AFB/PPRC.20/21
4 March 2017

Adaptation Fund Board
Project and Programme Review Committee
Twentieth Meeting
Bonn, Germany, 14-15 March 2017

Agenda Item 8 p)

PROPOSAL FOR SOLOMON ISLANDS

Background

1. The Operational Policies and Guidelines (OPG) for Parties to Access Resources from the Adaptation Fund (the Fund), adopted by the Adaptation Fund Board (the Board), state in paragraph 45 that regular adaptation project and programme proposals, i.e. those that request funding exceeding US$ 1 million, would undergo either a one-step, or a two-step approval process. In case of the one-step process, the proponent would directly submit a fully-developed project proposal. In the two-step process, the proponent would first submit a brief project concept, which would be reviewed by the Project and Programme Review Committee (PPRC) and would have to receive the endorsement of the Board. In the second step, the fully-developed project/programme document would be reviewed by the PPRC, and would ultimately require the Board's approval.

2. The Templates approved by the Board (OPG, Annex 4) do not include a separate template for project and programme concepts but provide that these are to be submitted using the project and programme proposal template. The section on Adaptation Fund Project Review Criteria states:

> *For regular projects using the two-step approval process, only the first four criteria will be applied when reviewing the 1st step for regular project concept. In addition, the information provided in the 1st step approval process with respect to the review criteria for the regular project concept could be less detailed than the information in the request for approval template submitted at the 2nd step approval process. Furthermore, a final project document is required for regular projects for the 2nd step approval, in addition to the approval template.*

3. The first four criteria mentioned above are:
   1. Country Eligibility,
   2. Project Eligibility,
   3. Resource Availability, and
   4. Eligibility of NIE/MIE.

4. The fifth criterion, applied when reviewing a fully-developed project document, is:
   5. Implementation Arrangements.

5. It is worth noting that since the twenty-second Board meeting, the Environmental and Social (E&S) Policy of the Fund was approved and consequently compliance with the Policy has been included in the review criteria both for concept documents and fully-developed project documents. The proposals template was revised as well, to include sections requesting demonstration of compliance of the project/programme with the E&S Policy.

6. In its seventeenth meeting, the Board decided (Decision B.17/7) to approve "Instructions for preparing a request for project or programme funding from the Adaptation Fund", contained in the Annex to document AFB/PPRC.8/4, which further outlines applicable review criteria for both concepts and fully-developed proposals. The latest version of this document was launched in conjunction with the revision of the Operational Policies and Guidelines in November 2013.

7. Based on the Board Decision B.9/2, the first call for project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on April 8, 2010.

8. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

9. The following fully-developed project document titled “Enhancing urban resilience to climate change impacts and natural disasters: Honiara” was submitted by UN-Habitat, which is a Multilateral Implementing Entity of the Adaptation Fund.

10. This is the second submission of the proposal. It was first submitted as a concept for the twenty-eighth meeting of the Board and the Board decided to:

> *(a) Endorse the project concept, as supplemented by the clarification response provided by United Nations Human Settlements Programme (UN-Habitat) to the request made by the technical review;*
>
> *(b) Request the secretariat to transmit to UN-Habitat the observations in the review sheet annexed to the notification of the Board’s decision, as well as the following issues:*
>
> (i) *The full proposal needs to clarify how the proposed approach is cost effective in comparison to alternative approaches as per the Fund’s guidelines;*
>
> (ii) *The full proposal needs to clearly state the lessons from identified projects and show how they have informed its design beyond the complementarity potential;*
>
> (iii) *The full proposal needs to include specific roles of participants in the consultations under each administration level: community; ward; and city-ward;*
>
> *(c) Request UN-Habitat to transmit the observations under item (b) to the Government of Solomon Islands; and*
>
> *(d) Encourage the Government of Solomon Islands to submit through UN-Habitat a fully-developed project proposal that would address the observations under item (b) above.*
>
> *(Decision B.28/10)*

11. The current submission was received by the secretariat in time to be considered in the twenty-ninth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number SLB/MIE/Urban/2016/1, and completed a review sheet.

12. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with UN-Habitat, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.

13. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.

Project Summary

Solomon Islands - Enhancing urban resilience to climate change impacts and natural disasters: Honiara

Implementing Entity: United Nations Human Settlements Programme (UN-Habitat)
Project/Programme Execution Cost: US$ 351,500
Total Project/Programme Cost: US$ 4,051,500
Implementing Fee: US$ 344,377
Financing Requested: US$ 4,395,877

Project Background and Context:

Solomon Islands is a Pacific Small Island Developing State that is vulnerable to adverse effects of climate change, and has adaptation gaps at the level of urban infrastructure development, housing and service provision. The project proposal intends to enhance urban resilience to climate change impacts and natural disasters in Honiara, the capital City of Solomon Island. It proposes to intervene in identified communities, wards and in the city. It lays out a set of actions to address well-defined priority challenges that have emerged, including food security, capacity building, profiling of community hotspots and implementation of community level agreed resilience actions. It is also aligned with key local, national, and regional priorities. The initiative has six components:

Component 1: Community level actions (US$ 1,720,000)

After identifying key issues and prioritisation of actions for two additional hotspot case studies (Nggosi and Panatina wards), component 1 will focus on developing community action plans based on local experience and knowledge using participatory methodologies involving planning for Climate Change. Many of the informal settlements are fast growing, and affected by complex land tenure issues, and this activity will ensure that an up-to-date baseline of local data is available to inform resilience planning and future action.

The component will support that each of the actions identified by the local communities be assessed to indicate the cost, feasibility and partnerships that will be needed to implement the actions. Each of the proposed actions will be screened to see if SIA and EIAs are required. Overarching themes include: protection from hazards, housing design, resilient infrastructure, waste management and environmental clean-up activity, drainage improvements, and environmental risk awareness programs.

Component 2: Community level capacity strengthening (US$ 180,000)

This component will focus on awareness and capacity building related to key community issues, including climate risks and adaptation (including ways to integrate science and local knowledge), disaster risk reduction, issues of land tenure, and issues of sanitation and health (accounting for increasing risks due to the impacts of climate change). Given the fast pace of urbanization, it is vital that up-to-date information informs the resilience strengthening agenda for Honiara. Component 1 will therefore provide local training on surveys, data recording, and data management will build capacity for self-assessment. It will also support training and

empowerment of individuals to monitor their community's progress in implementing adaptation action and resilience building measures.

Component 3: Ward level actions (US$ 1,060,000)

Component 3 will be aimed at strengthening institutional structures and processes at the ward level in support of adaptation outcomes (acting as an important bridge between national and city Government and local communities). Strengthening adaptive capacity is considered important in the Honiara context, and under this component, particular attention will be paid to communication, awareness and education activity that targets women, youth, urban agriculture and food security, and the promotion of climate resilient community spaces. Enhancing adaptive capacity will be achieved through the improvement of community access to – and awareness of – already available climate risk information and adaptation techniques, which are not easily accessible in the context of the isolated, low-literacy and informal communities of Honiara's urban poor.

In addition to developing a women-focused climate risk communications program, through theatre, radio and community newsletters, the component will also engage with NGO organisations such as Gurafesu Biodiversity, Conservation, and Climate Change Community Development Association to promote ecosystem-based adaptation by conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area). This will contribute to increased awareness of the value of ecosystem services and their value to the climate adaptation agenda and will involve training workshops, pilot actions that showcase best practice in urban agriculture, and education on eco-system based adaptation and improved food security.

Component 4: Ward level capacity strengthening (US$ 280,000)

This component will focus on providing training for nominated 'resilience officers' in each of Honiara's wards in urban resilience and climate adaptation planning. The ward level is a strategically important level for capacity building. The project will undertake training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings and capacity building.

At the city-level the primary focus will be on governance and partnerships, and improvements to institutional arrangements in support of improved urban resilience. A major part of the capacity building component would be to initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University / UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities.

Component 5: City-wide governance and capacity strengthening (US$ 310,000)

Component 5 will focus on capacity development needs assessment that will involve a team of disciplinary lecturers visiting Honiara to meet with key officials and to carry out site visits in order to be able to tailor capacity development workshops at RMIT that meet the contemporary needs of policymakers and practitioners in Honiara.

Short courses at RMIT will be tailored for Honiara needs after a scoping visit by lead lecturers. Opportunities include: environmental and civil engineering, urban planning and risk mapping, data management, and media and communications. Given an already identified need the first of these, and costed for funding in this application, will be a 2-week course of workshops designed to cater for planning, land administration, and GIS risk mapping.

Under this component, a 'flagship' research project to support sustainable water supply for Honiara will be undertaken to identify and implement key resilience actions. This research, to be undertaken in collaboration with Solomon Islands Water Authority (SIWA), will establish a base line for water supply for the city, then factor in climate change and development scenarios to better understand the stresses on the water supply system. This knowledge will be used to identify suitable supply and demand interventions – including the potential use of recycled water - in support the development of a sustainable water catchment plan.

Component 6: Knowledge Management and Advocacy (US$ 150,000)

This component will focus on developing climate change adaptation training and knowledge exchange programs between HCC staff and ward councillors, and establishing a monitoring regime for the project will be implemented and overseen by the CARO to facilitate transfer of results and lessons learnt to other communities across Honiara. This will involve the development and maintenance of a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key Ministries. This will inform other communities about activity and transferable findings from the hotspot pilot actions.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Regular-sized Project

Country/Region: **Solomon Islands**
Project Title: **Enhancing urban resilience to climate change impacts and natural disasters: Honiara**
AF Project ID: **SLB/MIE/Urban/2016/1**
IE Project ID:
Requested Financing from Adaptation Fund (US Dollars): **4,395,877**
Reviewer and contact person: **Rawleston Moore**
Co-reviewer(s): **Daouda Ndiaye**
IE Contact Person: **Bernhard Barth**

Review Criteria	Questions	Comments	Comments on February 14th 2017
Country Eligibility	1. Is the country party to the Kyoto Protocol?	Yes, Solomon Islands is party to the Kyoto Protocol	
	2. Is the country a developing country particularly vulnerable to the adverse effects of climate change?	Yes., Solomon Islands is a SIDS in the Pacific, particularly vulnerable to the adverse effects of climate change.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. Letter dated 23 December 2016.	

	2. Does the project / programme support concrete adaptation actions to assist the country in addressing adaptive capacity to the adverse effects of climate change and build in climate resilience?	Yes, the project proposes a number of adaptation measures for five communities/vulnerability hotspots (Kukum Fishing Village, Ontong, Java, Tuvaruhu, and White River. Clarification should be provided as to how waste management activities, and environmental clean-up activities are adaptation activities. While these may be priorities for communities it is unclear as to how these types of activities respond to the adverse effects of climate change in Honiara, what vulnerabilities these activities are to address and how they will effective address urban resilience to climate change. **CR1** Further information should also be provided on the issues of land tenure, and sanitation and health and the relationship to climate change vulnerability in Honiara. **CR2**	**CR1**: Partially Addressed. There are some clarifications provided. Waste management will be addressed as part of resilient infrastructure, to assist in reducing the impacts related to flooding, improved drainage and vector borne diseases. It is noted that there will be environmental clean-up activity. However, it is not clear how this type of activity and its output will be sustained in the future to prevent the current waste situation re-occurring again. The proposal does not clarify if there will be new laws or regulations on waste management and improper disposal of waste. **CR2**: Partially Addressed. The proposal should demonstrate that land tenure considerations have been taken into account as it relates to the type of adaptation infrastructure interventions that can be taken on lands which have different tenure arrangements and licenses to occupy.

	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes, the project will provide economic, social and environmental benefits, particularly to vulnerable communities. While table 16 provides an estimation of the number of beneficiaries, further information should be provided on the number of beneficiaries (e.g. families, gender) in each of the communities/hotspots. **CR3**	**CR3:** Addressed. Table 2bis and figure 13 bis provide the relevant information.
	4. Is the project / programme cost effective?	Table 5 provides additional information on the cost effectiveness, which is satisfactory.	
	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans, poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments?	Yes	

	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund??	Yes	
	7. Is there duplication of project / programme with other funding sources?	Please provide additional information on the linkages with the World Bank project "Community Resilience to Climate and Disaster Risk in the Solomon Islands" and the UNDP project "Solomon Islands Water Sector Adaptation Project (SIWSAP)" **CR4** **CR5:** The project should also enhance its natural linkages and exchange information with the ICLEI resilient cities program.	**CR4:** Addressed. **CR5:** Partially addressed. The project proponent should provide clear information as to whether there will be co-operation and linkages with the World Bank project "Community Resilience to Climate and Disaster Risk in the Solomon Islands in Table 7. The statement *"In particular for peri-urban areas some lessons may be learnt"* could be improved and provide additional clarification.
	8. Does the project / programme have a learning and knowledge management component to capture and feedback lessons?	Yes	

	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Yes. However, clarification is requested as to whether organizations with a focus on gender were involved in the key stakeholder workshop held on 23 November 2016. **CR6**	**CR6:** Addressed.
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes, however there is a requirement for further clarification of some of the proposed activities, as requested in CR1 and CR2.	Addressed.
	11. Is the project / program aligned with AF's results framework?	Yes	
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	For the most part. The project proposed to employ a Climate Adaptation and Resilience officer for the Honiara city council. Please clarify whether or how this position will be maintained after project closure. It is noted in the project documentation that the position will be for the, duration of the 4-year project and will be housed at the offices of HCC. What happens after the project closes and outputs need to be scaled up and replicated. **CR7**	**CR7:** Addressed. HCC will support Resilience officer beyond project period
	13. Does the project / programme provide an overview of	Yes. However, please clarify what is the final categorization of this project, following the	**CR8:** Addressed. The project is categorized as a B.

	environmental and social impacts / risks identified, in compliance with the Environmental and Social Policy and Gender Policy of the Fund?	Environmental and Social Policy of the Fund. **CR8**	
Resource Availability	1. Is the requested project / programme funding within the cap of the country?	Yes	
	2. Is the Implementing Entity Management Fee at or below 8.5 per cent of the total project/programme budget before the fee?	Yes	
	3. Are the Project/Programme Execution Costs at or below 9.5 per cent of the total project/programme budget (including the fee)?	Yes	
Eligibility of IE	4. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes	

Implementation Arrangements	1. Is there adequate arrangement for project / programme management, in compliance with the Gender Policy of the Fund?	Yes. However, please provide additional information on gender and the arrangements for project management. For example, will gender issues be addressed by the technical advisory group? **CR9**	**CR9:** Addressed. A gender focal point will be involved in the technical advisory group.
	2. Are there measures for financial and project/programme risk management?	Yes	
	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy and Gender Policy of the Fund?	Yes. However, please clarify the implementation arrangements and budget implication of the mitigation measures presented under Table 18, as well as the management of USP under the ESMP. **CR10**	**CR10:** Addressed. Relevant updates have been provided to the new table 19 along with additional clarifications
	4. Is a budget on the Implementing Entity Management Fee use included?	Yes	
	5. Is an explanation and a breakdown of the execution costs included?	Yes	
	6. Is a detailed budget including budget notes included?	Yes, there is a detailed budget. However, please include budget notes detailing the costs. **CAR**	**CAR:** Addressed. Detailed budget notes are provided.

	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators, in compliance with the Gender Policy of the Fund?	For the most part. There could be a few minor amendments to the results framework, to enhance clarity. Output 2.1 indicator, could include the number of persons trained disaggregated by gender. Output 4.1 indicator could include No. of people trained disaggregated by gender. Also, please consider the "number of ecosystem based adaptation options put in place" under Output indicator 3.3. **CR11**	**CR11:** Addressed. Relevant amendments have been made to the results framework.
	8. Does the M&E Framework include a break-down of how implementing entity IE fees will be utilized in the supervision of the M&E function?	Yes	
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	Yes	
	10. Is a disbursement schedule with time-bound milestones included?	Yes	

Technical Summary	The project has the overarching goal to enhance the resilience of Honiara and its inhabitants to current and future climate impacts and natural disasters, with a particular focus on pro-poor adaptation actions that involve and benefit

	the most vulnerable communities in the city. The project therefore focuses on urban resilience, and improving the overall resilience of five vulnerability hotspots in Honiara. The hotspots are Kukum Fishing Village, Ontong Java, Aekafo, Tuvaruhu, and White River. The objectives of the project are on three levels. The community level, the ward level and city wide. At the community level the project aims to support the implementation of prioritized resilience actions in vulnerability hotspot communities and to strengthen the capacity of local communities to respond to climate change and natural hazards through awareness raising and capacity development training. At the ward level, the project will support the implementation of resilience actions that target women, youth, urban agriculture and food security, and disaster risk reduction and strengthen the capacity of ward officials / councils to lead climate change adaptation and DRR planning activity, in support of increased urban resilience. At the city-wide level the project aims to strengthen institutional arrangements at the city-level to respond to climate change and natural disasters through mainstreaming, improved partnership working. The initial technical review found that although the proposal was very well written, there were still a number of issues which needed to be clarified. A number of clarification requests (CRs) and corrective action request (CAR) were made. The final technical review finds that although most of the issues have been addressed, there remain a few that were not addressed, including issues related to land tenure and the proposed adaptation activities. The following observations are made: a) The proposal should clarify how the waste management activities and their related outputs will be sustained in the future to prevent the current waste situation re-occurring again, and clarify if there will be new laws or regulations on waste management and improper disposal of waste; b) The proposal should demonstrate that land tenure considerations have been taken into account as it relates to the type of adaptation infrastructure interventions that can be taken on lands which have different tenure arrangements and licenses to occupy; c) The proposal should provide clear information as to whether there will be co-operation and linkages with the World Bank project “Community Resilience to Climate and Disaster Risk in the Solomon Islands”.
Date:	18 February 2017

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Regular
Country/ies:	Solomon Islands
Title of Project/Programme:	Enhancing urban resilience to climate change impacts and natural disasters: Honiara
Type of Implementing Entity:	Multilateral
Implementing Entity:	United Nations Human Settlements Programme (UN-Habitat)
Executing Entities:	- Honiara City Council (HCC) - Ministry of Lands, Housing and Survey (MLHS) - Ministry of the Environment, Climate Change and Disaster Management (MECDM); With scientific and training support from: - RMIT University, Melbourne, Australia
Amount of Financing Requested:	USD 4,395,877

Project / Programme Background and Context:

International climate scientists have identified Small Island Developing States (SIDS) in the Pacific, such as the Solomon Islands, as being amongst the most vulnerable countries to the risks of future climate change. However, it is also important to recognize that the islands of Melanesia have historically been highly exposed to an array of extreme climate events driven by natural variability, as well as other natural hazards such as earthquakes and tsunamis. In the case of the Honiara - the capital city of the Solomon Islands - there is acute sensitivity to external shocks and stresses due to existing 'adaptation deficits' in urban infrastructure, housing and service provision. These deficits result from a range of development drivers; including rapid and unplanned urbanization, the associated growth of informal settlements, a lack of adequate infrastructure and basic services in many areas, issues related to land tenure in peri-urban areas, and weak institutional structures governing the urban environment. The intention of this project is therefore to work with vulnerable urban communities in Honiara to implement climate adaptation actions and to undertake capacity strengthening initiatives across multiple urban scales – community, ward and city-wide (including issues that cross the city-province boundary) – in order to strengthen the climate resilience of the city.

Due to the immensity of the climate-related challenges facing Pacific SIDS, extensive climate vulnerability and adaptation work has been conducted across the region, including in the Solomon Islands. However, to date this activity has been predominantly conducted in rural / remote areas with emphasis on island ecosystems and traditional,

subsistence-based livelihood options, with limited focus on the urban setting. This is despite the national Solomon Islands Government (SIG), funding / donor organizations and many civil society organizations, being based in these major cities; a proximity that provides significant opportunities for transferring knowledge and building the adaptive capacity of vulnerable urban communities. By concentrating on Honiara, as the country's capital and primary city with continuing rapid growth projected into the future, the proposed activity is not only complementary to rurally-focused projects but also urgently needed. Furthermore, this also supports the Solomon Islands NAPA (2008) which identified human settlements and human health as one of the top priorities for the country under the objective of enhancing resilience to climate change. Other important priorities pertinent to the urban environment included waste management, coastal protection and infrastructure development.

An urban focus is considered particularly important given the rapid urbanization processes that are occurring in the in a number of primate Pacific cities as rural people migrate to have access to better education, health, employment opportunities and other urban services that are often lacking in more remote locations. This, in turn, is leading to the unfettered growth of informal settlements. Indeed, as noted at the Pacific Urban Forum in 2015 (UN-Habitat/CLGF, 2015) urban growth rates in the Pacific are most pronounced in Melanesia, and it is here that the most dramatic growth rates will continue into the future. The Solomon Islands, in particular, is considered to be one of the world's fastest urbanizing countries, with the majority of these migrants heading to Honiara. This large movement of people is overwhelming the urban development and planning capacity of the City Council, and other Government entities. As a consequence while urbanization has the potential to act as a key process in adapting to climate change, it is instead currently exacerbating current and future climate challenges, and adversely affecting the ability of urban communities to respond.

The activity proposed for this project also addresses some of the key limitations that were highlighted in the SIG INDC such as the 'very limited capacity at the community level to undertake local level vulnerability mapping, adaptation planning, and the implementation of priority adaptation actions', and directly addresses a key objective which is to strengthen capacities at the community level for vulnerability mapping and adaptation planning and support the implementation of priority resilience measures through direct access to financing for such measures.

The proposed project focus on strengthening the resilience of Honiara to external shocks and stresses will build on the strong knowledge platform that has already been established by a climate vulnerability assessment for the city (UN-Habitat, 2014)[1] and the subsequent Honiara Urban Resilience and Climate Action Plan (HURCAP). This will be launched by UN-Habitat and local and national government stakeholders in late 2016. The HURCAP process involved close working with local communities (particularly those identified as the most vulnerable in the original assessment), NGOs, local and national government agencies and other stakeholder groups. This highly participatory approach has identified key local problems and then translated the community

[1] http://unhabitat.org/books/honiara-solomon-islands-climate-change-vulnerability-assessment/

objectives into priority resilience actions. It is the intention of this AF proposal to access the funds necessary to support a mix of resilience actions that have been identified by local stakeholders in Honiara through the HURCAP process, as well as providing the necessary local capacity strengthening activity. This is in recognition that a high level of awareness raising and capacity building is needed in the Honiara context to promote self-empowerment of communities and maximize the long-term sustainability of resilience actions that are implemented.

Concrete actions that target reductions in exposure and sensitivity to climate-related impacts have been proposed at the community, ward, and city scale (see details later in this proposal). In both the literature and in practice, such a multi-actor, multi-level, approach to resilience building has been found to be beneficial for effective adaptation planning. This was recognized in HURCAP, with actions set out to benefit individual hotspot communities, vulnerable groups (women and youth), as well as addressing critical city-wide resilience issues. The implementation of local priority actions in support of a climate-resilient Honiara constitutes the vast majority of the requested budget.

Socio-economic context

The Solomon Islands:

As noted by the Solomon Islands Government (SIG) in their INDC response to the UNFCCC, the Solomon Islands comprises of a scattered archipelago of 994 islands combining mountainous islands as well as low lying coral atolls within a tuna-rich and potentially mineral-rich maritime Economic Exclusive Zone (EEZ) of 1.34 million square kilometres. The land area of 28,000 square kilometres with 4,023 kilometres of coastline is the second largest in the Pacific after Papua New Guinea. There are six main islands, Choiseul, New Georgia, Santa Isabel, Malaita, Guadalcanal and Makira, which are characterized by a rugged and mountainous landscape of volcanic origin. Between and beyond the bigger islands are hundreds of smaller volcanic islands and low lying coral atolls. All of the mountainous islands of volcanic origin are forested with many coastal areas surrounded by fringing reefs and lagoons[2].

