress in the setting up of the hubs and of their connection to the internet. It will also gather success stories regarding the use of the hub in the use of e-government services (where possible) or business development that can be linked to the availability of the hubs' resources provided.
12. Purchase an additional up to date 400 laptops with enhanced Wi-Fi connection capabilities and higher processing speed and free memory, so that the VCs will at least each benefit from 2 laptops in each hub that can be used for more complex and interactive use of the computers. Given the limited lifespan of laptop computers, the cost-recovery scheme at local level should also plan how to replace broken or unusable laptops after the end of the next phase.[51]
13. PMU should have a stock of spares for the ICT hubs during these three years so that the ICT hub manager in each VC can access the replacement parts directly through contacting the PMU. This should be the responsibility of the community development officer (to be recruited) as it allows the OPM to obtain better prices by buying in bulk for the 200 ICT hubs the necessary materials (including paper rims, toner, connection cables, and other materials and spares such as lightbulbs). A survey of the projected needs should be included in the workplan for 2024.

[50] PMU comment: The modality of the handover will be defined and designed collectively, if any. This handover and its operational functions will have implications to funding allocated and appropriated through the national budget. This will be further explored. A total handover has issues of unaccountability, lack of maintenance, and no supervision and policy guidance. Evaluator comment: not if a sustainability strategy has been developed with the communities for the post project period.
[51] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

14. UNDP should recruit immediately a monitoring officer that is provides monitoring of the project, something that has not been done until now. As responsible for quality assurance and oversight, the monitoring function should be carried out by UNDP and not the PMU as they are already stretched enough with their own scope of work. The financial cost of the post should be covered by the project budget and the recruitment should follow UNDP's policies and procedures.
15. UNDP also suggested that a programme associate could be dedicated to work with the PMU exclusively to enhance the efficiency of the support UNDP has been providing to the PMU. The post should be financed with project resources as well. This suggestion is strongly supported by the MTE[52].
16. Establish a (re-)training workplan for the ICT hub managers and discuss with the VCs the feasibility in each location to introduce co-funding schemes (e.g. for the payment of the ICT hub manager in the afternoon and for the cost-recovery measures in the use of the hubs, to ensure maintenance costs and replacement of supplies during the life of the project, and to contribute to the sustainability of the ICT hub maintenance post project under national budgetary allocations.[53]
17. Hold awareness raising sessions in the VCs where the ICT hubs are not being used with a visual support to show the potential benefits of internet connectivity to the VC and resident population (see lessons learned hereunder). No all communities are equally aware of the benefits of the use of computers and of the internet connectivity. Given the limited level of literacy in some VCs, a visual video support of best practice should be shown to develop interest, use and ownership of the ICT hub.[54]
18. The project (PMU+UNDP) should develop clear written roles and responsibilities for the ICT hub manager and for the VCs.[55]
19. UNDP should commission the compulsory external terminal evaluation of the project at least two months before the end of the three-year phase. In case unforeseen difficulties occur or there is another change in the GoG priorities, there may be a need to consider an additional mid-term evaluation, only if major difficulties that cannot be solved without the involvement of all stakeholders arise.[56]

10 Lessons learned.

- Project designs should avoid being overly ambitious and focus on realistically achievable results in the project lifespan.
- Project development planning requires consultations with all partners including local communities to test some basic assumptions (such as the existence and availability of buildings or constructions in which to establish the ICT hubs).
- Project design should consider a one-year lead time for any project to be fully staffed and operational, so the implementation period should be counted from the time that the adopted policies are enacted and support project implementation, not from the time of the project design. There cannot be an assumed seamless transition between policy

[52] PMU comment: same as above
[53] PMU comment: same as above
[54] PMU comment: same as above
[55] PMU comment: Activities to achieve these recommendations are in progress and will be completed shortly.
[56] PMU comment: Activities to achieve these recommendations are outlined in the revised project document 2023-2025

decision and the physical establishment of the hubs. Implementing a project without the policy environment adopted and enacted can lead to additional challenges and thwart the local level ownership.

- Bottom-up approaches that are mindful of the economic capacity of the target beneficiaries can strengthen local ownership. Development projects evaluation reports indicate that higher ownership is leveraged from the communities if they participate actively in the project implementation as partners, and contribute financially to the efforts, than if everything is granted for free.
- Developing infrastructure and providing equipment is not a guarantee that the benefits will be reached unless community ownership is also addressed and developed. Soft skills development is just as important, if not more, than the hardware provided.
- Communities who do not seem so interested (e.g., Baramita) may require more efforts to sensitise the VCs and population through awareness raising of the benefits of the ICT hubs. It is suggested that a short video be shown on the monitors of the ICT hubs established using a USB Flash key to highlights the benefits of those communities that have been able to effectively use the internet services for e-government or business development. If no such example is available in Guyana, a video from another country in the region may also serve to raise awareness and interest in the potential benefits of e-connectivity.