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Acronyms:

CCA	Climate Change Adaptation
CEA	Cost-Effectiveness Analysis
COVID-19	Coronavirus Disease 2019
CS	CommonSensing Project
DRR	Disaster Risk Reduction
EO	Earth Observation
IPP	International Partnership Programme
M&E	Monitoring and Evaluation
ODA	Oversees Development Aid
OECD-DAC	Organization for Economic Cooperation and Development-Development
	Assistance Committee
PIFTAC	Pacific Financial Technical Assistance Centre
SDG	Sustainable Development Goal
SPC	South Pacific Community
ТА	Technical Assistance
ТоС	Theory of Change
ToR	Terms of Reference
UAV	Unmanned Aerial Vehicle
UKSA	United Kingdom Space Agency
UNITAR	United Nations Institute for Training and Research
UNOSAT	UNITAR Operational Satellite Applications Programme
WP	Work Package

Foreword

The CommonSensing project aims to strengthen the capacities of Fiji, Solomon Islands and Vanuatu in reaching important sustainable development objectives and particularly Goals 9 (Industry, innovation and infrastructure) and 13 (Climate action) under the 2030 Agenda for Sustainable Development. Commencing in 2018, the project is implemented by a consortium of partners specialising in satellite applications, geospatial and remote sensing, and is funded by the United Kingdom Space Agency through its International Partnership Programme. The project is one of UNITAR's largest projects with focus on Small Island Developing States.

The evaluation found the project to be relevant, cost-effective, coherent with sector policies and national strategies and showing some signals of likelihood of impact. The evaluation identified areas for improvement with a set of nine recommendations to strengthen the project's coherence, sustainability, effectiveness and efficiency.

The evaluation was managed by the UNITAR Planning, Performance Monitoring, and Evaluation (PPME) Unit and was undertaken by Ms. Gemma Piñol Puig, consultant and independent evaluator. The PPME Unit further provided guidance, oversight and quality assurance. The Consortium leads' response to the evaluation and its conclusions and recommendations are outlined in the Management Response.

The PPME Unit is grateful to the evaluator, the UNITAR-UNOSAT, the consortium members, the donor (UK Space Agency), Caribou Digital, the partner countries and the other stakeholders for providing important input into this evaluation.

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Executive Summary

This report presents the findings, recommendations and lessons learned from the mid-line evaluation of the CommonSensing (CS) project. The project is funded by the United Kingdom Space Agency (UKSA) and was initiated in March 2018 with the aim to strengthen disaster risk reduction and climate change resilience in Fiji, Solomon Islands and Vanuatu through 1) increasing national resource capacities in the use of Earth Observation (EO) solutions to address disaster risk reduction and climate change resilience by 2020, and 2) enhancing evidence-based decision making by using CS solutions for disaster risk reduction and climate change adaptation (CCA) by the end of 2020.

The project covers a period of three years with a total budget is 24,269,759 GBP. The present mid-line evaluation covers the period between March 2018 and June 2020. The project was conceived by a consortium comprised of UNITAR/UNOSAT and Catapult, Devex, Commonwealth Secretariat, Radiant Earth, the University of Portsmouth, Sensonomic and the UK Meteorological Office. Nevertheless, Radiant Earth left the project at the end of the first year of implementation due to changes in organizational priorities.

The evaluation assesses whether the project remains relevant and is likely to achieve the expected results. In accordance with its terms of reference, the evaluation's specific objectives are to 1) track the progress against targets, 2) identify the main problems and challenges that undermine project implementation and the achievement of results, and 3) provide recommendations for corrective actions. The evaluation focuses on appraising the situation of the project, as well as identifying enabling and preventing factors of project performance, including the assessment of output results. This is done by applying the six evaluation criteria of the Organization for Economic Co-operation and Development's Development Assistance Committee (OECD DAC). It also includes the preliminary result of a cost-effectiveness analysis parallel to the present assessment. Following the United Nations Evaluation (UNEG) Guidelines, the assessment includes a gender dimension in analysing results to the extent possible.

The evaluation's data collection contains several components: a review of existing project documents; interviews with key staff from project partners, partner countries and development agencies in partner countries; and a survey deployed to beneficiaries, carried out jointly with the project's Monitoring and Evaluation (M&E) expert, using statistical sampling. A field mission for on-site observation and interviews was not possible due to the global emergency situation caused by the COVID-19 pandemic. Interviews in Vanuatu and the Solomon Islands could not take place either, due to the double state of emergency caused by COVID-19 and Cyclone Harold.

At the time of the present assessment, about one-third of the project activities had been implemented and around 53 per cent of the total budget spent. Most of the activities delivered are related to capacity development and data collection. The central activities of the project, development of a Common Sensing Platform (CS Platform) and technical assistance on climate funds, will be only completed in the last year of the project.

Despite the lack of outcome-level results, the project remains relevant for most of the project's stakeholders. Most of the participants found the content of the training interesting and relevant to their jobs. About 91 per cent of respondents considered the information provided in awareness-raising events to be useful, and 81 per cent relevant to their jobs. Backstopping activities are also highly appreciated for their capacity to respond quickly and effectively to beneficiaries' demands. In terms of coherence, the project generally aligns with sector policies and national strategies. However, the evaluation found evidence of

overlap and duplication, or the risk arising, with projects of other development partners or regional institutions.

The project includes a Theory of Change and log frame that complement each other. Indicators, baselines and targets are provided at the output, outcome and impact level. Most of them are relevant and pertinent, but there is room for improvement. The project relies on a 'learning by doing' approach that comprises the delivery of capacity development activities while using CS Platform and providing advice on climate funding. However, due to issues of coordination, coherence and time, this approach could not be applied. Most capacity development activities have already been delivered. However, the CS Platform is not in place, and climate funding experts have yet to be deployed. These missing elements are likely to undermine the achievement of outcome and impact results if not addressed in the near future.

Despite the project including gender-based monitoring with sex-disaggregated data collection, the project cannot be considered to be gender-sensitive or one in which gender is effectively mainstreamed. A gender analysis at the beginning of the project is missing, and a deepening in the gendered data collected would be desirable and necessary to address existing gender gaps. Nevertheless, it was noticed that women show less confidence in improving their knowledge but at the same time are more optimistic in achieving the objectives of the trainings. This could be attributed to two cultural and educational matters. On the one hand, cultural and traditional patriarchal patterns would reduce levels of women's self-confidence. But on the other hand, women working in the sector would be better academically and professionally prepared than their male mates.

Given the scope and magnitude of CommonSensing, project management has proved to be challenging with multiple stakeholders and implementing agencies. In addition, project management faced the challenge of having a dual leadership overseeing different project partners with roles and responsibilities often over the same work packages, which seems to have created challenges to coordination and internal coherence.

The preliminary cost-effectiveness analysis finds that the CS project is cost-effective compared to other projects that offer non-space alternative solutions, such as unmanned aerial vehicles and helicopters. In fact, the satellite-supported method would have a lower cost-effectiveness ratio (0.087), and the UAV (0.338) and aircraft solution would be 0.141 during both the project implementation period (2018–2021) and beyond.

Although it is difficult to determine the level of impact of the project at this stage, some signs of impact are traced to capacity development resulting from training and backstopping activities. Notably, 80 to 90 per cent of participants considered having achieved 'high or moderate competency in utilising EO for DRR and CCA' as per participant feedback provided after the trainings¹. Positive trends are also observed when comparing the self-assessment of knowledge before and after training done for monitoring purposes. These elements might not be sufficient to achieve the results and generate the expected impact, however. Very few survey respondents confirmed using and sharing the information provided by CS project activities. Issues related to ensuring a consistent and logical result chain, measurement and treatment of the indicators might greatly undermine their achievement. Impact might be further undermined by challenges in managing expectation issues. The project generated great expectations but the general feeling among most of the interviewees is that the project has yet to fully deliver on results.

¹ Collected through project monitoring system

Finally, it was difficult at this time to determine the sustainability of the project, not only because it is too early. As mentioned, the CS Platform has not been completed, climate finance advisors are not yet in the field, and business models and sustainability plans are still under development. Also, many stakeholders, including staff from governments, felt that the project communication was sometimes confusing and information about project progress and results was not sufficiently shared, which might further hinder the ownership and sustainability of the project.

The report contains nine recommendations:

On coherence:

R1: UNITAR and Catapult should establish a mechanism to ensure the overall complementarity and coherence of activities and outputs so the results chain can deliver the expected intermediate and final outcomes.

On internal communication:

R2: UNITAR and Catapult should strengthen information-sharing, including information about what each partner is doing and how this is done.

On stakeholder engagement:

R3: UNITAR and Catapult should further strengthen relationships, communication and visibility with beneficiary institutions and the most relevant development partners or at least with those who show interest.

On external communication:

R4: UNITAR and Catapult should strengthen external communication and visibility of the project's results.

On gender:

R5: UNITAR and Catapult should elaborate case studies to deepen information on gender issues and the potential of women of becoming drivers of change in the sector.

On the log frame:

R6: UNITAR and Catapult should review the outcome indicators 5 to 10. This may include: 1) Merging or deleting indicators that might be tracking the same or similar information, which will help to better monitor project performance and map specific outcomes; and

2) Including intermediate outcome indicators in order to fill the current gap between outputs and more general outcomes, and include qualitative indicators complementary to the current ones as suggested by the baseline evaluation (e.g. those related to policy changes or to learning outcomes) and in order to track better changes and specific results achieved (e.g. policy or behavioural changes) in the field.

R7: UNITAR and Catapult should address the inconsistencies between the ToC and the log frame with particular attention to alignment with the outcome and impact of the log frame.

On capacity development through learning:

R8: UNITAR and Catapult should develop a process or system where capacity development planning and assessment systems are integrated to promote individual and organisational learning and improvement strategies (e.g. developing learning paths, close beneficiary tracing up and follow up coaching/mentoring).

On sustainability:

R9: The TA in climate financing will not automatically make the project sustainable over time. Sustainability requires ownership, and ownership is built through engagement at the policy and political levels. **UNITAR** should improve engagement with government officials from line ministries as well as from prime ministers' office and/or cabinet.

Introduction and Background

- 1. In 2017, the United Kingdom Space Agency (UKSA) awarded the United Nations Institute for Training and Research (UNITAR) and Catapult a grant to implement the CommonSensing (CS) project. The project aims to enhance disaster risk reduction (DRR) and climate change resilience in Fiji, Solomon Islands and Vanuatu by developing capacities and closing gaps in data. Its specific objectives are to increase national resource capacities in using Earth Observation (EO) solutions to address DRR and climate change resilience in the three countries by 2020, and to enhance evidencebased decision making by using CS solutions for DRR and climate change adaptation (CCA) by the end of 2020.
- 2. The project assumes that integrating EO derived services into national strategic programmes can provide the needed data quantity and quality to access to climate funds and produce effective policy-making processes. The intervention's logic is based on setting up a data cube to process, store and create data layers to monitor developments in geographies and analyse physical risk along with the provision of capacity development in the form of training and technical assistance to ensure the sustainability of the project. A third component of the project includes support to develop a sustainability plan and business case to ensure lasting results.
- 3. The project aims to enable partner countries to increase the climate finance dispersed out of the amount of climate finance available in each partner country. In terms of longer-term impacts, it is expected that people's lives will be saved, and undernourishment reduced from damages and destruction caused by extreme climaterelated disasters. Fiji, Solomon Islands and Vanuatu were chosen due to their high vulnerability to climate change, exposure to different types of natural hazards and their low institutional capacity to prevent, manage and respond to emergency situations.
- 4. CS is implemented by a consortium that was initially comprised of UNITAR/UNOSAT and Catapult, Devex, Commonwealth Secretariat, Radiant Earth, the University of Portsmouth, Sensonomic and the UK Meteorological Office. At the end of 2019, Radiant Earth left the project due to changes in the company's priorities. While UNITAR/UNOSAT and Catapult share coordination and management responsibilities, including monitoring and evaluation (M&E), Devex is responsible for the project's outreach to development community. Radiant Earth, the University of Portsmouth, Sensonomic and the UK Met Office are responsible for the delivery of different work packages (WPs) and activities related to DRR, food security or climate forecasting. Finally, the Commonwealth Secretariat is in charge of high-level stakeholder coordination and climate finance sustainability under specific WPs, like other implementing partners. At the project level, the Commonwealth Secretariat is responsible for Climate Finance components.
- 5. At the time of the mid-line evaluation, the project had spent about 53 per cent of its total budget. Most of the activities delivered relate to data collection, capacity development activities and technical assistance (TA). There has been progress constructing the data cube, platform and sustainability plans, but these deliverables are still under development and only expected to be finalized in the project's last year (end 2020 and 2021). Table 1 (page 2) summarizes the implementation status of the project's outputs organized by WP.



Figure 1: Division of tasks (latest version September 2019)

Table 1: Implementation Status

Work Package	Responsible Party	Status
WP 100 Project Management	UNITAR/UNOSAT	Ongoing
WP 200 User-Centred Design	Catapult	Ongoing
WP 300 Build Analysis and Data Products	Catapult	To be completed
WP 400 Solution, Design, Build and Integration	Catapult	To be completed
WP 500 Capacity Building	UNITAR/UNOSAT	Ongoing
WP 600 Business Modelling	Catapult	To be completed
WP 700 Sustainability	UNITAR/UNOSAT, Catapult, CommSec	Ongoing
WP 800 Communications (includes knowledge sharing)	Catapult, Devex	Ongoing
WP 900 Stakeholder Engagement	Commonwealth	Ongoing
WP 1000 Monitoring and Evaluation	UNITAR/UNOSAT	Ongoing

6. The project started in April 2017 and is scheduled to end by 31 March 2021. Nevertheless, the project period is likely to be extended as the result of delays caused by the Coronavirus disease 2019 (COVID-19) pandemic. The present evaluation was undertaken between March and June 2020, after two years of project implementation, during the pandemic and cyclone Harold response period in partner countries.

Purpose and Scope

7. The overall objective of the evaluation is to independently assess the project at midline and track the progress against targets, identify the main problems and challenges that might be undermining project implementation and the achievement of results, and provide recommendations for corrective actions. The evaluation aims to provide information for accountability, learning and quality improvement purposes. The evaluation focuses on reassessing the project's original objectives, their achievements thus far and their relevance in light of new circumstances and events,² as well as the likelihood of achieving the results expected when the project was designed, despite recent events. The evaluation assesses progress against relevance, coherence, effectiveness, efficiency, impact and sustainability criteria, aligning to the guiding principles set by the OECD-DAC.

- 8. The mid-line evaluation is complemented by a Cost-Effectiveness Analysis (CEA) report.³ The CEA's main aim is to provide evidence to demonstrate that the CS is the most cost-effective solution to achieve the CS project's expected results (i.e. to analyse whether the resources, or inputs, are being used optimally to achieve the intended outcomes). The CEA was drafted as a separate report. Some information from the CEA is contained in the present report to assess efficiency criteria.
- 9. The findings, conclusions and recommendations are intended to inform the remaining period of the project. The primary users of this evaluation are the project partners and the target countries (i.e. the governments of Fiji, Solomon Islands and Vanuatu). Other audiences include development agencies and local civil society organizations as well as other UN agencies working in the field of climate change in the Pacific.

Methodology

10. The methodology used to carry out the present evaluation includes an analysis of primary and secondary qualitative and quantitative information and data. Due to the COVID-19 pandemic, the data collection tools proposed in the ToR and the inception report were reviewed and some of them adjusted. Based on this review, the following data collection tools were used to complete the evaluation:

a. Qualitative data was gathered through an in-depth desk review of project documents and semi-structured interviews. The desk review consisted of the revision of programme documentation.

b. Thirty semi-structured interviews⁴ were carried out with project partners, staff from the governments of Fiji and Vanuatu, UKSA as well as from development partners in the Pacific. Interviews with beneficiaries from Solomon Islands could not take place due to the health situation and cyclone that caused a full lockdown for most of the population and the deployment of government staff to affected disaster zones.

c. While interviews in Fiji and Vanuatu were undertaken by the project's local focal points, meetings with the other stakeholders were conducted online. Interviewees were selected following the stakeholders' analysis list and recommendations from project staff. Interviews lasted approximately one hour. The information collected was then reported through evaluation grids according to each of the evaluation questions.

11. Quantitative data was collected using an outcome indicator survey used for the ongoing monitoring of the project and, thus, administered by the project's M&E consultant at the time of developing the data collection tools. An additional survey was not organised as the ongoing survey contained similar questions and to avoid survey fatigue among project stakeholders. The survey was deployed from December 2019 to March 2020

² Mainly COVID-19 and Cyclone Harold

³ The ČEA report is considered as an interim report and will be finalized in conjunction with the end-line project evaluation.

⁴ See Annex 1.

using the SurveyMonkey platform and adjusted to claim representativeness of the sample.

- 12. Of a total of 262 individuals recorded as project beneficiaries⁵, a total of 82 responses were collected, 37 from women and 63 from men. Fifty per cent of respondents were from Fiji, 26 per cent from Solomon Islands and 24 per cent from Vanuatu⁶. More than 50 per cent worked for national, provincial or local governmental institutions, 21 per cent for academia and the rest for the private sector and regional and international organizations.
- 13. Despite the limited data collection tools used to carry out the evaluation, it was possible to triangulate the information collected to reduce bias and attribution issues when interpreting the information collected. Information and data from the desk review were cross-checked during the semi-structured interviews and informed the interpretation of statistical data from the survey. Data gathered through the survey and provided by the M&E dashboards was used to cross-check, support and complement statements collected during the semi-structured interviews. Bias from the field was further minimised by running a consistency check of the answers provided in each of the semi-structure interviews. When discrepancies among the different sources of information were found, requests for further clarifications on the information provided were made. Finally, attribution issues have been addressed using contribution analysis as part of the evaluation's methodology and further controlled by mapping specific outcomes/ impact of the activities delivered (e.g. locating stakeholders who used the knowledge learnt in the trainings, the specific use of backstopping activities or whether the information acquired in these specific activities was shared).