The Solomon Islands has a population of 598,860 (September 2015 estimate), with around 80% of the national population living on low lying coastal areas. Most people in Solomon Islands are ethnically Melanesian (94.5%). Other large ethnic groups include Polynesian (3%) and Micronesian (1.2%), with a few thousand ethnic Chinese in the country. There are 70 living languages in Solomon Islands with Melanesian languages spoken mostly on the main islands. While English is the official language, only 69% of the population speaks English (SINSO, 2011)[3]. The Solomon Island's Human Development Index (HDI) was 0.510 in 2011, and is one of the lowest in the Pacific, ranking 142 out of 187 countries (UNDP, 2011).

Honiara:

[2] Solomon Islands government (2015, p3) INDC

[3] http://www.mof.gov.sb/Libraries/Statistics/2011_06_-_Report_on_2009_Population_Housing_Census.sflb.ashx

From a population of less than 20,000 at the country's Independence in 1978 the city has grown rapidly to an estimated 87,000 residents in 2015, despite civil unrest disrupting rural-urban migration in the early 2000s (SINSO, 2011)[4]. Although there are a number of urban-classified townships and settlements on other islands across the archipelago (such as Gizo, Noro, Munda and Auki), as well as peri-urban wards on the city fringe within Guadalcanal Province (Tandai and Malango), Honiara is the primary city. There are no other cities with a population of more than 10,000 in the country. Honiara is the only major centre of economic activity and as such attracts increasing numbers of youth and adults from other islands seeking employment and income. Urban migration is estimated at 4% and with the current rate of growth the national population is expected to double by 2020.

With the city located along a thin coastal strip (containing critical national infrastructure) on the northern edge of Guadalcanal Island and extending southward into topographically limiting and hazardous terrain, current and future climate impacts will continue to exacerbate and interact with priority development issues, damaging road infrastructure, sensitive and exposed housing, and causing health issues in the local communities (32% of which fall below the Basic Needs Poverty Line). With one quarter of the urban population lacking access to potable water, 64% lacking rubbish collection facilities, and less than half of the city with sealed sanitation facilities, these development issues also compound climate risks by blocking rivers, spreading disease, and polluting critical ecosystem services.

Honiara City Council has jurisdiction over the municipal area, as shown in the following figure, encompassing approximately 23 square kilometres of rugged hills and valleys rising up from the northern coastline of Guadalcanal Island. The Honiara municipal area is divided into 12 wards, each of which is represented by a single elected councillor. The remaining council positions are comprised of four members appointed by the Minister for Home Affairs, the three members of parliament that represent the Honiara city area, and the premier of Guadalcanal Province (CLGF, 2012). It is surrounded on all sides by land and ocean that falls within Guadalcanal Province's jurisdiction, within which land and near-shore marine tenure is primarily controlled by customary law.

[4] SINSO (2011) http://www.statistics.gov.sb/component/advlisting/?view=download&format=raw&fileId=413

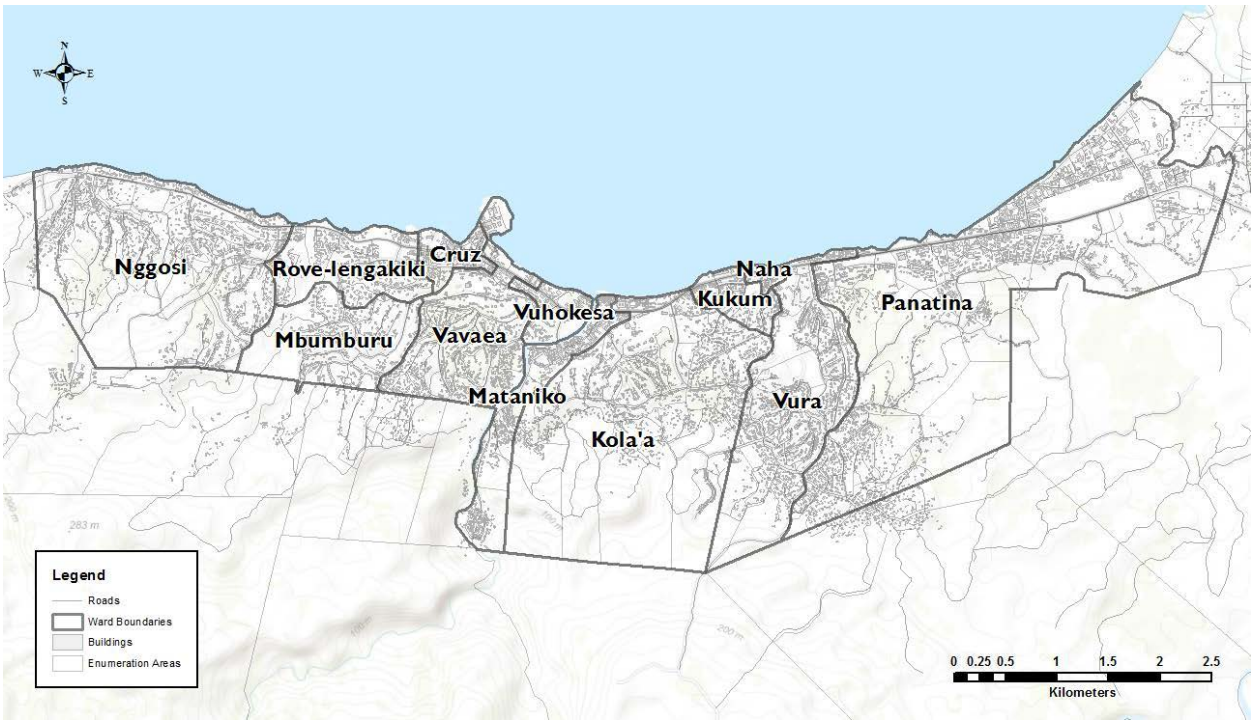

Figure 1: Honiara administrative wards

While the growth rate of the municipal population has slowed over time, peri-urban areas around the city have continued to grow rapidly, including the Guadalcanal wards of Tandai and Malango, bordering Honiara, which grew at an annual rate of 16.4% over the decade prior to 2009. Notably, the disrupted process of urbanization in the Solomon Islands following the 1999 census limits the capacity to project future trends. Fieldwork conducted as part of the HURCAP process suggests that rural-urban migration has accelerated, and may continue at significantly higher rates than those projected in the official 'Constant Migration' scenario.

Although a sizeable area of land within the municipal boundary could yet be developed, particularly in the southern sections of the Kola'a and Panatina wards, growth in these areas has been limited by a lack of road access, utilities and government land releases. As a consequence, the share of the city's population living in informal settlements – in untenured, temporary or makeshift housing – has grown rapidly to roughly one third of the municipality's total population. It is estimated that this figure will reach 50% by 2020 if not addressed through relocation and formalization of tenure.

As shown in Figure 2, spatial analysis of the growth patterns across the city over the decade preceding the 2009 census shows that Honiara's urban footprint continues to expand, with the population in the more established areas of central and eastern Honiara largely stable (Trundle & McEvoy, 2015). A breakdown by wards highlights this distinct spatial distribution, with population growth over the 10 years following the 1999 census focused within Nggosi (5.7% p.a.), Mbumburu (5.0% p.a.) and Panatina (4.7%

p.a.), while Cruz and Naha shrunk significantly (at rates of -6.3 and -6.0 p.a. respectively) (*ibid*). In contrast the peri-urban provincial area of Tandai grew by 25.75% annually to reach a total population of 10,083 by 2009.

The pull factors of jobs, education and access to the global economy has attracted a large number of young people from the provinces to Honiara; in all, 58% of the city's population is less than 25 years old, while a third are less than 15 years of age. While the number of young people aged 15-25 is distributed relatively evenly across wards (with the exception of Cruz, which has only a third of its population within the youth age bracket), the distribution of children is more distinct. As shown in Figure 3, young families are concentrated in the same growth areas evident in Figure 2; Nggosi and Panatina. This 'youth bulge' represents both a challenge and an opportunity for the city. Although the limited number of jobs available has led to high levels of youth unemployment (with associated issues such as heightened occurrences of anti-social behaviour), the concentration of education institutions, youth groups and strong social networks provides a strong capacity for engagement with an active and creative section of the community. Training programs such as the Rapid Employment Project (REP) provide pilot examples of how these sectors of the community can be involved productively in the development of Honiara's urban infrastructure, while at the same time providing jobs and training opportunities (World Bank, 2015)[5].

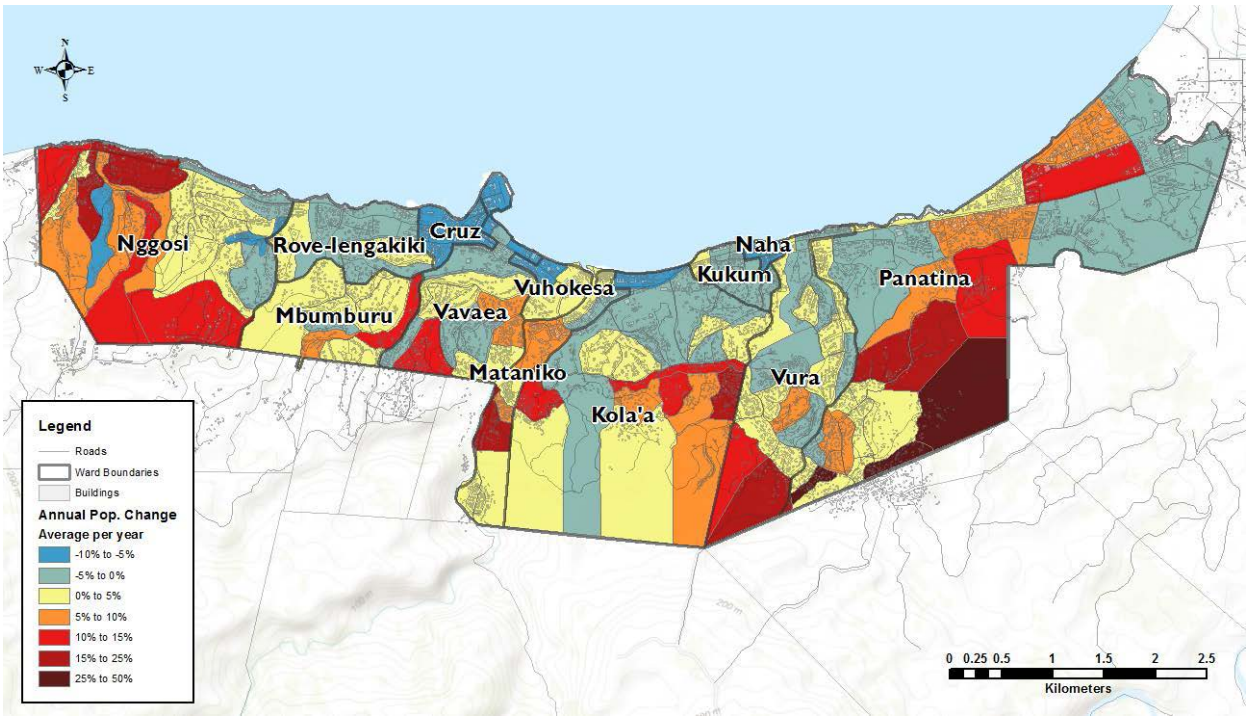

Figure 2: Honiara population growth estimates 1999-2009 by 1999 Enumeration Area (Trundle & McEvoy for UN-Habitat and HCC 2015)

[5] World Bank (2015) Solomon Islands Rapid Employment Project Implementation Status and Results Report: Sequence 7.

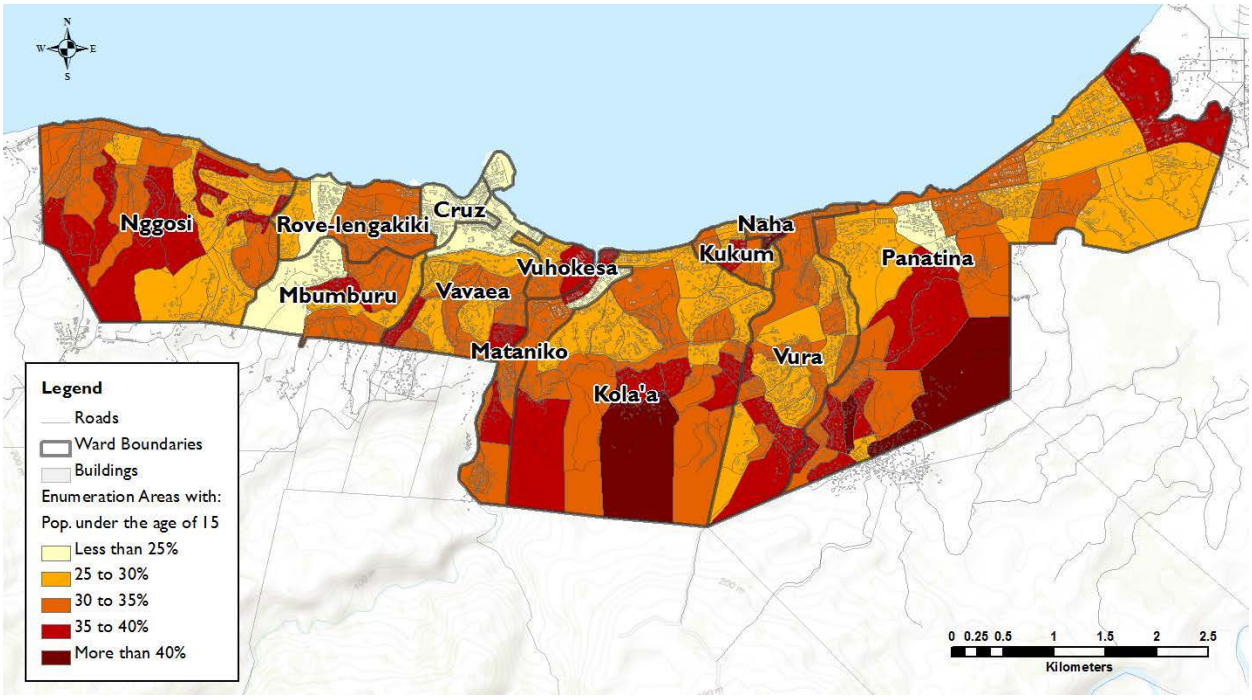

Figure 3: Percentage of total enumeration area population less than 15 years old, 2009 (Trundle & McEvoy for UN-Habitat and HCC, 2015)

Useful data on unemployment, including in urban areas, is extremely limited in Solomon Islands. All anecdotal evidence, however, suggests that the proportion of the working age population engaged in formal sector waged or salaried employment is relatively low. It also suggests that a single income earner within Honiara is often supporting many others, including extended family members (this includes family members in Honiara but also often family in rural areas). In addition, youth unemployment is estimated to be very high. In 2005/06, for example, the unemployment rates for 15–19 year olds was estimated at 75%, and 49% for 20–24 year olds.

Given the lack of formal sector jobs, the informal economy is critically important in Honiara. Research by Union Aid Abroad, for example, revealed a hugely diverse range of informal livelihood activities undertaken by individuals and households across the city. These ranged from selling produced goods such as vegetables, baked goods, and handicrafts, to trading tobacco and betel nut. Overall, the research showed almost all informal sector livelihood activities had a higher return than casual or low paid employment. Recent poverty profiles developed from the 2012/13 Household Income and Expenditure Survey (HIES) are illuminating for Solomon Islands, and Honiara. This work calculated Solomon Islands specific poverty lines (determining the minimum expenditure required to obtain basic food and nonfood goods) that varied across the country. Honiara, for example, had the highest Basic Needs Poverty Line – as meeting basic needs in Honiara costs around twice as much as in the provinces, particularly due to the very high cost of housing in the city. The report also noted that this effect

appeared to spill over into Guadalcanal Province, which had the second highest poverty line in the country (UN-Habitat 2016, Informal Settlements Analysis - draft).

Climate variability

The city of Honiara is heavily influenced by a number of significant regional weather and climate systems, including the South Pacific Convergence Zone, the El Nino Southern Oscillation Index and the West Pacific Monsoon. As a result, its two-season tropical climate is characterized by highly variable inter-annual rainfall, and is exposed to major extreme events such as tropical cyclones, drought, extreme rainfall events and associated flash flooding/landslides, as well as extreme nocturnal/diurnal heat. This variability is expected to be exacerbated under most climate scenarios, with annual warm days already showing a significant increasing trend, sea level increasing above the global average, while oceanic aragonite saturation levels are projected to reach critical levels for coral bleaching recovery under RCPs 4.5 and 8.5 in the next 20-30 years, threatening local livelihoods, cash-economy resource flows (both marine and tourism-based), as well as subsistence food stocks.

***Current climate conditions*:**

Honiara is located 9°25'59" south of the equator at a longitude of 159°56'59" East, and has a two-season tropical monsoon climate. Annual temperatures show little variation month to month, with minimum and maximum daily temperatures ranging on average from 22.0°C to 23.5°C and 30.1°C to 30.7°C respectively (SIMS, BoM & CSIRO, 2013)[6]. In contrast, rainfall varies distinctly on an annual basis, with 70% of average annual rainfall falling within the November-April wet season (known as Komburu), while rainfall during the dry season (or Ara) averages only 110mm per month (see figure 4 below).

Despite these long-term averages showing distinct rainfall patterns and temperature stability, the location of the Solomon Islands at the juncture of the South Pacific Convergence Zone, the Inter-tropical Convergence Zone, and the West Pacific Monsoon leads to significant inter-annual variability, particularly in terms of total annual rainfall. This variation is attributed to shifts in these regional systems, such as to the movement of hot and cold water across the Pacific associated with the El Niño-Southern Oscillation. The extent of this inter-annual variation is significant, with total annual rainfall in 1969 recorded as roughly three times that of the following year (3300mm, followed by 1110mm in 1970).

[6] SIMS, BoM & CSIRO (2013) http://www.pacificclimatechangescience.org/wp-content/uploads/2013/06/13_PCCSP_Solomon_Islands_8pp.pdf

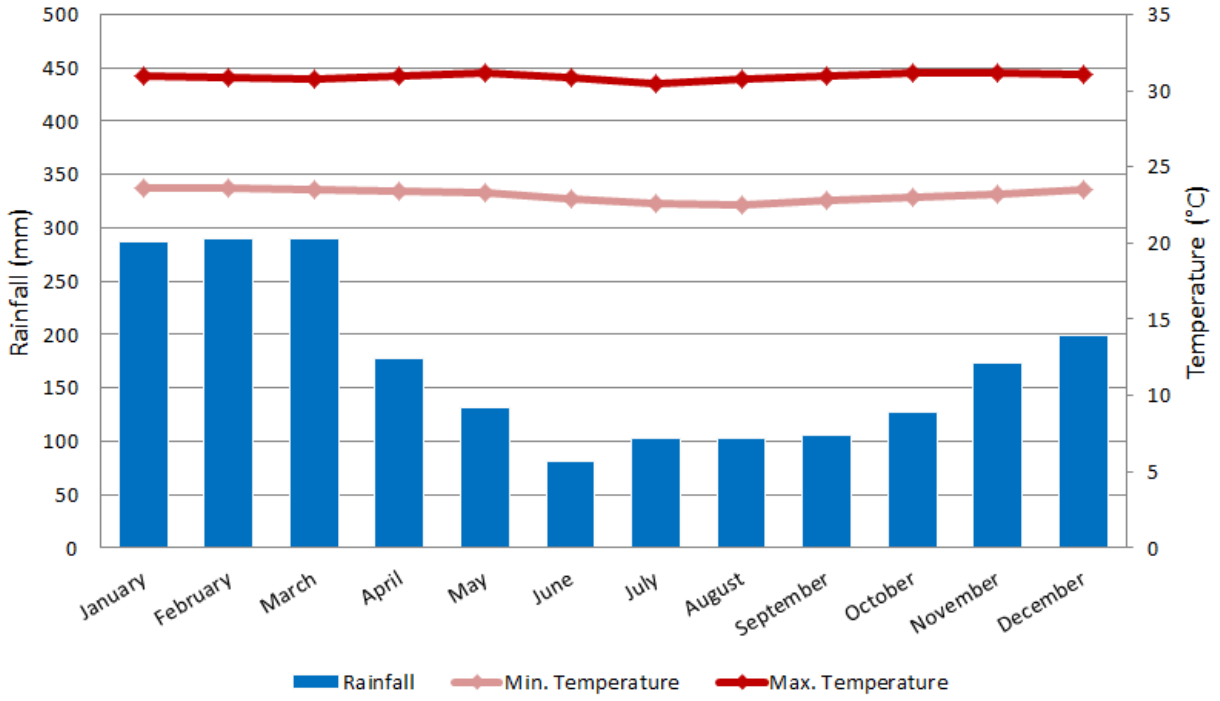

Figure 4: Honiara Monthly Average Rainfall and Temperature (Trundle & McEvoy for UN-Habitat and HCC, 2015)

Extreme weather events:

As a product of the city's tropical climate and the converging regional climate systems, Honiara faces a range of extreme weather phenomena that impact in different ways across the city.

Extreme rainfall events can lead to both localized flash flooding and severe riverine flooding as a product of the large catchment areas that lie upstream of the city, coupled with limited drainage infrastructure and debris-filled waterways. The most extreme such event on record was the April 2014 Floods, caused by peak daily rainfall of 318mm (3rd of April 2014). Although long-term daily rainfall records are not available for the area, modelling-based analysis suggests that this equates to more rainfall than expected in a 1-in-100 year event (Lal & Thurairajah, 2011)[7]. Rainfall has also been associated with the risk of landslips in the more rugged areas of the city, as well as riverbank erosion and the spread of vector-borne diseases. Riverine flood risk areas for the April 2014 floods are known, however spatial information on flash flooding hotspots and riverine flood risk areas for more frequent return periods is not available. Areas of landslip risk also require further analysis, particularly in relation to the Honiara Local Planning

[7] Lal, P. N., & Thurairajah, V. (2011). Making informed adaptation choices: A case study of climate proofing road infrastructure in the Solomon Islands. Retrieved from https://www.environment.gov.au/system/files/resources/67fb2472-ae17-4b88-adb6-62a0c0859940/files/iucn-infrastructure-solomon-islands-case-study.pdf

Scheme, which has placed regulatory restrictions and requirements on building sites located on gradients steeper than 45 degrees (MLHS & HCC, 2015)[8].

