

Annex 1

Terms of Reference

Endline Evaluation and Cost-effectiveness Analysis of the CommonSensing Project

Background

1. 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 the individual, institutional and organizational capacity 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.
2. The **UNITAR Operational Satellite Applications Programme Unit (UNOSAT)** is a technology-intensive 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 and midline evaluations can be found [here](#).

Purpose of the evaluation

5. The purpose of this endline evaluation is to assess the effectiveness, efficiency, impact and sustainability of the initiative; to identify any problems or challenges that the initiative has encountered; to issue recommendations, and to identify lessons to be learned on design, implementation and management. The evaluation's purpose is thus to provide findings and conclusions to meet accountability requirements, and recommendations and lessons learned to contribute to the initiative's improvement and broader organization learning. The evaluation should

not only assess how well the initiative has performed, but also seek to answer the ‘why’ question by identifying factors contributing to (or inhibiting) successful delivery of the results. In addition to assessing the final outcomes achieved, the evaluation focuses on assessing the and impacts of the project, as well as its delivery. The evaluation should compare with baseline conditions and assess change. The evaluation should also include recommendations and identified key learnings for future projects.

The endline evaluation will include an updated 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. The draft CEA prepared in conjunction with the midline evaluation can be found [here](#).

Scope of the evaluation

6. The endline evaluation will cover the entire project duration until the evaluation’s start and take into consideration ongoing activities. 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.
7. The evaluation will look at the target countries Fiji, Solomon Islands and Vanuatu as well as Samoa as a comparison country.

Evaluation criteria

8. The evaluation will assess project performance against effectiveness, efficiency, impact and sustainability criteria.
 - **Effectiveness:** *How effective has the project been in delivering results and in strengthening evidence-based decision making for improved Disaster Risk Reduction and Climate Change Adaptation?*
 - **Efficiency:** *To what extent has the project delivered its results in a cost-effective manner?*
 - **Impact:** *What are the cumulative and/or long-term effects expected from the project, including contribution towards the intended impact, positive or negative impacts, or intended or unintended changes?*
 - **Sustainability:** *To what extent are the project’s results likely to be sustained in the long term?*

Principal evaluation questions

9. The following questions are *suggested* to guide the design of the evaluation:

A. Process Evaluation:

Effectiveness: How effective was project delivery?

- a. How effective has online training and other online project delivery been with the onset of the COVID-19 pandemic in supporting individual and institutional capacities for Disaster Risk Reduction and Climate Change Adaptation?
- b. To what extent have recent project adaptations supported a human rights-based approach and gender mainstreaming in the CommonSensing project?
- c. Were accepted recommendations from the mid-term evaluation implemented?

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

- d. To what extent were the outputs being produced in a cost-effective manner?
- e. Were the CommonSensing project’s outputs and objectives achieved on time?

- f. To what extent have partnership modalities (including project and implementing partners if any) been conducive to the efficient delivery of the CommonSensing project and achievement of results?
- g. To what extent has the initiative adjusted to the COVID-19 related context?
- h. How environment-friendly (natural resources) has the initiative been?

Economic Evaluation (using 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 the project used the least costly resources possible in order to achieve the desired impact compared to alternatives.

- i. Was the project a cost-effective means of achieving the results by project end, as compared to the non-space alternatives of unmanned aerial vehicles (UAV) and helicopters?
- j. What are the net economic benefits of the project as compared to the non-space alternatives at project end?
- k. What lessons can be drawn based on the results of the CEA to support efficient project delivery in similar contexts?

B. Impact Evaluation

Effectiveness: Extent to which project met its objectives as stated in the logframe? Why/why not?

- a. To what extent have project deliverables supported government ministries in applying for climate funding?
- b. Is there evidence that the CS platform is effective in strengthening evidence-based decision making for improved Disaster Risk Reduction and Climate Change Adaptation?
- c. To what extent did the CommonSensing project meet the planned results at the output and outcome levels, and did the project reach its intended users and respond to their needs?
- d. What factors have influenced the achievement (or non-achievement) of the CommonSensing project's objectives?