Limitations to the Methodology

- 14. The COVID-19 pandemic declaration in early March resulted in the cancellation of the field mission and, in turn, the re-arrangement of the evaluation's data collection. In the following two weeks, alternatives were considered, such as engaging consultants based in partner countries or the region. However, travel restrictions and border closures followed the declaration of a state of emergency from COVID-19, which prevented any travel to or within the region. It was also during this period that it was decided that comparing results against targets at this stage would not prove highly relevant. Sufficient information would not be available since the treatment is not completed yet.
- 15. Data collection was further delayed by Cyclone Harold, which hit parts of the three countries. This involved a second declaration of a state of alarm and the mobilization of government staff participating in the project for the emergency response and damage assessment, including UNITAR/UNOSAT focal points. Consequently, data and information tools were redefined and adapted to the new situation, focus groups and field missions did not take place, and the data was collected by the UNITAR/UNOSAT local focal points in Fiji and Vanuatu only under the supervision of the evaluation expert. No stakeholders were interviewed from Solomon Islands, however.
- 16. Since the focal points are part of the project's implementation, issues of independence and impartiality were raised as factors that could compromise the validity and reliability of information and data collected. To reduce the associated risks of bias, focal points were asked to only interview staff from partner countries, and the evaluation expert

⁵ This includes participants in trainings, awareness activities, backstopping activities any other activity delivered by the project.

⁶ A required response rate of 81 respondents was required for a 95 per cent confidence level and a nine perc cent margin of error.

interviewed other local stakeholders, such as development partners, the South Pacific Community remotely⁷, among others.

- 17. It is also worth mentioning the low level of project delivery at the time the mid-line evaluation. After almost two years of project implementation, a little more than half of the budget had only been spent (53 per cent), while around 47 per cent remains to be spent during the final 12-month project period. These funds correspond mainly to completing the design of the solution, delivery of related trainings and the provision of climate finance advisory services. Indeed, the data cube ('the solution'), which is at the core of the project and its main added value, was under development as well as the corresponding online platforms at the time of the present analysis. Therefore, the assessment of the project's impact can only be associated to the outcomes generated by awareness, training and backstopping activities. For this, the experts tried to map specific outcomes or potential outcomes.
- 18. Finally, the evaluation found a number of projects related to climate change and DRR in the region, especially in the project's three beneficiary countries. In fact, this sector has been a top priority for many development partners and development banks in these countries, with many similar initiatives being implemented in parallel and which can undoubtedly generate attribution issues. Such attribution issues are addressed using contribution analysis, a statistical representative survey and specific results tracking, as per the result chain.

⁷ The evaluator provided a spreadsheet to the local focal points to complete with the information from their meetings. Then, information was carefully reviewed by the evaluation expert, and if additional information was required, the local focal reviewed the grid and gathered the missing information.

Process Evaluation

Relevance

Relevance of project in addressing the constraints and needs of targeted countries

19. Relevance is assessed at the design and implementation levels of the project. CS is considered to be very relevant to the needs of the public authorities of the three countries. According to survey results, almost 70 per cent of the beneficiaries work in organizations and institutions that use geospatial or remote sensing data for climate change-related strategic planning regularly or sometimes, as shown in Figure 2 below.

Figure 2: Does your organization or entity use geospatial or remote-sensing data for climate change-related strategic planning?



- 20. The project relies on a scoping study undertaken in its first phase which involved an extensive field mission carried out by the members of the project consortium and which involved large consultations with competent public authorities in Fiji, Solomon Islands and Vanuatu as well as with academia, the University of South Pacific, the South Pacific Community and most development agencies working in the fields of DRR and CCA. The study included a specific capacity needs assessment of main project beneficiaries which enabled the project to design tailor-made, detailed capacity development for training and awareness raising for the three countries. Capacity needs assessment intends to increase skills of government staff working in target sectors and ministries targeted by the project like climate change or agriculture, awareness raising activities are more broad and are aimed at raising awareness of the project (e.g. education or health) and its tools and products.
- 21. This plan also included backstopping activities at the beginning of the project. The scoping phase also served to map the main stakeholders and direct and indirect beneficiaries as well as gather information to design a tailor-made solution. Consultations were conducted with beneficiaries and stakeholders for the design of the project.
- 22. The project is implemented with a 'learning by doing' approach, which combines the delivery of capacity development activities and the provision of tools to use the

capacities acquired. Hence, the technical assistance work package in the form of backstopping activities (e.g. mainly in the form of short-term studies and the provision of specific data and EO-based information) complements capacity development activities. Requests for backstopping activities came from all three beneficiary countries, but mainly from Fiji and Solomon Islands. Of a total of 47 requests, 21 were supported as they were considered pertinent and aligned to the project objectives and expected results.

- 23. The fact that this technical assistance is demand-driven makes it possible to address key knowledge gaps and use the deliverables as inputs for other policy/project performance, despite the challenges experienced defining the scope of the backstopping support. The fast mobilisation of technical support, good-quality products and a deliverable approach responds to contextual and sectorial needs. For example, as part of the emergency response to Cyclone Harold, interactive dashboards and damage visualisation were developed and delivered, displaying the total number of affected population, casualty, damaged buildings and households as well as the location of Emergency Operations Centres at national/provincial level in Vanuatu. Backstopping activities were highly appreciated and considered an added value of the project, filling the gaps left by other projects and/or institutions, such as the Pacific Islands Applied Geoscience Commission.
- 24. Survey respondents rated training and awareness-raising activities positively⁸. According to data collected by the project's M&E system, 81 per cent of respondents who attended awareness-raising activities found that the information provided was needed and the knowledge and skills acquired were relevant for job success. About 96 per cent of respondents also found awareness-raising sessions to be useful. Similar results are reported by the survey deployed in the framework of the present evaluation, where about 60 per cent of respondents strongly agreed that 'awareness of the importance of EO and Geospatial Information Technology data for CCA and DRR has increased through CS events. Furthermore, many stakeholders highlighted the opportunity these sessions brought to share similar challenges and concerns with colleagues from other government agencies and peers from neighbouring countries. Nevertheless, the outreach of this activity might be limited. Only 40 per cent of beneficiary respondents confirmed having participated in awareness sessions, as shown below in Figure 3.

Figure 3: Have you participated in any of the CommonSensing Project's awareness-raising events?



25. Participation in training has reached around 75 per cent of the total identified beneficiaries. The outreach of training activities is higher compared to awareness-

⁸ According to data collected by the project's M&E system.

raising activities since most of the project's capacity development activities consist of training.



Figure 4: Have you participated in any of the CommonSensing project's technical training sessions?

- 26. Information obtained from post training feedback on introductory GIS technical training shows that 66 per cent of survey respondents (55 per cent for Fiji, 75 per cent for Solomon Islands and 62 per cent for Vanuatu) agreed that the learning objectives were fully or mostly relevant to their learning needs; 88 per cent of respondents agreed or strongly agreed that the training was relevant to their job; 90 per cent of respondents also believed that they achieved the learning objectives based on self-assessment; and 80 per cent affirmed utilising EO on DRR and CCA. However, 23 per cent of respondents (average of the three countries) found the content to be insufficiently clear.⁹ In follow-up interviews, some stakeholders also pointed out weak links between the training sessions and a lack of continuity, which produced a degree frustration, demotivation and training fatigue, although this finding may have been attributed to the fact that the introductory training sessions were attended by staff with different levels of knowledge.
- 27. The most relevant activity for the stakeholders was the CS Platform. The CS Platform consists of the Climate Information app, the Risk Information app, the Map Explorer app, and Spatial Decision Support System (SDSS). The SDSS, in the form of a data platform, provides exposure and vulnerability models and forecasts hazard mapping to support decision making in DRR and CCA policies, among other services, and it is expected to become a tool that will address many of the institutional and capacity gaps of competent authorities in partner countries such as the ministries of environment and climate change, countries' meteorological departments, the National Disaster Management Office or Meteorology Geo-Hazards Department. Indeed, many interviewees expressed high expectations with the project and, in particular, the CS Platform. However, the CS Platform was not fully in place at the time of the present evaluation, and the climate change finance experts were in the process of being recruited or deployed to the field. It is therefore not possible to determine the extent the CS solution is relevant to improving the quality of climate fund applications at this juncture.
- 28. The outbreak of COVID-19 produced delays in completing the platform, including user training and feedback sessions (face-to-face) as well as in selecting and deploying the climate finance advisors, but it seems as though these activities were already experiencing issues with delivery before the onset of the health emergency, such as the time to recruit the in-country focal points at the beginning of the project, difficulties in accessing existing data and in-country electoral processes. The evaluation found that these delays contributed to a sense of disinterest or doubtfulness among

⁹ Forty-three percent of respondents replied "more or less".

beneficiary institutions and project stakeholders, and may have contributed to lost momentum.

Relevance of the project design

- 29. The project was designed based on a scoping mission carried out in a first design phase of the project. Capacity development plans were updated at the beginning of the project to avoid overlapping with other training sessions delivered by existing projects and adapt to new requests (e.g. drone use training). Stakeholders also acknowledged the capacity of the project to address some managerial challenges that undermined effective and timely implementation of the project during the first year. In the context of Tropical Cyclone Harold, the project was also used to provide relevant data for damage assessment, among others.
- 30. The local project partners are the government agencies from Fiji, Solomon Islands and Vanuatu, as they provide in-kind contributions. However, the role they play is rather passive and more akin to the role of a direct beneficiary. Other relevant and strategic stakeholders, such as the South Pacific Community (SPC), which has had a mandate to manage and provide EO data for the last 20 years in the region, were not identified as potential partners or direct beneficiaries during the scoping phase. Rather, they were considered mere stakeholders.
- 31. In the context of the COVID-19 pandemic, each of the consortium partners proposed how their respective activities could be implemented and shared with the project leads, Catapult and UNITAR/UNOSAT. Project partners looked into alternative delivery modalities based on the type of activity, with backstopping activities continuing remotely with the support of the local focal points and plans to deliver the remaining training activities online using local or regional expertise. Where feasible, climate funding experts could work remotely. At the time of data collection, a concrete response had not yet been defined, with different options under consideration by project management.
- 32. Project management introduced a gender perspective at the M&E level by gathering sex disaggregated data and informing gender-related decisions, such as the promotion of the participation of women in the trainings. The evaluation found that the design of the project lacks a gender analysis to ensure gender mainstreaming, however. Gender analysis in the scoping could have raised gender issues, for example related to learning processes, in advance to ensure equal learning opportunities and activities to promote gender balance throughout the implementation of the project.
- 33. The project is monitored at three levels: output, outcome and impact. While the output indicators are defined to monitor the deliverables, outcome and impact indicators intend to capture the project's impact in the medium and long term, including its contribution to the achievement of the Sustainable Development Goals (SDGs), with expected impact (achievements), indicators, targets and baselines defined. The existence of these three levels of monitoring also ensures a follow-up at the input (e.g. financials, recruitment process) deliverables and impact level, providing an overall view of the status of the project implementation at any time and introducing corrective measures when needed. While the evaluation found the indicators to be clear and specific, most of the them are measured quantitatively which does not allow for capturing a more qualitative impact of the project. The baseline study brought up some key data and it is been very helpful to understand the context and, likely, to help to assess impact by the end of the project. However, reliability and validity issues of the information contained might undermine a full performance assessment of the project. For example, the baseline value for indicator "8.1.2: Amount of climate funds made available from all

sources in all three countries" was calculated based on a mapping of climate changerelated projects but included infrastructure and agriculture projects, among others. Furthermore, the classification criteria (e.g. forecasted, committed or disbursed) varied across the study.

- 34. Issues of measurability are closely linked to considering whether the means for collecting data are sufficiently straightforward and cost-effective. Data collection could likely result in a resource-intensive endeavour. In terms of achievability, all indicators include a baseline and clear targets, which makes them robust and attainable, but some outcome and impact indicators might try to measure results that are beyond the project's scope or might not be relevant for the project in the short to medium term¹⁰. The baseline also suggested refining some log frame indicators to address some of the attribution, reliability and validity challenges mentioned above and provided baselines for these additional indicators. At the time of the present mid-line evaluation, these indicators had not been integrated in the log frame.
- 35. Most of the indicators can be considered relevant since they can be easily linked with the activities to be delivered (e.g. Indicator 3) as well as to the expected outcomes (e.g. Indicator 10). At the same time, the indicators also present issues of concern. First, some outcome and impact indicators may measure results that are beyond the project's scope, making it difficult to attribute any impact specifically made by the project. For example, in the case of indicator 10.3, 10.4 or 8.2, applying, winning or simply increasing the percentage of climate funding depends on many factors, such as the willingness of a government to apply them, management capacity, the level of competition (regional or global) or development partners policies¹¹, and not just the capacity to write convincing proposals.
- 36. Second, other indicators may not be relevant for the project in the short to medium term, such as those related to nutrition (10.6), the value of food (10.5) or the amount of economic damage (10.6) since these are multi-sectoral issues that require much time to produce change. Other relevant indicators might be missing (e.g. related to stakeholders' engagement and coordination/synergies with other ongoing projects).
- 37. Finally, it was noticed that some indicators might be capturing the same or similar information that is rather repetitive and useless and that in the end might not be used to justify any specific achievement (e.g. 8.1 with 10.3; the sub-indicators of 8.2). All the indicators are time-bound and set to track their progress in 2019, 2020 and 2021. All of them are provided with baselines defined through a baseline study executed at the beginning of the project.

¹⁰ Such as those related to nutrition (10.6), the value of food (10.5) or the amount of economic damage (10.6) since these are multi-sectoral issues that require time to produce change.

¹¹ Often, climate funds are part of bilateral cooperation, and partner countries do not need to apply for climaterelated funding.

Relevance of the project for IPP objectives and SDGs

- 38. The project clearly aligns to IPP priorities, including 1) contributing to the achievement of the SDGs, 2) increasing the use of space expertise to lead in the delivery of oversees development aid (ODA), 3) demonstrating added value of space solutions and application over terrestrial systems for sustainable development, 4) forging new partnerships formed to execute IPP projects, and 5) creating new opportunities for the UK space sector.
- 39. The project is closely aligned to SDG 9 (Industry, Innovation and Infrastructure), given the aim to promote the use of space-based solutions for sustainable development and SDG 13 (Climate Action), which is at the core of CS. Stakeholders concurred with this close alignment. Many interviewees also noted the project contributing to SDGs 11 (Sustainable Cities and Communities), for its use in public buildings and urban infrastructures; 15 (Life on Land) for activities related to forestry (e.g. the Solomon Islands) and 17 (Partnership for Goals) for the public-private partnership nature of the project consortia.

Coherence

Alignment to national and sector policies

- 40. The coherence criterion aims to assess the alignment of an intervention with national and sector policies as well as with other development projects in the same or similar sectors. Internal coherence refers to synergies and interlinkages between the intervention and partner countries' strategies, policies and projects. External coherence deals with the synergies and interlinkages of CS with other projects.
- 41. The evaluation found the project to have made efforts to ensure alignment of activities. Project partners coordinated the delivery of activities with the concerned governmental department or ministry by e-mail and with follow-up by the local focal points. While partners also made sure the request is on top of the concerned ministry's e-mail inbox. with the aim of gathering all the technical and policy information so the activities are aligned to their strategy/plans, their efforts seem to have been insufficient to assess the adherence of the project to national polies, plans and strategies. These tend to be guite broad and limited references to technologies to be used for its implementation are stated. In the case of Fiji, the National Climate Change Policy 2018-2030 includes 'sustainable financing' and 'national capacity development' as 'pathways to achieve the policy objectives. Further, the use of ITC and creation of database and data collection tools are mentioned as strategies. However, specific references to the use of satellitebased solutions are not made. In Vanuatu, capacity development in general is considered as a cross-cutting issue and enhancing data collection and analysis is a priority in the Climate Change and Disaster Risk Reduction Policy 2016-2030, although no references to the use of satellite-based solutions were found. Finally, the related policy in Solomon Islands is outdated.

Complementarity and synergies with other development projects

42. The case is similar for external coherence. There are many development agencies supporting CCA and DRR in the three countries. Ensuring complementarities and avoiding potential overlap were considered during the scoping phase of the project, during which main development partners were consulted. Synergies and complementarities with some UN agencies and other development partners also occurred during implementation. For example, CS shared satellite images of

Guadalcanal (Solomon Islands) as complementary to a project delivered by the United Nations Office for the Coordination of Humanitarian Affairs to show differences before and after the 2007 tsunami or the provision of estimated forest area for four sites in Isabel Province (Solomon Islands) to determine the impact of a GIZ-funded forest project for the Melanesian Spearhead Groups Secretariat. The evaluation found that these examples were also met with cases of duplication. As highlighted in the relevance section, some overlapping issues were identified. Some capacity development activities, mainly training, were similar or had the same content of training already provided by other projects in the region. To address this, it was decided to change the subject of some of them (e.g. climate change prediction in the long term to assess the potential impact of climate change).

- 43. The evaluation found some overlap with a few interventions, such as the multi-donor¹² Climate Change Finance Readiness for the Pacific project that focuses on strengthening the capacity of Pacific Islands countries to access climate change finance, which targets Vanuatu and the Solomon Islands and is implemented by the Pacific Island Forum Secretariat (PIFS) in cooperation with the SPC and Pacific Financial Technical Assistance Centre (PIFTAC), or with the Remote Sensing Technology Centre project in Fiji and Vanuatu, financed by the Government of Japan¹³. Other overlaps regarding mandate (and some activities too) were noticed with the mandate of SPC, an interregional organization providing similar services to the CS for more than 20 years through its Geoscience, Energy and Maritime Division, which has created some degree of discomfort in the sector. Similar issues might be raised between the role of Technical Assistance (TA) in climate finance and the PIFTAC when providing climate-related finance expertise at the country level.
- 44. The evaluation found weak internal and external coherence to be attributed to different reasons, mainly: 1) delays in delivering training activities,¹⁴ CS Platform and climate finance advisors' activities in a coordinated and complementary manner; 2) a lack of stakeholder engagement and 3) weak internal project coordination.
- 45. The CS Platform and recruitment of climate finance advisors are considered by the vast majority of project stakeholders to be the project's most valuable asset. Actually, CS Platform generated great expectations among all stakeholders at the beginning of the project. However, delays in setting up the CS Platform and the lengthy contractual procedure of the technical assistance on Climate Finance have introduced some degree of frustration and scepticism about the capacity of CS to deliver and, in turn, support the implementation of countries' policy priorities and development projects, making it very difficult to determine the level of compatibility of the project with national strategies and other development projects.
- 46. Both internal and external coherence require continuous stakeholder engagement, which has been indicated as one of the gaps in the CS project overall in a dynamic and crowded sector like CCA and DRR in the Pacific. In the case of CS, both local and international actors in the field highlighted the low level of stakeholder engagement of the project through keeping them informed, participating in national coordination bodies, regional and international coordination mechanisms and forums. Despite the presence of project focal points in each of the partner countries, local partners voiced concerns that they received very limited information on the progress of project

¹² Australian Aid, GIZ, Federal Ministry of Economic Cooperation and Development.