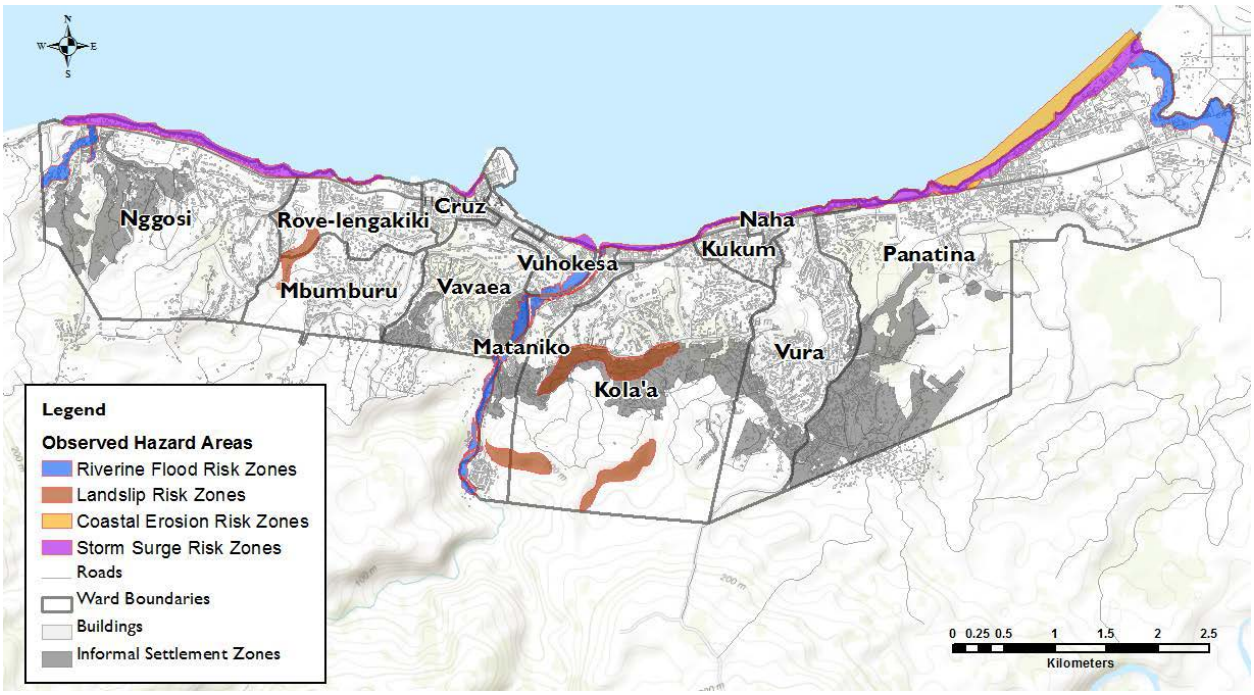

Figure 5: Identified Climate-related Hazard Areas (Trundle & McEvoy for UN-Habitat and HCC, 2015 - data sourced from MLHS, UN-Habitat and MECDM)

Most coastal areas along the northern edge of the city lack natural or artificial defenses from storm surges and tropical cyclones, with those areas of the city likely to be impacted by a 5 metre storm surge height shown in Figure 5. Tropical cyclones are seasonally most likely to occur between November and April, with on average one cyclone passing within 400km of Honiara each year. Tropical Cyclone occurrence varies significantly year-to-year however, ranging from five in 1971/72 to none in various other years (PACCSAP, 2014)[9]. Cyclones are twice as likely to pass in close proximity to Honiara during El Niño conditions as they are during a La Niña event. Exposure to other impacts resulting from tropical cyclone events such as extreme winds are also likely to impact the coastal areas of the city, as well as the ridgeline and north-facing housing in the city's interior. Housing located on southerly-facing slopes below the ridgeline is least likely to be impacted.

Extreme heat events – particularly in the form of hot night-time temperatures – have been noted to be having increasing impact on particular communities, an observation

[8] Ministry of Lands Housing & Survey (MLHS), & Honiara City Council (HCC). (2015). Honiara Local Planning Scheme 2015. Honiara, Solomon Islands. Retrieved from http://www.honiaracitycouncil.com/wp-content/uploads/2014/09/Honiara-Local-Planning-Scheme-2015.pdf

[9] http://www.pacificclimatechangescience.org/wp-content/uploads/2014/07/PACCSAP_CountryReports2014_WEB_140710.pdf

supported by SIMS data showing a strong increase in the number of very hot day-time and night-time temperatures over the last two decades. These extreme heat conditions are worsened in high-density areas, where a lack of through-flow prevents cooling through sea breezes and natural air circulation.

Drought and coral bleaching events have historically had a secondary impact on the city by reducing the availability of food, livelihood products, and water, while also driving rural-to-urban migration. However, exposure to these events is not spatially specific to the Honiara municipal area.

Climate trends and projections:
Trends in annual rainfall and average temperatures in Honiara are shown in Figures 6 and 7. The overall trend in annual rainfall is not statistically significant; however a clear warming trend is evident across mean, maximum and minimum air temperatures. Sea surface temperatures show a similar warming trend, increasing at a rate of 0.12°C per decade since the 1970s (PACCSAP, 2014).

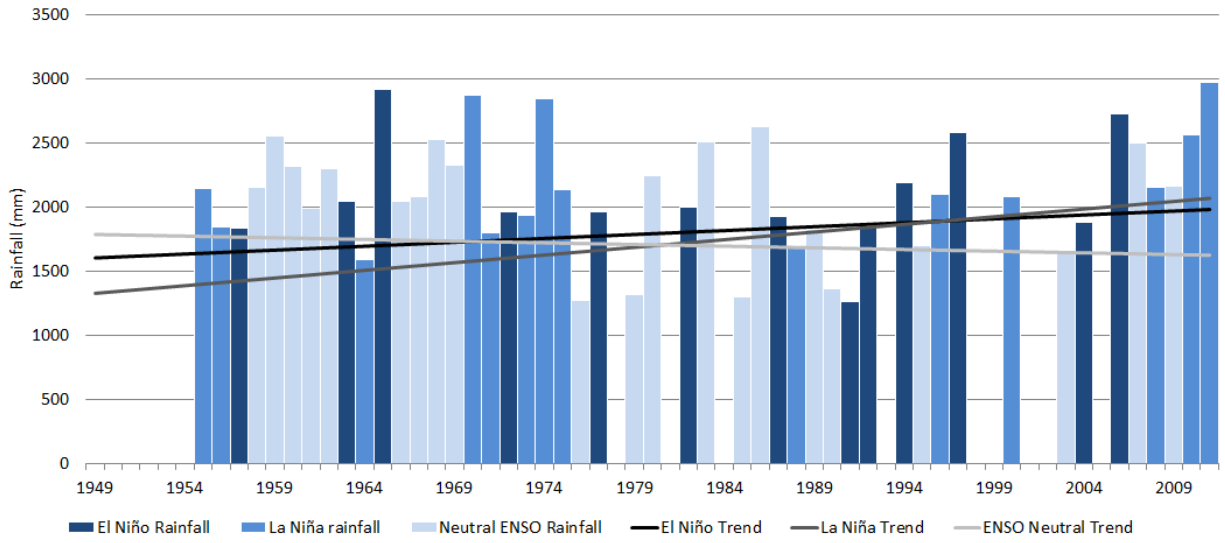

Figure 6: Long-term rainfall trends in Honiara by ENSO status (Trundle & McEvoy for UN-Habitat and HCC, 2015 - sourced from PACCSAP, 2014)

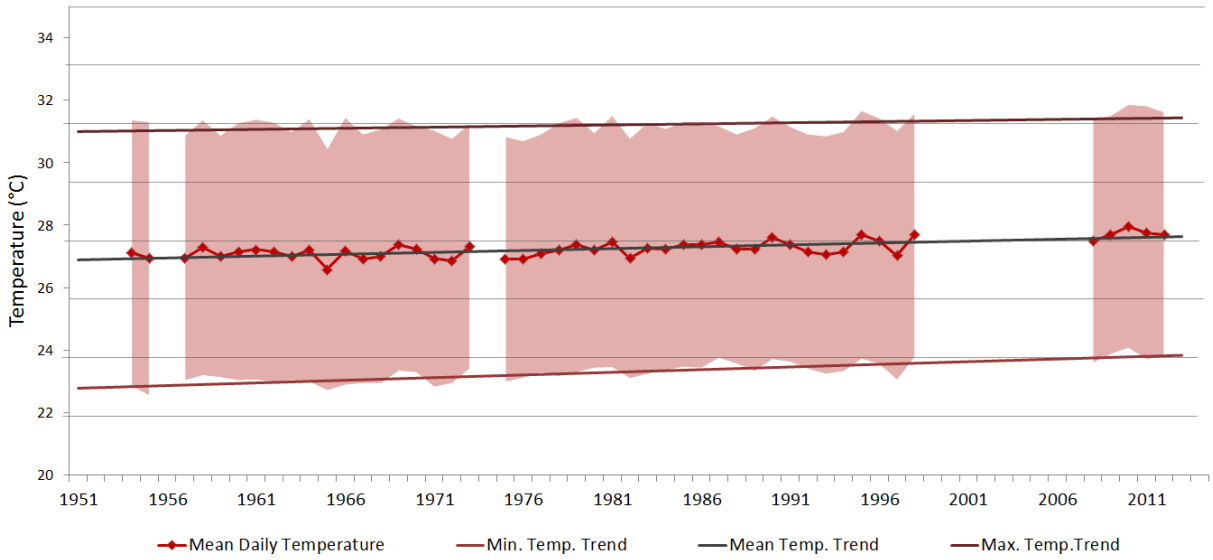

Figure 7: Long-term mean, maximum and minimum temperature trends, Honiara (Trundle & McEvoy for UN-Habitat and HCC, 2015 - sourced from PACCSAP, 2014)

Seasonal and daily rainfall trends are not clear, although the number of rainy days experienced in Honiara has decreased slightly (3.75 less rainy days per decade). As noted, extreme temperatures have shifted significantly, with nighttime extremes showing a strong increase in unusually hot minimum temperatures, and a similar decrease in extremely cool nighttime minimums.

Satellite observations of near-shore sea level rise around Guadalcanal shows an increase of more than double the global average, rising at an average rate of 8mm per year since 1993 (PACCSAP, 2014).

Analysis of trends in tropical cyclone occurrence and intensity is not recommended at the country level in the Pacific region.

Future climate projections are based on Representative Concentration Pathways (RCPs), which reflect different warming scenarios dependent on the level of global emissions over time. The agreement between Global Climate Models (GCM's) – as well as their consistency with the underlying science and observations – is reflected in the 'confidence' levels that are applied; as determined by the Pacific-Australian Climate Change Science and Adaptation Planning Program (comprising climate science experts from the Australian Bureau of Meteorology and the Commonwealth Science and Industry Research Organisation).

There is very high confidence that both sea surface and air temperatures will continue to increase across the Solomon Islands. However, the range of this change varies increasingly with the longer-range projections, particularly for higher emissions scenarios. By 2030 annual temperatures are projected to increase by approximately 0.7°C irrespective of the emissions trajectory over the next decade and a half, while by

2090 a ‘business as usual’ high emissions scenario could result in as much as a 4.0°C annual temperature increase (PACCSAP, 2014).

Extreme temperatures are projected to increase by a similar amount, while the frequency of extreme heat days is also projected to increase, although there is low confidence in both the magnitude of the intensification and the frequency with which such days will occur.

Projected changes to annual rainfall are largely within the existing range of rainfall variability, with only low confidence that annual rainfall in the Solomon Islands will increase, due to the uncertainty around changes to regional climate systems in the area and a wide variation between model outputs. Extreme rainfall events, however, are expected to increase in frequency and intensity, with a current 1-in-20 year daily rainfall event increasing by 9mm by 2030. This increases to and additional 43mm by 2090, under a worst-case, very high emissions scenario (RCP 8.5). The frequency of a current-day 1-in-20 year rainfall event – the equivalent of approximately 220mm of rainfall within a day – would increase to once every 4 years by 2090 under the same scenario (PACCSAP, 2014).

There is very high confidence that ocean acidification will continue to increase, with moderate confidence that under low to very high emissions scenarios, aragonite saturation will fall below 3.4Ωa around 2040 (a critical threshold for coral health, below which reefs struggle to grow or rebuild). However, under a very low emissions scenario (RCP2.6) viable health reef conditions are likely to continue. These effects will be coupled with an increasing risk of coral bleaching events, a product of increased sea-surface temperatures. Such events are projected to increase in frequency (bleaching events that occur more than once every 5 years in the same location can lead to a reef area dying permanently).

Projected sea level rise in the longer-term ranges significantly due to uncertainty regarding the contribution and speed of melting of the Antarctic ice sheet (PACCSAP, 2014: p275). Inter-annual variability has historically ranged 31cm around the long-term average, and is projected to maintain a similar range as the overall average sea level increases.

There is low confidence in the projected change to the frequency, duration and severity of droughts that the Solomon Islands will face under climate change, although the proportion of time spent in drought is expected to remain the same or decrease slightly, as is the frequency of drought events.

Climate models are not yet effective at modelling regional changes to tropical cyclones, due to their relatively small size and short lifespan within the global climate system. At a global scale, by 2100 tropical cyclones are projected to decrease in frequency (between -6 and -35%), but increase in maximum wind intensity (+2 to +11%), with an estimated increase in rainfall by an average of 20% within 100km of the cyclone’s eye (PACCSAP,

2014: p.272). Within the South-West Pacific region, the change in the frequency of cyclone is similar to the global average, however with greater model disagreement.

Sensitivity of people and critical infrastructure:
Socio-economic measurements can be used as proxies for the likely sensitivity of different households and urban areas to certain climate impacts; with tenure, housing type, infrastructure access, health and demographics resulting in different levels of impact from climate-related hazards. For example, although the same areas may be impacted by a tropical cyclone, areas with better housing quality might be less damaged by extreme winds. Similarly, communities which are dependent on fishing for livelihoods or income will be most sensitive to coral bleaching events that result in a depletion of fish stocks.

The initial analysis of climate sensitivity is contained in the Honiara Climate Change Vulnerability Assessment (UN-Habitat, 2014) but has been complemented by HURCAP analysis and mapping of the 2009 National Census data at a sub-ward level across the city. Additionally, transect walks and community workshops in key hotspot locations provided further local information on climate sensitivity at the household level.

Informal Settlement Zones (ISZs) comprise almost 15% of the city's total land area, and contain an estimated 28% of the city's population. In addition to these zones, informal housing structures can be found throughout the city on road reserves and other accessible un-populated areas, such as the national cemetery and the botanical gardens (UN-Habitat, 2016). Two examples of these untenured structures are shown in Figure 8. Both are limited in terms of their structural integrity as well as being located in areas that were exposed to flooding in 2014. Other examples of housing exposed to flood and landslide risk are shown in Figure 9.

Figure 8: Informal housing structures outside of on road reservations and embankments in Mataniko Ward

Figure 9: Housing exposed to climate-related risks in Honiara

Almost half of Panatina Ward's total population (48.6%) is contained within ISZs, while Kola'a Ward comprises a similarly large ISZ population (39.9% of its total ward consistency). 20-30% of Nggosi, Vavaea, Mataniko and Vura's populations also reside within these zones. ISZs have a significantly higher population density than the rest of the city (52.7 residents per hectare compared with 26.8 city-wide), which increases sensitivity to extreme heat, and worsens health-related issues such as vector- and water-borne disease. Other urban areas with notably high population density are Ontong Java settlement (also known as Lord Howe Settlement) in Mataniko Ward (218 residents per hectare), and Fishing Village in Panatina Ward (112 residents per hectare), as shown in Figure 10. In both of these areas, the unplanned built form was noted to be preventing on-shore breezes from penetrating the settlements, worsening issues associated with extreme heat days that were being observed by community members.

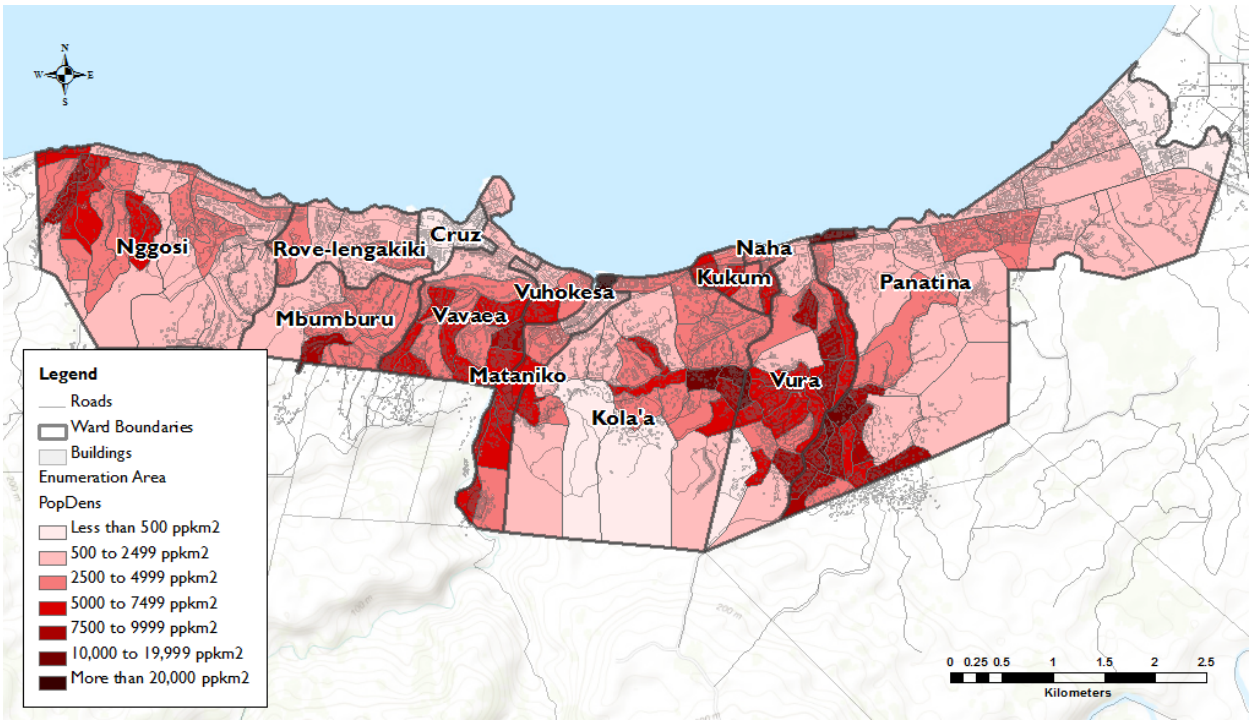

Figure 10: Population Density by Enumeration Area, 2009 (Trundle & McEvoy for UN-Habitat and HCC, 2015)

A second aspect of sensitivity that cuts across multiple climate hazards is access to, and quality of, sanitation. This has the potential to compound the immediate impacts of flooding with the spread of disease, and can lead to underlying health conditions that also heighten sensitivity to extreme heat events. Furthermore, seepage into groundwater has the potential to put the city's water supply at risk, as well as affecting local water sources. Over a third of households in Vuhokesa and a similar percentage of Naha ward residents (31.5%) have either unsealed or no toilet facilities. Hotspot areas in larger wards are offset by more established, connected locations, which generally correspond to formal land tenure. City-wide, roughly 17% of households lack access to these basic sanitation services. Approximately 30% of the city is connected to the Solomon Water sewerage network (UN-Habitat, 2014: p.16).

One quarter of households across the city lack formal metered access to potable drinking water, although unauthorised secondary water connections are commonplace particularly within ISZs. Panatina and Rover-Lengakiki Wards have the lowest levels of potable water access (63.6% and 68.9% respectively). The city's official water supply is sourced from a combination of groundwater sources and freshwater springs, located within or adjacent to the city boundary, with the city's main water supply located upstream of Nggosi ward within the White River catchment (Kongulai Spring).

Access to the SIEA electricity grid follows a similar pattern across the city, with the exception of significantly lower access rates in Nggosi Ward (53.6%). Vuhokesa ward recorded the lowest rate of SIEA connections per household (48.0%), while Kola'a, Panatina and Vavaea all fell within the 55-65% electricity access range. It was noted

during site analysis that housing constructed with traditional materials were not permitted to be connected to the grid, limiting access to some customary sites along the Mataniko River, as well as a number of informal settlements. In total roughly two thirds of households in Honiara have electricity access, although a number of off-grid houses were observed to be using small solar panels to generate power for devices such as mobile phones.

The city's power supply is heavily dependent on imported diesel, which, combined with transport fuel, accounts for roughly 30% of the country's goods imports by cost, and 80% of SIEA's expenditure (MMERE, 2014). Based on 2013 figures Honiara's power supply consumes an estimated 16.2 million litres of diesel annually. Port access and diesel storage in Cruz, as well as the continuing operation of the city's two power stations, is therefore critical following an extreme weather event.

As noted in the Honiara Vulnerability Assessment, previous tropical cyclone events have brought down power lines, resulting in power outages. A one-megawatt photovoltaic rooftop array supplements the diesel generators, with back-up generators located at most government ministries and other key infrastructure facilities. A number of small-scale hydro stations are also currently being refurbished, and are due to return to operation in 2016.

Makeshift and improvised roofing increases the sensitivity of housing to tropical cyclone, extreme wind and flood events, with poorly constructed housing structures along the Mataniko River collapsing during the 2014 floods; resulting in large debris that damaged downstream infrastructure. Poor quality roofing can also lead to heightened risk in extreme heat, reducing shading of walls and insulation of inside spaces. These houses are concentrated in ISZs, where a lack of formal tenure was noted to prevent investment in stronger housing designs and materials.

Vulnerability hotspots

4 hotspot communities were initially identified as being particularly vulnerable by the UN-Habitat vulnerability assessment in 2014 (a finding that was borne out during the Mataniko River flood event that killed over 20 people, and caused widespread damage to infrastructure and buildings, shortly after the assessment was published).

Although the damage suffered by one of the communities was so severe that it no longer exists as before, therefore 'Planning for Climate Change' engagement took place with the other three (Ontong Java/Lord Howe, Kukum Fishing Village, and Aekafo Planning Area in the Kola'a ward) as part of the development of the HURCAP. These were:

1. Ontong Java Settlement, also referred to as Lord Howe Settlement, remains one of the highest priority hotspot areas, being located at the mouth of the Mataniko River and 0.5 metres below the current high-water mark. The community faces additional hazards such as heavily polluted internal drainage systems,

overpopulated high density housing, and a lack of basic sanitation and proximity to sewerage outfalls from the National Referral Hospital (which has limited waste treatment capabilities). Saline water-logging was preventing planting of gardens within the community, as well as the digging of pit-latrines. Extreme night-time temperatures were also identified as being an issue, with sea-breezes prevented from penetrating into the settlement due to overcrowding.

2. Kukum Fishing Village, is located in Vura Ward adjacent to the Kukum highway along a thin strip of coastline that has been heavily eroded in past cyclone events. The dependence on fisheries for livelihoods further heightens the community's vulnerability to the marine impacts of climate change, while the community experiences similar issues to Ontong Java Settlement with a neighbouring sewerage outfall polluting the local environment. Health risks associated with water pollution and poor rubbish collection services were also noted by community members, which were worsened by the high population density and overcrowding in the area.
3. The Aekafo Planning Area in Kola'a Ward includes the two informal settlements of Matariu and Jericho; hotspots highlighted in the Honiara Vulnerability Assessment. This area has limited road access and no formal connection to utilities and services, resulting in severe pollution along the riverine valley and significant risk from disease due to a lack of basic sanitation. A large portion of the area is also potentially at risk of landslip, with houses built without formal approval or under Temporary Occupation Licences, resulting in variable structural quality and little to no government regulation.

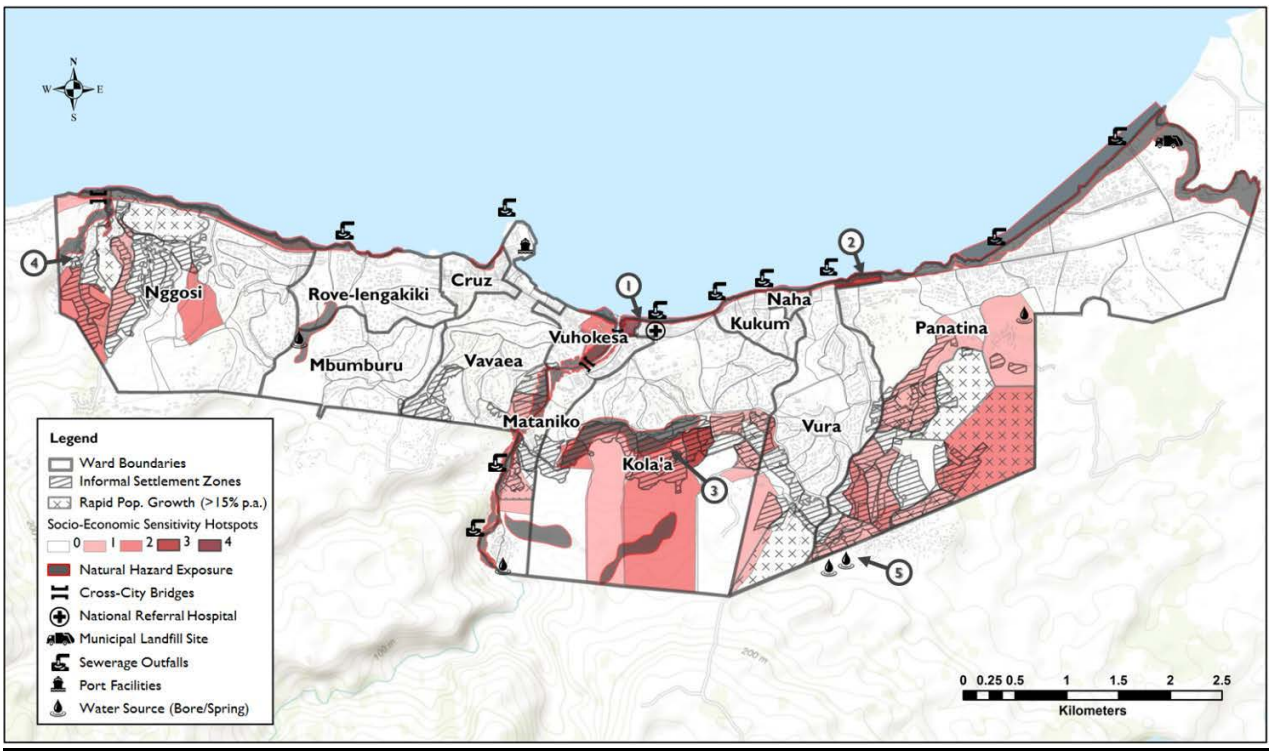

Figure 11: Hotspots based on climate impact assessment – exposure and sensitivity overlays (Trundle & McEvoy for UN-Habitat and HCC 2016)

Ontong Java community-level actions:
The Ontong Java community is located on the coast at the mouth of the Mataniko River. The majority of issues that were raised relate to either being on the coast, flooding and need for improved drainage, or alternatively to general development deficits which are worsened by their location. As a consequence, availability of alternative land for resettlement was considered a primary action across multiple issues / objectives.