Assessment of Gender equality and empowerment of women: Extent has the project been relevant for advancing gender equality and the empowerment of women and meeting the needs of other groups made vulnerable

- ✓ Overall, to what extent did the project develop knowledge, skills and other capacities of women stakeholders, and if so, what were the enabling or preventing factors?
- ✓ To what extent are Working Packages such as "User-Centred Design, Build Analysis and Data Products and Solution, Design, Build and Integration, Sustainability, Communications and Stakeholder Engagement" gender-sensitive in their approach and final products? To what extent have women stakeholders been using the CS Platform including the Climate Information app, the Risk Information app, the Map Explorer app, and Spatial Decision Support System (SDSS)?
- ✓ To what extent has the project increased awareness of women stakeholders?
- ✓ To what extent has the project contributed to SDG 5 "Gender Equality"?

Early indication of impact: What are the early indications of impact of the project? What are the early indications of impact compared to the counterfactual country?

- e. What observable end-results or organizational changes (positive or negative, intended or unintended) within key stakeholder/partner institutions have occurred from the project?
- f. To what extent has the initiative contributed to enhanced DRR and climate change resilience in Fiji, Solomon Islands and Vanuatu?

- g. To what extent has the project generated early signs of impact, globally and in intervention countries (Fiji, Solomon Islands and Vanuatu) in comparison to non-intervention countries (Samoa)?
- h. What real difference does the initiative make in enhancing evidence-based decision making in Fiji, Solomon Islands, and Vanuatu?
- i. What early indications are there that the initiative make in increasing resource capacities to address DRR and Climate Change resilience in Fiji, Solomon Islands, and Vanuatu?
- j. To what extent are the results from the project contributing to global efforts to implement SDG 13 (Climate action) and SDG 9 (Industry, innovation and infrastructure)?

Early indication of sustainability: Are the project results sustainable? Will project impacts continue after IPP funding ceases?

- k. To what extent are the project's results (e.g. individual, institutional capacities, CS platform) likely to endure beyond the implementation of the activities in the mid- to long-term and beyond the beneficiary countries and what factors are likely to contribute to this?
- l. To what extent are there early signs that the project has supported environmental sustainability?
- m. What indications are observable that show that there are resources in place in each country to continue use of the project's results in the short/medium term?

Evaluation Approach and Methods

10. The evaluation is to be undertaken in accordance with the [UNITAR Monitoring and Evaluation Policy Framework](#) and the [United Nations norms and standards for evaluation, the UNEG Ethical Guidelines](#) and the CEA methodological guidance provided by Caribou Digital. The evaluation will be undertaken by a supplier or an international consultant/s (the "evaluator") under the supervision of the UNITAR Planning, Performance Monitoring and Evaluation Unit (PPME).
11. In order to maximize utilization of the evaluation, the evaluation shall follow a participatory approach and engage a range of project stakeholders in the process, including the project partners, the UN Country Teams, the participants, the donor and other stakeholders. 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; review of the log frame (reconstructed) baseline data and reconstruction of the theory of change; key informant interviews; focus groups; and field visits. 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 include a draft and revised CEA, the midline evaluation identified two alternative, non-space approaches to CommonSensing with a view to comparing costs and outcomes of CommonSensing and the alternative courses of action. The baseline evaluation collected data for Samoa as a comparison country with similar geographical and socio-economic characteristics as the treatment groups to assess the counterfactual. Endline 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).
15. With the objective to increase the likelihood of the evaluation to be used, the evaluation's key findings shall be presented through a video. For this purpose a videomaker will be employed.

16. 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.

Data collection methods:

Comprehensive desk review

The evaluator will compile, review and analyse background documents and secondary data/information related to the project, including a results framework indicator tracking review. A list of background documentation for the desk review is included in Annex C.

If baseline data available allows for it, the evaluator should consider using [Difference in Difference \(DD\)](#) and [Propensity Score Matching \(PSM\)](#) methodologies for the impact assessment related evaluation questions.