¹³ The project stopped in Fiji for the similarities with the CS project, and today, it is only being implemented in Samoa.

¹⁴ For further details see section on effectiveness.

implementation and achievements and development agencies had very little or no information about the status of the project.

- 47. Coordination issues would have further undermined opportunities for coherence and alignment with national policies and projects. The fact that the project partners had to liaise directly with stakeholders for the project implementation and meet them while in the field led to a certain confusion among main stakeholders in identifying the leader of the project. Stakeholders referred to occasions when project partners would be approached simultaneously, giving the impression there were different projects. At times, focal points were not aware of the direct relationships between project partners and local partners, which has made it difficult to ensure a follow-up and efficient information flow for internal and external coherence from the field. Government stakeholders recognised that some efforts have been made to improve coordination and information flow in recent months, however.
- 48. The evaluation found that coordination was compromised by issues external to the project, such as having the same interlocutor throughout project implementation due to a high turnover of government staff, the existence of many reporting lines within stakeholders as well as the ongoing state of emergency caused by Cyclone Harold and COVID-19.
- 49. Although there were challenges aligning national policies and complementarities with other development partners' projects, stakeholders expressed a number of value-added elements of the project:
 - The integration of the use of remote sensing data as part of CCA and DRR projects, including the capacity development component, was the most widely referenced added value of the project. Many CCA and DRR projects used remote sensing for modelling and emergency response, but efforts to build a system to manage and exploit EO data for South Pacific countries has yet to be done.
 - Another added-value element is the flexibility of the project. CS contains a technical assistance mechanism that reacts quickly to the demands of partner countries and mobilises good-quality expertise very quickly, emergency or not, as compared to other projects where technical assistance is only provided if it is part of the project.
 - Equally appreciated was the fact that the project deliverables are mainstreamed into different sectors, such as agriculture, food security, urban infrastructures or forestry, among others. The project has proved to provide high-quality data and analysis in a very short time, which has been key in preparing emergency responses to Cyclone Harold.
 - Last but not least, the capacity of the project brings together various government staff, working in disparate sectors and backgrounds from the three target countries to understand the importance and use of geospatial and EO data for decision-making, which has led to sharing concerns and knowledge, peer-to-peer learning and networking within and among the three target countries.

Effectiveness

Effectiveness in terms of methodological approach and results chain

50. Project effectiveness refers to the likelihood that CS will contribute to the achievement of its objectives and expected results. The evaluation intends to track progress made

towards project objectives and results, as well as analyse the potential of the action to attain the targets by the end of the project. This is done by combining an assessment of the results chain with evidence of any initial sign of impact.

- 51. The project includes a log frame and a theory of change (ToC). Both tools are well defined and informed. They contain activities, input, output and outcome results, indicators as well as baselines per each target. Activities seem feasible, as one-third have been implemented and the rest are undergoing. These are also consistent with the outputs, outcomes and impact results to some extent.
- 52. Although the intervention logic could be more clearly stated, the information provided in the project document, ToC and log frame is sufficient to infer it: Increased climate funding will be achieved through strengthening the capacities of governments in Fiji, Solomon Islands and Vanuatu to draft informed and evidence-based applications and credible policies/strategies and, in turn, contribute to enhance DRR and CC resilience in the three countries. This should be achieved by setting an CS Platform along with capacity development.

By 2030 enhanced Disaster Risk Reduction and Climate Change resilience in Fiji, Solomon Islands and Vanuatu in support of SDG de clusters decests and SDG & lindustry, incovation and infrastructure) using tools and skillests from CommonSensing will have busted is increasing the disbursement ratio for cluster funding by 30%, reducing the human loss from network disasters by educine economic damages from multi-hazards by 20% and imporving natural and environmental accounce magazament 13 (Clima 20% reducing economic damages from multi-hazards by 20% and improving natural and enviro by having 70% of resources mapped and regularly monitored. Continued policy support and priority for Climate action By end 2020 at least 10 users per country making By end 2020, reduced effort and By end 2020, at least a 20% improved success in applying for and more informed decisions using the improvement across the target reporting to Climate funds for each of CommonSensing Platform and taking action stakeholders in knowledge, skills and Outcome towards Disaster Risk Reduction (DRR) and the partner countries, by demonstrating awareness on satellite-enabled solutions enhanced evidence based decision Climate Change Action (CCA) in Fiji, Solomon for improved DRR and CCA making using CommonSensing Solutions Islands and Vanuatu Integration of skillsets into decision for DRR and CCA making Customized user-centred By end 2020, By end 2020, skills development training delivered CommonSensing Solutions ninimum 30 technical officers per country and Sustainability plan Outputs shared and agreed with Delivery of 3 thoughts leader delivering actionable information awareness-raising delivered to minimum 100 other the country partner stakeholders per country on tools and solutions event, digital communication on climate impacts developed by stakeholders developed under the project based on user campaign and project website end 2019, tested and deployed for Commonwealth Secretariat and climate fund advisors and wider interest group. requirements (<u>CommonSensing</u> solutions), allowing for more informed decision making in use by end 2020 in all three Global climate action annual spend estimate at \$100bn per year by 2020 countries priority climate challenges Continued engagement User-dirven design. Implementation of Develop a business model Delivery of Capacity Development development, testing and communication that underpins the solution with key stakeholders in climate operation of CommonSensing strategy, delivering and the continued access Earth Observation and actions in the partner countries. and usage by the countries knowledge exchange geospatial solution, delivering including government, academia within the UK, with the and development of a information and decision industry, and local communities sustainability plan international partners support for climate action and global community

Figure 5: Theory of Change

- 53. As discussed earlier, the project logic is underpinned by a 'learning by doing' approach, which combines theoretical and practical support for an effective learning process, which is abundant for the context of targeted countries. In the case of CS, this involves the development of skills to run and interpret the data exploited to define policies, draft successful project proposals and, in turn, mobilise climate funding.
- 54. The methodological approach and the result chain present certain weaknesses that might affect the effectiveness of the project in reaching its targets, however. Some differences can be found between the log frame and ToC; for example, the outcomes and targets from the ToC do not match with those of the log frame and either does not properly reflect the relevant outcomes associated to, for instance, 'increase of climate funding'. In terms of the result chain, the project contains output, outcomes and impact results, but some of them could be considered 'input' results (e.g. number of customised user-centred CS solutions delivered), rather than outputs.

importantly, however, there is the missing link between the immediate results obtained (outputs) and the impact in the medium term (outcomes), which results in some inconsistencies in the result chain. This is the case for capacity development activities, for example, where the number of people trained is measured, but knowledge acquired by the participants through the training is only measured subjectively through participate self-assessments. Nevertheless, the expected outcome is that '...at least 20 per cent improvement across the target stakeholders in knowledge, skills and awareness on satellite-enabled solutions...'.

- 55. The consistency of the result chain relies on many assumptions and inferences that are outside of the project's control, such as learning from the training provided, applying knowledge to draft projects for funding, having the opportunity to apply for projects or influence policy making, governments needing to apply for funds or automatically adopting the sustainability plans with no specific engagement, to mention a few. As referred to earlier, this introduces attribution challenges when assessing the project's impact¹⁵.
- 56. In addition, the methodological approach based on 'learning by doing' was not applied. This approach would require the delivery of the CS Platform in parallel with the delivery of capacity development, so knowledge acquired could be practised using the CS Platform to achieve the expected results (e.g. increased climate funding). Project management recognized the limited time for applying the platform to climate finance activities. To date, awareness activities have been delivered as planned, and most of the trainings have been implemented alongside many backstopping actions, while the CS Platform and climate change financial support services are not yet fully in place. In fact, some interviewees pointed out that there has been very little internal coordination to ensure a 'learning by doing' process. It seems that very limited coordination has taken place at the strategic level to establish links among the work packages and link activity results. Project management has mainly been focused on planning and delivering activities which often give the impression to have been implemented in silos: rather keeping a certain consistency among the project activities with common or complementary results has not been a priority. This, in turn, might lead to an atomised impact of the project, undermining the achievement of overall outcomes and impact results.

Effectiveness in integrating gender equality and human rights perspective

57. Gender and human rights are the two cross-cutting issues to be considered in the project and assessed according to UNEG Guidelines¹⁶. As previously mentioned, the project design lacks a gendered analysis of the problems involved, leading to weak integration of a gender perspective. In order to comply with UNEG norms and standards as well as with the Accountability Framework for Mainstreaming Gender Equality and Empowerment of Women in UN agencies, UNITAR/UNOSAT proposed to include the gender perspective at project delivery by making indicators gender sensitive and collecting data in a disaggregated manner. Based on this information, UNITAR has adopted measures to address any gender equality issue or lack thereof, such as promoting women to attend the trainings or trying to align the content of training specifically to female participant needs. Gender sensitive monitoring allows for carrying out certain gender-sensitive analyses and drawing attention to some gender trends and issues. Participants in both awareness and capacity development activities are predominantly male, which can be attributed to different issues.

¹⁵ For example, it is assumed the governments must apply for CCA and DRR funds and compete with other countries, while in the Pacific, a lot of CCA and DRR funds are part of bilateral aid.

¹⁶ General Norms for Evaluation – Norm 8: Human rights and gender equality.

- 58. In general terms, this is the consequence of public administrations staffed heavily by males in the three target countries. Usually, people attending this type of activity are appointed by a senior position occupied by men and it is assumed that these decisions tend to be gender-biased, as is often observed in male dominated public administrations in the Pacific (Haley et al., 2016). Work done by female GIS officers often includes much administrative work and/or repetitive GIS tasks which could give the impression to upper management that women do not need to undertake any type of training; rather, men who have more technical job descriptions are seen as more capable and 'adaptable' technical officers. Finally, it cannot be forgotten that science, and mathematics are sectors where women technoloav are globally underrepresented¹⁷ especially in the target countries with strong patriarchal societies driven by Kastom¹⁸.
- 59. Distinctions in the perception of awareness activities' impact were not found, however; 94 per cent of women and 91 per cent of men agreed or strongly agreed that awareness of EO and GIS data has increased. Despite these findings, there seem to exist differences in the predisposition to share the information with other colleagues and peers (96 per cent men and 85 per cent women) as well as in assessing the level of knowledge acquired. While 77 per cent of men considered information to be new, only 45 per cent of women did. Meanwhile, women seemed more hesitant in assessing the knowledge acquired. In fact, only 64 per cent self-assessed achievement of learning objectives in contrast to 90 per cent for men; 64 per cent of women also felt they achieved 'high' or 'moderate' competency in utilising EO for DRR and CCA, compared to 91 per cent for men. According to the interviews, these discrepancies could be attributed to the fact that very few men working in the sector are qualified in GIS. In fact, a geospatial science bachelor's degree was only recently integrated into the curricula of the University of South Pacific. It is most likely to find male participants with more varied background studies, other than environment or engineering, than women with some experience and/or qualifications in GIS and GIS-related issues.
- 60. Last but not least, there are cultural and social patterns that push women to underestimate their capacities and, in this case, they would be more self-demanding when assessing their own progress than men. Nevertheless, a more in-depth, gendered analysis of these results is recommended. Besides the principle of non-discrimination, gender equality and legality, the integration of a human rights approach in CS is rather limited. The project only focuses on strengthening the capacities of duties bearers and their institutions to deliver better policies with no participation of right holders (e.g. through civil society organizations). In fact, low levels of project engagement with communities and outreach were reiterated in interviews. Meanwhile, this undermines any opportunity for accountability and the empowerment of citizens beyond direct beneficiaries. Further, the lack of a human rights perspective could be explained by the strong technical and scientific focus of the project and the nature (private sector) of most consortium partners, which are not used to accounting for this perspective in the delivery of their work.

¹⁷ According to UNESCO (2019), women represented less than 20 per cent of all researchers in 2017 (retrieved 25 June 2019): (<u>http://uis.unesco.org/sites/default/files/documents/fs55-women-in-science-2019-en.pdf</u>)

¹⁸ Refers to a set of informal norms, conventions and traditions which determine economic, political, social and cultural life in Melanesian countries.

Efficiency

61. Efficiency involves assessing whether the intervention is likely to be implemented and achieve results in a cost-effective and timely manner. This includes assessing the management of the project, timely delivery of activities as well as the use of economic, human and material inputs into outputs.

Efficient management of the project

- 62. The project is comprised of a partnership of seven international public institutions, UKbased private companies and one British university, but no partner is from or based in the targeted countries. The partnership was built based on previous project partnership experience and the contacts of both project leaders from UNITAR/UNOSAT and Catapult.
- 63. The project can be considered innovative as it is implemented in partnership by a consortium of private, international public and academic organizations, which is quite rare in international development. Its composition presents an optimal mix of organizations whose combined experience presents excellent expertise in the sector (e.g. EO for CCA and DRR); sub-sectors (e.g. food security and agriculture); as well as in the Pacific region (e.g. implementing projects in target countries). Nonetheless, it is important to highlight that the absence of a local partner or not having a physical presence in the region previous to the project might have created bottlenecks in terms of cooperation, visibility or information sharing and required more time and resources, affecting the efficiency of the project.
- 64. The overall management of the CS project is characterised by a dual leadership, composed by UNITAR/UNOSAT and Catapult. At the beginning, only one project leader was foreseen, UNITAR/UNOSAT. However, due to the existence of two contracts with UKSA, and subsequent coordination and reporting issues, it was decided to include Catapult in the overall management of the project, creating dual project management leadership. This is, in fact, a unique management structure within the IPP programme.
- 65. Within this governance setting, both leads have management responsibilities (WP110). While Catapult is in charge of technical governance (WP 120), which mainly involves the implementation and coordination of the delivery of the CS Platform, data analysis, solution design and communication work packages, UNITAR/UNOSAT is responsible for the implementation of project management (WP110), M&E (WP1000), and the overall coordination and management of capacity development (WP500), stakeholder engagement (WP900) and sustainability (WP700). This dual structure is shown in Figure 6 below.

Figure 6: Management Structure



- 66. The complex governance setting automatically implies a kind of division of project partnership into two blocks, those under the management and reporting duties of Catapult and those under the management and reporting duties of UNOSAT. All project partners have a direct line of communication with the beneficiary institutions. The overall coordination of the project is co-led by both leaders and done through weekly consortium lead meetings and wider monthly online meetings to monitor progress, identify opportunities and mitigate risk. These are complemented with bi-annual full consortium meetings. These meetings are attended by consortium partners and are used to share information about the implementation status of the activities of each project partner and to discuss the cross-cutting issues to be tackled. Coordination meetings between each WP leader and consortium partners take place on a regular basis.
- 67. Regarding decision making that affects the project's orientation, it seems each WP leader makes decisions unilaterally and then informs the other. Decision making involves consultation with project partners under their management structure and feasibility assessment, only after information is shared with the other project leader. Day-to-day decision making is done by project partners at the individual level through continued communication and consultation with the corresponding leader. All of this is done by e-mail, recorded and reported in monthly meetings by Catapult and/or UNITAR/UNOSAT.
- 68. The COVID-19 emergency required a full rearrangement of the project. Each partner elaborated a strategy to face the challenges posed by COVID-19 on the delivery of activities in consultation with Fiji, Solomon Islands and Vanuatu. E-learning training, blended courses or live online training with the support of local focal points were considered alternatives to present capacity development activities, for instance. Once each partner had developed a contingency plan, this was shared with the corresponding WP leaders. At the time of the present evaluation, the development of a joint response document with a plan for each partner to share with UKSA, governments in Fiji, the Solomon Islands and Vanuatu as well as other relevant stakeholders was in progress. This might not result in a solid joint response, rather, a fragmented strategy further undermining coordination, coherence and complementarity issues at the delivery and impact levels.

Efficient Communication

- 69. Regarding communication, internal and external communication problems seem to undermine the efficient implementation of the project. Despite monthly meetings, these are limited to sharing information on the status of activities in a very limited period. Information about process, the content of the activity or results which could interest other partners is not shared. Communication within the project and among partners takes place through the two project leaders. Direct lines of communication among project partners, linking project partners for coordination purposes in the delivery of complementary activities, seem to be limitedly promoted, and if they exist, these come from an individual initiative. Poor internal communication combined with pressure to deliver would be also pushing project partners to work often in silos, thereby not taking advantage of possible economies of scale and allowing for the more efficient use of resources.
- 70. Internal communication challenges produced external communication problems with local stakeholders. Communication was often characterized as 'messy' and 'confusing' by the local stakeholders who were interviewed. In one instance, two project partners simultaneously contacted stakeholders for similar activities or different activities to be implemented synchronously or in the same period of the year. Not involving the local focal point in the communication did not help to give a good impression of the project. Rather, it created confusion within local partner institutions.

Efficient coordination and timely implementation of the project

- 71. Closely linked to communication, the evaluation found coordination challenges at the delivery level which in turn impacted on coherence among activities, which is key for the success of an intervention based on the learning-by-doing approach and consistency of the results chain to achieve expected results. UNOSAT and Catapult organise information sessions making sure that all activities are coherent and aligned. Monthly meetings are also spaces where the coordination and coherence of work packages can take place. Coherence is often ensured by individuals who take the time to liaise with their project peers and share information to ensure the efficient delivery of activities. Finally, the M&E and quality assurance systems are also considered instruments that support project coherence.
- 72. Nevertheless, these instruments may not be sufficient, as the notable time lapse between the delivery of most capacity development activities and the development of the CS Platform and deployment of the climate finance advisors. The evaluation found evidence of confusion on who would be playing these roles. For some stakeholders, it was Catapult; for others, UNITAR/UNOSAT, depending on the topic and type of activities. Although all project partners are committed to complying with the quality assurance guidelines, there was little or no follow-up on the system, so the output complementarity and coherence could be assured at the delivery level.
- 73. Some other challenges that might undermine efficient project management are associated with the large number of project partners compared to other IPP projects, which requires more coordination and time-consuming management activities; the partners' nature (private and public institutions), which involves the use of disparate implementation approaches, rules and procedures; and the complex structure and distribution of work packages that sometimes involves double (e.g. WP 700) or cross-reporting (e.g. capacity development activities overseen by UNOSAT but implemented by a partner under Catapult's responsibility).