Priority actions identified: 1) improved flood risk management and drainage; 2) reduce water logging; 3) access to additional land; 4) manage coastal erosion and sea/river protection measures; 5) preparedness for coral bleaching; 6) reduction in water pollution; 7) waste management; 8) manage exposure to extreme heat; 9) reduce environmental health issues.

Aekafo Planning Zone, Kola'a, community-level actions:
Kola'a is situated in steep, hilly terrain upstream from Ontong Java and as a consequence many of the issues that were identified by local community members were linked to flood and landslide risks, accessibility, infrastructure deficits, as well as limited rubbish disposal and poor sanitation (the overwhelming majority of actions were linked to water, sanitation and waste).

Priority actions identified: 1) risk zoning and housing development restrictions (flood and landslide); 2) improved housing quality; 3) households to have land title; 4) improved road infrastructure; 5) improved sanitation and drainage; 6) waste management; 7) clean drinking water; 8) public health; 9) education on environmental risks; 10) zero violence community.

Kukum Fishing Village community-level actions:
Fishing Village is again most concerned about coastal issues, though due to location there is less focus on riverine issues than is the case with Ontong Java (though relocation was also cited as an option). There is also more noticeable attention paid to disaster risk reduction. Again, as with the other two hotspots, many of the critical issues relate to deficits in development.

Priority actions identified: 1) relocation / additional land; 2) dealing with over-population; 3) flood risk management; 4) being safe from cyclones; 5) improved sanitation; 6) access to drinking water; 7) protection from SLR and coastal erosion; 8) reduced risk from tsunami and cyclone; 9) reduced coastal pollution; 10) reduced risk of fire.

It is evident that the issues and actions that were identified during the 'Planning for Climate Change' engagement process were not just related to climate change but also involved disaster risk reduction and more general urban development / planning issues (see figure 12). Responses to critical community problems can therefore be considered either climate-driven, climate-influenced or non-climate in nature. However, it is important to recognize that current day development deficits are severe in many parts of Honiara and amplify the 'sensitivity' of local communities to the impacts of climate change. Addressing these current-day development issues is therefore a critical initial stage of enhancing community resilience to climate change and natural disasters.

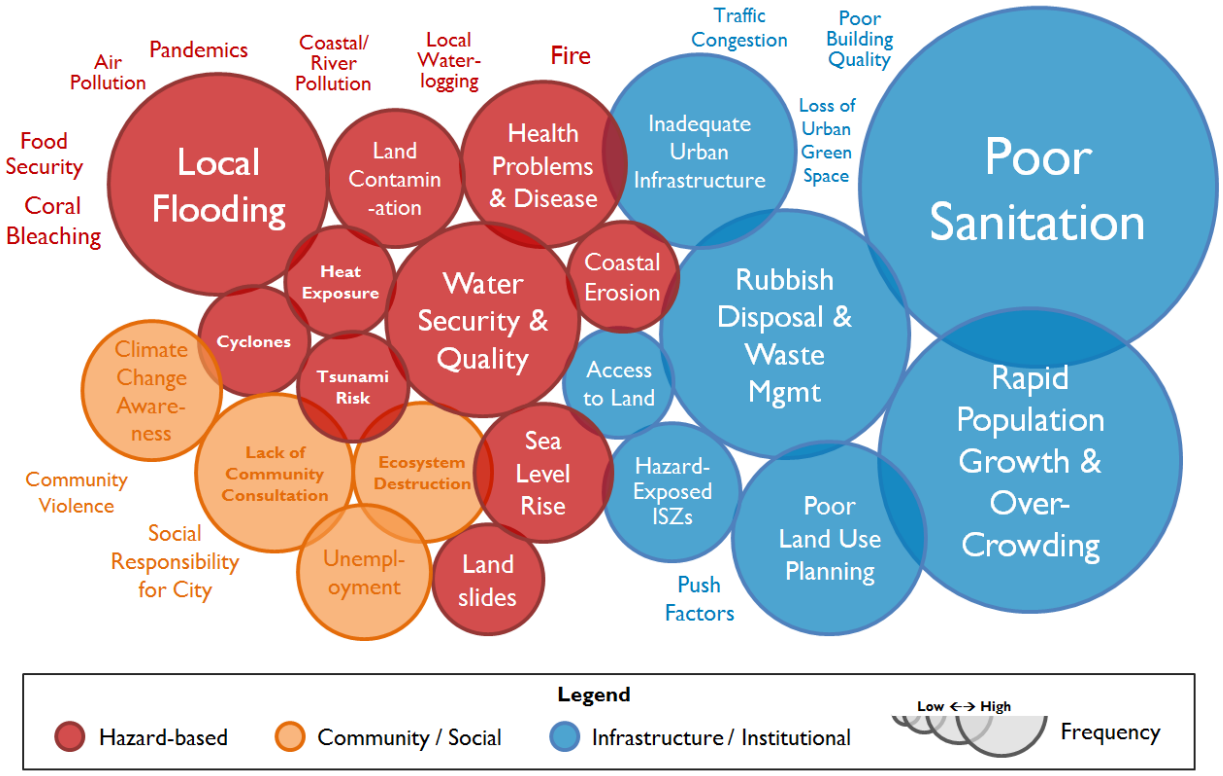

Figure 12: Community Level Priority Issues (Trundle & McEvoy for UN-Habitat and HCC 2015)

The initial assessment of hotspot locations was further developed in the HURCAP process using a range of exposure, sensitivity and adaptive capacity overlays to provide an updated spatial representation of areas that could be considered the most vulnerability to the impacts of climate change and natural hazards (as shown in Figure 13 below).

This second phase assessment identified additional areas that can be considered vulnerability hotspots (see following figure). Two additional communities (White River, Nggosi ward, and Tuvaruhu, Panatina ward) will therefore be added to the community-level action plan and will be subject to similar activity aimed at identifying key local issues and translating these into objectives and actions. The intended vulnerability hotspots to act as case studies for actions are therefore:

- Kukum Fishing Village (coastal)
- Ontong Java (coastal and downstream in the Mataniko River catchment);
- Aekafo planning zone (hilly, steep ravines, further upstream in Mataniko River catchment);
- Tuvaruhu, Panatina (furthest inland, Mataniko River catchment, settlement expansion, subject to cross boundary);
- White River, Nggosi (settlement expansion, subject to cross boundary issues).

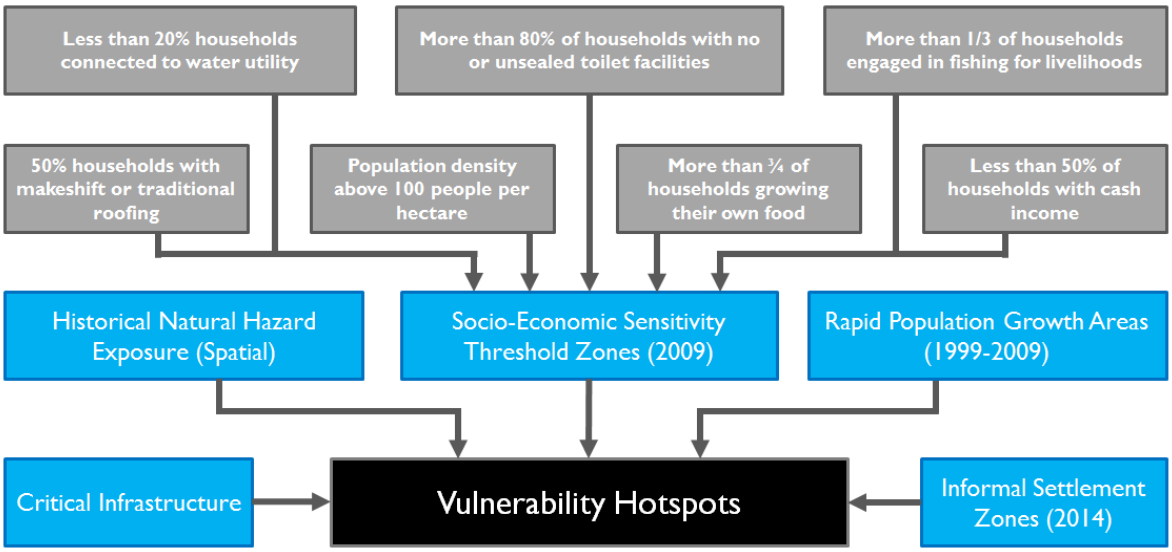

Figure 13: Data overlays used to highlight vulnerability hotspots (Trundle & McEvoy for UN-Habitat and HCC, 2015)

Table 2bis: Community Summary

Hotspot Name	Number of Households	Total Population	Honiara City Council Ward Location	Number of Women (estimate)**	Youth & Children (0-24 years)**
Ontong Java	77	610	Mataniko	287	342
Kukum	60	453	Vura	213	254
Aekafo Planning Area	822	5183	Kola'a	2436	2902
White River	113	789	Nggossi*	371	442
Tuvaruhu	360	2339	Panatina*	1099	1310

* Parts of these settlements have overflowed into Guadalcanal Province, beyond the Honiara City Council boundary (Source NSO, 2009 Census)

** Based on 2009 city-wide demographic statistics

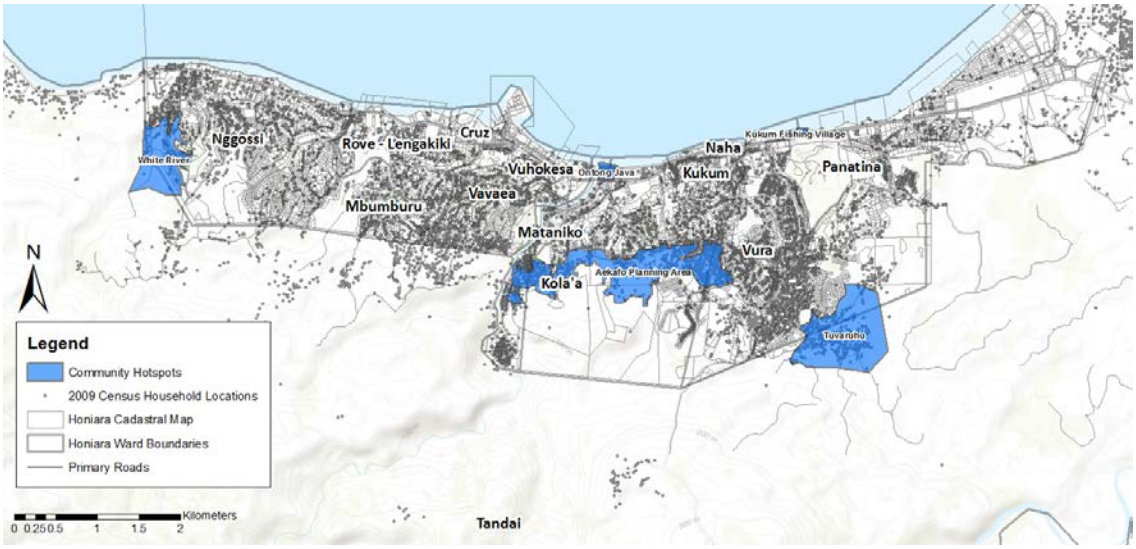

Figure 13 bis: Selected hotspots

Project / Programme Objectives:

Goal:

In line with and in support of the Honiara Urban Resilience and Climate Action Plan, the overarching goal of this project is to enhance the resilience of Honiara and its inhabitants to current and future climate impacts and natural disasters, with a particular focus on pro-poor adaptation actions that involve and benefit the most vulnerable communities in the city.

Objectives:

Community-level

1) To support the implementation of prioritized resilience actions in vulnerability hotspot communities.
2) To strengthen the capacity of local communities to respond to climate change and natural hazards through awareness raising and capacity development training.

Ward-level

3) To support the implementation of resilience actions that target women, youth, urban agriculture and food security, and disaster risk reduction.
4) To strengthen the capacity of ward officials / councils to lead climate change adaptation and DRR planning activity, in support of increased urban resilience.

City-wide

5) To strengthen institutional arrangements at the city-level to respond to climate change and natural disasters through mainstreaming, improved partnership working

Project Components and Financing:

Table 1: project components and financing

Program components	Expected outputs	Outcomes	Amount (USD)
1. Community level actions	1.1. In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements	Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level (AF Outcome 3)	$40,000
	1.2. In-depth community profiling for the hotspot case studies[10]		$50,000
	1.3. Scoping and feasibility studies of prioritized local actions for each hotspot community		$50,000
	1.4. Implementation of screened / agreed resilience actions in each hotspot community[11] (hard)	Increased adaptive capacity within relevant development and natural resource sectors (AF Outcome 4)	$1.580,000
			$1.720,000
2. Community level capacity strengthening	2.1. Training on conducting community profile self-assessment	Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level (AF Outcome 3)	$60,000
	2.2. Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)		$120,000
			$180,000
3. Ward level actions	3.1. To develop a women-focused climate risk communications program	Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level (AF Outcome 3)	$80,000
	3.2. To integrate climate change into educational programs for youth and children		$80,000
	3.3. Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented[12] (hard)	Increased ecosystem resilience in response to climate change and variability-induced stress (AF Outcome 5).	$450,000
	3.4. Climate resilient community spaces developed, including productive open spaces and community evacuation centres (hard)	Increased adaptive capacity within relevant development and natural resource sectors (AF Outcome 4)	$450,000
			$1.060,000
4. Ward level capacity strengthening	4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)[13]	Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses (AF Outcome 2)	$100,000
	4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate action planning		$80,000
	4.3. Assess locally appropriate land administration		$100,000

[10] Synergies to be sought with UN-Habitat's Participatory Slum Upgrade Programme.
[11] Possible synergies with Mataniko River clean-up program or SPREP Ecosystem Services project etc.
[12] Links to SPREP Ecosystem Services and UN-Women Markets for Change projects.
[13] Links to ICLEI / UNISDR DRR self-assessment and action plan for HCC.

	options for peri-urban locations		**$280,000**
5. City-wide governance and capacity strengthening	5.1. Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC 5.2. Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping. To be held at RMIT in Melbourne 5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings 5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation 5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes)	Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses (AF Outcome 2)	$30,000 $70,000 $150.000 $30,000 $30,000 **$310,000**
6. Knowledge Management and Advocacy	6.1. Climate change training and knowledge exchange 6.2. Advocacy materials 6.3. Knowledge sharing platform 6.4. Project learning mechanism	Project implementation is fully transparent. All stakeholders are informed of products and results and have access to these for replication;	$150.000 **$150,000**

7. Project/Programme Execution cost	351.500
8. Total Project/Programme Cost	4.051.500
9. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)	344.377
Amount of Financing Requested	4.395.877

Table 2: Relevant Adaptation Fund outcomes

Outcome 1: Reduced exposure at national level to climate-related hazards and threats
Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses
Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level
Outcome 4: Increased adaptive capacity within relevant development and natural resource sectors
Outcome 5: Increased ecosystem resilience in response to climate change and variability-induced stress

Projected Calendar:

Table 3: Project calendar

Milestones	Expected Dates
Start of Project/Programme Implementation	06-2017
Project/Programme Closing	06-2022
Terminal Evaluation	09-2021

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. The project components

Program design:

The proposed project has been designed to reflect the importance of both adaptation processes and outcomes, though with an intentional emphasis on concrete actions that have already been identified by local stakeholders through the HURCAP process. With outputs 1.4, 3.3 and 3.4 the hardware/assets/infrastructure development component of the project is 67 percent, part at the ward level but most at the community level. Greatest attention is paid to the informal settlements and 'hotspot' communities that have been identified as being in greatest need (according to a combination of exposure, sensitivity and adaptive capacity criteria). It is intended that findings will also be transferable to other urban communities.

The project will engage across all spatial scales with resilience actions and capacity building at **city-wide**, **ward** and local **community** levels. A combination of actions, and capacity building across spatial scales, is seen as particularly innovative (and necessary) and ensures that actions are not stand-alone, rather are integrated into a resilience action plan for the city and hence more likely to be sustainable in the longer term. One important 'process' outcome is improved institutional arrangements and working relationships between national and city Government, ward councils (as closest entity to communities and bridging agents for adaptation planning and actions) and vulnerable communities (the direct beneficiaries of actions).

At the community level, a list of priority actions that were identified by local communities are listed on p19 of this proposal. A similar exercise to identify key actions will take place with the two additional hotspot communities (as noted on p20). However, given budget limitations, it will not be possible to implement all actions that have been identified as local needs. Therefore, the intention of this project is to work closely with the communities to 1) prioritize actions for implementation, 2) assess their feasibility and longer-term benefits, 3) screen prioritized activities for their adaptation benefit, and 4) consider where the same actions could be introduced across multiple communities in Honiara in ways that enhance adaptation learning and knowledge transfer between communities (e.g. tree planting initiatives to reduce coastal or riverine flooding, erosion etc.). The overarching themes for these potential actions is indicated on p30 of the proposal, and the 5 hotspot communities together have been allocated USD1.580.000 to implement their hardware/assets/infrastructure priority actions over the 4 year period of the project.

At the ward level the concrete actions focus on women and youth. These activities range from the development of theatre performances, education modules, and the piloting of urban agriculture best practice. Besides that, concrete ecosystem-based adaptation and resilient community spaces development, worth USD900.000, will take place in an urban setting.

The project of resilience building activity will be coordinated and managed by UN-Habitat, with oversight provided by an in-country manager who will be based at the offices of Honiara City Council (this arrangement being agreed at a Government stakeholder meeting in Honiara in June 2016). A project steering committee will include representation from the City Council, Guadalcanal Provincial Council, the Ministry of Lands, Housing and Survey, and the Ministry of Ministry of Environment, Climate Change, Disaster Management and Meteorology. This arrangement provides strong institutional support for the program not only between different levels of Government but also in terms of addressing environmental issues and land administration across the city/provincial boundary. Other key stakeholders will also be involved depending on the activity involved.

Scientific expertise, training, and capacity development support will be provided by multi-disciplinary academic resources at RMIT University, Melbourne, Australia. RMIT University researchers, Professor Darryn McEvoy and Alexei Trundle, have led the development of the Honiara Urban Resilience and Climate Adaptation Plan (HURCAP). Their extensive connections and track record in this context ensure that planned actions will maximize synergies with other ongoing country environmental initiatives and involve the relevant stakeholders. Their leadership of the project will be strongly supported by RMIT staff (from various disciplines) who have also conducted research and have extensive networks in the Solomon Islands and the wider Pacific region.

The importance of building on community strengths:

Adaptive capacity is a measure of the resources, institutional and community structures, and knowledge networks and skills that are able to be used or activated in response to a shock or long-term stress. Adaptive capacity counteracts the heightened vulnerability resulting from exposure and sensitivity, and can be similarly considered in terms of spatial variation within the city, as well as across the city as a whole.

A rapid assessment of city-wide adaptive capacity was conducted by a series of stakeholder groups in 2015, including the Honiara City Council, Solomon Water, the National Disaster Management Office, as well as youth and NGO representatives, and hotspot communities. The outcomes of this are shown in Figure 14, and supplement the outcomes of the 2012 city consultation workshop, which provided the baseline for assessing adaptive capacity in the Honiara vulnerability assessment (UN-Habitat, 2014: p.15).

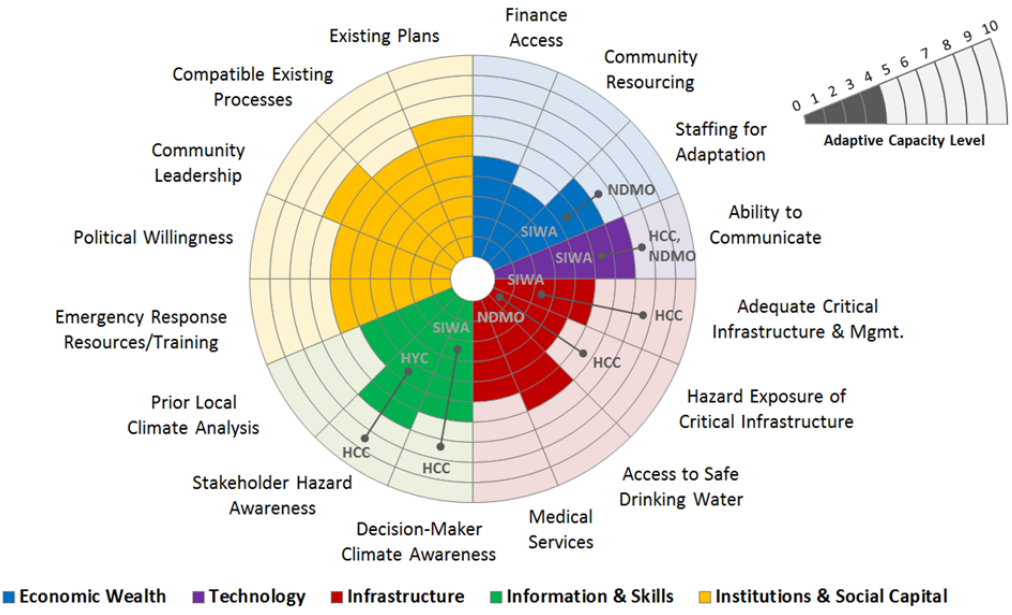

Figure 14: Adaptive Capacity (Trundle & McEvoy for UN-Habitat and HCC 2015)

Access to finance is an issue at both community and household levels, as well as across national government agencies. As noted in the PCRAFI Disaster Risk Financing and Insurance Country Note, disaster relief through the National Disaster Council has a limited national budgetary allocation (USD305,250 in 2013), which has a 77 percent chance of being exceeded in a given year. This results in heavy dependency on international recovery funds and limits preparatory and preventative actions (World Bank, 2015b)[14]. At a household level, 32% of the population falls below the Basic Needs Poverty Line (UN-Habitat, 2014: p.15). These results are consistent with the 2012 workshop findings that access to finance is both a critical limitation to city wide adaptive capacity, as well as resourcing community and household-level resilience building measures.

Similarly, the vulnerability of critical infrastructure to climate-related events – such as cross-city bridges, the National Referral Hospital, and Honiara International Airport – was viewed as seriously limiting institutional responses following a natural disaster event such as a tropical cyclone. The lack of effective back-up electricity generators for mobile phone communications was also identified as an area of critical response infrastructure that would have a knock-on effect in reducing collective adaptive capacity.

