

Terms of Reference

Midline 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 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.
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 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 evidence-based 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 incorporated in the design and implementation of the CommonSensing project?
- 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 conducive 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 the project used the least costly resources possible in order 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 non-space 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 [UNITAR Monitoring and Evaluation Policy Framework](#), the [Norms and Standards of the United Nations Evaluation Group](#), and the [CEA methodological guidance provided by Caribou Digital](#).¹ 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, [a comparison group](#) 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:

¹ 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.

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

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'.²

Gender and human rights

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 [ethical](#) 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) to 13 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.

² The Baseline evaluation included a comparison with the non-beneficiary country Samoa.

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 [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.
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.

Measurable outputs/Deliverables/Schedule of Deliverables*:

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

Annex D: 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 Form³

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.

Signed at place on date

Signature: _____

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

³www.unevaluation.org/unegcodeofconduct