Efficient monitoring and evaluation of the project

- 74. The overall M&E of the project is ensured by UNITAR/UNOSAT in close collaboration with Caribou, which is responsible for the overall M&E of the IPP. For it, an M&E plan with a corresponding M&E framework was developed and aligned to the log frame indicators, targets and expected results. Data collection tools were designed to provide qualitative and quantitative information for both output and outcome indicators. While the performance of output indicators is measured monthly, the performance of outcome indicators and reports are reviewed by Caribou.
- 75. The M&E does not contain process indicators that might track impact of the project in the short to medium term, such as the level of knowledge acquired by the people after being trained and any behavioural change in an objective manner. This is related to the 'missing link' in the results chain, as mentioned earlier under project effectiveness. The M&E information is shared with the two project co-leaders in addition to Caribou, but not with the other members of the project's consortium and local partners (beneficiaries) in the three countries. In fact, the lack of information about project performance was a complaint raised by some project partners and authorities from partner countries.
- 76. Financial and reporting management was considered adequate by all parts with minor issues, such as difficulties in adjusting and reporting match funding and in-kind contributions and the pre-financing system, which has often constrained some partners' budget.

Financial efficiency and cost effectiveness

77. Regarding expenditures, around 55 per cent of financial resources were disbursed during the two first years of project implementation, delivering about one-third of project activities in a 24-month period. About 45 per cent remains to be spent in the third and last year of the project and cover the costs of the rest of the activities, as shown in Figure 7 below.

Figure 7: Level of Expenditures, March 2020



78. Of these funds, 63 per cent was allocated to cover the costs of human resources, and 12 per cent for travel costs. The data and sub-contracts' costs, mainly in consultancies and expertise, represented around 11 per cent of the expenses, while the remaining costs corresponded to 'other' costs. If the costs of the sub-contracts are added to the costs of project staff, the allocation to human resources represents more than 80 per cent of project costs.



Figure 8: Budget Allocation March 2018–March 2020

- 79. The financial figures show a certain slowness in disbursing funds mainly attributed to managerial and coordination issues at the beginning of the project, the lengthy procurement process of the public institutions that are part of the project partnership, and the low-capacity absorption of target countries. The COVID-19 global health emergency is expected to cause further delay. However, even if an extension of the implementation period of six to nine months is requested, the availability of a large budget to spend in almost half of the time might put the project under performance constraints in the next months and, in turn, at risk of not achieving some results (e.g. those linked to climate-related funding).
- 80. According to a preliminary cost-effectiveness analysis, the project would remain costeffective compared to other projects that offer non-space alternative solutions that use Unmanned Aerial Vehicles (UAVs) and helicopters. The analysis concludes that the satellite-supported method would have a lower cost-effectiveness ratio (0.087), and the UAV (0.338) and aircraft solution is 0.141 during both the project implementation period (2018–2021) and beyond. This means that each £1M spent on satellite-supported analysis would capture around £12M additional funds – more than the UAV method

(around £3M) or the aircraft method (around £7M). The space-based solution is, therefore, the most cost-effective for the years covering project implementation.



Figure 9: Cost-Effectiveness Ratios

Impact

- 81. Assessing project impact intends to determine the extent to which the CS project is expected to generate any expected, unexpected, positive or negative impact. As previously mentioned, determining any concrete impact at this point of the project is difficult since core activities (e.g. CS Platform and climate-related funding technical assistance) complementary to the ones already delivered (e.g. training or data collection) have yet to be fully implemented. Most stakeholders indicated that the CS Platform and climate funding expertise will be delivered too late in project implementation, leaving a very short period of time to develop the capacities of staff to run and use the platform and, in turn, attain outcomes such as 'increased climate funding'. Therefore, impact here refers to the likelihood of the project to have any expected impact.
- 82. COVID-19 and Cyclone Harold implies more pressure to deliver in the remaining time with the high risk of overloading staff in target countries with information and fatigue. Accordingly, there is a huge risk of achieving a fragmented impact, because of the limited coordination and coherence at the delivery level. This is very likely to happen with backstopping activities. Even though these are most appreciated by local stakeholders, they are also the most difficult ones to match with the rest of project activities, leading to an isolated impact, or 'islands of impact'.

Potential impact in terms of awareness

- 83. The evaluation found that beneficiaries struggle in understanding the link between climate change geospatially and the concrete benefits of a project that does not involve local communities at large. Despite the success of the awareness activities, the project has reached out to a very limited number of people (40 per cent of stakeholders identified by the project), which is probably insufficient to understand how CS can close the gap between theory and practice and its benefits for their populations in the long term.
- 84. Closely linked to awareness, there is the issue of communication and visibility of project results. One of the project partners is a communication and research organization, Devex, which has the main role of drawing case studies related to CS objectives and generating complementary data. However, this role would not seem to be sufficiently utilised. The data generated by the M&E activities is only shared with UKSA and Caribou, but not with project partners, including Devex, beneficiaries and other

stakeholders to engage at the community level, inform about project results or deepen on issues raised from ongoing M&E (e.g. engendered perceptions in training).

85. A lack of visibility and exposure to wider audiences, such as development partners and local civil society organizations working in the sector, can impede building trust and managing expectations on project results and intended impact. A newsletter was supposed to be published through which audiences could be informed while giving visibility to project results. Unfortunately, these activities have not been implemented. Finally, the website is outdated and contains very limited information about the project and project progress.

Potential impact in terms of skills development and knowledge

86. Nonetheless, some objective evidence of potential impact could be tracked in the present analysis. Following M&E results, some 80 to 90 per cent of participants considered having achieved 'high or moderate competency in utilising EO for DRR and CCA'. Again, the percentage of women affirming to have achieved 'high or moderate competency' is slightly lower than men.



Figure 10: Percentage of participants who achieved 'high' or 'moderate' competency in utilising EO for DRR and CAA

- 87. As per the self-assessments of participants, positive learning outcomes can also be observed before and after training. Both male and female learning outcomes' assessment indicates that their knowledge has increased or improved. For example, about 55 per cent of women indicated having average knowledge on how to apply GIT for climate resilience and decision-making products, and 50 per cent of men a 'weak' capacity to do so before the training. About 80 per cent of women and 75 per cent of men are moderately or highly able to perform GIT.
- 88. Another important change was observed in terms of data collection and processing. Before being exposed to the training, no men and only 25 per cent of women acknowledged possessing skills in summarising the data collection process using smartphones; after the training, more than 60 per cent of women and more than 30 per cent of men indicated having acquired high skills in this field¹⁹. While analysing the results of the self-assessments, it was also noticed that women seem to be more knowledgeable than men before the training and, hence, the impact of the training is lower than among men. This would confirm the argument that women working in this

¹⁹ See Annex 2.

field are academically better prepared than men, as already pointed out in the effectiveness analysis. Nonetheless, it is important to state that learning outcomes' assessment is based on individual perceptions (self-assessment), which might involve certain biases in overrating the levels of improvement. A little more objective are the results of a survey which maintains that a little more than 75 per cent of participants in training sessions applied the knowledge and skills acquired in their work²⁰ for 'creating maps using GIS', 'setting projection', 'research', 'monitoring agricultural areas' and georeferencing, among others.²¹





89. When asked about knowledge and information sharing, few responses from the survey and semi-structured interviews reported transferring content of the training to colleagues, supervisors or other stakeholders. In the case where this was done, the type of information shared was mainly related to the existence of CS and about the system it intends to establish, the adoption of best practices assessing risks or backstopping outputs (e.g. maps) and very occasionally supporting decision-making. An example of this is the interactive dashboard and 3D damage visualisation produced for the Cyclone Harold damage assessment in Vanuatu which was used to organise relief distribution logistics.

Sustainability

90. Sustainability consists of assessing to what extent the results and benefits of the project are sustained over time. In a mid-line evaluation, the *likelihood* that the results will be sustained after the end of the project is assessed. This involves analysing the efforts and actions put in place to ensure the sustainability of project benefits in the medium to long term after the end of the project.

Institutional and political sustainability

91. Sustainability is considered extremely important for CS, as the project intends to create and manage mass data systems which is a very sensitive issue among project stakeholders²². At first glance, it could be assumed that the sustainability of CS is most

²⁰ Information about frequency cannot be considered relevant since many respondents skipped this part.

²¹ See list in Annex 3.

²² Mainly within different governmental departments, some development partners, SPC and USP.

likely to be ensured since sustainability is one of the cornerstones of the project in the form of capacity development and advisory services. In practice, sustainability is supported through capacity development (WP 500) and sustainability (WP700), which includes business modelling, sustainability plans and advisory services.

- 92. Within this framework, the sustainability of the project depends very much on the capacity of the project to timely deliver activities and the likelihood of achieving project results. Based on the present assessment, the project is experiencing great challenges regarding the timely delivery of products aligned with the logic of an intervention and results chain, which puts at risk the attainment of project results.
- 93. Equally important to the project activities aimed at promoting project sustainability are the financial, institutional and political capacities of the systems needed to sustain the project's results over time. Institutional capacity is the main challenge to sustainability in the Pacific, overall, including in Fiji, Solomon Islands and Vanuatu. The small size of the public sector, low levels of education combined with high levels of staff turnover between the public, private and international sectors do not support the solid institutional and capacity development of the main beneficiaries. The multi-sectoral approach of the project also requires that target institutions can coordinate with agencies in a context where public administration is quite fragmented and politicised.
- 94. The level of engagement with beneficiaries, mainly governmental institutions, was also considered extremely low by most of the interviewees compared to other projects in the same sector, limited to one-off meetings when the project management team was present in the country. In fact, stakeholder engagement seems to have been overlooked all over the project's implementation. Within the project management structure, it is not clear who is or should be in charge of stakeholder engagement. Within this context, there are limited chances that CS creates a sense of ownership within beneficiary institutions and, in turn, the needed political capacity, commitment and leadership to take over the project as part of governments' public service.

Financial Sustainability

- 95. In terms of financial sustainability, it was observed that the costs of the liabilities created by the project could be covered by countries' own resources or with more development aid from donor partners. Nowadays, there is no sign of commitment from partner countries to allocate public resources to sustain project benefits after the project. This might come with the climate financial experts who would be placed at the ministries and departments in charge of public financial management to involve the concerned actors in the preparation and implementation of the sustainability plan.
- 96. Climate funds could be an alternative to consider to national public funding. In the case of Fiji, Solomon Islands and Vanuatu, many bilateral and multilateral development agencies are already in the field providing and implementing CCA and DRR as part of their country's support (e.g. Australia, GIZ, World Bank, European Union, UNDP). Sustainability also involves making the project visible to this community and continued engagement. However, most interviewed actors highlighted the lack of engagement with this community and information made available. Despite acknowledging the relevance of CS for the sector and their development projects, they felt that a lack of communication and engagement with the larger international community could make it difficult to link CS with other projects.

Quantitative measurements of each log frame indicator²³

97. Due to delays incurred in the implementation of some activities, mainly in the setting of the CS Platform and the climate finance technical advisory services, the assessment of progress performance of outcome and impact indicators could not be realised. Nevertheless, a quantitative measurement at output indicators level was possible and is presented below:

Result	Achievements	Ref. no	Indicators	2018 Baselin e	Target Year 1 (2019)	Total Achieved Year 1 (2019)	Target Year 2 (2020)	Achieve d Year 2 (June 2020)	Progres s
Outputs	4. By 2021, case studies on using CommonSensin g solution produced for Fiji, Solomon Islands, and/or Vanuatu by the project consortium	4.1	Number of case studies published by the project consortium on the application of CommonSensing solutions for CCA and DRR (cumulative for all three countries) (IPP Alignment)	0	1	0	2	N/A	Off track
	3. By 2021, 3. capacity 4. development 4. training 4. delivered to 5. technical officials 3. and awareness- 7. raising event 6. delivered to 7. project 5. stakeholders on 7. CommonSensin 3. g solutions 3. 3. 3.	3.1	Number of technical trainings organised by the project consortium in Fiji, Solomon Islands, and Vanuatu	0	4	4	12	1	On track
		3.2	Number of participants in technical trainings organised by the project consortium in Fiji, Solomon Islands, and Vanuatu (KPI 2)	0	10 per country (5 M; 5 F)	101 from the 3 countries, (73M; 28F)	30 per country (15 M; 15 F)	30 from all three countries (22MI 8 F)	Achieved
		3.3	Number of technical backstopping activities completed by in-country experts in Fiji, Solomon Islands, and Vanuatu	0	15	13	9	55	Achieved
		3.4	Number of participants in technical backstopping activities completed by in-country experts in Fiji, Solomon Islands, and Vanuatu	0	15	42 (30M; 12 F)	9	42 (30M; 12F)	Achieved
		3.5	Number of unique government ministries taking part in technical backstopping activities completed by in-country experts in Fiji, Solomon Islands, and Vanuatu	0	FI: 3 SI: 3 VN: 3	FI:4 SI: 3 VN: 2	FI:4 SI:4 VN:4	Fi: 8 SI: 5 VN:2	Achieved
		3.6	Number of technical awareness-raising events on CommonSensing solutions (co)organised by the project consortium in Fiji, Solomon Islands, and Vanuatu	0	1 per country	15 FI:7 SI:3 VN:5	2 per country	1 Fl: 1	On track

Table 2: Quantitative measurements of outputs

	3.7	Number of attendees of technical awareness- raising events (co)organised by the project consortium on CommonSensing solutions in Fiji, Solomon Islands and Vanuatu	0	6 per country (3 M; 3 F)	360 FI:101 M & 74 F SI:46 M& 20 F VN: 68 M&51F	10 per country (5 M; 5 F)	17 FI:8M &9F	On track
	3.8	Number of unique government ministries of the three partner countries represented at the technical awareness- raising events on CommonSensing solutions (co)organised by the project consortium	0	FI: 3 SI: 3 VN: 3	FI:6 SI:10 VN:3	FI: 5 SI: 5 VN: 5	Not available	On track
2. CommonSensin g technical solution for data	2.1	Number of CommonSensing products developed for the MVP in Fiji (KPI 3.1)	0	0	0	3	11	Achieved
access and analysis designed and implemented, and Minimum	2.2	Number of products developed for the technical solution in Solomon Islands and Vanuatu (KPI 3.2)	0	0	0	2	6	Achieved
Viable Product (MVP) tested and deployed for use by 2021 in Fiji. Alternative	2.3	Number of visitors on all product platforms in Fiji, Solomon Islands and Vanuatu	0	0	0	20	0	Off track
technical solution developed, tested and deployed for use in Solomon Islands and	2.4	Number of unique government agencies in Fiji, Solomon Islands and Vanuatu adopted technical solutions developed by the consortium partners	0	0	0	FI: 3 SI: 2 VN: 2	0	Off track
Vanuatu by 2021.	2.5	Number of technical roadmaps developed for the three partner countries	0	0	0	3	0	Off track
1. Communication strategy and sustainability plan are developed and implemented by 2021 in Fiji,	1.1	Number of visitors to website on CommonSensing project managed by the communications project partners (WP 800)	0	1000	52	1000	Data from Jan – March has been lost due to a coding error	Off track
Solomon Islands, and Vanuatu	1.2	1.2.1: Number of content views on the CommonSensing project website 1.2.2: Time spent on each content page (per view, MM:SS)	0	1.2.1: 500 1.2.2: 1:30:00	1.2.1 :722 1.21.2: 7:12:00	1.2.1: 500 1.2.2: 1:30:00	Data from Jan – March has been lost due to a coding error	On track
	1.3	Number of follow-up queries from the website visitors	0	25	0	25	Data from Jan – March has been lost due to a coding error	Off track
	1.4	Number of conferences, seminars, and/or workshops where CommonSensing has been presented by a member of the consortium or steering board (IPP Alignment)	0	10	22	10	3 (Jan)	On track
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	1.5	Number of attendees of conferences, seminars, and/or workshops where CommonSensing has been presented by a member of the consortium or steering board	0	0	3356	500	1090	On track
	1.6	Number of users who engage with CommonSensing on social network services	0	100	1454	250	135 (Jan), 89 (Feb) 45 (March)	On track
	1.7	Number of CommonSensing project newsletter subscribers	0	50	51	125	Data from Jan – March has been lost due to a coding error	On track
	1.8	Number of endorsement letters issued by the project's stakeholders on CommonSensing's sustainability plan (KPI 4)	0	FI: 0 SI: 0 VN: 0	0	FI: 5 SI: 5 VN: 5	0	Off track

- 98. In the Table 2 above, 14 out of 22 output indicators are considered on track or 'achieved' and only six off track. Indicators off track are those to be delivered by activities related to the CS Platform and on communication and sustainability. This would be in line with the assessment of mid-line evaluation criteria, where the CS Platform setting, sustainability and communication are identified as the most challenging areas in terms of both implementation and impact.
- 99. In some cases, output targets were surpassed. This was the case in the number of training participants (3.2), technical backstopping activities (3.3) or the number of awareness-raising events and outreach (3.6 and 3.7). Gender parity in participation (50:50 ratio) was achieved in some individual events, but not in all trainings. Thus, the gender targets were not achieved at aggregated level.
- 100. Finally, it is important to remember that all the output indicators are quantitative and do not objectively measure impact beyond the completion of the activity (e.g. real learning outcomes of the participants/behavioural change because of awareness raising). There are no qualitative indicators that could help to map better outcomes and stories of change.

Conclusions

101. After two years of implementation, most of the interviewed stakeholders consider the project relevant to the Pacific context, and it globally aligns to national policy and strategic priorities in terms of CCA and DRR. Nevertheless, it was difficult for them to assess whether the project is addressing their main institutional needs due to a lack of coordination, stakeholder engagement and deliveries/information. The project also seems to bring great added value to the sector, compared to other CCA and DRR projects. The CS Platform, the climate finance advisory services and the joint training with peers from three countries are among the added values of the project. Nevertheless, the valued role of the project is its potential to close the existing gap between EO data and policy making.