An important component of city-wide adaptive capacity related to the ability to communicate (both in terms of formal institutional communication procedures, and collective social response measures), and stakeholder and community awareness of climate-related natural hazards. Existing community leadership structures, particularly through *kastom* networks and ward-level committees, were identified as being effective following historical disaster events, with a number of the residents displaced due to the

[14] World Bank (2015) – Disaster Risk Financing and Insurance - Country Note, Solomon Islands

April 2014 floods being quickly re-housed through kinship networks, families and church groups.

Although the number of existing strategies and plans was seen as being a city-wide strength, the implementation, effectiveness, and awareness of these documents in both key government agencies and the community as a whole was noted to be limiting. Other areas, such as the awareness of decision-makers of climate change and the adequacy of critical infrastructure, were inconsistently assessed by different stakeholder groups, suggesting that improved communications between agencies could directly enhance Honiara's institutional adaptive capacity across levels of government, stakeholders and non-government actors.

As with sensitivity and exposure, adaptive capacity varies significantly across the city. Informal settlements lack many of the institutional support structures available to households with tenure; however have strong community networks that contribute to collective adaptive capacity strength. Other factors, such as communications access, similarly correspond to access to utilities and other institutions. For instance mobile phone access correlates closely to informal neighbourhoods and other sensitive locations.

In contrast, measures of access to luxury services, such as wired internet access, can demonstrate sections of the community with a high level of adaptive capacity, both directly in terms of the ability to autonomously respond and self-finance, and indirectly through access to institutional response mechanisms such as government websites and international networks. Although internet connectivity across the city was generally very low at the last census, localities with concentrations of higher income households, with the south-eastern hillside areas of Nggosi, central Kola'a above Chinatown, and Cruz exhibiting these characteristics.

Project components

1. Community level actions

- Identification of key issues and prioritisation of actions for two additional hotspot case studies (Nggosi and Panatina wards).[15]

  This action expands on the original HURCAP and will develop community action plans based on local experience and knowledge using the same participatory methodology - 'Planning for Climate Change'. This will increase the number of

[15] Consistent with:
- National Climate Change Policy outcome: vulnerability and adaptation and disaster risk reduction.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 7: understand and strengthen the community's capacity for resilience.
- SIG INDC: strengthen capacities at community level for vulnerability mapping and adaptation planning.

case study communities benefiting from pilot actions to a total of five, the other three communities being Aekafo, Ongtong Java and Fishing Village.

- In-depth profiling of all hotspot communities.[16]
  Many of the informal settlements are fast growing, and affected by complex land tenure issues, and this activity will ensure that an up-to-date baseline of local data is available to inform resilience planning and future action. Local survey teams will be responsible for this activity, coordinated by the UN-Habitat program manager based in Honiara. The necessary training will be provided in order to introduce new skills and ensure that this process can also be replicated elsewhere.

- Scoping and feasibility study.

  Each of the actions that have been identified by the local communities will need to be assessed to indicate the cost, feasibility and partnerships that will be needed to implement the actions. Each of the proposed actions will be screened to see if SIA and EIAs are required.

- Implementation of screened / agreed concrete adaptation actions, building community assets, in each hotspot community, with technical support from UN-Habitat / RMIT as required.[17]
  As noted, it will not be possible to implement all actions that have been identified by the vulnerable communities. Concrete actions will be prioritized in close consultation with each of the community groups. Overarching themes for actions that were identified by the HURCAP assessment include: protection from climate and natural hazards, housing design, resilient infrastructure waste management and environmental clean-up activity to reduce flooding, drainage improvements,

[16] Consistent with:
- HCC 5-year Strategic Plan: point 6 - upgrading of informal settlements.
- National Development Strategy (2016-2035): objective 2: poverty alleviated across the whole of the Solomon Islands, basic needs addressed and food security improved, benefits of development more equitably distributed.

[17] Consistent with:
- HCC 5-year Strategic Plan: point 3 – environmental planning and waste management, point 6 - upgrading of informal settlements, point 8 – infrastructure development.
- National Development Strategy (2016-2035): objective 2: poverty alleviated across the whole of the Solomon Islands, basic needs addressed and food security improved, benefits of development more equitably distributed; objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- National Climate Change Policy outcome: vulnerability and adaptation and disaster risk reduction.
- SI NAPA (2008): enhancing resilience to climate change – human settlements and human health signaled as a top priority. Other priorities include waste management, coastal protection and infrastructure development.
- SIG INDC: implementation of priority resilience measures through direct access to financing.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 4: pursue resilient urban development and design.

and environmental risk awareness programs. A total of $1,580,000 has been allocated for the community to support implementation. [Whilst waste management and environmental clean-up activity are not obvious climate change adaptation actions, they were identified as priority issues through substantive community engagement activities and act as important influences on individual and community 'sensitivity' to climate-related impacts, and their ability to adapt. It is considered important to address current vulnerabilities as a platform for adaptation to future climate change. It is also important to recognize that waste is a critical issue in parts of Honiara with direct consequences for effective drainage, as witnessed by the major 2014 flood event; as well as having implications for health (climate change is anticipated to amplify health risks, including through water- and vector borne diseases, and is noted as a priority issue in the country's NAPA]. In the context of this output asset-building activities (hardware) are supported for example: improved drainage and maintenance, to reduce flooding and to counter water and vector borne diseases, access roads and Jacob's ladders, (i.e. staircases from roads into the steep valleys, which also serve as evacuation routes during flooding), improved access to water and sanitation (to build resilience during droughts and to counter waterborne diseases during flooding), relocation of particularly vulnerable houses (within settlements) and strengthening of structures to enhance resilience during extreme weather events, support to early warning (flood gauge and community communication systems) in support of timely evacuation.

2. Community level capacity strengthening

- Awareness and capacity building activity relating to key community issues[18]:

  Key community needs have been identified as climate risks and adaptation (including ways to integrate science and local knowledge), disaster risk reduction, issues of land tenure, and issues of sanitation and health (accounting for increasing risks due to the impacts of climate change). As noted above, health has been identified as a priority issue under the NAPA and there are critical linkages between sanitation, health and climate change that need to be addressed as part of a climate-resilient Honiara. Furthermore, land tenure considerations are vital in the Honiara context as they impact the ability of people to adapt and also influence the type of interventions that can be introduced (e.g. permanent dwellings are not allowed on land subject to temporary occupancy licenses, i.e. the tenure arrangement of most informal setters). Informal settlers occupy marginal / high-risk land (steep slopes, bottom of valleys) as this is the

[18] Consistent with:
- National Climate Change Policy outcome: vulnerability and adaptation and disaster risk reduction; education, awareness and capacity building.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 1: organise for disaster resilience; essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.
- SIG INDC: strengthen capacities at community level for vulnerability mapping and adaptation planning.

only land available to them. Not only does this leave them exposed to hazards, their tenure situation also prevents households as well as government agencies to invest in resilient houses and infrastructure. Land tenure issues need to be explicitly considered for successful and longer term, adaptation. Whilst there are numerous emerging initiatives (such as the rapid employment programme, the provision of services by the utilities and the formalization of the temporary occupancy licenses) which demonstrate that significant adaptation options are possible, it is critical to unlock further tenure issues for larger scale investments.

- Training on conducting community profile self-assessment[19]

  Given the fast pace of urbanization, it is vital that up-to-date information informs the resilience strengthening agenda for Honiara. Providing local training on surveys, data recording, and data management will build capacity for self-assessment.

  Training and empowerment of individuals to monitor their community's progress in implementing adaptation action and resilience building measures.

3. Ward level actions

Although the major intended focus of the proposal is supporting actions at the community level, there will also be important activity that is aimed at strengthening institutional structures and processes at the ward level in support of adaptation outcomes (acting as an important bridge between national and city Government and local communities). Strengthening adaptive capacity is considered important in the Honiara context, and particular attention will be paid to communication, awareness and education activity that targets particularly vulnerable groups such as women and youth, and key urban issues such as urban agriculture and food security, and the promotion of climate resilient community spaces in the city.

The project will work closely with existing local networks to ensure that engagement is widespread and equitable. UN-Habitat has a long established presence in Honiara, and through the HURCAP process has developed extensive networks including with women and youth groups (two of these are named in the proposal). Vois Blong Mere is a women's network that was set up post the civil conflict in order to empower women through various media (including theatre and radio) and the Solomon Islands Development Trust are representative of youth and have experience of environmental and climate change education. Other Civil Society Organizations in Honiara – such as

[19] Consistent with:
- National Climate Change Policy outcome: monitoring and evaluation.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 1: organise for disaster resilience; essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.

the Development Service Exchange - will also be engaged with to ensure that participation in activities and awareness raising is encouraged.

Significant numbers, estimated to reach more than 20,000 people will have access to the benefits either directly through involvement with key actions or indirectly from being the beneficiaries of the theatre, radio, educational or urban agriculture action initiatives. Theatre productions, education classes, and agricultural pilot studies will all take place in the informal settlements within the city and peri-urban environments.

Enhancing adaptive capacity can be achieved through the improvement of community access to – and awareness of – already available climate risk information and adaptation techniques, which are not easily accessible in the context of the isolated, low-literacy and informal communities of Honiara's urban poor. The HURCAP highlights the following objectives with particular relevance to climate change and natural disasters: education on environmental risks; promotion of non-written climate communications to reach all members of the community; improved community understanding and awareness of local climate change impacts, particularly for the most vulnerable groups such as women and youth; and disaster risk reduction, response and management programs.

- To develop a women-focused climate risk communications program, through a variety of mediums such as theatre, radio and community newsletters.[20]

  Engage with the civil society sector e.g. Vois Blong Mere to develop women-focused drama and multi-media through training and facilitation. This will include the development of non-written performances that highlight gender-biased climate vulnerability and associated adaptation options, supporting the empowerment of women in responding to climate impacts and natural disasters. Staff at RMIT, with experience of gender, social change and translating climate information into adaptation actions, will work with women's groups in Honiara to determine the most effective means of communicating with this cohort about climate risk strategies, and which actions are likely to be most successful given the local context. A pilot activity was conducted RMIT (in 2015) with Vois Blong Mere (theatre), as well as young men and women through the Honiara Youth Council (dance).

- Education of youth on climate change and environmental risks.[21]

[20] Consistent with:
- HCC 5-year Strategic Plan: point 2 – empowerment of youth and women.
- National Climate Change Policy outcome: education, awareness and capacity building.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 1: organise for disaster resilience; essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.
- SIG INDC: strengthen capacities at community level for vulnerability mapping and adaptation planning. Also, a need to translate climate science and predicted impacts into messages that support action by Solomon Islanders

Engage with the Solomon Islands Development Trust to translate their Climate Change Child-Centred Adaptation approach to schools and youth programs in Honiara (a previously successful initiative in rural areas). Actions will involve the development of teaching modules relevant to the urban context, conducting lessons in schools and youth community settings, and contributing to the development of environmental curricula for schools.

- Ecosystem-based adaptation in the urban environment.[22]

  Engage with NGO organisations such as Gurafesu Biodiversity, Conservation, and Climate Change Community Development Association to promote ecosystem-based adaptation by conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area). This will contribute to increased awareness of the value of ecosystem services and their value to the climate adaptation agenda and will involve training workshops, pilot actions that showcase best practice in urban agriculture, and education on eco-system based adaptation and improved food security.

- Climate resilient community spaces.[23]

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[21] Consistent with:
- HCC 5-year Strategic Plan: point 2 – empowerment of youth and women.
- National Climate Change Policy outcome: education, awareness and capacity building.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 1: organise for disaster resilience; essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.
- SIG INDC: strengthen capacities at community level for vulnerability mapping and adaptation planning. Also, a need to translate climate science and predicted impacts into messages that support action by Solomon Islanders

[22] Consistent with:
- HCC 5-year Strategic Plan: point 2 – empowerment of youth and women; point 3 –environmental planning and waste management.
- National Climate Change Policy outcome: education, awareness and capacity building.
- National Development Strategy (2016-2035): objective 2: poverty alleviated across the whole of the Solomon Islands, basic needs addressed and food security improved, benefits of development more equitably distributed.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 5: safeguard natural buffers to enhance the protective functions offered by natural systems.

[23] Consistent with:
- HCC 5-year Strategic Plan: point 3 – environmental planning and waste management.
- National Development Strategy (2016-2035): objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 4: pursue resilient urban development and design.

Engage with Honiara City Council to identify and promote climate resilient public space e.g. using floodplains as sports areas, planting trees to increase shading in community spaces to combat heat stress, and the rehabilitation of community centres for use as safe places for evacuation, etc.

4. Ward level capacity strengthening:

- Provide training for nominated 'resilience officers' in each of Honiara's wards in urban resilience and climate adaptation planning, and integrate this with DRR objectives (what to do and where to go during extreme events).[24]

  The ward level is a strategically important level for capacity building. The project will undertake training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings and capacity building.

- Pilot best practice participatory approaches for city government, NGO, and community collaboration in climate action planning and enhance the understanding of adaptation pathways.[25]

  The HURCAP assessment process, which was tailored for application in the Pacific region from the UN-Habitat Planning for Climate Change framework, will form the basis for increasing capacity in climate action planning and to promote participatory approaches.

- Assess locally appropriate land administration options for peri-urban settlements, and households, around Ngossi and Panatina wards.[26]

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[24] Consistent with:
- HCC 5-year Strategic Plan: point 1 – governance.
- National Development Strategy (2016-2035): objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- National Climate Change Policy outcome: education, awareness and capacity building.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.

[25] Consistent with:
- National Climate Change Policy outcome: vulnerability and adaptation and disaster risk reduction; education, awareness and capacity building.
- SIG INDC: strengthen capacities at community level for vulnerability mapping and adaptation planning. Also, a need to translate climate science and predicted impacts into messages that support action by Solomon Islanders

[26] Consistent with:
- HCC 5-year Strategic Plan: point 1 – governance, and point 6 – upgrading of informal settlements.
- National Development Strategy (2016-2035): objective 2: poverty alleviated across the whole of the Solomon Islands, basic needs addressed and food security improved, benefits of development more equitably distributed.

Given land pressures, a rapidly growing city, and the increasing number of informal settlers in peri-urban areas, this activity will work closely with HCC and Guadalcanal Provincial Council to assess appropriate land administration system options that seeks to account for both Western and Customary laws when dealing with urban growth, secure and safeguard legitimate tenure rights, and inform decisions on resettlement. This assessment will draw on data gained from the in-depth profiling of all hotspot communities on perceptions of tenure security and areas of potential land conflict, and will be informed by the FIG Christchurch Declaration (2016): Responding to Climate Change and Tenure Insecurity in Small Island Developing States: The Role of Land Professionals.

5. City-wide level capacity building

At the city-level the primary focus will be on governance and partnerships, and improvements to institutional arrangements in support of improved urban resilience.

A major part of the capacity building component would be to initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University / UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities. In the first instance, this would involve a training needs assessment visit to Honiara by key disciplinary staff at RMIT University (planning, GIS risk mapping, land administration, engineering, data management, climate change adaptation, media and communications) and subsequent tailoring of professional short courses to be held at the University in Melbourne. These learning linkages would be maintained in the longer term by funding opportunities such as the Australian Endeavour awards. A new relationship between RMIT and SINU would also support undergraduate and post-graduate studies in both Honiara and Melbourne. Funded activity requested to the Adaptation Fund includes:

- Capacity development needs assessment in Honiara by key lecturing staff.
- Development of tailored capacity building workshops for professional staff to build knowledge and required skill sets (HCC and focal Ministries) at RMIT University; sustained in the longer term through initiatives such as the Australian Endeavour scheme. Opportunities include: environmental and civil engineering (e.g. for Solomon Islands Water Authority, Ministry of Infrastructure Development), urban planning, land administration, and risk mapping (MLHS, MECDM and HCC), data management (all departments), media and communications (all departments and NGOs).

With an appropriate MoU between RMIT and SINU in place, the following long-term collaboration would involve:

- Taught modules by RMIT staff for students at the SINU campus as part of existing courses (e.g. engineering, construction, planning, media and

- National Climate Change Policy outcome: partnership and cooperation.

communication), as well as RMIT acting as the host university for postgraduate students in support of long-term and sustainable urban resilience action.

- Capacity development needs assessment.[27]

  This will involve a team of disciplinary lecturers visiting Honiara to meet with key officials and to carry out site visits in order to be able to tailor capacity development workshops at RMIT that meet the contemporary needs of policymakers and practitioners in Honiara.

- Capacity development workshops for HCC and SI Ministry staff.[28]

  Short courses at RMIT will be tailored for Honiara needs after a scoping visit by lead lecturers. Opportunities include: environmental and civil engineering, urban planning and risk mapping, data management, and media and communications. Given an already identified need the first of these, and costed for funding in this application, will be a 2-week course of workshops designed to cater for planning, land administration, and GIS risk mapping.

- Employ a Climate Adaptation and Resilience Officer (CARO) for Honiara City Council, and constitute a multi-stakeholder steering group for implementation of the project.

  The resilience officer will be based in Honiara for the duration of the 4-year project and will be housed at the offices of HCC. The steering group will include

[27] Consistent with:
- National Climate Change Policy outcome: vulnerability and adaptation and disaster risk reduction; education, awareness and capacity building.
- HCC 5-year Strategic Plan: point 3 – environmental planning and waste management, point 6 - upgrading of informal settlements, point 8 – infrastructure development.
- National Development Strategy (2016-2035): objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- SI NAPA (2008): enhancing resilience to climate change – human settlements and human health signaled as a top priority.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 4: pursue resilient urban development and design.

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- National Climate Change Policy outcomes: vulnerability and adaptation and disaster risk reduction; education, awareness and capacity building.
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- National Development Strategy (2016-2035): objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- SI NAPA (2008): enhancing resilience to climate change – human settlements and human health signaled as a top priority.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 4: pursue resilient urban development and design.

core members from HCC, MLHS, MECDM and Guadalcanal Province, as well as implementing partners and other key stakeholders (e.g. SIWA).

- Develop a formal mechanism for managing cross-boundary urban resilience issues between Guadalcanal Province and HCC, particularly taking into account cross-boundary flows of resources, people and the long-term urban expansion of the city.

  Regular meetings will be supported between HCC and Guadalcanal Province, and will have particular relevance to the two vulnerability hotspot areas in Nggosi and Panatina wards, as well as the activity examining land administration.

- Actor and policy mapping, and opportunities for mainstreaming of climate change considerations[29]

  Map and assess linkages between relevant stakeholders and initiatives for improved governance and institutional response to climate change impacts and natural disasters. Conduct a whole-of-govt. policy review to identify areas for mainstreaming of climate change considerations across urban policy (including a review of land use plans and the introduction of possible building codes).

6. Knowledge management and advocacy:

- Climate change training and knowledge exchange.[30]

  Develop climate change adaptation training and knowledge exchange programs between HCC staff and ward councillors.

- Transfer of results and lessons learnt to other communities across Honiara

[29] Consistent with:
- National Development Strategy 2016: p44 – "Build capacity of development planners at all levels to routinely integrate risk management (e.g. DRR and CCA) into development plans and policies), and also p45 - "Establish a framework for integrating climate change considerations into national development planning and relevant sectoral policies"

[30] Consistent with:
- HCC 5-year Strategic Plan: point 1 – governance, point 3 – environmental planning.
- National Development Strategy (2016-2035): objective 4: resilient and environmentally sustainable development with effective risk management, response and recovery.
- National Climate Change Policy outcomes: enabling environment and institutional arrangements; mainstreaming of climate change; vulnerability and adaptation and disaster risk reduction; education, awareness and capacity building; partnership and cooperation; monitoring and evaluation.
- UNISDR/ICLEI (draft, forthcoming) Honiara City Council DRR self-assessment, essential 1: organise for disaster resilience; essential 7: understand and strengthen the community's capacity for resilience; essential 9: ensure effective preparedness and disaster response.
- SI NAPA (2008): enhancing resilience to climate change – human settlements and human health signaled as a top priority.

This will involve the development and maintenance of a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key Ministries. This will inform other communities about activity and transferable findings from the hotspot pilot actions.

- Project learning mechanism and evaluation

  An annual review of activity, and project findings, will be conducted and recorded.

B. Economic, social and environmental benefits

By implementing a combination of institutional, community and assets risk and vulnerability reduction measures, especially in community-level vulnerability hotspots, this project is expected to provide reductions in future climate related economic, household and livelihood losses, reductions in vulnerabilities of women, indigenous people, disabled people and youth and reductions in environmental degradation.
Given that communities, and especially vulnerable groups, will be involved throughout the project, they'll have the opportunity to directly influence project activities and outcomes, thus influencing their direct project benefits.

Whilst targeting resilience to climate change, each of the individual actions will also have significant flow-on socio-economic and other environmental benefits. These will be unique to the particular community or ward level action, but will involve a range of environmental benefits such as improvements to the local environment through improved stewardship of natural resources, protection of ecosystem services, less pollution and better air and water quality etc. In economic terms, resilience actions will contribute to local livelihoods, safeguard cash crops (or introduce new opportunities in the urban environment), protect assets against hazards etc. Social benefits are improved health and well-being, but there will also be support for less obvious social capital such as customary practice (and how it can be integrated with the latest scientific expertise).

'Soft' interventions aimed at capacity building will also have economic, social and environmental benefits for the vulnerable communities and the city as a whole. Training and awareness raising activity will introduce new knowledge that will aim to stimulate behavior change, and for the local environment this will mean a reduction in the degrading impact of human activity as well as the opportunity for promoting new ecosystem services (tree planting etc). New knowledge will also bring economic benefits through improved land management techniques and by communities being more prepared for future climate impacts, hence reducing future losses. Supporting the empowerment of women and youth networks, and ensuring that climate information is available to all (e.g. theatre performance for those unable to read English), will benefit local society and make a valuable contribution to community resilience.

Table 4: Overview of economic, social and environmental benefits of AF intervention compared to no intervention (baseline).

Type of benefit	Baseline	With/after the project
Economic	Extreme events such as storms, floods, droughts and landslides increasingly lead to economic losses and loss of community infrastructure and livelihood options. Longer-term stresses such as sea level rise, coral bleaching and droughts impact on the economic well-being of local communities and reduce the ability to cope. Informal urban settlements are fast-growing, high density, lack basic and resilient infrastructure and inhabitants have limited livelihood options.	Reduction in economic and community infrastructure losses because institutions, communities and physical and natural assets, ecosystems and livelihoods are more resilient. Improved preparation for extreme events lessens the social and economic impact. Reduction in climate induced poverty Improved food security and promotion of urban agriculture, changes to resource management, and identification of alternative livelihoods. Capacity development of urban poor / youth / women to gain new skills and employment opportunities. Reduction in household losses of urban poor communities because of resilience building activity. New climate resilient infrastructure and services contributes to economic benefits.
Social	Extreme events such as storms, floods, and landslides can increasingly be considered as co-drivers of poverty and compound social problems such as, disease, sanitation, food security issues, community safety issues etc. Longer-term stresses such as sea level rise, coral bleaching and droughts impact on the social well-being and cohesion of local communities and reduce the ability to cope. The lack of (resilient) infrastructure, high poverty incidences and density in informal urban settlements lead to relatively high fatality rates, diseases and safety issues, especially for women, elderly, disabled people and youth	Further strengthening strong social networks to protect against disasters, fatality rates, diseases and food security and safety issues because of increased resilience of city and ward governments, communities and physical and natural assets, ecosystems and livelihoods. Improved adaptive capacity through a greater awareness of climate risks and adaptation options at the community level. Capacity development and direct involvement in adaptation actions increases the resilience of the most disadvantaged in the city. New climate resilient infrastructure and services contributes to social well-being.
Environ-mental	Extreme events such as storms, floods, droughts and landslides increasingly lead to environmental losses, in particular important ecosystem services and loss of livelihood options, flood protection etc. Longer-term stresses such as sea level rise, coral bleaching and droughts impact	Reduction in climate-induced environmental degradation and losses and improved planning and preparation for disasters. Improved resource management practice ensures the environment is protected, and livelihoods account for a changing climate.

	on local environmental conditions. Rapid urban development increasingly leads to environmental degradation, land losses, increased flood and heat risks, increased waste production and energy use. Ecosystem degradation and increased waste production lead to reduction of livelihood options and health issues and flood risks because of waste, especially in poor urban communities	Promotion of ecosystem-based adaptation in the urban environment, leading to environmental benefits. Reduced human impact though changes to land zoning, waste e.g. community-based waste reduction and recycling schemes and energy efficient building construction techniques. Environmental benefits due to resilience actions in the informal settlements, clean-up campaigns and awareness raising. Improvement of community resilience in urban poor communities because of above.