The evaluator should also consider whether [Outcome mapping](#) / [Outcome harvesting](#) are suitable tools for answering the evaluation questions.

Stakeholder analysis

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

Treatment Countries:

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

SPREP, World Bank, GIZ

Comparison Country

Samoa

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 consultant will 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 contacts is available in Annex A. 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, at the national or local level.

Focus groups

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

Field visit

Due to COVID-19 the data collection does not include a field visit that requires international travel. Local travel to Fiji, Solomon Island and Vanuatu (treatment countries) and Samoa (non-treatment) for interviews and focus groups is desirable depending on the residence of the evaluator and assistant evaluators. Observation may also prove useful if activities are being implemented simultaneously to the local field visit. The evaluator shall also organise a one-day workshop on [outcome evidencing](#) with project stakeholders remotely if it can add value to the evaluation's data collection.

The evaluator should be able to undertake data collection entirely remotely should travel restrictions be imposed due to the COVID-19 pandemic.

Gender and human rights

17. 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 evaluation report. Though this is a general requirement for all evaluations, this evaluation should particularly put emphasis on gender equality.
18. The guiding principles for the evaluation should respect transparency, engage stakeholders and beneficiaries; ensure confidentiality of data and anonymity of responses; and follow **ethical** and professional standards([UNEG Ethical Guidelines](#)).

Timeframe, work plan, deliverables and review

19. The proposed timeframe for the evaluation spans from November 2020 (initial desk review and data collection) to March 2021 (submission of final evaluation report). An indicative work plan is provided in the table below.
20. 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/limitations in collecting data and confirm the final timeframe for the completion of the evaluation exercise. In addition, a video outline shall be submitted.
21. 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.
22. 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 excel template 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. As the midline evaluation has produced a draft CEA report, the existing draft shall be updated by the endline evaluation.
23. In addition, a video script shall be developed and submitted with the zero draft report. A script template shall be developed jointly with the videomaker.
24. 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 8 March 2021. Within one week of receiving feedback, the evaluator shall submit the final evaluation and CEA report. The target date for this submission is 15 March 2021.

Indicative timeframe: November 2020 – March 2021

Activity	November	December	January	February	March
Evaluator selected and recruited					
Initial data collection, including desk review, stakeholder analysis					
Evaluation design/question matrix and video outline					
Data collection and analysis, including survey(s), interviews and focus groups and field visit					
Zero draft report submitted to UNITAR					
Draft evaluation report consulted with UNITAR evaluation manager and submitted to Project Management					
Project Management reviews draft evaluation report and video script and shares comments and recommendations					
Evaluation report and video finalized and management response by Project Management					
Presentation of the evaluation findings and lessons learned and video presentation					

Measurable outputs/Deliverables/Schedule of Deliverables*:

Deliverable	From	To	Deadline
Evaluation design/question matrix (and video outline)	Evaluator	Evaluation manager	21 December 2020
Comments on evaluation design/question matrix	Evaluation manager	Evaluator	23 December 2020
Interview protocol and interview questions	Evaluator	Evaluation manager	4 January 2021
Interview protocol and interview questions	Evaluator	In-country experts	8 January 2021
Zero draft report and video script	Evaluator	Evaluation manager	8 February 2021
Comments on zero draft and video script	Evaluation manager	Evaluator	15 February 2021
Draft report and video script	Evaluator	Evaluation manager/ CommonSensing project manager	22 February 2021
Comments on draft report and video script	CommonSensing project manager	Evaluation manager	8 March 2021
Final report	Evaluator	Evaluation manager/ CommonSensing project manager	15 March 2021
Presentation of the evaluation findings, recommendations and lessons learned and video presentation	Evaluator/evaluation manager	CommonSensing team	15 March 2021

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

Communication/dissemination of results

26. The evaluation report shall be written in English. The final report and video will be shared with all partners and be posted on an online repository of evaluation reports open to the public.