- 102. Coherence with other development projects in the sector is challenging, mainly due to weak engagement and communication with these stakeholders as well as a lack of participation in the existing development, partners' coordination or forums in the sector despite in-country expert's participation to regional events/fora. The effectiveness of the project at this point is difficult to determine. Despite one-third of the project being delivered, its effectiveness has yet to be seen. This is mainly due to delays in completing the delivery of core activities, such as the CS Platform and climate finance advisory services. Consequently, this has created concerns among main beneficiaries and apprehension towards the project and its capacity to deliver. The project lacks a sequential implementation process aligned to the learning by doing approach that underpins the intervention logic. The project is like a puzzle; the pieces are there (e.g. capacity development, some TA climate change in Fiji), but the puzzle is not being assembled in a manner that will ensure the timely delivery of the results and produce a coherent results chain to achieve the intended outcomes.
- 103. It was generally agreed that the creation of a dual leadership helped to address main managerial bottlenecks and, in turn, speed up the implementation of the project. Nevertheless, challenges remain in terms of communication and project coherence. The way the project was set up creates barriers for communication and cross-communication between subcontractors and other partners, resulting in information fragmentation and the discharge of responsibilities to some extent. As a result, the project has noteworthy challenges on coordination and coherence which places constraints on project delivery and the accomplishment of the result chain and, in turn, project outcomes and impact. Nonetheless, signals of positive impact can be identified: self-assessment points out that participants would be acquiring some new knowledge or improving their skills in the use and process of EO data. It was also found that most beneficiaries would use the knowledge, and some of them would share it with their superiors and/or peers.
- 104. Sustainability of the project at mid-term can be considered at risk. The level of involvement with governments to allocate sufficient financial and institutional capacities to sustain project results at this level is rather weak, and the limited communication and visibility of the project would play against the interest of other development partners in the field for the results and follow-up of CS. Great expectations seem to be put on the performance of the climate change advisors, but given the present context, this might be insufficient, and dialogue at the policy and political levels might be also required.

Recommendations

105. Based on findings and conclusions, nine recommendations (R) are issued:

On coherence:

R1: UNITAR and Catapult should establish a mechanism to ensure the overall complementarity and coherence of activities and outputs so the results chain can deliver the expected intermediate and final outcomes. This could be done by adopting an approach based on phases; however, the project may be in a too advanced stage of execution to do so. Alternatively, project partners could take a more strategic approach in setting the weekly and monthly meetings, where the timing and sequencing of delivery of the different activities are discussed. This could be a great opportunity to also discuss the pertinence of delivering the activity at this stage or wait for another activity or the need to advance the delivery of

other activities. The way to communicate with the interlocutor in the delivery of complementary activities should also be discussed to avoid double channels of information.

On internal communication:

R2: UNITAR and Catapult should strengthen information-sharing, including information about what each partner is doing and how this is done. This could be done, for example, by promoting direct lines or links among project partners beyond the monthly meetings. It should not necessarily be about more meetings, but rather finding a way to learn about what partners are doing and linking the work, activities and results. This could be facilitated or promoted by the project manager at both organisations who have a good overview of the project and are updated on the activities' implementation. Time could also be taken to draft briefings/minutes of the meetings and share them with the other partners.

On stakeholder engagement:

R3: UNITAR and Catapult should further strengthen relationships, communication and visibility with beneficiary institutions and the most relevant development partners or at least with those who show interest. Participation in coordination forums such as the Pacific Resilience Partnership task force technical working group within the Pacific Islands Forum Secretariat (now co-shared by GIZ) should be explored as a channel for communication, coordination and visibility within the development community in the different existing forums. This may require that the local focal point is involved in communication and visibility actions and receives some guidance since this role is presently rather operational.

On external communication:

R4: UNITAR and Catapult should strengthen external communication and visibility of the project's results. This could include, for example, strengthening the links and information-sharing between M&E results and communication and visibility WPs to elaborate case studies, stories of change or simply project achievements. It is thus encouraged to implement the communications plan and to agree on roles among the project partners in reaching out to wider audiences in sharing project achievements.

On gender:

R5: UNITAR and Catapult should elaborate case studies to deepen information on gender issues and the potential of women of becoming drivers of change in the sector.

On the log frame:

R6: UNITAR and Catapult should review the outcome indicators 5 to 10. This may include: 1) Merging or deleting indicators that might be tracking the same or similar information, which will help to better monitor project performance and map specific outcomes; and 2) Including intermediate outcome indicators in order to fill the current gap between outputs and more general outcomes, and include qualitative indicators complementary to the current ones as suggested by the baseline evaluation (e.g. those related to policy changes or to learning outcomes) and in order to track better changes and specific results achieved (e.g. policy or behavioural changes) in the field.

R7: UNITAR and Catapult should address the inconsistencies between the ToC and the log frame with particular attention to alignment with the outcome and impact of the log frame.

On capacity development through learning:

R8: UNITAR and Catapult should develop a process or system where capacity development planning and assessment systems are integrated to promote individual and organisational learning and improvement strategies (e.g. developing learning paths, close beneficiary tracing up and follow up coaching/mentoring). This could include, for example,

developing a process promote learning environments, motivation and incentives for systemic change and ownership of the learning process and development process in the end. Within this approach, project partners become real and genuine mentors and not only managers of capacity development activities.

On sustainability:

R9: The TA in climate financing will not automatically make the project sustainable over time. Sustainability requires ownership, and ownership is built through engagement at the policy and political levels. **UNITAR** should improve engagement with government officials from line ministries as well as from prime ministers' office and/or cabinet. Actions on this recommendation could include, for example:

- Increasing the transparency of the project with concerned ministries, including bidirectional communication and feedback conveying the progress and results achieved;
- Following up on policy and budget processes. If it is expected that governments take up part of the costs of CS project liabilities, it is indispensable to engage with government at the policy level and influence the policy process and budget so the government allocates necessary human and financial resources to sustaining project results in the medium/long term as well as the protection of data.
- Relying on a UK in-country representative to leverage efforts at the political level for the sustainability of the project. This would involve updating high UK representatives in Fiji, Solomon Islands and Vanuatu on a regular basis on progress achieved as well as of any other political bottleneck that might undermine project implementation.

Lessons

- 1. Integrating flexible mechanisms such as backstopping activities that can react to local demands, particularly in rapidly changing environments such as the Pacific Islands, is supportive of successful project implementation.
- 2. Coherence and alignment between the log frame and ToC is key for a clear pathway to impact.
- 3. Both internal and external communication is key for project success.
- 4. A governance system based on co-leadership is complex and requires frequent interactions and exchanges.
- 5. With country projects it is important to involve local partners and engage with a wider community as much as possible to ensure local ownership and participation.

ANNEXES

	Last Name	First Name	Organization
1	Achitsaikhan	Anudari	UNOSAT
2	Сох	Liz	UKSA
3	Dell'Oro	Luca	UNOSAT
4	Draper	Jennifer	Satellite Applications Catapult (previously)
5	Bjorgo	Einar	UNITAR
6	Gaunavinaka	Leba	UNOSAT
7	Gundersen	Anders	Sensonomic
8	Hury	lan	UNOSAT
9	Hudson	Timothy	UKSA
10	Mashfiq	Khaled	UNOSAT
11	McCourt	Karen	UK Met Office
12	Morgan	Helen	Devex
13	Nair	Unnikrishnan	Commonwealth Secretariat
14	No	Oran	UNOSAT
15	Oates	Richard	Satellite Application Catapult
16	Рарао	Joy	UNOSAT
17	Sasvari	Gabor	GIZ (Fiji)
18	Teeuw	Richard	University of Portsmouth
19	Anise1	Koroi	Government ITC Services (Fiji)
20	Hicks	Meizyanne	Geospatial Division, Ministry of Lands & Mineral Resources (Fiji)
21	Chan	Carrol	Geospatial Assistant, Geoscience Maritime and Energy Division of SPC (Fiji)
22	Kumar	Shayalo	Ministry of Economy (Fiji)
23	Prakash	Shaneel	Ministry of Disaster Management (Fiji)
24	Soko	Vasiti	Ministry of Disaster Management (Fiji)
25	Atalifo	Terry	Meteorological Services, Ministry of Infrastructure and Meteorological Services (Fiji)
26	Rollings	Nicholas	University of the South Pacific (Fiji)
27	Rarai	Allan	Vanuatu Meteorological and geo-hazards Department (Vanuatu)
28	Malosu	Neil	Van-KIRAP Project (Vanuatu)
29	Taviti	Jonah	Van-KIRAP Project (Vanuatu)
30	Morris	Charlie	Department of Water & Natural Resources (Vanuatu)

ANNEX 1:	List of	Stakeholders	Interviewed
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ANNEX 2: Learning outputs Men and Women







Solomon Islands:



Vanuatu:





ANNEX 3: Use of knowledge acquired

#	RESPONSES	DATE
1	Providing detail maps to my subordinate's, transferring data into information by using the different tools available within ArcMap & Sharing the knowledge and skills to my colleagues.	2/26/2020 2:00 AM
2	Plotting hydrant locations	2/25/2020 7:20 PM
3	Use Epicollect5 for survey	2/25/2020 1:25 PM
4	Updating street map	2/25/2020 9:55 AM
5	Epiccollector5 for our road data inventory	2/25/2020 9:10 AM
6	Creating maps using QGIS.	2/25/2020 6:51 AM
7	Data collection and gbs location	2/24/2020 8:08 PM
8	this was a first training i attendedone of the first step done after the training is getting familiar and on how to use the software. so i have done one basic activity and that is to plot all our projects sites in the country.	1/20/2020 4:53 AM
9	After the training, it has tough me to clarify and justify my maps more than I have done before	1/13/2020 4:42 AM
10	Overlaying and swiping of datasets using ArcGIS for verification and accuracy.	1/9/2020 2:33 AM
11	I will be taking lectures to my students on Remote sensing and also the introductory use of QGIS, this semester, 2020	1/8/2020 8:16 AM
12	students field research. Communities which field research is contacted are mapped out using the street mapping.	1/8/2020 7:03 AM
13	-Data collection - Creating maps -Setting projections	1/8/2020 6:06 AM
14	For the GIT and Earth Observation training we had in November, we were trained on how to use online resources to access and process satellite imagery that were acquired online. This was used to assist during post natural disaster assessments on damages to the road infrastructure and all the assets under the Fiji Roads Authority inventory (bridges, jetties etc).	1/8/2020 2:27 AM
15	Cartography skills, Imagery interpretation skills and awareness of the coordinate system to be used.	1/8/2020 2:05 AM
16	I've been using the knowledge/skills to complete my assignments for my studies. i used the commonsensing techniques to view areas prone to disaster in the Pacific Island Countries.	1/7/2020 10:16 AM
17	Remote sensing theory on the flood analysis on coastal communities.	12/26/2019 4:32 AM
18	After this training I learn how to download images using Sentinel EO Brownser or how to get access to any information using website such as BBBIKE or HDX, also how to adjust an images using Geoferencing scanned topographic maps I actually work on mapping activities and this training help me to improves my professional skills on mapping.	12/23/2019 7:48 AM
19	as a student attending this workshop, the skills used in QGIS software has help to monitor my farm areas using satellite and i am able to determine the distance of the area as well. i used bbbike for my mapping and QGIS for location it was exciting as it can also be able to do land survey as well using GPS Epicollect for data collection is so helping in disaster risk management.	12/23/2019 7:18 AM
20	We are trying to use the new software which was taught during the training program.Eg, Plotting of Government Offices and Government Quarters under Governments Building Roll.	12/23/2019 2:55 AM
21	I have used open source maps to map church location	12/19/2019 1:22 PM
22	Gaining knowledge on wide range of internet google search with various applications and techniques using new technology on mapping and communication system.	12/19/2019 9:36 AM
23	Remote sensing and	12/19/2019 4:55 AM
24	*QGIS software digitizing *QGIS software map production QGIS software geo-referencing of scanned map documents to local projection and data-set *A more professional attitude and approach to GIS software & hardware application as have been academically trained formally by credited academic personnells recently by UNOSAT. *Have learned alot more news about RemoteSensing useful important consepts & applications that can be used in my profession	12/18/2019 3:13 PM

UNOSAT CommonSensing 2019 Evaluation Survey

2/3

25	field data collection UAV	12/18/2019 11:20 AM
26	The process of Digitization and the use of building footprints to overlay as basemap during analysis, Requesting for satellite imagery via common sensing support and use of open source GIS software such as Qgis for GIS works.	12/18/2019 6:12 AM
27	Mapping out risk areas, rating Hazard risk matrices according to their impacts, Assessment survey after a disaster etc.	12/18/2019 6:09 AM
28	I have developed a Delimiting survey questionnaires on Coconut Rhinoceros beetle using the Epicollect 5 which I learn from the training.	12/18/2019 5:02 AM
29	Mapping	12/18/2019 5:01 AM
30	Using of GIS knowledge and skills acquired during the training to map out impacted areas following the recent TC Rita that struck the eastern part of Solomon Islands.	12/18/2019 4:57 AM
31	Geo referencing and geocoding	12/18/2019 3:42 AM
32	Attended to customer requests on climate change science.	12/18/2019 3:21 AM
33	Used the OSM data for GIS analysis at our PA Sites. Downloading and analysing of freely available satellite data.	12/18/2019 2:28 AM
34	Data mapped which has assisted the team in terms of data analysis for informed decision making .	12/18/2019 1:54 AM
35	Extracting information from satellite images for map creation and analysis work.	12/18/2019 1:03 AM
36	Open Street Mapping	12/18/2019 12:52 AM

pathway once mastered and adopted to daily workline usage. *Would be very glad to attending in the near future to more of UNOSAT organised RemoteSensing either locally or overseas. **Thank you very much UNOSAT**

ANNEX 4: List of Documents Reviewed

Name of the document	Туре
Application Form: International Partnership Programme – Call Two	.doc
(Common Sensing Project document)	
Baseline Evaluation Report	.pdf
Capacity Development Mission Notes, Fiji, Regional, Solomon Islands,	.doc
Vanuatu	
Cost-Effectiveness Analysis Report (DRAFT)	.doc
Dashboards for WP 500 and 800	.xlsx
D1_CommonSensing Mission Plan	.pdf
D2_CommonSensing Inception Mission Report	.pdf
Haley, N. and Zubrinich, K. (2016) 'Women's Political and	.pdf
administrative leadership in the Pacific', State, Society and Governance	
in Melanesia, The Australian National University, Canberra	
IPP CommonSensing -Service Concept: Fiji, Solomon Islands and	.pdf
Vanuatu	
Landscape Analysis – Climate Finance	.pdf
Landscape Analysis – Data & Tools	.pdf
Memorandum of Understanding: Fiji, Solomon Islands and Vanuatu	.pdf
Quarterly Technical Backstopping Reports: Q1, Q2, Q3, Q4	.pdf
Working Package Breakdown	.ppt
IPP CommonSensing ME Plan (Reviewed)	.pdf
Knowledge Sharing and Communication Plan	.pdf
Stakeholder Coordination Mechanism Report	.doc
Sustainability Plan	.doc
Training Quality Assurance Framework	.doc
Training Reports (CLEARII Report)	.pdf
Weekly Reports (local focal points)	.doc

ANNEX 5: Log frame

Result Levels	Achievements	ref. no.	Indicators	By gender	2018 Baseline	Year 1 12/2019	Year 2 12/2020	Target 03/2021	2021 End- line	Means of Verification	Assumption s
	10. By 2030, enhanced	10.1	Overarching indicator: Co with SDG indicators 13.1	ontribution	to SDGs targets and 9.a.1 by 203	13 and 9 in p 0 <mark>(IPP Align</mark>	artner count ment)	ries – as meas	sured	Statistics from	Project funded
	DRR and climate change resilience in Fiji, Solomon Islands and Vanuatu in support of SDG 13 (Climate action) and SDG 9 (Industry, innovation and infrastructure)		SDG 13.1.1: Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Ζ	FI: 2.86 deaths 36,683 affected 8,456 displaced 3 missing SI: 4.54 deaths 71,050 affected 1,247 displaced 5 missing VN: 5.67 deaths 7,251 affected 2,363 displaced No. missing unknown	0% decrease	15% decrease	20% decrease	TBD	NDMOs, PDNA reports (WB), CRED, and UN Disaster Reports Voluntary national reviews	through Climate Funds successfully addresses disaster risk reduction and climate change adaptation and fosters sustainable development in agriculture, natural resources, and food security sectors High-level government officials in
Impact			SDG 13.b.1: ²⁴ Number of least developed countries and small island developing States that are	Ν	FI: £569,971.5 ²⁵	0% increase	20% increase	30% increase	TBD	Fiji, Solomon Islands, and Vanuatu	Fiji, Solomon Islands, and Vanuatu show strong coordination

²⁴ The focus of this indicator in this project will be the amount of specialized support (measured in GBP) received for raising capacities for climate change-related planning and management, including focus on women, youth and local and marginalized communities.

²⁵ This amount includes support for TC Winston Recovery Support, for upgrading the National Disaster Management Office and Emergency Operation Centres, and for the hiring of a Disaster risk Reduction Advisor.

	receiving specialized support, and amount of support, including finance, technology and capacity building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities.		SI: £143.4 million ²⁶ VN: £13.4 million						on climate change and disaster risk reduction policy issues
	9.a.1: Total official international support (official development assistance plus other official flows) to infrastructure ²⁷	N	FI: £11.6 million SI: £121.5 million VN: £58.7 million	0% increase	20% increase	30% increase	TBD		
10.2	Number of DRR / CCA initiatives (proposed/implemente d) supported by development partners with the goal of enhancing resilience in partner countries (KPI 1)	N	FI: 36 SI: 16 VN:13 Cumulative: 65	Cumulative: 69	Cumulative: 77	Cumulative: 81	TBD	CommonSens ing post- project review by UNITAR	
10.3	Percentage of climate finance dispersed out of the amount of	N	FI: £43.7 million available (uncertain	FI: 0% increase SI: 0% increase	FI: 20% increase SI: 20% increase	Amount available: 30% increase	TBD	Annual Reports from National Advisory	

²⁶ This amount is the Solomon Island portfolio of the Community Resilience to Climate and Disaster Risk Project supported by the ACP-EU Natural Disaster Reduction Program. The project has been focusing on strengthening government capacity in disaster and climate risk management in high-risk communities. However, it is difficult to determine the amount for only 2018-2019. This value also includes the amount allocated to the Ministry of Environment, Climate Change and Disaster Management from the government's development budget for 2019.