C. Cost-effectiveness of the project

The design and implementation of the project focuses on maximizing the size of the 'hard' component; thus limiting the 'soft' components to only those activities required to supporting the appropriate implementation of the 'hard' component and strengthening institutional and community capacities to sustain the project. Although the project aims at maximizing the impact/population coverage of strengthened and/or new community hardware/assets/infrastructure, the type will depend on community priorities. However, construction/development costs will be minimized through large-scale procurement procedures (for multiple sub-projects, by using local and durable materials (if possible) and by in-kind community contributions.

Altogether, the project aims to be cost-effective by:

- Avoiding future costs of climate change impacts and ensuring sustainability of interventions
- Efficient project operations
- Community involvement/distributions
- Selecting technical options based on cost-, feasibility and resilience/sustainability criteria
- Avoiding future costs of climate change impacts and ensuring sustainability of interventions

Taking no action (business as usual) will lead to incrementally increasing costs in time associated with damage and losses due to storms/typhoons, floods, droughts and landslides (for more info, see background section), low productivity/limited livelihood options and health related costs, especially in urban informal settlements. Proposed interventions under this project will reduce these future costs. Although sustainability related measures, especially those related to the AF outcomes 1-3, can be considered as 'extra' costs, not bearing these costs will significantly reduce the impact of this project on the long run and the scale beyond the community (i.e. country-wide impact).

Efficient project operations

UN-Habitat traditionally shows high cost-effectiveness in project operations because technical assistance, capacity building and infrastructure designs are done mostly in-house, because UN-Habitat works directly with local government partners (thereby building their capacity as well as reducing costs) and because of strong community involvement, which helps reducing costs significantly. This is relevant to all components of the project. Moreover, with the establishment of HURCAP and the Honiara vulnerability assessment, UN-Habitat has already paved the way for this project, including avoiding costs for assessments already conducted.

Community involvement/distributions

The project will be implemented in close partnership with communities and local government institutions. This model of partnership will allow significant cost reduction as communities and local partners will provide support. For example, communities will provide in-kind contributions by participating in infrastructure development. Community mobilization in Solomon Islands is traditionally very strong and thus, infrastructure development with community involvement is expected to be at least a 30 percent cheaper than government or contractor driven approaches, this is based on UN-Habitat's community contracting processes throughout the Asia-Pacific region; cost savings relate to cutting out the middle man (the contractor) and the in-kind contribution of community members. Besides that, it will benefit the community because of capacity development and through recruitment of semi-skilled and skilled workers.

Selecting technical options based on cost-, feasibility and resilience/sustainability criteria

Although non-resilient technical intervention may initially cost less to construct (between 30-50 per cent), resilient technical options are expected to last much longer, especially with every year recurring storms and typhoons. As for the costs per technical type, this will vary significantly depending on the location of such an intervention (i.e. remoteness, size, terrain, etc.).

Alternative technical adaptation/resilience options to achieve the same intended outcome under components 1, 3 and 5 will be assessed during the project. Depending on vulnerability assessment data and community workshops, appropriate adaptation/resilience measures will be identified, prioritized and constructed.

Table 5: Cost-effectiveness of project results/outputs compared to alternative approaches.

Expected results	Outputs	Cost-effectiveness rationale with respect to alternative approaches
Community-level		

Reduced vulnerability of hotspot communities to climate-related hazards and threats	In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements In-depth community profiling for the hotspot case studies Scoping and feasibility studies of prioritized local actions for each hotspot community Implementation of screened / agreed resilience actions in each hotspot community (hard)	Alternatively, 'hard' interventions (i.e. resilience actions) may be implemented without the development of action plans, in depth community profiling and scoping and feasibility studies, but this may lead to interventions that do not target the most vulnerable areas and people and that may not be appropriate in terms of resilience building. In order to have an appropriate response, actions are selected based on above processes. Communities will be involved in the budgeting to ensure cost-effective options are selected. Technical support will ensure that options with the highest resilience impact will be selected.
Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level	Training on conducting community profile self-assessment Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	Alternatively 'hard' measures can be implemented without training and awareness and capacity development support but this will lead to 'hard' interventions that are more costly, not necessarily supported by the community and thus not sustainable. In addition the training will support the direct engagement of the communities in the development / construction of community adaptation actions reducing the costs and ensuring maintenance.
Ward-level Increased ward-level climate, disaster and ecosystem resilience in response to climate change and variability-induced stress.	To develop a women-focused climate risk communications program To integrate climate change into educational programs for youth and children	Alternatively, 'hard' interventions (i.e. eco-system based adaptation and resilient community spaces) may be implemented without the development of a women-focused climate risk communication program and educational program, but this may lead to interventions that may not be supported by certain groups. Community level awareness and capacity development initiatives that are not directly anchored in

		concrete adaptation options are likely to have limited impact. Capacity development without support to implementation is doomed to fail in the Solomon Islands given the high level of poverty / resource constraints.
	Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented[31] (hard)	Eco-system based adaptation options are often more cost-effective than 'hard' infrastructure interventions, but they are only effective at the higher level (ward level and above)
	Climate resilient community spaces developed, including productive open spaces and community evacuation centres (hard)	Alternatively, more funding is allocated to eco-system based adaptation options but the development of resilient community spaces is limited to infrastructure that is needed when disasters strike.
Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go) Pilot best practice participatory approach to city government, NGO, and community collaboration in climate action planning	Alternatively, without the training and piloting 'hard' interventions can be implemented but these and new interventions may not be sustainable (where ward officials / councilors will not be able to implement appropriate resilience activities in the future
City-wide Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping. To be held at RMIT in Melbourne Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular	Alternatively, climate change adaptation and DRR planning activity can be implemented but in an unsustainable way (where city officers will not be able to implement resilience activities in the future) The project pursues an integrated approach where community, ward and city-level activities are planned and implemented in an integrated manner. This approach recognizes the wide ranging capacity challenges and aims to address these in a comprehensive manner. A piecemeal approach may seem more focused and therefore more

[31] Links to SPREP Ecosystem Services and UN-Women Markets for Change projects.

	meetings Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes)	efficient but the project consultations clearly resulted in an integrated approach which lays a solid foundation for successful implementation and sustainability. City-level engagement will ensure that ward- and community-level actions will be adequately supported. Identifying and promoting synergies with other initiatives in Honiara will improve outcomes and add to cost effectiveness of actions (win-wins). In-kind time commitment of Ministries, HCC, NGOs, CSOs and local chiefs and community members (already engaged with as part of HURCAP). We have also noted training of nominated resilience officers at the ward level. In-kind time commitment of multi-stakeholder steering group. In-kind time commitment of RMIT staff (e.g. scoping visit and collaborative discussions with SINU) Capacity building of SINU staff will add to sustainability of project results and long term cost effectiveness of the program. Engagement with the NGO community will lead to shared cost savings and more coordinated action on the ground e.g. DRR and WASH initiatives. Bottom up approach will also enable free/cheap use of local venues for meetings and training. Engagement with Rapid Employment Program will not only allow employment of local workforce but also promote capacity building and low cost actions.

D. *Project consistency with national or sub-national sustainable development strategies*

This project is consistent with national and sub-national development strategies. While the National Development Strategy (2016-2036) serves as the overall implementation framework for this project, The Solomon islands Intended National Determined Contributions (INDC) (2015), the Climate Change Policy (2012-2017), the NAPA (2008), the Initial National Communication (2004) and especially the Honiara Urban Resilience & Climate Adaptation Plan (2016), the Honiara Climate Change Vulnerability Assessment (2014), the Honiara City Council (HCC) 5-year strategic plan (2014-2018) and HCC disaster operating procedures (2013); to be updated by HCC Disaster Risk Reduction self-assessment (UNISDR / ICLEI, forthcoming) have served to identify relevant project outputs and activities (see also footnotes in the section a). This project will seek to maximise synergies with the UNISDR / ICLEI DRR action plan during its development (currently under discussion for 2017/18).

The HURCAP action plan provides a solid foundation for the program of activity as laid out in this proposal. The first phase vulnerability assessment was formally endorsed by the Honiara City Council and the two Solomon Islands Government (SIG) focal ministries (Ministry of Lands, Housing and Survey & Ministry of Ministry of Environment, Climate Change, Disaster Management and Meteorology) in August 2015, with the Lord Mayor and the respective SIG Ministers committing to work across scales of government in the development and implementation of a Honiara Urban Resilience and Climate Adaptation Plan.

The project also aligns with sectoral policies, plans and programmes as listed below:

- ❑ UN-Habitat Participatory Slum Upgrade Programme
- ❑ Honiara Local Planning Scheme – Shaping Honiara's Future (2015)
- ❑ Solomon Islands National Infrastructure Investment Plan (2013)
- ❑ National Water Policy (2007)
- ❑ National Health Strategic Plan (2011)
- ❑ National Waste Management and Pollution Control Strategy 2017-2026

E. *Compliance with relevant national technical standards*

All project activities are in compliance with existing rules, regulations, standards and procedures endorsed by the government, as shown in the table below. In addition, compliance with tools is discussed below.

Table 6: Project compliance with relevant rules, regulation, standards, procedures and tools to project activities

Expected Concrete Outputs	Relevant rules, regulations, standards	Compliance & procedure

	and procedures	
1.1. In addition to existing community action plans, complete community climate action plans for White River and Tuvaruhu informal settlements	UN-Habitat Planning for climate change toolkit	The project will use the tool on the left to complete community climate change action plans
1.2. In-depth community profiling for the hotspot case studies	Not relevant	
1.3. Scoping and feasibility studies of prioritized local actions for each hotspot community	Solomon Islands Environmental and Social Impact Assessments	In accordance with Solomon Islands procedures the project will screen to see if proposed actions require Environmental and Social Impact Assessments. If so, assessments will be conducted following Solomon Islands procedures
1.4. Implementation of screened / agreed resilience actions in each hotspot community	Relevant SI and international rules, regulations, standards and procedures regarding housing design, waste management, water supply, sanitation, drainage, etc.	The project will adhere to SI and international standards (SDG) regarding construction and use building back better principles
2.1. Training on conducting community profile self-assessment	Not relevant	
2.2. Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	Not relevant	
3.1. To develop a women-focused climate risk communications program	No standard	The project will engage with the civil society sector and women in Honiara to develop a women-focused climate risk communications program.
3.2. To integrate climate change into educational programs for youth and children	Climate Change Child-Centred Adaptation approach of Solomon Islands Development trust	The project will engage with the Solomon Islands Development Trust to translate their Climate Change Child-Centred Adaptation approach to schools and youth programs in Honiara
3.3. Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented	No clear rules, regulations, standards and procedures	The project will Engage with NGO organisations to promote ecosystem-based adaptation
3.4. Climate resilient community spaces including productive open spaces and community evacuation centres	Solomon Island local planning schemes and draft building codes	The project will follow the scheme and draft building code to develop infrastructure
4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)	Not relevant	
4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate action planning	The HURCAP assessment process	The project will follow the HURCAP assessment process to increasing capacity in climate action planning and to promote participatory approaches.
4.3. Assess locally appropriate land administration for peri-urban locations	Not relevant	
5.1. Training and teaching & learning needs assessment	Not relevant	
5.2. Develop and run professional training programs for planners and other urban and	Not relevant	

related professionals in support of urban resilience: planning, engineering and communication. 5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings 5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation 5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes).	SI government, AF and UN-Habitat standards	The project will adhere to SI government, AF and UN-Habitat standards
6.1. Climate change training and knowledge exchange 6.2. Advocacy materials etc 6.3. Knowledge sharing platform 6.4. Project learning mechanism	Not relevant SI government, AF and UN-Habitat standards	 The project will adhere to SI government, AF and UN-Habitat standards

F. Other funding sources

One of the selection criteria of the target towns and informal settlements is that of avoided overlap with other projects. This information has been retrieved based on in-depth consultations with the national government Honiara authorities, and on the ground project activity through the UN-Habitat climate change vulnerability assessment and the development of the subsequent climate adaptation plan since 2014.

The UN-Habitat 'Planning for Climate Change' framework advocates a series of key phases which can be understood simply as assessing climate vulnerability, identifying key issues in collaboration with stakeholders (and then translating associated objectives into adaptation actions), implementing the priority actions, and maintaining a regime of ongoing monitoring and evaluation (recognizing that urban resilience to climate change is dynamic). HURCAP expanded the focus of the traditional climate adaptation plan to include urban resilience to non-climate drivers due to the many complex and critical urban development issues that face primate cities in Melanesia (substantial rural-urban migration, rapid urban development leading to informal settlements, inadequate urban infrastructure etc). This proposal builds directly on the evidence base that was established by the vulnerability assessment and the development of the HURCAP, supporting actions that address the critical needs of informal settlements in the city. As well as working closely with local communities, the UN-Habitat activity is fully supported, and has also been formally endorsed, by the City Council and the focal national Ministries.

UN-Habitat also has a long standing commitment to Honiara through its Participatory Slum Upgrading Programme (PSUP). This initiative is aimed at trying to improve the lives of informal settlers through improvements to their housing and provision of basic needs. Correspondingly, these efforts will also contribute to recuing exposure and sensitivity to climate

impacts. The lessons learnt, knowledge of local networks, access to chief structures etc., will be extremely valuable in supporting the proposed project activity.

Other projects with complementarity include the SPREP PEBACC programme on ecosystem services and a significant World Bank consultancy on flood risk management in the Mataniko River catchment. The SPREP project is in the early stages of ecosystem identification and mapping, though there are opportunities for aligning with their phase 2 pilot studies in 2017/18 from an informal settlement perspective, and the World Bank project is yet to be awarded though there are obvious benefits in using the flood risk data to inform adaptation options for the communities in the catchment area.

Table 7: Relevant projects and their complimentary potential

Relevant projects	Complimentary potential	Lessons learned
UN-Habitat Honiara vulnerability assessment, 2014	Activities in this project are informed by the vulnerability assessment	Strong community knowledge / engagement can be leveraged for project implementation. Whilst resilience building is an emerging concept it provides an engaging 'fuzzy' concept that allows consideration of current and future climate exposure and action planning, while also linking to disaster risk reduction and management. Legislative enforcement across the city in all areas is weak; laws must have community support, education and effective funding for implementation and maintenance to be effective.
Honiara Urban Resilience and Climate Adaptation Plan, 2016	Activities in this project are identified based on the urban resilience and climate adaptation actions	Value of bottom up approach as opposed to top down 'external' programs which don't tend to work well in the Melanesian context. Local knowledge is invaluable in understanding risks and shaping solutions. Need to take account of local cultural structures and processes and integrate scientific and traditional knowledge. Correlation between informal settlement areas and climate

		exposure and sensitivity. Conversely, strengths in community-based adaptive capacity in these zones, largely operating independently of government structures and top-down initiatives. Need to consider current day exposure and sensitivity to climate extremes and baselines as a starting point for future projections. Due to rapid population growth, consideration of non-climate futures for the city is critical if climate projections are to be effective. Youth unemployment and the significant youth 'bulge' in the city's population provides a substantial opportunity for educating and training relating to resilience-building initiatives
UN-Habitat Participatory Slum Upgrading Programme (PSUP)	Align with the programme	Informal settlement upgrading initiatives cannot be sustainable without mainstreaming of resilience. Partnership between communities, Honiara City Council and MLHS can work. Mechanisms have been developed. With and increasing share of the city's population living informally (currently more than 1/3 of residents), there is a need for new, community-based modes of building climate resilience where municipal governance is weak,
SPREP PEBACC project (ecosystem services in Fiji, Vanuatu and the Solomon	Honiara ~~will be~~is one of the case studies for this Pacific project and there are opportunities to complement	The project is too new for lessons to be learnt. But SPREP and UN-Habitat ~~will~~ have agreed to closely

Islands)	their activity with a focus on informal settlements.	collaborate to ensure joint learning and synergies when implementing pilot initiatives.
World Bank commissioned consultancy on flood risk management in the Mataniko River Catchment (likely to commence in late 2016)	Top-down flood risk data can be used to further inform resilience actions for communities in this important river catchment.	World Bank REP: win-win benefits of engaging local workforce in implementing community actions
AF: UNDP (USD5.5 million): targeted rural communities in the Solomon Islands, in particular enhancing the resilience of the agricultural sector and ensuring food security.	Use lessons learned regarding food security. Provides an urban contrast to the rural focus of the UNDP project, and may have lessons in relation to rural – urban migration.	At this stage lessons relate primarily to the engagement of MIE (UNDP) and national executing entity, project management, financial management. Lessons based on consultations with UNDP and MECDM have been integrated into this project document. Substantive lessons are yet to be explored
World Bank project "Community Resilience to Climate and Disaster Risk in the Solomon Islands	The objective of the project is to increase the capacity of selected rural communities to manage natural hazards and climate change risk. In particular for peri-urban areas some lessons may be learnt.	The project is relatively new. Substantive lessons are yet to be explored.
UNDP project "Solomon Islands Water Sector Adaptation Project (SIWSAP)	The project focuses on provincial areas and not Honiara. UN-Habitat and UNDP work closely together in the Solomon Islands and will exchange lessons learnt.	Substantive lessons are yet to be learned.
ICLEI resilient cities program	ICLEI and UN-Habitat worked closely together in the preparation of the HURCAP (UN-Habitat) and the resilience training and planning (ICLEI), ensuring participation in respective workshops (in Honiara) and communication between ICLEI Melbourne and UN-Habitat (Regional Office)	An integrated approach to climate change adaptation and wider urban resilience to ensure efficient and effective institutional response (Honiara and National Government).

G. Capturing and disseminating lessons learned

A dedicated component (6) addresses Knowledge Management and Advocacy. Whilst this provides the cornerstone for capturing and disseminating lessons learned, other project components/activities directly contribute to knowledge management mechanisms and dissemination of lessons learned from local to national and to international levels (see table below).

At the local level, a participatory approach (involving communities and local authorities in planning and implementation activities) will lead to increased local knowledge on climate change adaptation. Project demonstration sites will contribute, from the start and in an ongoing way, to sharing lessons and training through local disseminators and tools and guidelines. The project will also use a participatory monitoring process, which will enable the beneficiary communities to work directly with the project's M&E officer, to highlight issues in delivery and to strengthen adaptation benefits, including in replication and sustaining the project's gains.

At the city level, transfer of results and lessons learnt to other communities across Honiara will be promoted. This will involve the development and maintenance of a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key Ministries. This will also inform other communities about activity and transferable findings from the hotspot pilot actions.

At the national level, other vulnerable towns in the Solomon Islands will be able to draw from lessons learned through this project, including replication and scale-up of good practices. Information will be consolidated in reports and the tools and guidelines will be developed. A direct linkage will be established, through the partnering departments of the various line ministries facilitating countrywide dissemination to other towns, informal settlements, policy-makers and civil society.

As part of the sustainability/exit strategy, the project will develop participatory monitoring processes, which will trigger institutional learning processes, participation, knowledge exchange and replication and scale-up of good practices.

At the international level, other climate change related projects, especially related to urban development, informal settlements and community level infrastructure may benefit from this project. The Council of Regional Organizations (CROP) Agencies: the Secretariat of the Pacific Community (SPC), Secretariat of the Pacific Community Applied Geo-science and Technology Division (SOPAC) and the Secretariat of the Pacific Environmental Programme (SPREP), provide knowledge management platform for Climate Change and Human Settlements interventions. It is proposed to use this platform (as well as UN-Habitat websites) to disseminate the lessons learned from this project.

Table 8: Project outputs and related learning objectives & indicators and products

Expected Concrete Outputs	Learning objectives (lo) & indicators (i)	Knowledge products

1.1. In addition to existing community action plans, complete community climate action plans for White River and Tuvaruhu informal settlements	(lo): improved climate change sensitive planning at community level (i) no of plans	2 Community action plans
1.2. In-depth community profiling for the hotspot case studies	(lo): increased information for resilience planning (i) availability of baseline	An up-to-date baseline of local data will be available to inform resilience planning and future action
1.3. Scoping and feasibility study of prioritised local actions for each hotspot community	(lo): understand costs, feasibility and risks of actions (i) no of plans	Report
1.4. Implementation of screened / agreed resilience actions in each hotspot community	(lo): Understand how to develop infrastructure in a resilient way (i) Number of reports	Photos, reports
2.1. Training on conducting community profile self-assessment	(lo): How to self-assess (i) availability of tool	Self-assessment tool
2.2. Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	(lo): Integrate local knowledge (i) Number of reports	Report
3.1. To develop a women-focused climate risk communications program	(lo): Understand gender-biased climate vulnerability and associated adaptation options (i) Report	Report, photo's
3.2. To integrate climate change into educational programs for youth and children	(lo): understand how to promote a youth specific approach (i) Teaching module	Teaching modules
3.3. Ecosystem-based adaptation options, in particular for flood mgt. implemented	(lo): awareness of ecosystem value and adaptation options (i) project sites	Project site examples
3.4. Climate resilient community spaces including productive open spaces and community evacuation centres	(lo): Understand adaptation options (i) project sites	Project site examples
4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)	(lo): capacity to implement adaptation options (i) Availability platform	Platform for whole of city regular meetings and capacity building.
4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate action planning	(lo): Increased awareness of planning processes (i) No of wards councillors engaged	Pilot study write up
4.3. Assess locally appropriate land administration for peri-urban locations	(lo): Understand appropriate land administration system options (i) Availability of appropriate system	Assessment report
5.1. Training and teaching & learning needs assessment 5.2. Develop and run professional training programs for planners and other urban and related professionals in support of urban resilience: planning, engineering and	lo) Understand learning needs (i) report lo) better qualified planners vis-a-vis urban resilience (i) Number of planners	

communication. 5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings 5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation 5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes).	lo): Ensure resilience knowledge is available throughout the project (i) No of climate change actions mainstreamed lo): Ensure cross-boundary learning (i) Availability formal mechanism lo): *Improved governance and institutional response* (i) Report	Formal mechanism for managing cross-boundary urban resilience issues Report
6.1. Climate change training and knowledge exchange 6.2. Advocacy materials etc 6.3. Knowledge sharing platform 6.4. Project learning mechanism	lo): Increased awareness and capacity (i) Report lo): Increased awareness and knowledge (i) Availability materials, platform and mechanism	Report Materials, platform and mechanism

H. The consultation process

A considerable amount of work has been conducted to first assess the vulnerability of Honiara and then, based on these findings, to develop a Honiara Urban Resilience and Climate Adaptation Plan (HURCAP) under the auspices of the UN-Habitat Cities and Climate Change Initiative. Given current day development needs in the city, as well as having to plan for inevitable urban growth in the future, actions to adapt to climate change need to be embedded within this broader urban development context. As a result of the many challenges facing the city, HURCAP was deliberately widened in scope to address urban resilience beyond just adaptation to climate change. This aligns with the new strategy for resilient development in the Pacific region, which seeks to *"strengthen the resilience of Pacific Island communities to the impacts of slow and sudden onset natural hazards by developing more effective and integrated ways to address climate and disaster risks, within the context of sustainable development"* (SPC and SPREP 2015, p2)[32].

This forthcoming action plan provides a solid foundation for the program of activity as laid out in this proposal. The first phase vulnerability assessment was formally endorsed by the Honiara City Council and the two Solomon Islands Government (SIG) focal ministries (Ministry of Lands, Housing and Survey & Ministry of Ministry of Environment, Climate Change, Disaster Management and Meteorology) in August 2015, with the Lord Mayor and the respective SIG Ministers committing to work across scales of government in the development and implementation of a Honiara Urban Resilience and Climate Adaptation Plan.