Professional requirements

27. The lead evaluator should have the following qualifications and experience:

- MA degree or equivalent in evaluation, development or a related discipline. Knowledge and experience of executive type training, including in areas related to climate change and DRR.
- At least 7 years of professional experience conducting evaluation in the field of capacity building. Knowledge of United Nations Norms and Standards for Evaluation.
- Technical knowledge of the focal area including the evaluation of climate change/DRR related topics.
- Field work experience in developing countries.
- Excellent research and analytical skills, including experience in a variety of evaluation methods and approaches. Experience in evaluation using Kirkpatrick method is an advantage.
- Excellent writing skills.
- Strong communication and presentation skills.
- Cross-cultural awareness and flexibility.

- Availability to travel.
- Fluency in oral and written English.

28. Supporting consultant(s) should have the following qualifications and experience:

- MA degree or equivalent in evaluation, social science, development or a related discipline. Knowledge and experience of executive type training, including in areas related to climate change and DRR.
- At least 3 years of experience in research, data collection and analysis.
- In country experience, Regional knowledge and networks are desirable.

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

28. The evaluator will be contracted by UNITAR and will report directly to the Director of the Strategic Planning and Performance Division and Manager of Planning, Performance Monitoring, and Evaluation Unit (PPME) ('evaluation manager'). The evaluator will work in close collaboration with supporting in-country consultants to support the data collection.
29. The evaluation manager reports directly to the Executive Director of UNITAR and is independent from all programming related management functions at UNITAR. According to UNITAR's Monitoring and Evaluation Policy, in due consultation with the Executive Director/programme management, PPME issues and discloses final evaluation reports without prior clearance from other UNITAR Management or functions. This builds the foundations of UNITAR's evaluation function's independence and ability to better support learning and accountability.
30. 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, if any, will be in accordance with the UN rules and regulations for consultants.

Evaluator Ethics

31. The evaluator selected should not have participated in the project's design or implementation or have a conflict of interest with project activities. The selected consultant shall sign and return a copy of the code of conduct under Annex F prior to initiating the assignment and comply with [UNEG Ethical Guidelines](#).

Annexes:

- A. List of contact points**
- B. Event data available on the UNITAR Event Management System**
- C. List of documents and data to be reviewed**
- D. Structure of evaluation report**
- E. Audit trail**
- F. Evaluator code of conduct**

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

Partners	
Organization	Focal Point

B: Event data available on the Event Management System

Annex C: List of documents/data to be reviewed

Annex D: Structure of evaluation report

Structure of the endline evaluation report

1. Title page
2. Table of Contents
3. Acronyms
3. Executive Summary
4. Introduction and Background
5. Purpose and Scope
6. Methodology
- 6.1. Limitations to Methodology
7. Process Evaluation
8. Impact Evaluation
9. Economic Evaluation (using Cost-Effectiveness Analysis)
10. Quantitative measurements of each logframe indicator (in a table format)
11. Conclusions
- 11.1. Assessment of likelihood of achieving outcome and impacts
- 11.2. Learnings
- 11.3. Recommendations
12. Appendices
 - a. Terms of reference
 - b. Survey/questionnaires deployed
 - c. List of persons interviewed
 - d. List of documents reviewed
 - e. Evaluation question matrix
 - f. Evaluation consultant agreement form

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

Annex F: Evaluation Consultant Code of Conduct and Agreement Form*

The evaluator:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. He/she should provide maximum notice, minimize demands on time, and respect people's right not to engage. He/she must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. He/she are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncovers evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. He/she should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, he/she must be sensitive to and address issues of discrimination and gender equality. He/she should avoid offending the dignity and self-respect of those persons with whom he/she comes in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, he/she should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Is responsible for his/her performance and his/her product(s). He/she is responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form¹

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation. and I declare that any past experience, of myself, my immediate family or close friends or associates, does not give rise to an actual or perceived conflict of interest.

Signed at *place* on *date*

Signature: _____

*This form is required to be signed by each evaluator involved in the evaluation.

¹www.unevaluation.org/unegcodeofconduct