²⁷ Measured as support for infrastructure that is sustainable and resilient. Sourced by consolidating all CCA and DDR-related projects funded by development partners that are also infrastructure related. Recipient ministries include Ministry of Infrastructure and Transport, Water Authorities, Ministry of Local Government, Ministry of Housing, Ministry for the Environment, etc.

		climate finance available in each partner country 10.3.1: Amount of climate finance available from all sources 10.3.2: Amount of climate finance available that is dispersed		about amount actually dispersed) SI: £142.7 million available (uncertain about amount actually dispersed) VN: £100.1 million (uncertain about amount actually dispersed)	VN: 0% increase	VN: 20% increase	Amount dispersed: 30% increase		Climate Board (Vanuatu), Ministry of Economy (Fiji), Ministry of Finance (Solomon Islands). Information consolidated with the help of Climate Finance Advisors based in the three countries.	
	10.4	Amount of economic damages (in GBP) from multi-hazards in three partner countries	N	FI: £683.6 million SI: £80.2 million VN: £334.5 million	0% decrease	15% decrease	20% decrease	TBD	Statistics from NDMOs, PDNA reports (WB), CRED, and UN Disaster Reports	
	10.5	Average value of food production in three partner countries (\$/person)	N	Fl: £162.3 Sl: £150.3 VN: £207.7	0% increase	15% increase	20% increase	TBD		Target countries have implementati
	10.6	Prevalence of undernourishment in three partner countries (% of population)	Ν	FI: 4.4 SI: 12.3 VN: 7.1	0% decrease	15% decrease	20% decrease ²⁸	TBD	FAOSTAT	on capacity to utilise the food security modelling systems toward agriculture planning

²⁸ Target set based on the knowledge that the worldwide prevalence of undernourishment in 2017 was around 11% (Source: FAO). Our goal should be to have Solomon Island's percentage decrease to below that of the world's average by 2021.

	9. By 2021, improved lives in Fiji, Solomon Islands, and Vanuatu through the use of space expertise	9.1	Number of lives impacted by grantee projects, measured as direct beneficiaries ²⁹ (IPP Alignment)	Y	FI: 0 SI: 0 VN: 0	FI: 0 SI: 0 VN: 0	FI: 0 SI: 0 VN: 0	FI: Female: 166,000 Male: 166,000 SI: Female: 217,000 Male: 217,000 VN: Female: 10,000 Male: 10,000	TBD	Project documents, training records, backstopping logs, national records, key informant interviews, statistics from NDMOs, PDNA reports (WB), CRED, and UN Disaster Reports	All three target countries are eligible to apply for climate funds and apply for climate funds during the timeframe of CommonSe nsing project Current financial
Institutional outcomes	8. By 2021, increased resource capacities to address DRR and Climate Change resilience in Fiji, Solomon Islands and Vanuatu	8.1	Share of climate funds made available out of total amount requested by all three countries (%) 8.1.1: Amount of climate funds requested annually by all three countries 8.1.2: Amount of climate funds made available from all sources in all three countries	Ν	FI: 8.1.1 : N/A 8.1.2 : £43.7 million available SI: 8.1.1 : N/A 8.1.2 : £142.7 million available VN: 8.1.1 : N/A 8.1.2 : £100.1 million	FI: 8.1.1 : TBD 8.1.2 : 0% increase SI: 8.1.1 : TBD 8.1.2 : 0% increase VN: 8.1.1 : TBD	FI: 8.1.1 : TBD 8.1.2 : 20% increase SI: 8.1.1 : TBD 8.1.2 : 20% increase VN: 8.1.1 : TBD	TBD ³⁰	TBD	Records of grants received and disbursed from Climate Funds. Information will be consolidated with the help of climate finance advisors based in the three countries.	support from Climate Funds is very low as applications from the target countries lack evidence- based analysis Target countries lack implementati on capacity,

²⁹ Measured by consolidating and then rounding to the nearest 10,000 1) People who obtain access to the service, 2) People who receive productive assets, 3) People impacted by improvements in environmental management and 4) People impacted by disaster resilience measures. (IPP Alignment)

³⁰ Annual and final targets will be set after conversation with deployed Climate Finance Advisers.

					8.1.2 : 0% increase	8.1.2 : 20% increase				which hinders the disbursemen
	8.2	Success rate of climate funds applications submitted by each country (%) Percentage of successful applications that incorporate CommonSensing solutions 8.2.1: Number of climate funds applications submitted in total 8.2.2: Number of successful climate funds applications submitted 8.2.3: Number of successful climate funds applications that incorporate	Ν	FI: N/A SI: N/A VN: N/A	TBD	TBD	TBD ³¹	TBD	Document review of applications submitted to Climate Funds. Information will be consolidated with the help of climate finance advisors based in the three countries.	disbursemen t of potentially allocated funds Trained technical officials and policy stakeholders use CommonSe nsing solutions to enhance applications to Climate Funds with evidence- based needs/prioriti es
		solutions								

³¹ Annual and final targets will be set after conversation with deployed Climate Finance Advisers.

7. By 2021, enhanced evidence- based decision making in Fiji, Solomon Islands, and Vanuatu by using CommonSensi ng solutions for DRR and CCA.	7.1	Number of government ministries using CommonSensing solutions to inform policy and decision making	Ν	0	FI: 1 SI: 1 VN: 1	FI: 2 SI: 2 VN: 2	FI: 4 SI: 4 VN: 4	TBD	Surveys, key informant interviews with select government focal points or written records of decision making that integrate geospatial or RS-derived information	
	7.2	Percentage of national stakeholders who feel that geospatial and remote sensing data regularly contributes to climate change-related strategic planning in their organizations	Y	FI: Male: 29% Female: 0% SI: Male: 19% Female : 20% VN: Male: 22% Female: 0% Cumulative : Male: 17% Female: 2% No. blank: 5	FI: 30% SI: 30% VN: 30%	FI: 40% SI: 40% VN: 40%	Cumulative : Male: 50% Female: 50%	TBD	Surveys with select government focal points	
	7.3	Percentage of national stakeholders who feel that geospatial and remote sensing data are used regularly for	Y	FI: Male: 29% Female: 0% SI:	FI: 30% SI: 30% VN: 30%	FI: 40% SI: 40% VN: 40%	Cumulative : Male: 50% Female: 50%	TBD	Surveys with select government focal points	

			decision-making in their organizations		Male: 19% Female: 20%						
					VN: Male: 11% Female: 0%						
					Cumulative: Male: 14% Female: 2% No. blank: 5						
	6. By 2021, strengthened knowledge, skills and awareness on CommonSensi ng solutions in Fiji, Solomon Islands, and Vanuatu on earth	6.1	Percentage of technical staff from government ministries who achieve "high" or "moderate" levels of competency in utilizing Earth Observation applications for DRR and CCA through the CommonSensing technical trainings.	Y	0	70%	70%	70%	TBD	Training records, including assessment scores	Training and awareness- raising events target correct audiences from Fiji, Solomon Islands, and Vanuatu
Intermediate outcome(s)	observation applications for DRR and CCA	6.2	Percentage of national stakeholders from government agencies who "strongly agree" or "agree" that awareness about the importance of using Earth Observation and GIT data for DRR and CCA has increased through CommonSensing awareness-raising events.	Y	0	70%	70%	70%	TBD	Records from awareness- raising workshops	Selected participants successfully complete and utilise skills and knowledge acquired from training/awar eness- raising events Senior government officials are supportive of

										using acquired kills on the daily tasks
5. By 2021, strengthened knowledge and skills on	5.1	Number of readiness support proposals prepared with the support of climate finance advisors in Fiji, Solomon Islands, and Vanuatu	N	0	TBD	TBD	TBD ³²	TBD	Project documents collected by climate finance advisors in each of the three target countries; climate finance technical backstopping logs	
accessing climate finance in Fiji, Solomon Islands, and Vanuatu	5.2	Percentage of national stakeholders in the three partner countries who feel informed ("very informed" in surveys) about accessing climate funds	Y	FI: Male: 0% Female: 0% SI: Male: 0% Female: 20% VN: Male: 22% Female: 0% Cumulative: Male: 4% Female: 2% No. blank: 5	FI: 30% SI: 30% VN: 30%	FI: 40% SI: 40% VN: 40%	Cumulative : Male: 50% Female: 50%	TBD	Surveys with select government focal points	

³² Target value to be determined after climate finance advisers have been deployed in their respective countries.

	4. By 2021, case studies on using CommonSensi ng solution produced for Fiji, Solomon Islands, and/or Vanuatu by the project consortium	4.1	Number of case studies published by the project consortium on the application of CommonSensing solutions for CCA and DRR (cumulative for all three countries) (IPP Alignment)	N	0	1	2	3	TBD	PRISM surveys on before and after the use of CommonSen sing solutions	Country focal points and national stakeholders provide narratives for case studies
	3. By 2021, capacity development trainings delivered to technical	3.1	Number of technical trainings ³³ organised by the project consortium in Fiji, Solomon Islands, and Vanuatu	Ν	0	4	12	16	TBD	Lists of participants from training and awareness	
	officials and 3.2 awareness- raising events delivered to project stakeholders	3.2	Number of participants in technical trainings organised by the project consortium in Fiji, Solomon Islands, and Vanuatu (KPI 2)	Y	0	10 per country (5 M; 5 F)	30 per country (15 M; 15 F)	30 per country (15 M; 15 F)	TBD	raising events measured by UNOSAT and validated by M&E team	Logistic support and required equipment are provided
	on CommonSensi ng solutions	3.3 Number of technical backstopping ³⁴ activities completed by in-country experts in Fiji, Solomon Islands, and Vanuatu N	Ν	0	15	9	30	TBD	Technical backstopping	by target countries while cost of training is covered by the project	
Outputs	3	3.4	Number of beneficiaries of technical backstopping activities completed by in-country experts in Fiji, Solomon Islands, and Vanuatu	Y	0	15	9	30	TBD	relevant communicatio n document	

³³ Definition of "technical trainings": Training sessions designed to strengthen technical capacities in the use of EO/GIT applications, climate information, and capacity to access to climate finance.

³⁴ Definition of "technical backstopping": Continued engagement with project stakeholders after training sessions (e.g. technical advisory support and communities of practice)

3.5	Number of unique government ministries taking part in technical backstopping activities completed by in- country experts in Fiji, Solomon Islands, and Vanuatu	N	0	FI: 3 SI: 3 VN: 3	FI: 4 SI: 4 VN: 4	FI: 4 SI: 4 VN: 4	TBD		
3.6	Number of technical awareness-raising events ³⁵ on CommonSensing solutions (co)organised by the project consortium in Fiji, Solomon Islands, and Vanuatu	N	0	1 per country	2 per country	3 per country	TBD	Promotional and	
3.7	Number of attendees of technical awareness-raising events on CommonSensing solutions (co)organised by the project consortium in Fiji, Solomon Islands, and Vanuatu	Y	0	6 per country (3 M; 3 F)	10 per country (5 M; 5 F)	12 per country (6 M; 6 F)	TBD	communicatio n material for awareness- raising events Lists of participants from training and awareness raising events	
3.8	Number of unique government ministries of the three partner countries represented at the technical awareness-raising events on CommonSensing solutions (co)organised by the project consortium	Ν	0	FI: 3 SI: 3 VN: 3	FI: 5 SI: 5 VN: 5	FI: 5 SI: 5 VN: 5	TBD	measured by UNOSAT and validated by M&E team	

³⁵ Definition of "awareness-raising events": Non-learning events designed to encourage information exchange, as well as secure buy-in and commitment among expert groups and among policy makers.

2. CommonSensi ng technical solution for data access and analysis	2.1	Number of CommonSensing products developed for the MVP in Fiji (KPI 3.1)	N	0	0	3	3 ³⁶	TBD		
designed and implemented, and Minimum Viable Product (MVP) tested and deployed for use by 2021 in Fiji.	2.2	Number of products developed for the technical solution in Solomon Islands and Vanuatu (KPI 3.2)	Ν	0	0	2	2 ³⁷	TBD	Project documents, technical reports, user's feedback	All levels of stakeholders are regularly informed
Alternative technical solution developed, tested and	2.3	Number of visitors on all product platforms in Fiji, Solomon Islands and Vanuatu	Ν	0	0	20	22	TBD	reports collected by UNOSAT and validated through	project's activities and achievement s through
deployed for use in Solomon Islands and Vanuatu by 2021.	2.4	Number of unique government agencies in Fiji, Solomon Islands and Vanuatu adopted technical solutions developed by the consortium partners	Ν	0	0	FI: 3 SI: 2 VN: 2	FI: 4 SI: 3 VN: 3	TBD	interviews by M&E team	established project website, social media, mailing list, webinars
	2.5	Number of technical roadmaps developed for the three partner countries	Ν	0	0	3	3	TBD		etc.
1. Communicatio n strategy and sustainability plan are developed and implemented	1.1	Number of visitors to website on CommonSensing project managed by the communications project partners (WP 800)	Ν	0	1000	1000	2000	TBD	Surveys, key informant Interviews, project activity reports, users feedback reports	

³⁶ The three products in Fiji include the CommonSensing main platform, the DRR decision support system and the agricultural systems modelling

³⁷ Two separate products will be designed, tested and deployed in Solomon Islands and Vanuatu

by 2021 in Fiji, Solomon Islands, and Vanuatu	1.2	1.2.1: Number of content views ³⁸ on the CommonSensing project website 1.2.2: Time spent on each content page (per view, MM:SS)	Ν	0	1.2.1: 500 1.2.2: 1:30:00	1.2.1: 500 1.2.2: 1:30:00	1.2.1: 1000 1.2.2: 3:00:00	TBD	
	1.3	Number of follow-up queries from the website visitors	Ν	0	25	25	50	TBD	
	1.4	Number of conferences, seminars, and/or workshops where CommonSensing has been presented by a member of the consortium or steering board (IPP Alignment)	Ν	0	10	10	20	TBD	
	1.5	Number of attendees of conferences, seminars, and/or workshops where CommonSensing has been presented by a member of the consortium or steering board	Ν	0	TBD	TBD	TBD	TBD	
	1.6	Number of users who engage with CommonSensing on social network services	N	0	100	250	500	TBD	
	1.7	Number of CommonSensing project newsletter subscribers	Ν	0	50	125	150	TBD	

³⁸ Definition of "content": Videos embedded on the CommonSensing website.

	1.8Number of endorsement letters issued by the project's stakeholders on CommonSensing's sustainability plan (KPI 4)	0	FI: 0 SI: 0 VN: 0	FI: 5 SI: 5 VN: 5	FI: 5 SI: 5 VN: 5	TBD	Copy of endorsement letters	
Activities	 Overall project management/governance: (WP100, WP110) Requirements gathering (WP 200) Design, development, testing and operations of CommonSensing solutions based on user requirement (WP300 and WP400) Design and Implementation of capacity development activities:(WP500) Technical assistance on climate finance (WP 600) Design of sustainability roadmap (WP700) Implementation of communication strategy (WP800) Stakeholder engagement (WP 900) 	Inputs	 Project bu Human re technical of partners a Commony Existing s Secretaria Capacity f Nations compared 	adget provided esources with development, as in-kind cont wealth Secreta olid framewor at to which act for bridge fund ountries	d from UK Space experience in pro- capacity develous initiat and countra- k for climate fina- ivities will be intra- ding for sustaina	e Agency roject manago ppment, data y in-kind con ance access regrated ability and sc	gement, needs asses , communication and tributions hub lead by the Cor aling up to other Cor	ssments, d outreach from nmonwealth mmonwealth of

ANNEX 7:

Evaluation Matrix

	EVALUATION MATRIX										
OECD-DAC Criteria	Relevant Evaluation Question (EQ)	Key Questions (KQ)	Indicators (I)	Baseline	Data Collection methods/Tools	Source of Information					
RELEVANCE	EQ 1: 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.	KQ 1.1. Are the technical trainings being delivered relevant to learner (both male and female) needs and priorities (including user requirements related to disaster risk reduction and climate change), and are the learning outcomes aligned with the institutional outcomes and intended impacts of the project?	I.1.1. Evidence that CommonSensing project objectives can address the needs of beneficiaries and end- users as well as align to their priorities	According to the baseline study, the TOC for the project has not been given sufficient consideration to institutional implementation capacity constraints.	Desk review of existing documents Semi- Structured interviews Site Observation, Survey	Project document, M&E reports , baseline, progress reports, Self Evaluations; Staff trained, NGOs working with government, steering committees, coordination mechanisms, other development partners.					

KQ 1.3. To what extent are the CommonSensing solutions designed to be relevant to improving the quality of climate fund applications by Fiji, Solomon Islands and Vanuatu? (i.e. quality of the definition of the objectives, log frame/ToC, risk analysis/context analysis, needs assessment included)	I.1.3. Evidence that CommonSensing Solutions contribute to improve skills to apply to climate funds	Currently, the log frame is unable to capture any qualitative change. According to the baseline study,' there is a need also to document qualitative achievements which often remain outside the requirements in the log frame.'	Desk review of existing documents Semi- Structured interviews Site Observation	Project documents, Self- Evaluations, baseline, governments' policy documents, action plans and strategies, government staff, theory of change.
KQ 1.4. How relevant is the expertise from the implementing partners to the effective and efficient delivery of the project (i.e. is the "consortium" of implementing partners the right mix)?	I.1.4. All project partners are involved in the project implementation and deliver activities foreseen in their area of expertise	Project implementation has been planned in order that all partners are expected to be involved in different states of the project implementation according to their area of expertise	Desk review of existing documents Semi- Structured interviews Site Observation	Project document, M&E reports , baseline, progress reports, Self Evaluations; implementing partners, NGOs working with government, steering

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					committees, coordination mechanisms, other development partners
		KQ 1.5. To what extent is the CommonSensing project in alignment with the UK Space Agency's IPP mandate and strategic objectives?	I.1.5. Evidence that CommonSensing objectives align to those of the UK Space Agency's IPP mandate and strategic objectives	Desk review of existing documents Semi- Structured interviews	Project documents, UK Space Agency's IPP project document, project management staff and project partners

KQ 1.6. How relevant is the project in supporting the 2030 Agenda for Sustainable Development and more specifically helping Member States to achieve Goal 9 and 13?	I.1.6. Evidence that CommonSensing project objectives align to the priorities of global priorities, mainly SDG 9 & SDG 13 and other related international commitments (i.e. Paris Agreement)	To be assessed. The indicator associated with SDG 13.1.2 was already achieved before the project started.	Desk review of existing documents Semi- Structured interviews	Project documents, progress reports, project management team, 2030 Agenda document, local stakeholders (e.g. development partners, governments' staff involved in the project)
KQ 1.7. Have changed circumstances (including critical contextual constraints) been taken into account by updating the intervention logic and ToC as recommended by the baseline?	I1.7. Flexibility mechanisms/rules are in place to adapt the project to unexpected circumstances	Baseline indicated the project should have some updates (e.g. ToC, include other stakeholders) but this has not been done so far.	Desk review of existing documents Semi- Structured interviews	Minutes, progress reports, beneficiaries, project partners and project management staff.