32 SPC and SPREP (2015) Strategy for Climate and Disaster Resilient Development in the Pacific. SPC, Fiji. Available at: http://www.pacificdisaster.net/dox/SRDP_Executive_summary.pdf (accessed 20th July 2016).

The proposal seeks the necessary funding in support of the implementation of urban resilience actions that were identified and prioritized by local communities, NGOs, and local and national levels of Government. Engagement activity to identify these key actions took place in 2014 and 2015 and involved over 280 individuals representing informal settlements, government, youth, donor organizations, NGOs, utilities and business groups. These activities culminated in a two-day forum, attended by 93 community members who provided high-level input to the plan through open forums and project presentations.

Consultations, taking place over a two year period, involved a mix of workshops, focus groups and interviews. Workshops and focus groups were held at the community, ward and city level, as well as with relevant Government Ministries. Sector specific workshops (water and DRR) and sessions involving women and youth groups in the city were also held. One to one interviews were conducted with city and national Government officials, and locally-based NGOs, to complement the community and ward level input and ensure that actions would be integrated across levels. Findings contributed to the HURCAP action plan and the participatory approach maximized local ownership and support for the actions identified.

This initiative is also particularly timely given the hosting of the first Solomon Islands National Urban Conference (SINUC) in the Solomon Islands in June 2016, aimed at planning a more sustainable future for the city (recognizing the many complex challenges that the city faces). Key stakeholders discussed the priorities of the HURCAP in the context of this proposal in a one-day workshop following the urban conference.

In November 2016 the Climate Change Coordinator of UN-Habitat's Regional Office for Asia and the Pacific conducted a mission to Honiara to discuss the finalization of this Project Document.

Table 9: Stakeholder consulted and outcomes

Consultation Group	Stakeholder Role & Input / Consultation Type	Consultation objective	Outcome	Conclusion
Climate Vulnerability Hotspot Communities				
Ontong Java Informal Settlement (climate vulnerability hotspot)	- Community workshop (18 participants, 10M,8F): Settlement participatory climate action planning & climate science communications and past event and observed trend discussion - Transect walk	- Assess Climate Change Vulnerability (2014) - Develop Community Climate Change Action Plan (2015-2016) - Determine settlements	- Hotspot Analysis - Key issues and objectives identified - Community-level resilience action plan input - Increased	- Resilience actions prioritised for hotspot community (high exposure, high socio-economic sensitivity, limited adaptive capacity).

	(community leaders) examining community-level climate sensitivities, exposure and observed trends - HURCAP Forum representation (~10 community representatives) involving group-based development of ward-level adaptation actions	climate action in the context of a city-wide adaptation plan (city-wide consultation), - Build awareness of climate change	community adaptive capacity and understanding of climate change	
Aekafo Informal Settlement Area (climate vulnerability hotspot)	- Community workshop (26 participants – 19M,7F): Settlement participatory climate action planning & climate science communications and past event and observed trend discussion - Transect walk (community leaders) examining community-level climate sensitivities, exposure and observed trends - HURCAP Forum representation (~10 community representatives) involving group-based development of ward-level adaptation actions	- Assess Climate Change Vulnerability (2014) - Develop Community Climate Change Action Plan (2015-2016) - Determine settlements climate action in the context of a city-wide adaptation plan (city-wide consultation), - Build awareness of climate change	- Hotspot Analysis - Key issues and objectives identified - Community-level resilience action plan input - Increased community adaptive capacity and understanding of climate change	- Resilience actions prioritised for hotspot community (high exposure, high socio-economic sensitivity, limited adaptive capacity).
Kukum Fishing Village (climate vulnerability hotspot)	- Community workshop (35 participants – 22M,13F): Settlement participatory climate action planning & climate science communications and past event and observed trend discussion - Transect walk (community leaders) examining community-level climate sensitivities, exposure and observed trends	- Assess Climate Change Vulnerability (2014) - Develop Community Climate Change Action Plan (2015-2016) - Determine settlements climate action in the context of a city-wide adaptation plan (city-wide consultation),	- Hotspot Analysis - Key issues and objectives identified - Community-level resilience action plan input - Increased community adaptive capacity and understanding of climate change	- Resilience actions prioritised for hotspot community (high exposure, high socio-economic sensitivity, limited adaptive capacity).

	- HURCAP Forum representation (~10 community representatives) involving group-based development of ward-level adaptation actions	- Build awareness of climate change		
National Government Stakeholder Level				
Ministry of Land, Housing and Survey. Permanent Secretary, Stanley Waleanesia (21 and 23 November 2016), Director of Planning (21 and 22 November 2016), various other officials 22 November 2016.	- SIG National Ministry leadership level (various meetings & correspondence) project authorisation and high-level input - Chairing of HURCAP Forum feedback sessions and plenary contributions	- Review of AFB Secretariat comments on concept note. - Input to Part III of AF project proposal, in particular project management, risks, logical framework and budget.	- Agreement on full project document	- Agreement on partnership and project implementation.
Ministry of Finance, Selesia Alepia (Focal Point for MLHS)	- SIG National Ministry leadership level (various meetings & correspondence) authorisation and high-level input	- Financial management of project - Financial safeguards, transparency, pass-through funding for executing agencies and possibility of setting up of trust fund.	- MLHS with Ministry of Finance can setup a trust fund. Executing Agencies UN-Habitat is not signing Agreements of cooperation with, can receive funding through trust fund arrangement.	- Trust fund ideal for MLHS project implementation and possibility for pass-through grants for other executing agencies. - Direct agreements through UN-Habitat Agreement of Cooperation possible.
Ministry of Environment, Climate Change, Disaster Management and Meteorology 1. Desig nated Authority (Permanent	- SIG National Ministry leadership level (various meetings & correspondence) authorisation and high-level input - Review and feedback regarding proposed adaptation actions - Workshop on Adaptation Fund Proposal	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016) - Consultation on HURCAP for national	- City-wide analysis and resilience action plan - Formal Endorsement of Vulnerability Assessment (2015) and support for HURCAP (2015-2016)	- City-wide resilience action plan agreed - Designated Authority to provide endorsement of proposal.

Secretary, Undersecretary and Director of Climate Change) July 2016. On 24 November 2016 meeting with Chanel Iroi (AF designated authority, Undersecretary)	development, prioritization and endorsement	alignment - November 2016: Input regarding AFB recommendations, and AF Proposal Part III	- November 2016: MECDM continues to be supportive of project.	
2. National Disaster Management Office (Director NDMO and entire team)	- National government level public sector representatives (13M,2F): participation in vulnerability assessment and action planning workshops; toolkit training for capacity building; HURCAP Forum participation; written feedback and report review	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016) - Consultation on HURCAP for national alignment - Workshop on Adaptation Fund Proposal development, prioritization and endorsement	- City-wide analysis and resilience action plan - Endorsement of Vulnerability Assessment and support for HURCAP (2015-2016)	- City-wide resilience action plan agreed
Local/Municipal Government Level				
Honiara City Council (Mayor, Deputy Mayor, Town Clark, Deputy Town Clark, councillors) and municipal government Heads of Department	- City-wide action planning workshop - Review and feedback on community-level hotspot action proposals - Ward councillor facilitation of ward-level action planning in HURCAP forum - Review Workshop for draft HURCAP actions - Project authorisation and high-level steering by executive team	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016) - Consultation on HURCAP for national alignment - Workshop on Adaptation Fund Proposal development, prioritization and endorsement	- City-wide analysis and resilience action plan - Endorsement of Vulnerability Assessment and support for HURCAP (2015)	- City-wide resilience action plan agreed

November 2016: City Clerk (Charles Kelly) and Deputy City Clerk (Fred Warereau) 22, 23 November 2016, 3 February 2017	- Municipal government – executive-level meeting with project planning input	- Discussion on AFB recommendations, discussion on Part III - Role of resilience officer - Additional support mechanisms for city government for project implementation - Sustainability of resilience officer	- Endorsement of proposed project governance and HCC role - Part III of project document agreed upon. - Request to New Zealand volunteer service for resilience planning support. -	- Full project proposal endorsed - HCC will support Resilience officer beyond project period
Sector-specific Stakeholders and Expert Groups				
Land Management and Urban Planning National Stakeholder Group	- Workshop with SIG Ministry of Land Housing and Survey (Minister, Permanent Secretary, Undersecretary/ Technical, Director, Planning, SPC consultant and INGO specialists – stakeholders outlining city-wide urban planning issues, climate-related extreme event risks to the sector, and complementary initiatives - Individual review of and comment on the vulnerability assessment report and HURCAP by all group members	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016) - Consultation on HURCAP for national alignment - Adaptation Fund Proposal development, prioritization and endorsement	- City-wide analysis and resilience action plan input - Endorsement of Vulnerability Assessment and support for HURCAP (2015) -	- City-wide resilience action plan agreed
Solomon Water (CEO and senior management team)	- Workshop (13 participants, 11M,2F): Sector specific participant identification of vulnerability	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016) - Consultation on HURCAP for sectoral alignment	- Sectoral vulnerability and adaptation actions	- Contribution to city-wide resilience action plan

Honiara Youth Council	- Workshop with 21 youth representatives from each of the city's 12 wards (15M,6F) - Participation by additional youth representatives in the HURCAP Forum action planning and ward-level assessment activities	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016)	- Youth-specific issues relating to climate vulnerability and involvement in adaptation actions	- Contribution to city-wide resilience action plan
Development Services Exchange	- Action planning workshop with 11 representatives of local and international civil society organisations (7M,4F) identifying sector-specific perspectives on climate vulnerability and possible actions, as well as opportunities for building on NGO expertise and existing community linkages and projects	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-2016)	- Civil society perspectives on climate vulnerability and involvement in adaptation actions	- Contribution to city-wide resilience action plan
SPREP Pacific Ecosystems-based Adaptation to Climate Change Project (PEBACC), Project Manager, Herman Timmermans, 17 November 2016 (in Fiji) and Fred Patison, Country Manager, 22 November 2016	- Multi-lateral international scientific secretariat: various meetings to provide project input from ecosystem-based adaptation viewpoint	- Explore synergies	Ongoing work can inform planned activities under this project (such as watershed and coastal zone assessments for Honiara). Community-level action: potential for synergistic activities in communities and for exchange of tools and joint learning across communities.	Ensure good communication (mailing lists, workshop invitations, working level meetings) SPREP to be on project technical advisory team. UN-Habitat to support SPREP Solomon Islands climate change summit.
World Bank Group Country Office	- Various meetings with organisational representatives to identify opportunities for collaborative input and complementary project objectives - Participation by in-	- Assess Climate Change Vulnerability (2014) - Develop city-wide Climate Change Action Plan (2015-	- Sectoral vulnerability and adaptation actions	Contribution to city-wide resilience action plan Ensure good communication and cross-project

	country team and external flood experts in the HURCAP Forum	2016) - Consultation on AF Proposal synergies		coordination
Other cross-scale/multi-sector engagement activities				
City-wide stakeholder Consultation (July 2016)	- N/A: Cross-scale/multi-sector activities	- Focus Group discussions during Vulnerability Assessment and HURCAP development (multiple, 2015) - 2 day consultation with all key stakeholders (August 2015) - Climate Change presentation and discussions during Solomon Islands National Urban Conference (June 2016) - Stakeholder consultations (1 day workshop) in preparation for AF proposal (June 2016)	- Validated Vulnerability Assessment. - Agreed upon Resilience and Climate Change Action Plan	- Mandate to go ahead with resource mobilization for plan and plan implementation
Key stakeholder workshop (23 November 2016)	- Review of project concept notes and comments of AF board secretariat~~N/A~~ - The settlements upgrading country team as well as key climate change stakeholders were present at the meeting. The country team includes national and local government, academia, utilities, civil society and as gender mainstreaming focal	- Consult with key stakeholders (MLHS, HCC, Utilities, Civil Society) key elements of Part III of the project document in particular: - Steering Committee - Project Management Team - Key partners - Project risks - Tenure risks /	- Inputs provided through working groups and plenary session.	- Recommendations are incorporated in this project document.

	points Vois Blong Mere and Development Services exchange	risks of evictions and relocations		

I. Justification of the project

The proposed project objectives align government/institutional priorities/gaps identified at the community, ward, city and national level and with identified needs of community and vulnerable groups and with the Adaptation Fund outcomes as stated in the Adaptation Fund results framework. This alignment has resulted in the design of a comprehensive approach in which the different components strengthen each other and in which outputs and activities are expected to fill identified gaps. Activity includes traditional adaptation activities, but also complements these with broader resilience actions that seek to reduce current day vulnerabilities and build a strong platform for future adaptation pathways. In particular construction of drainage, access (paths, bridges, Jacob's ladders), small-scale water and sanitation projects will be implemented with communities. At the ward level, in particular the support to ecosystems-based adaptation and the construction of emergency shelters (multi-purpose for broader resilience) will be supported. The project aims to maximize the funding amount for the concrete adaptation measures; funding allocation to the other (softer) components is required to complement/support these measures and for sustainability and quality assurance of the project. The table below provides a justification for funding requested, focusing on the full cost of adaptation reasoning, by showing the impact of AF funding compared to no funding (baseline) related to project objectives

Table 10: Overview of impact of AF funding compared to no funding (baseline) related to project objectives

Project results/outcomes	Baseline (without AF)	Additional (with AF)	Comment/ Alternative adaptation scenario
Community-level			
Reduced vulnerability of hotspot communities to climate-related hazards and threats	The most vulnerable areas and people receive limited infrastructure support and no targeted resilience support because of limited capacity and resources.	The most vulnerable areas and people are targeted and appropriate resilience measures are implemented	Some measures may be implemented but they may not target the most vulnerable areas and people and they may not be appropriate in terms of resilience building.
To strengthen the capacity of local communities to respond to climate change and natural hazards through awareness raising, capacity development and training.	Local communities have limited capacity to prepare for and respond to climate change and natural hazards	Local communities are enabled to prepare for and respond to climate change and natural hazards	Hard measures can be implemented but in a less sustainable way because of limited community support
Ward-level			

To support the implementation of resilience actions that target women, youth, urban agriculture and food security, and disaster risk reduction.	The most vulnerable people are not targeted/reached	The most vulnerable people are the main beneficiaries to the project	Some vulnerable people may benefit from the project but measures may not be appropriate for the groups
To strengthen the capacity of ward officials / councilors to lead climate change adaptation and DRR planning activity, in support of increased urban resilience.	Ward officials / councilors do not have the capacity to lead climate change adaptation and DRR planning activity	Ward officials / councilors can lead climate change adaptation and DRR planning activity	Climate change adaptation and DRR planning activity can be implemented but in an unsustainable way (where ward officials / councilors will not be able to implement resilience activities in the future
City-wide To strengthen institutional arrangements at the city-level to respond to climate change and natural disasters through mainstreaming	City level officers do not have the capacity to lead climate change adaptation and DRR planning activity	City level officers will have the capacity to lead climate change adaptation and DRR planning activity	Climate change adaptation and DRR planning activity can be implemented but in an unsustainable way (where city officers won't be able to implement resilience activities in the future

J. Sustainability of the project

Institutional sustainability

The project will pave the way for the national government and city and ward authorities to sustain and up-scale the project to other cities and informal settlements by sharing lessons learned. Trained government officials at different levels will support this in combination with the technical support of the Climate Adaptation and Resilience Officer and supporting plans. Honiara City Council as committed to use this project to institutionalize climate resilience including making one councilor responsible for resilience and to find the means to maintain the position of the Resilience Officer. Where applicable the project will work with public utilities such as Solomon Water to ensure institutional support and sustainability.

Social sustainability

By fully engaging informal settlement households in project activities, including assessments, the development of plans/ strategies and monitoring, the project aims to achieve long-lasting awareness and capacities of these households. Besides that, the increased resilience of community level infrastructure will reduce community vulnerabilities in the long-run. Moreover, community members will be involved in capacity development activity.

Economic sustainability
Investing in the resilience of vulnerable physical, natural, and social assets and ecosystems is a sustainable economic approach. It will not only avoid future costs related to climate change and disaster impacts but it will also enhance livelihood options. The city-level and community level plans will include economic opportunities, as well as that resilience building opportunities, including economic benefits of resilience, which can be integrated in national plans and policies.

Environmental Sustainability
The city-level and community level plans will also be considerate of the environment, including for instance the protection of ecosystems or the reduction of waste production.

Financial sustainability
The Ministry of Lands, Housing and Survey and Honiara City Council have started to pay more attention to settlements upgrading including resilience in settlements upgrading. The government has started to allocate funding to the sector, however, insignificantly considering the challenges. The adoption of the Informal Settlements Upgrading Strategy is expected remove further barriers for funding. The adoption of the HURCAP is also expected to provide opportunities for budget allocations as well as resource mobilization. The project will provide some institutional and capacity development support which will empower the city to replicate community level resilience action. Further, land regularization will be facilitated by better service provision; this in turn will increase the tax base of Honiara City Council. In certain cases infrastructure may be jointly managed with public utilities which would further strengthen the financial sustainability.

At the community level, improved skills, livelihoods, income (or avoided losses) are expected to enhance the financial strength of households.

Technical sustainability
Infrastructure will be designed using resilience and building back better principles. This will enhance the durability/sustainability significantly. Besides that, resilient infrastructure will be maintained in partnership with local public utilities and communities/households. This will ensure that after the project, infrastructure systems are maintained.

K. Environmental and social risks and impacts

Table 11: Overview of the environmental and social impacts and risks identified

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law		X

Access and Equity		X
Marginalized and Vulnerable Groups		X
Human Rights		X
Gender Equity and Women's Empowerment		X
Core Labour Rights		X
Indigenous Peoples		X
Involuntary Resettlement		X
Protection of Natural Habitats		X
Conservation of Biological Diversity		X
Climate Change		X
Pollution Prevention and Resource Efficiency		X
Public Health		X
Physical and Cultural Heritage		X
Lands and Soil Conservation		X

Note: an initial environmental and social assessment has been conducted as part of the Vulnerability Assessment and the Honiara Urban Resilience and Climate Action Plan. Further assessments (as per above) are only required for unidentified sub-projects

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP). Outlined below is a brief description of the initial analysis that has been carried out to evaluate environmental and social impacts of the project, and areas where further assessment is needed.

The capacity strengthening activities (under component 2, 4, 6 and 7) are all soft activities. According to the Adaptation Fund's Environmental and Social Policy, "Those projects/programmes with no adverse environmental or social impacts should be categorized as Category C[33]." No environmental and social impacts, whether direct, indirect, transboundary or cumulative are envisaged to arrive as a result of any of the soft activities. Despite this, however, steps will be taken to ensure that no environmental or social impacts can occur. Some of the capacity development, planning and governance support will however directly assess the environmental and social impacts and actively seek to develop countermeasures.

Some activities under components 1, 3 and 5 are 'hard' activities, and as such some activities have the potential, without and environmental and social safeguarding system, including mitigation measures, create negative environmental and social impacts. However, in our assessment, none of the activities proposed could be considered to be in Category A of the Adaptation Fund's impact classification, and as such, the activities in the Table are likely to fit into Category B or C. This is because this project proposes hard activities that are small scale and very localized, and managed by communities where possible, who have a stake in avoiding environmental and social impacts. This means that the potential for direct impacts is small and localized, that there can be few indirect impacts, and that transboundary impacts are highly unlikely. Given this, cumulative impacts are also unlikely.

[33] Adaptation Fund Environmental and Social Policy, paragraph 28, Page 8

The community and vulnerable groups consultation that took place in 2015 and 2016 included questions focused on identifying environmental and social risks of the project as per the safeguard areas in the table above. As for components 1, 3 and 5, which include sub-project development that potentially fall in category B, an environmental and social management plan has been developed (see annex 1). Because of this, the whole project has been categorized as B.

Although an initial assessment of all safeguard areas already took place and for most areas very little negative impacts are expected, all safeguard areas will be assessed and monitored in depth during the project implementation phase, as per the ESMP developed.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Arrangements for project management

For this AF project, UN-Habitat will be the Multilateral Implementing Entity (MIE), as requested by the Solomon Islands Government. UN-Habitat's Regional Office for Asia and the Pacific (ROAP) and UN-Habitat's Headquarters (HQ) will ensure project management compliance in accordance with UN-Habitat and AF standards and requirements. In order to fulfil its obligation for day-to-day Implementing Agency functions and related coordination with the Executing Agencies and other local stakeholders a project management unit will be set up building on established partnership arrangements with Honiara City Council and the Ministry of Lands Housing and Survey.

In close consultation with the executing agencies, the Ministry of Lands, Housing and Survey (MLHS), the Honiara City Council (HCC), Ministry of the Environment, Climate Change and Disaster Management (MECDM) and RMIT University, Melbourne, Australia the following mechanisms for project coordination and project implementation were agreed upon:

MLHS is the key national executing agency. The Ministry is responsible for land issues, including urban land and physical planning; informal settlements upgrading; housing and urbanization. Given its mandates the Ministry will chair the **Project Management Committee** will support leadership of the **Project Team** on a day-to-day basis and will support the coordination of the various project components. The Ministry has further offered to house the project office. The Ministry will further provide **Technical Advisory** support relating to land, settlements upgrading, housing and urbanization / urban development.

MECDM is the National Designated Authority and beyond its oversight role, for example expressed in its role as co-chair of the **Project Management Committee** will also support the project on a day-to-day level through support to the leadership of the **Project Team,** and **Technical Advisory** in particular as this relates to national climate change and disaster management policy and strategy and their implementation.

HCC is the local government and key custodian of the Honiara Urban Resilience and Climate Action Plan. It implements national and local policies and plans through infrastructure and other development projects. Given its mandates the City Council will be a member of the **Project Management Committee** and technical staff such as the project supported resilience officer will be part of the **Project Team**. **Technical Advisory** functions as they relate to the implementation of the HURCAP, Ward and community strategies and local infrastructure projects will also be provided.

RMIT has supported the Solomon Islands Government and UN-Habitat in local climate change Planning since 2014 and has agreed to provide a wide range of technical advisory, capacity development and training support through this project.

For local implementation the collaboration with the ward councilors (and their teams) as well as the community development committees is critical. Whilst implementation will be spearheaded by national and local government entities, wards and communities will be involved in the planning, implementation and monitoring of all activities.

Various other national government entities, in particular the Ministry of Infrastructure Development, the Ministry of Health and Medical Services, utilities, Solomon Island National University, NGOs, Regional Organizations, in particular SPC and SPREP as well as Development Partners will engage in the project (as per the organigramme).

MoUs are planned to specify the roles of the parties in the Project Management Committee and for project implementation.