	EQ 2: The extent to which other interventions (particularly policies) support	KQ 2.1. <u>Internal Coherence:</u> To what extent is the project leveraging possible synergies or linkages with other interventions/policies ?	I.2.1. Evidence of complementarity of CommonSensing project activities or overlaps, both upstream on the level of policies and downstream on project implementation level with related government actions and services	This might be difficult since climate change and risk reduction mandates are split in different ministries	Desk review of project documents Semi- structured interviews Site Observation	Project documents, Self- Evaluations, baseline, governments' policy documents, action plans and strategies, government staff.
COHERENCE	or undermine the intervention, and vice versa. Includes internal coherence and external coherence	KQ 2.2. External Coherence: To what extent is the intervention consistent with other actors' (WB, ADB, EU, GIZ) interventions in the same context?	I.2.2. Evidence of complementarity of CommonSensing project activities or/and overlaps, both upstream on the level of donor coordination and downstream on project implementation level with other ongoing projects financed by other development partners?	Outcomes rest on closer linkages with other active development partners in the project countries. Activities in the project design to strengthen the Aid Coordination Division within the Ministry of Finance/Economics in all three countries could	Desk review of project documents Semi- structured interviews Site Observation Focus Groups	Project documents, Self- Evaluations, baseline, other development partners projects and strategies, staff working at development agencies in

		improve coherence and transparency about climate finance.		target countries.
a) Is there an effective sector coordination system/mechanism at national/regional/international level including partner government(s), donors and other relevant stakeholders?	I.2.2a. Evidence of functional sector coordination system/mechanism and the CommonSensing is part of it.	NDMO - Vanuatu	Desk review of project documents Semi- structured interviews Site Observation Focus Groups	Project document, government policies, strategies, other grey documents, government staff, development partners, other staff.

		b) Which is the added-value of the CommonSensing project compared to other national or international supported interventions?	I.2.2b Evidence the CommonSensing results provides an "added value in comparison to the results provided by other projects	mechanism to interact and maintain synergies with other development projects are not part of any work packages outlined.	Desk review of project documents Semi- structured interviews Focus Groups	Project document, government policies, strategies, other grey documents, government staff, development partners, other staff.
	c) What factors were specifically enablers or barriers for coordination?	I.2.2c Evidence of enabling and disabling factors for coordination	Existing of many donors with similar projects as well as of many windows of opportunity for climate finance	Desk review of project documents Semi- structured interviews Focus Groups	Project partners, project management staff, staff from governments and other beneficiaries	

		KQ 2.3 Are the activities and outputs of the CommonSensing project consistent with the overall goals and objectives?	I.2.3. Evidence the project activities and outputs contribute to the achievement of the objectives of the project.	the TOC does not demonstrate how the planned outputs will contribute to the main thrusts of the project, that is, (i) integration of knowledge in decision-making and (ii) increasing implementation rate demonstrated by fund disbursement to approval ratio.	Semi- structured Interviews Desk review of Project documents Site Observation	Project document, log frame, budget, government staff, project staff, project partners.
EFFECTIVENESS	EQ3: The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.	KQ 3.1. Is there early evidence that the CommonSensing solutions are effective to strengthen evidence-based decision making for improved Disaster Risk Reduction and Climate Change Adaptation?	I.3.1 Evidence that information provided by the project has been used for decision making at political and/or management level by partner governments.	Decision making is based on limited or bad quality geospatial and data information, often outdated.	Semi- structured Interviews Focus Groups Survey	Project documents, log frame, beneficiaries, government staff, development partners, local NGOs, coordination mechanism
KQ 3.2. To what extent is the CommonSensing project on track in reaching its intended users ?	I.1.5 Degree of coverage/outreach of the project and evidence of addressing their needs related to disaster risk reduction and climate change.	Stakeholders analysis was limited at the design level. The list of stakeholders was reviewed during the baseline study.	Desk review of existing documents Semi- Structured interviews Site Observation	Project documents, progress reports, project managers, partner organisations, project plan and logframe matrix, budget reports, project management staff and governments' staff, landscape analysis report		
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KQ 3.3. To what extent is the CommonSensing project on track in achieving the planned results at the output, outcome and impact levels?	I.3.3.1. Evidence that indicates positive change/developments for which a contribution can be traced to the CommonSensing	See Indicators spreadsheets	Semi- structured Interviews Desk review of project documents	Log frame, ToC, timeline, progress reports, beneficiaries, other		

	activities. I.3.3.2 % of outputs and results achieved		(M&E reports) Focus groups	government staff.
KQ 3.4. To what extent is the CommonSensing project successful in supporting government ministries in applying for climate funding by introducing CommonSensing solutions?	I.3.4. The majority of participants of CommonSensing activities are satisfied with the content and format of these activities and are able to apply the knowledge and/or skills acquired in applying for climate funding	There are many climate change related projects being implemented in the target countries but no one of similar characteristics of CommonSensing	Stakeholders' Analysis Semi- structured Interviews Desk review of Project documents Survey Focus groups	Self- assessment reports, progress reports, M&E documents, government staff, beneficiaries.
KQ 3.5. What factors have influenced the achievement (or non-achievement) of the CommonSensing project's objectives at midpoint?	I.3.5. Evidence of enabling factors and disabling factors contributing to the achievement of project results	See spreadsheet 3	Desk review of documents Semi- structured interviews Focus groups	Progress reports, beneficiaries, government staff, development partners, local NGOs,

					coordination mechanisms
	KQ 3.6. How effective has the project's methodology been to improving knowledge and skills and awareness on satellite- enabled solutions for improved Disaster Risk Reduction and Climate Change Adaptation at midpoint?	I.3.6. Evidence that the project methodology is the most adequate to achieve the expected results	The project is implemented by various partners of complementary expertise necessary for an effective implementation of the project. It is implemented based on a user- cantered approach to ensure local ownership and customised user- centred Common solutions to answer to the specific needs.	Semi- structured Interviews Desk review of Project documents Focus Groups	Progress reports, beneficiaries, government staff, development partners, local NGOs, coordination mechanisms

KQ 3.8. Did the interventions reach the target population and properly met their needs (equity issues achieved), including any differential • Are women technical as men? • To what extent is the technical solution relevant to stakeholder needs?1.3.9 Evidence the project is meeting the needs of the target women to participate activities • Perception of the relevant to their learning needs?Semi- structured Interviews Data is not kept in a disaggregated manner. Support is required for NDMOs in each Commo Sensing to objectives? • To what extent is the projectProject relevant to their learning provided by - Levels of and knowledge gaps - Levels of activitiesData is not kept in a disaggregated manner. Support is required for NDMOs in each Commo in awareness activitiesProject required for NDMOs in each Site Observation Site Observation Site Observation stakeholders? AnalysisProject reports, beneficiaries, project staff and governments' staffProject reports, beneficiaries, staffProject reports, beneficiaries, staff• To what extent is the project increasing awareness of women stakeholders? • To what extent are women change agents involved in geospatial analysis and evidence gathering for applications for Climate Funds?- Levels of analysis and analysis and analysis and analysis and analysis and analysis and applications for Climate Funds?Climate Funds Evidence the projectNot we projectProject to what extent are women to mareness activities analysis and analysis and analysis and applications for Climate Funds?Not we projectNot we pr						
Funds? Evidence the project		KQ 3.8. Did the interventions reach the target population and properly met their needs (equity issues achieved), including any differential results across groups? • Are women technical stakeholders learning as much as men? • To what extent is the technical solution relevant to stakeholder needs? • Is the training provided relevant to their learning needs? • To what extent are the women technical officers meeting the learning objectives? • To what extent is the project increasing awareness of women stakeholders? • To what extent are women change agents involved in geospatial analysis and evidence gathering for applications for Climate	 I.3.9 Evidence the project is meeting the needs of the target population including: Opportunities of women to participate in project activities, specifically training activities Perception of the relevant stakeholders about the technical solutions and training provided by CommonSensing to close their capacity and knowledge gaps Levels of participation of women in awareness activities Levels of involvement of women in geospatial analysis and applications for Climate Funds 	Data is not kept in a disaggregated manner. Support is required for NDMOs in each country to maintain gender- disaggregated data	Semi- structured Interviews Desk review of Project documents Site Observation Survey Stakeholders' Analysis	Project documents, log frame, progress reports, beneficiaries, project staff and governments' staff
		applications for Climate Funds?	Climate Funds Evidence the project			

	 To what extent is the project contributing to SDG 5 "Gender Equality"? To what extent has the project been relevant for advancing gender equality and the empowerment of women 	is addressing Gender Equality issues related to SDG 5 - Evidence of project results is contributing to change gender relations/patterns in		
	and meeting the needs of other groups made vulnerable?	the participation of women in climate change and disaster risk reduction issues. - Evidence project is addressing needs of other vulnerable groups (e.g. inhabitants of outer islands, communities in rural areas)		

EFFICIENCY	EQ4: The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely manner.	KQ 4.1. Is the implementation strategy (incl. choice of implementation modalities, entities and contractual arrangements, partners) conducive for achieving the expected results?	I.4.1. Evidence that implementation architecture, processes, and mechanisms have proved to be efficient in addressing the needs of partner countries in terms of disaster risk reduction and climate resilience I.4.1.2 I.4.3.2 Examples of management intervention for overcoming barriers and constraints in project implementation	The project is implemented by a partnership composed by 8 organisations, combining Un agencies, academia, private sector and non- profit sector.	Semi- structured Interviews Desk review of Project documents Focus group	Project documents, steering committee minutes and minutes from other management meetings, governments' staff, project management staff and partners' staff.

<u>.</u>					
	KQ 4.2. Are the roles and accountabilities of all implementing partners clear for all project partners?	I.4.2.1. Level of engagement of stakeholders and project partners in M&E activities I.4.2.2. Level of participation of stakeholders and project partners in Steering Committee, project management bodies	M&E roles for each of the project partners are well indicated in the M&E Plan. UNITAR is the main responsible for the implementation of the M&E plan with the support of Catapult for the part on CEA. UNOSAT and Commonwealth Secretariat are involved in data collection. The Evaluation Plan does not elaborate on the role of local stakeholders. However, based on the M&E reports, stakeholders are the main providers of information through the self-	Semi- structured Interviews Review of Project documents Stakeholders' analysis Survey Focus groups	Project documents, steering committee minutes and minutes from other management meetings, progress reports, governments' staff, project management staff and project partners' staff.
			through the self-		
1			assessment		

		training documents, surveys, semi- structured interviews and focus groups. Information collected is crossed and complemented by random interviews for M&E purposes.		
KQ 4.3. To what extent have partnership modalities (including project and implementing partners) been conductive to the efficient delivery of the CommonSensing project and achievement of results at midpoint?	I.4.3. Evidence that partnership modalities contributes to the efficient delivery of the project (e.g. provision of expertise on time)	Division of tasks/contributions has been done according to the area of expertise of each project partner (e.g. Communication: Devex; CEA: Catapult)	Semi- structured interviews Focus group Review of documents	Project documents, steering committee minutes and minutes from other management meetings, progress reports, governments'

					staff, project management staff and project partners' staff.
	KQ 4.4. Is the action adequately monitored and/or assessed by the local partners? (or by project management)	I.4.4. Evidences monitoring and evaluation activities have been deployed effectively to inform the process of implementation	Progress reports, technical reports, user's feedback reports collected are issued have been used to update the Logframe in 2019.	Semi- structured interviews Review of documents	Project documents, M&E documents, project reports, project management staff, governments' staff.

	KQ 4.5. Cost-effectiveness analysis: KQ 4.5.1. Was the project a cost-effective means of achieving the results at midpoint? KQ 4.5.2.What non-space alternative approaches and technologies could have been applied to deliver the project objectives? KQ 4.5.3. What are the net economic benefits of the CommonSensing project as compared to the non-space alternative approaches? KQ 4.5.4. Was/is the CommonSensing project a cost-effectiveness means of achieving the results? - What non-space alternative approaches could reach the same results? - What are the costs of these alternative approaches? - What are the net economic benefits?	See CEA	N/A	Cost-Effective Analysis Semi- structured interviews Desk Review of Project documents	Project documents Project Budget Macro- economic data from official sources (e.g. Reserve Bank of Vanuatu) Documents related to other similar solutions
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	KQ 4.6. To what extent were the outputs being produced in a cost-effective manner?	See CEA	N/A	Cost-Effective Analysis	Project documents Project Budget
		151 A majority of			Project
LIKELIHOOD OF IMPACT	KQ 5.1. What real differences has the activity made or is it likely to make to the beneficiaries?	stakeholders in all 3 target countries are able to name concrete improvements in one or more of the mentioned areas which can be attributed to CommonSensing activities.	N/A	Survey Semi- structured interviews	self- assessment reports, progress reports, baselines, beneficiaries, governments' staff, Local NGOs, development partners.
	KQ 5.2. What unintended results, positive or negative, has the activity made or is it likely to make to the beneficiaries?	I.5.2. Stakeholders identify positive or negative changes that can be attributed to the project that were not foreseen.	N/A	Survey Semi- structured interviews Field visits, observation	Project documents, self- assessment reports, progress reports, baselines, beneficiaries,

						governments' staff, Local NGOs, development partners.
LIKELIHOOD OF SUSTAINABILITY	EQ6: The extent to which the net benefits of the intervention continue, or are likely to continue.	KQ6.1.To what extent are the benefits of the intervention likely to continue? How likely are individual and institutional capacities likely to be sustained at project completion?	I6.1 Stakeholders are able to identify/mention potential resources or exit strategies to ensure the sustainability of project results	(i) Inadequate recognition among the decision- makers about the critical role of geospatial and remote sensing analysis in development planning and decision-making; II)High Reliance on ODA funding for CCA and DRR activities; III) High turnover of technical staff in all three countries, thereby resulting in the loss of	Semi- structured interviews Desk review of project documents and other policy/budget official documents	Project documents, grey documents, governments' staff and other beneficiaries

			institutional memory and capacity; No contact with private sector so far.		
	KQ6.2.To what extent the project has developed modalities to ensure the platform will run three years after the IPP project?	I6.2 Evidence of actions/options to ensure the sustainability of the platform once the project has ended	There is no plan in place as the platform does not exist or it is been fully functional	Semi- structured interviews Desk review of project documents and other policy/budget official documents	Project documents, grey documents, governments' staff and other beneficiaries

ANNEX 8:

Terms of Reference Midline Evaluation and Cost-Effectiveness Analysis of the CommonSensing Project

Background

- The United Nations Institute for Training and Research (UNITAR) is a principal training arm of the United Nations, with the aim to increase the effectiveness of the United Nations in achieving its major objectives through training and research. UNITAR's mission is to develop individual, institutional and organizational capacities of countries and other United Nations stakeholders through high quality learning solutions and related knowledge products and services to enhance decision making and to support country-level action for overcoming global challenges.
- The UNITAR Operational Satellite Applications Programme Unit (UNOSAT) is a technologyintensive programme that delivers imagery analysis and satellite solutions to relief and development organizations within and outside the United Nations, with the aim to contribute to decision-making in areas such as humanitarian relief, human security and strategic territorial and development planning.
- 3. Funded under the International Partnership Programme (IPP) of the UK Space Agency, CommonSensing project aims to improve resilience towards climate change, including disaster risk reduction, and contribute to sustainable development in three Commonwealth Pacific island countries: Fiji, the Solomon Islands and Vanuatu. These and other small island developing States (SIDS) are exposed to the damaging effects of climate change. Such changes in the climate system have direct effects on the economy as well as overall development and the very existence of many SIDS. Urgent action towards development for climate resilience is therefore required.
- 4. The CommonSensing project supports the IPP's priorities to deliver a sustainable social and economic benefit to emerging and developing economies, in alignment with the UN Sustainable Development Goals. CommonSensing aims to contribute to helping the beneficiary countries achieve Goal 9 (Innovation and Infrastructure) and Goal 13 (Climate Action) of the 2030 Agenda. The project focusses on developing national capacities for longer-term sustainability and business continuity by providing beneficiary countries the knowledge and skills sets for strengthened evidence-based decision making and dossiers to access climate funding. The full solutions are being applied in Fiji while partial solutions are applied in the Solomon Islands and Vanuatu. An independent baseline evaluation was performed in early 2019 to establish the project's entry-level conditions on (a) climate information, (b) food security, (c) disaster risk reduction and (d) climate change. The baseline evaluation can be found here.

Purpose of the midline evaluation

- 5. The CommonSensing project calls for an independent evaluation to be undertaken after the project's midline in order to determine progress being made toward the achievement of planned targets, to identify any problems or challenges that the project may be encountering, and to issue recommendations for corrective action, if needed. The purpose is to provide findings and conclusions to meet accountability requirements as well as to generate recommendations and lessons that contribute to improvement and organizational learning.
- 6. The evaluation exercise should not only assess project performance, but also seek to answer the "why" question by identifying factors contributing to (or inhibiting) successful implementation and achievement of results.

- 7. The midline evaluation will assess progress against expected outputs and outcomes relative to the implementation and operational use of CommonSensing models and technical solutions as well as the project's contribution towards the intended impacts. Based on the midline evaluation, the project's results framework and intervention strategy might require fine-tuning and further calibration to reach required level of performance/accuracy and to fit end users' needs and operational requirements.
- 8. The midline evaluation will include a cost-effectiveness analysis (CEA) to determine the net economic benefit of the project and how the costs of the CommonSensing project compare to non-space project alternatives.

Scope of the evaluation

9. The midline evaluation will cover the project's three beneficiary countries (with a focus on Fiji) in the period from project start-up (February 2019) through to March 2020 when the evaluation's data collection is expected to be completed. Although the scope of the evaluation does not include the inception phase of the project (February 2018-January 2019), the evaluator should consider that phase as contextual background in framing the evaluation's findings and conclusions.

Principal evaluation questions

10. The following questions are intended to guide the evaluation:

Process Evaluation:

Relevance: How relevant is the project to the beneficiary countries?

- How relevant is the project in supporting the 2030 Agenda for Sustainable Development and more specifically helping Member States to achieve Goal 9 and 13?
- Are the technical trainings being delivered relevant to learner needs?
- Are the learning outcomes aligned with the institutional outcomes and intended impacts?
- To what extent are the CommonSensing solutions expected to be relevant to improving the quality of climate fund applications by Fiji, Solomon Islands and Vanuatu?
- How relevant is the expertise from the implementing partners to the effective and efficient delivery of the project (i.e. is the "consortium" of implementing partners the right mix)?
- To what extent is the CommonSensing project on track in reaching its intended users and is it relevant to the direct beneficiaries, including both male and female, and their needs and priorities with regards to user requirements related to disaster risk reduction and climate change?
- To what extent is the CommonSensing project in alignment with the UK Space Agency's IPP mandate and strategic objectives?
- To what extent is the CommonSensing project expected to be relevant to improving disaster risk reduction and climate change resilience in Fiji, Solomon Islands and Vanuatu?

Effectiveness: How well is the project on track in delivering?

- Is there early evidence that the CommonSensing solutions are effective to strengthen evidencebased decision making for improved Disaster Risk Reduction and Climate Change Adaptation?
- Is there early evidence that the use of space expertise led to improved lives in Fiji, Solomon Islands, and Vanuatu?
- To what extent is the CommonSensing project on track in achieving the planned results at the output, outcome and impact levels?
- To what extent is the CommonSensing project successful in supporting government ministries in applying for climate funding by introducing CommonSensing solutions?
- What factors have influenced the achievement (or non-achievement) of the CommonSensing project's objectives at midpoint?

• How effective has the project's methodology been to improving knowledge and skills and awareness on satellite-enabled solutions for improved Disaster Risk Reduction and Climate Change Adaptation at midpoint?

To what extent were a human rights-based approach and a gender mainstreaming strategy

• Are the activities and outputs of the CommonSensing project consistent with the overall goals and objectives?

Efficiency: Were KPIs, deliverables and milestones delivered on time and on budget? Why/why not?

- To what extent were the outputs being produced in a cost-effective manner?
- Were the CommonSensing project's outputs and objectives achieved on time by midterm?
- To what extent have partnership modalities (including project and implementing partners) been conductive to the efficient delivery of the CommonSensing project and achievement of results at midpoint?
- Are the roles and accountabilities of all implementing partners clear for all project partners?

Cost-effectiveness analysis

The outputs of the CEA are also an important input to answering the above evaluation questions related to the criteria of 'Efficiency'. This relates to whether

- to achieve the desired impact compared to alternatives.
- Was the project a cost-effective means of achieving the results at midpoint?
- What non-space alternative approaches and technologies could have been applied to deliver the project objectives?
- What are the net economic benefits of the CommonSensing project as compared to the nonspace alternative approaches?
- Was/is the CommonSensing project a cost-effectiveness means of achieving the results?
- What non-space alternative approaches could reach the same results?
- What are the costs of these alternative approaches?
- What are the net economic benefits?

Assessment of Gender Inequality:

The midline evaluation will assess the extent to which the CommonSensing project is achieving outputs and outcomes based on the gender disaggregated targets. Evaluation questions will include, among others:

- Are women technical stakeholders learning as much as men?
- To what extent is the technical solution relevant to stakeholder needs?
- Is the training provided relevant to their learning needs?
- To what extent are the women technical officers meeting the learning objectives?
- To what extent is the project increasing awareness of women stakeholders?
- To what extent are women change agents involved in geospatial analysis and evidence gathering for applications for Climate Funds?
- To what extent is the project contributing to SDG 5 "Gender Equality"?
- To what extent has the project been relevant for advancing gender equality and the empowerment of women and meeting the needs of other groups made vulnerable?

Evaluation Approach and Methods

11. The evaluation is to be undertaken in accordance with the <u>UNITAR Monitoring and Evaluation</u> <u>Policy Framework, the Norms and Standards of the United Nations Evaluation Group, and the CEA</u> <u>methodological guidance provided by Caribou Digital</u>.³⁹ The evaluation will be undertaken by a supplier or an international consultant (the "evaluator") under the overall responsibility of the UNITAR Planning, Performance Monitoring and Evaluation (PPME) Manager.

- 12. The evaluation shall follow a participatory approach and engage a range of project stakeholders in the process. Data collection should be triangulated to the extent possible to ensure validity and reliability of findings and draw on the following methods: comprehensive desk review, including a stakeholder analysis; surveys; key informant interviews; focus groups; field visits and comparison groups. These data collection tools are discussed below.
- 13. The evaluator should engage in quantitative and qualitative analysis in responding to the principal evaluation questions and present the findings qualitatively or quantitatively as most appropriate. In so far as the midline and endline evaluations will include a CEA, the midline evaluation should identify two alternative, non-space approaches to CommonSensing with a view to comparing costs and outcomes of CommonSensing and the alternative courses of action. Moreover, <u>a comparison group</u> with similar geographical and socio-economic characteristics as the treatment groups to assess the counterfactual. The baseline evaluation collected data for Samoa as a comparison country. Midline data for the comparison group shall be collected as well.
- 14. Cost-effectiveness analysis aims to compare the costs and impacts of alternative means to achieve the same impact. The midline and endline evaluations shall identify the cost-effectiveness of at least one viable alternative (i.e. the next best alternatives that could address the same developmental problem as the CommonSensing on a scale as close to the CommonSensing solution as possible). For the purpose of the CEA, the full CommonSensing Solutions delivered in Fiji will be utilized.

Data collection methods:

Comprehensive desk review

The evaluator will compile, review and analyze background documents and secondary data/information related to the CommonSensing project. A list of background documentation for the desk review is included in Annex A.

Stakeholder analysis

The evaluator will identify the different stakeholders involved in the CommonSensing project. Key stakeholders at the national and regional levels include, but are not limited, to:

<u>Treatment Countries:</u> Fiji Ministry of Lands & Mineral Resources Ministry of Economy Fiji National Development Bank World Bank, UNDP, ADB, FAO

The Solomon Islands Ministry of Environment, Climate Change, Disaster Management & Meteorology World Bank, ADB, GEF Ministry of Finance

Vanuatu Ministry of climate change adaptation, meteorology, geo-hazards, environment & energy and NDMO National Advisory Board on Climate Change and Disaster Risk Reduction Department of Strategic Policy Planning and Aid Coordination

³⁹ Guidance includes a one-to-one tutorial which will be organised by Caribou Digital end of 2019, and ongoing support to review progress against CEA methodology.

SPREP, World Bank, GIZ Partners:

- 1. Satellite Applications Catapult
- 2. UK Meteorological Office
- 3. Sensonomic
- 4. Devex
- 5. University of Portsmouth
- 6. Airbus UK (data provider, not project partner)
- International:

7. Commonwealth Secretariat (London) with Governments of Fiji, the Solomon Islands and Vanuatu

Survey(s)

With a view to maximizing feedback from the widest possible range of project stakeholders, the evaluator shall develop and deploy a survey(s) following the comprehensive desk study to provide an initial set of findings and allow the evaluator to easily probe during the key informant interviews.

Key informant interviews

Based on stakeholder identification, the evaluator will identify and interview key informants. The list of global focal points is available in Annex B. In preparation for the interviews with key informants, the consultant will define interview protocols to determine the questions and modalities with flexibility to adapt to the particularities of the different informants, either at the global or at the national level.

Focus groups

Focus groups should be organized with selected project stakeholders at the national and regional levels to complement/triangulate findings from other collection tools.

Field work

A field visit to Fiji, Solomon Island and Vanuatu (treatment countries) and Samoa (non-treatment) shall be organized and the evaluator shall identify national informants, whom he/she will interview.

Identify and interview key informants (national)

Based on the stakeholder analysis, the evaluator will identify national informants, whom he/she will interview. The list of national focal points is available in Annex B.

Comparison Groups (quasi-experimental design)

A comparison of 'treatment' and 'comparison' groups shall be involved against a selection of outcome and impact level Log frame indicators to determine the extent of changes that are attributable to the project, being the difference between the two groups. A 'treatment' group is made up of people who are included in/affected by the CommonSensing project while the comparison group receives no intervention.

The comparison group is designed to be as similar to the treatment group as possible across a large number of characteristics. For example, when comparing with groups from other small island developing states, they need to be of similar geography, demographics, socio-economic status, level of education, development status, climate change vulnerability and risk of natural disasters etc. Potential groups can be matched based on the average difference across key characteristics by using a 'propensity score matching'.⁴⁰

Gender and human rights

⁴⁰ The Baseline evaluation included a comparison with the non-beneficiary country Samoa.

- 15. The evaluator should incorporate human rights, gender and equity perspectives in the evaluation process and findings, particularly by involving women and other disadvantaged groups subject to discrimination. All key data collected shall be disaggregated by sex and age grouping and be included in the draft and final evaluation report.
- 16. The guiding principles for the evaluation should respect transparency, engage stakeholders and beneficiaries; ensure confidentiality of data and anonymity of responses; and follow <u>ethical</u> and professional standards.

Timeframe, work plan, deliverables and review

- 17. The proposed timeframe for the midline evaluation spans from 29 November 2019 (one-to-one workshop on CEA) to13 January 2020 (initial desk review and data collection) to 27 April 2020 (submission of final midline evaluation report and CEA report). An indicative work plan is provided in the table below.
- 18. The consultant shall submit a brief evaluation design/question matrix following the comprehensive desk study, stakeholder analysis and initial key informant interviews. The evaluation design/question matrix should include a discussion on the evaluation objectives, methods and, if required, revisions to the suggested evaluation questions or data collection methods. The Evaluation design/question matrix should indicate any foreseen difficulties or challenges in collecting data and confirm the final timeframe for the completion of the evaluation exercise.
- 19. Following data collection and analysis, the consultant shall submit a zero draft of the evaluation and CEA report to the evaluation manager and revise the draft based on comments made by the evaluation manager.
- 20. The draft evaluation and CEA reports (two separate documents) should follow the structures presented under Annex C. The report should state the purpose of the evaluation and the methods used and include a discussion on the limitations to the evaluation. The report should present evidence-based and balanced findings, including strengths and weaknesses, consequent conclusions and recommendations, and lessons to be learned. The length of evaluation report should be approximately 20-30 pages, excluding annexes. The CEA narrative report should have 8-10 pages and use the <u>excel template</u> provided and follow the methodology provided by the IPP programme. This report should outline the CEA process, key assumptions, results, interpretation of the results, and caveats including aspects of the project that cannot be quantified in the Excel model. The objective is to provide a compelling narrative which helps place the CEA analysis and findings, including the next best alternatives in context. This narrative will then be duplicated into the project's evaluation report.
- 21. Following the submission of the zero draft, a draft report will then be submitted to the CommonSensing project management team to review and comment on the draft reports and provide any additional information using the form provided under Annex D by 20 April 2020. Within one week of receiving feedback, the evaluator shall submit the final evaluation and CEA report. The target date for this submission is 27 April 2020.

Deliverable	From	То	Deadline
Organization of a one-to- one tutorial on CEA**	Caribou Digital	Evaluator	29 November 2019
Evaluation design/question matrix	Evaluator	Evaluation manager	13 January 2020

Measurable outputs/Deliverables/Schedule of Deliverables*:

Comments on evaluation design/question matrix	Evaluation manager/ CommonSensing project manager	Evaluator	20 January 2020
Zero draft evaluation and CEA reports (and excel)	Evaluator	Evaluation manager	23 March 2020
Comments on zero draft evaluation and CEA (and excel)	Evaluation manager	Evaluator	30 March 2020
Draft evaluation and CEA reports (and excel)	Evaluator	Evaluation manager/ CommonSensing project manager	6 April 2020
Comments on draft evaluation and CEA reports (and excel)	CommonSensing project manager	Evaluation manager	20 April 2020
Final evaluation and CEA reports (and excel)	Evaluation manager	CommonSensing project manager	27 April 2020
Presentation of findings	Evaluator	Evaluation manager/ CommonSensing team	4 May 2020

*Subject to review and adjustment on agreement between the consultant and the Evaluation Manager.

**Date to be agreed upon amongst Caribou Digital, London Economics, the evaluator and UNITAR.

Communication/dissemination of results

22. The midline evaluation and CEA reports shall be written in English. The final evaluation report (the CEA outputs are confidential) will be shared with all partners and be posted on an online repository of evaluation reports open to the public.

Professional requirements

23. The evaluator should have the following qualifications and experience:

- MA degree or equivalent in international relations, political science, environmental science, development or a related discipline. Training and/or experience in the area of GIS, climate change and/or disaster risk reduction would be a clear advantage.
- At least 7 years of professional experience conducting evaluation in the field of capacity building, sustainable learning, GIS and climate change and disaster risk reduction, with demonstrated experience conducting CEA or a related methodology for evaluating project efficiency.
- Technical knowledge of the focal area.
- Field work experience in developing countries, preferably in the SIDS.
- Excellent research and analytical skills, including experience in a variety of evaluation methods and approaches.
- Excellent writing skills.
- Strong communication and presentation skills.
- Cross-cultural awareness and flexibility.
- Availability to travel.
- Fluency in English.

Resources:

Task/deliverable	Estimated number of work days	Comments
Desk study and submission of evaluation design/question matrix	5	
Data collection, including field visits (including field visit preparation)	25	
Data analysis and preparation of zero drafts	18	
Preparation of draft reports	3	
Final reports	2	
Total estimated	53	

Contractual arrangements

- 24. The evaluator will be contracted by UNITAR and will report directly to the Manager of the Planning, Performance Monitoring, and Evaluation Unit ('evaluation manager'). The evaluator should consult with the evaluation manager on any procedural or methodological matter requiring attention. The evaluator is responsible for planning any meetings, organizing online surveys and undertaking administrative arrangements for any travel that may be required (e.g. accommodation, visas, etc.). The travel arrangements will be in accordance with the UN rules and regulations for consultants.
- 25. The Manager of PPME reports directly to the Executive Director of UNITAR. The unit is independent from all programming related management functions at UNITAR. According to UNITAR's Monitoring and Evaluation Policy, PPME formulates annual corporate evaluation plans within the established budgetary appropriations in due consultation with the Executive Director and Management and conducts and/or manages corporate evaluations at the request of the Executive Director and/or programmes and other Institute divisional entities. Moreover, in due consultation with the Executive Director and Management, PPME issues and discloses final evaluation reports without prior clearance from other UNITAR Management or functions. In managing mandated, independent project evaluations, PPME may access the expenditure account within the ledger account of the relevant project and raise obligations for expenditure. This builds the foundations of UNITAR's evaluation function's independence and ability to better support learning and accountability.

Evaluator Ethics

26. The evaluator selected should not have participated in the project's design or implementation or have a conflict of interest with project related activities. The selected consultant shall sign and return a copy of the code of conduct under Annex D prior to initiating the assignment.

Annexes:

- A: List of documents and data to be reviewed
- **B: List of Project Partners and Contact Points**
- C: Structure of evaluation and CEA reports
- D: Evaluator code of conduct

Annex A: List of documents/data to be reviewed

- Mission Reports
- Landscape Report
- Legal Agreement
- Project document
- Baseline Evaluation
- Results from Self-Evaluation
- Monitoring & Evaluation Plan
- Other project deliverables
- Any other document deemed to be useful to the evaluation

Annex B: List of CommonSensing Contact Points (to be completed by project Management prior to start of the evaluation)

Partners			
Organization	Focal Point		

Annex C: Indicative Structure of midline evaluation report

1. Table of Contents

- 2. Acronyms
- 3. Executive Summary
- 4. Introduction and Background
- 5. Purpose and Scope
- 6. Methodology
- 6.1. Limitations to Methodology
- 7. Process Evaluation
- 7.1. Effectiveness: How was the project delivered?

7.2. Relevance: How did consortium work together? What do consortium members, end users and others think about how the project was implemented?

7.3. Efficiency: Were KPIs, deliverables and milestones delivered on time and on budget? Why/why not?

8. Economic Evaluation (using Cost-Effectiveness Analysis)

8.1. Efficiency: Was the project a cost-effective means of achieving the results?

9. Quantitative measurements of each logframe indicator (in a table format)

- 10. Conclusions
- 10.1. Assessment of likelihood of achieving outcome and impacts
- 10.2. Learnings
- 10.3. Recommendations
- 11. Appendices

11.1. E.g. Copies of surveys or interview transcripts used, TORs developed etc.

Structure of the CEA report

- 1. Table of contents
- 2. Acronyms
- 3. Executive Summary
- 4. Introduction
 - Background of the project
 - Background and scope of the CEA
 - Audiences and objectives for the report

5. Methodology

5.1. Define

- Time horizons of the CEA
- Scope of the project
- Description of first alternative, including its scale and feasibility
- Description of second alternative, including its scale and feasibility

5.2. Costs

- Highlight major methodological decisions on costing
- List and explain cost inclusions. State costs that are included (e.g. matched stakeholder
- costs), but were not in the IPP budget.
- List and explain cost exclusions

5.3. Impacts

- What are the chosen benefit indicators (outcomes/impacts) and why
- Confirmation of the counterfactual approach for the benefit indicators

5.4. Standardise

- Describe the key decisions within the standardisation step
- Confirm exchange rates
- Confirm discount rate used is UK rate of 3.5%

6. Compute, Report and Conclude

- Present results and findings including CEA ratios. Using the standardised table template
- provided in the CEA Manual and CEA Case Study Excel
- Provide sensitivity analysis results and finding (optional)
- Conclude the findings and highlight the key takeaways/'so-whats'

7. Risks and Issues

• List the issues/concerns with the methodology used and/or results and findings

8. Next steps

- When/how will the analysis be updated
- When/how will the audiences be communicated of the results and findings