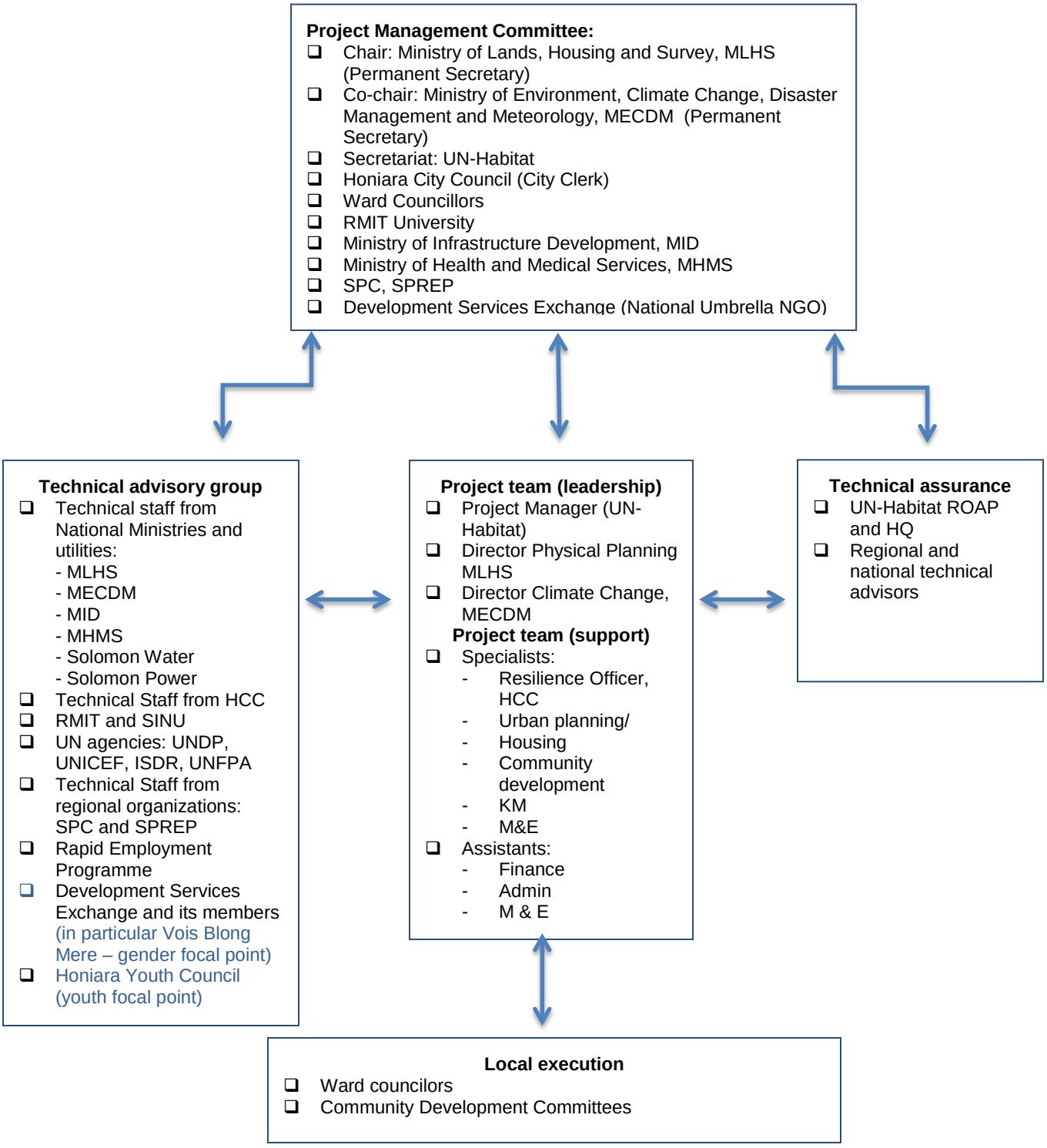
Agreements of Cooperation (AoCs)s, UN-Habitat's legal and financial mechanism to engage with executing agencies will be signed with executing agencies. To further strengthen the oversight role of the key National Executing Entity, the Ministry of Lands, Housing and Survey, the setting up of a trust funds account has been proposed to the Ministry of Finance; the trust fund would be managed by MLHS, signatories to the account would be the Permanent Secretary and the Chief Financial Officer of the Ministry. The project team leadership (UN-Habitat, MLHS, MECDM) would have to clear any financial transaction. This arrangement implies that MLHS would be the sole AoC partner and funds to other government entities would be channeled through the trust fund in line with the rules and regulations of the Solomon Islands Government, this project document and the details of the AoC.

At the national level, the Project will be supported by a **Project Management Committee** (PMC). The PMC will be formed to oversee and keep abreast of project progress and facilitate the implementation of the project, including overseeing and cooperating with the project team. The PMC will be chaired by MLHS and co-chaired by MECDM and UN-Habitat (including secretariat). The PMC will include Permanent Secretaries, the Honiara City Clerk and the respective executing officers (or their designated alternates). The Committee will approve annual work plans and review project periodical reports as well as any deviations from the approved plans.

The Project Team (PT), which will have the responsibility of day-to-day management of project activities and related coordination with the Executing Agencies and other local stakeholders, will also take the lead in monitoring and evaluation and learning. The team will will consist of the members listed in the organigram below.

To assist the Project Team on technical questions, a **Technical Advisory Group** (TAG) will be formed to provide guidance and advice on technical questions related to climate change/resilience, water management, spatial/urban planning, sanitation, health/hygiene, and vulnerable and marginalized people. The main objective of the TAG is to identify technical strengths and weaknesses of the project, take stock of available and required technical know-how under different project components, and provide technical backstopping and quality control throughout the project period.

Organigramme of the project



B. Measures for financial and project risk management

The status of financial and project risks, including those measures required to avoid, minimize, or mitigate these risks, will be monitored throughout the project (as discussed in section D: arrangements for monitoring, reporting and evaluation)

Table 12: Financial and project management risks, significance of risks and measures to manage/mitigate risks.

	Category and risk	Rating: Impact/ probability 1: Low 5: High	Management/mitigation Measure
1.	Environmental/social: Current climate and seasonal variability and/or hazard events result in infrastructure construction delays or undermine confidence in adaptation measures by local communities	Impact: 3 Prob: 2	❑ Current climatic variability will be taken into account in the planning and execution of project activities and especially into project Component 3 (the construction of resilient infrastructure): infrastructure will mainly be constructed in the dry season. ❑ Criteria for the selection of infrastructure projects at the community level will provide incentives for communities to cooperate towards long-term resilience because they are based on the outcomes of the climate change vulnerability and disaster risk assessments which look especially at long-term trends and impacts.
2.	Institutional: Loss of government support (at all levels) for the project (activities and outputs) may result in lack of prioritization of AF project activities.	Impact: 4 Prob: 1	❑ Establishment of a project management committee and the overall participatory and inclusive project design will improve national, ward and community level ownership throughout and thus enhance government support for project implementation. ❑ UN-Habitat will establish agreements (MoUs and AoCs) to ensure implementing entities will deliver project activities and outputs. UN-Habitat will facilitate planning processes to deliver these outputs at the all levels of government and in communities. ❑ Through the establishment of the Project Team and the Technical Assurance mechanism, a broad range of government (and non-state actors) will be strongly engaged in the project that will strengthen government buy-in. ❑ At the Ward level (councilors) and the community level (community development committees) the prioritization of resilience and development needs will be ensured. Such prioritization should further counter any government disenfranchising for example in case of political change.
3.	Institutional: Capacity constraints of local institutions may limit the effective implementation of interventions	Impact: 2 Prob: 1	❑ The project has a strong capacity building and training component, designed to promote effectiveness and sustainability at the community and the district, province and national government levels. ❑ The project is deliberately designed to work on the national level (institutionally) at the city, ward and community level, as

			the lack of institutional capacity has been identified as a key challenge for effective resilience building. Without institutional capacity development at the higher level, local resilience planning is not possible.
4.	Institutional/social Lack of commitment/buy-in from local communities may result in delay at intervention sites.	Impact: 2 Prob: 1	❑ Community stakeholder engagement during the Honiara Climate Change Vulnerability Assessment and the HURCAP development have contributed to the project idea. In addition, consultations during the development of this project with communities, NGOs and support organizations were held to ensure that needs are understood and that full buy-in to the AF project is ensured. ❑ Community representatives will be able to flag any issues through the Project Management Committee as well as the established grievance mechanisms (safeguards) for early detection and institutional mitigation of any issues that may result in reduced community engagement. ❑ A bottom-up approach to detailed planning (including further vulnerability assessments and action planning and prioritizations) and implementation (including through community infrastructure implementation directly by the communities) and community-level monitoring will be followed.
5.	Institutional/social: Disagreement amongst stakeholders with regards to adaptation measures (infrastructure) and site selection.	Impact: 2 Prob: 2	❑ Adaptation measures and intervention sites will be selected using an agreed upon process and list of criteria to ensure the selection is transparent and equitable. ❑ There will be a participatory approach to the AF project, particularly with regards to climate change vulnerability and disaster risk assessments and related to this, the planning and selection of adaptation measures and site selection.
6.	Institutional: Communities may not adopt activities during or after the AF project, including infrastructure maintenance	Impact: 2 Prob: 2	❑ The interventions will be institutionalized within the ministries, Honiara City Council and communities to ensure sustainable delivery of (post-) project implementation, including formal agreements for infrastructure maintenance through communities, HCC and MID as well as service/infrastructure user fees where applicable (e.g. provision of water). ❑ Capacity building and training of communities will be undertaken to improve their awareness and understanding of the benefits of the activities, including infrastructure maintenance. ❑ Communities will be involved in project implementation/decision making throughout the project.
7.	Financial: Complexity of financial management and procurement. Certain administrative processes could delay the project execution or could lack integrity	Impact: 2 Prob: 2	❑ Financial management arrangements have been defined during project preparation. ❑ UN-Habitat's control framework, under the financial rules and regulations of the UN secretariat, will ensure documentation of clearly defined roles and responsibilities for management, internal auditors, the governing body, other personnel and demonstrates prove of payment / disbursement.

			❑ A trust fund account (at MLHS) will ensure that the bulk of the funds will be channeled through a mechanism that ensures transparency and immediate accountability vis-a-vis the MIE and the designated authority as well as the implementing entities and beneficiaries. The mechanism should also avoid delays. ❑ Procurement will be done by the executing entities as agreed through AoCs. The project manager and the project team have a certifying role (for key procurements / expenditures).
8.	Institutional: Delays in project implementation, and particularly in the development of infrastructure interventions	Impact: 1 Prob: 2	❑ The ownership by the Government has been high during the preparation phase which will reduce this risk. ❑ A pilot community project (based on existing plans, as per the HURCAP) will be implemented in the first year to ensure that any unforeseen bottlenecks can be resolved prior to the roll out. ❑ Partnerships with key government agencies and infrastructure and community resilience project planning will start early on – in tandem with the community action planning. Institutional arrangements will be put in place well before the finalization of community action plans. ❑ Lessons learnt from the Rapid Employment Project are incorporated in the project design.
9.	Institutional: A lack of coordination between and within national government Ministries and Departments.	Impact: 1, Prob:2	❑ The Project Management Committee under the leadership of MLHS is to ensure coordination. Should UN-Habitat observe coordination problems, the agency will try to resolve issues directly with concerned parties and or the PMC.

C. Measures for the management of environmental and social risks

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP). For that purpose, environmental and social risks and impacts of the project and related activities need to be identified and addressed (so that the project does not unnecessarily harm the environment, public health or vulnerable communities). This will be done through the integration of an environmental and social safeguarding system in:

1. **Institutional processes:** staff and partners will be trained to identify, assess, manage and mitigate environmental and social risks, and MoUs and AoC will include agreements about how to deal with safeguard compliance during project implementation.
2. **Soft project activities:** a detailed environmental and social assessment will be part of ~~the project activity to conduct community-level climate change vulnerability and disaster risk assessments and action plans.~~community level project activities (Output 1.2. and 2.1. and 2.2.)

3. **Sub-projects:** environmental and social safeguard mechanisms will be put in place to identify, assess, manage and mitigate potential environmental and social risks of Unidentified Sub-Projects (USPs) (i.e. small-scale infrastructure investment projects and related activities) and establishment of a grievance mechanism.

Prior to the start of this project, all potential environmental and social risks (related to the 15 Adaptation Fund safeguards, which have been synchronized for this project with UN-Habitat's safeguard areas.) have been identified/assessed and measures to mitigate these risks proposed (see outcomes of initial environmental and social risk assessment in Annex 1).

During the project, potential environmental and social risks of Unidentified Sub-Projects, which have the potential to fall into medium risk category B, will be identified/assessed and mitigated as well. This is the main reason an Environmental and Social Management Plan (ESMP - see Annex 1) has been developed to which all MoU and AoC partners will have to adhere. Compliance will be monitored by UN-Habitat.

The ESMP discusses:

- **Environmental and social risks management framework**: explanation of method and process of dealing with potential environmental and social risks and grievance procedures
- **Measures to mitigate identified risks:** outcomes of initial environmental and social risk assessment and risk mitigation measures for institutional processes and soft project activities.
- **Risks assessment tool for Unidentified Sub-Projects**: to identify, assess, manage and mitigate potential environmental and social risks of small-scale infrastructure investment projects and related activities.

Regarding measures to mitigate identified risks, a detailed environmental and social assessment will be conducted in the target settlements/communities at the beginning of the project. The reasoning for this is that the assessment will be much more comprehensive/detailed, including the involvement of marginalized/vulnerable groups in all target settlements/communities, as could be done in the proposal development phase. Besides that, a detailed environmental and social assessment is only required for the activities under Component 3, which includes Unidentified Sub-Projects. Once the ~~climate change vulnerability~~ assessments have been carried out the ESMP will be reviewed and re-consulted.

The overall responsibility for compliance with the ESMP will be with the project manager and the project team leadership. This includes the training of key partners of the executing entities and the clear articulation of responsibilities in the Agreements of Cooperation with the executing entities, the monitoring of all activities, the signing off of unidentified sub-projects and the reporting. In addition to working with key actors of the executing entities on the entirety of the ESMP a broader group of stakeholders will receive briefings on key issues such as gender and youth participation (and mainstreaming of specific concerns) as well as the environment and climate change dimensions of the ESMP).

Stakeholder engagement has been and will be vital to the effective functioning of the ESMP, and beneficiaries and other local and national stakeholders, including government and communities, have been consulted and will be further consulted throughout the project duration. The consultations included and will include marginalized groups, including women, youth, the

elderly, disabled people and people from the diverse ethnic groups/ different islands and provinces. The final ESMP and ~~climate change vulnerability assessment/~~community consultations will be publicly available through UN-Habitat's website. Besides that, results will be shared with the communities in ways that they will understand the results (e.g. visually / verbally in Solomon Islands Pidgin).

A grievance mechanism is also part of the plan. This will allow any affected stakeholder to raise concerns, anonymously if they wish, to the leaders of the community development committees. Modalities for raising grievances will include a postal address to which community members can write in any language and an email address on the project's website and a confidential telephone number. In addition to the grievance mechanism, local staff will be trained to have an 'open-door' policy with communities, so that communities can discuss any aspect of the project at any time. This less formal mechanism will also enable project staff to listen to communities' concerns or ideas and promote them in the implementation of the project. More formal consultations and workshops, held at local and national levels throughout the project implementation will also serve as a means for stakeholders to raise concerns or suggests with the project's implementation.

The roles and responsibilities, budgetary requirements, timelines and monitoring and evaluation arrangements required to implement safeguarding actions are reflected in the designated sections of part III of this proposal.

D. Arrangements for monitoring, reporting and evaluation

The AF project will comply with formal guidelines, protocols and toolkits issued by the AF, UN-Habitat and Solomon Islands Government. The Monitoring and Evaluation (M & E) of progress in achieving project results will be based on targets and indicators established in the Project Results Framework (see below). Besides that, the status of identified environmental and social risks and the ESMP, including those measures required to avoid, minimize, or mitigate environmental and social risks, will be monitored throughout the project (annual project performance, mid-term and terminal reports). The same applies to financial and project management risks and mitigation measures.

The project team will develop an **M & E Plan** during the project's inception phase, which will be distributed and presented to all stakeholders during the initial workshop. The emphasis of the M & E Plan will be on (participatory) outcome/result monitoring, project risks (financial & project management and environmental & social risks) and learning and sustainability of the project. Periodic monitoring will be conducted through visits to the intervention sites.

UN-Habitat will ensure that the project team is fully briefed on the M&E requirements to ensure that baseline and progress data is fully collected and that a connection between the Knowledge Management component and M&E is established. The Agreements of Cooperation will reflect these roles too.

The community-level ~~vulnerability assessment, leading to the~~ action planning and the concrete adaptation projects provides the opportunity to collect household and sub-household level data, including gender, age and ability related disaggregation. Whilst this activity supports targeted programming, it further leads to the development of a detailed database which is well suited for baselining as well as monitoring and evaluation.

Participatory monitoring mechanisms (involving different levels of government and communities) will build on the above mentioned information and data (and database). These systems will be put in place for transparent decision making and the updating (collection and recording) of data in support M & E and reporting. This will allow beneficiary communities to directly input to the project's M & E and to highlight issues in project delivery and to strengthen adaptation benefits, including in replication and sustaining the project's gains. Data collected will include marginalized groups (e.g. women, youth, the poorest) dis-aggregated (if possible). Project site visits will be jointly conducted based on an agreed schedule to assess project progress first hand.

Annual Project Performance Review (PPR) will be prepared to monitor progress made since the project's start and in particular for the previous reporting period. The PPR includes, but is not limited to, reporting on the following:

- Progress on the project's objective and outcomes – each with indicators, baseline data and end- of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lessons learned/good practice;
- Annual Work Plan and expenditure;
- Annual management;
- Environmental and social risks (i.e. status of implementation of ESMP, including those measures required to avoid, minimize, or mitigate environmental and social risks. The reports shall also include, if necessary, a description of any corrective actions that are deemed necessary.
- Project financial and management risks (same as per above)

An independent **Terminal Evaluation** will take place as last activity before the operational closure of the project in accordance with AF guidance and following UN-Habitat's evaluation practices based on the OECD DAC framework. The terminal evaluation will focus on the delivery of the project's results, as initially planned and then reflected in the M&E framework, including the implementation environmental and social mitigation measures (and as corrected after the Mid-Term Evaluation, if any such correction took place). The terminal evaluation will assess the impact and sustainability of results, including their contribution to capacity development and the achievement of adaptation benefits.

The **reports** that will be prepared specifically in the context of the M & E plan are: (i) the M & E plan, (ii) the project inception report, (iii) Annual-, and terminal project performance reports and (iv) technical reports.

For the M & E budget and a breakdown of how implementing entity fees will be utilized in the supervision of the M&E function, please see the detailed budget (section G). For related data, targets and indicators, please see the project proposal results framework (section E).

E. Project proposal results framework

Table 13: Project results framework with indicators, their baseline, targets, risks & assumptions and verification means.

Expected Result	Indicators	Baseline data	Targets	Risks & assumptions	Data collection method	Frequency	Responsibility
Project objective: enhance the resilience of Honiara and its inhabitants to current and future climate impacts and natural disasters, with a particular focus on pro-poor adaptation actions that involve and benefit the most vulnerable communities in the city.							
Project component 1: **Community level actions**.							
Expected Accomplishment 1 Reduced vulnerability of hotspot communities to climate-related hazards and threats	Number of hotspot communities whose physical infrastructure has been improved to enhance climate resilience with particular emphasis on the poorest, women, youth, elderly and other vulnerable households.	0	5	Timely development of participatory community action plans National and local government capacity in place to support communities Timely and high quality implementation by communities and executing agencies.	Community-level monitoring	Baseline, mid-term and end	UN-Habitat
Output 1.1: In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements	Community action plans as foundation for concrete adaptation action available. Roles and responsibilities of women are identified in the plans	3 0	5 5	Timely and strong engagement of communities and executing agencies	Review of produced documents	Yearly until completion	UN-Habitat
Output 1.2: In-depth community profiling for the hotspot case studies	Detailed base-line data (including for monitoring of environmental and social risks) available for selected hotspot communities (ensuring gender and age disaggregation of data and detailed	0	5	Well suited technology available Well trained enumerators available. Data analysis and presentation in a GIS data base	Development of data base	ongoing	UN-Habitat

	assessment of household level vulnerability)						
Output 1.3: Scoping and feasibility studies of prioritized local actions for each hotspot community	Action plans and detailed proposals for prioritized community level concrete climate action are available.	0	5	Good facilitation of community consultations Participatory technical design of individual projects	Review of produced documents	Yearly until completion	UN-Habitat
Output 1.4: Implementation of screened / agreed resilience actions in each hotspot community (hard)	Concrete climate actions implemented.	0	Number to be defined but all target communities will be beneficiaries	Detailed baseline information available and tools to assess level of improvement of resilience required	Count of improved or newly constructed infrastructure	Baseline, mid-term and end	UN-Habitat
Activities 1.1.1 Identification of key issues and prioritization of actions for two additional hotspot case studies (Nggosi and Panatina wards) 1.2.1 In-depth profiling of all hotspot communities 1.3.1 Carry out scoping and feasibility study. Assess the cost, feasibility and partnerships that will be needed to implement the actions suggested by the community 1.4.1 Implement screened/agreed pilot-studies in each hotspot community 1.4.2 Provide technical support where necessary				Milestones Community Action Plans Community Adaptation Action - end of year one – one demonstration project) - end of year two – 10 percent of community adaptation projects - end of year three – 40 percent community adaptation projects - end of year four – 100 percent of communication adaptation projects			
Project Component 2: Community level capacity strengthening							
Expected Accomplishment 2 Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level	A majority of community members (including women and youth) are empowered to directly contribute to local resilience building.	0% (to be confirmed in assessment)	60%	Initial assessment survey needs to identify level of awareness. End of project survey needs to be conducted.	Database (to include information on awareness on resilience)	Baseline, mid-term and end	UN-Habitat
Output 2.1: Training on conducting community profile self-assessment and monitoring (also for compliance with ESMP)	No of trainings that are positively evaluated and % of women trained	0	5 At least 50% women	Capacity needs need to be confirmed with regard to self-assessment and monitoring	Training impact evaluation	End of each training	Executing entities
Output 2.2: Awareness and capacity development support, including workshops relating	No of workshops	0	5	Capacity needs with regard to resilience need to be understood	Training impact evaluation	End of each training	Executing entities

to key issues (CCA/Community Early Warning/DRR/Health)				Training tool developed			
Activities 2.1.1: Training on surveys, data recording, and data management. 2.2.1: Awareness and capacity building activity relating to key community issues.				Milestones Baseline on awareness and capacity needs Workshop series conducted Awareness building initiatives implemented			
Project component 3: **Ward level actions**							
Expected Accomplishment 3 Increased ward-level climate, disaster and ecosystem resilience in response to climate change and variability-induced stress.	Ward-level and community (with particular emphasis on women and youth) capacity strengthened in support of ecosystems-based adaptation and public space.	0	2	Ward councilors are actively engaging vis-à-vis climate resilience	Ecosystem and public space review	Baseline, and annually	UN-Habitat
Output 3.1: To develop a women-focused climate risk communications programme.	No of women-focused communication programmes	0	1	Honiara City Council, national government and Local NGOs collaborate	Review of communications programme	Baseline, annual	Executing agencies UN-Habitat
Output 3.2: To integrate climate change into educational programs for youth and children.	No of children and youth educational programmes	0	2	Honiara City Council, national government and education institution collaborate	Review of communications programme	Baseline, annual	Executing agencies, UN-Habitat
Output 3.3: Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented.	No of ecosystem-based adaptation initiatives (participation of women)	0	2 At least 50% women	Ward councilors, HCC and communities prioritize EbA action	Review of EbA action;	Baseline, annual	Executing agencies, UN-Habitat
Output 3.4: Climate resilient community spaces developed, including productive open spaces and community evacuation centres.	No of community / public spaces developed	0	2	Ward councilors, HCC and communities prioritize community / public space resilience action	Review of community public space resilience action	Baseline, annual	Executing agencies, UN-Habitat
Activities 3.1.1: Development of theatre performances, radio broadcasts, and community				Milestones Women focused communication programme outlined – end of year 1, theater			

newsletters. 3.1.2: Work with women's groups in Honiara to determine the most effective means of communication about climate risk strategies, and which actions are likely to be most successful given the local context. 3.2.1 Development of teaching modules relevant to the urban context, conducting lessons in schools and youth community settings, and contributing to the development of environmental curricula for schools. 3.2.2 Translate/apply the Climate Change Child-Centred Adaptation approach to schools and youth programmes in Honiara. 3.3.1 Conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area). 3.4.1 Engage with Honiara City Council to identify and promote climate resilient public space e.g. using floodplains as sports areas, planting trees to increase shading in community spaces to combat heat stress, and the rehabilitation of community centres for use as safe places for evacuation.				performances and publications documented – end of year 3, review published – end of year 3 Children and youth programmes conceptualized – end of year 2 and running – end of year 3 EbA programme developed (end of year 3) Public / community space initiatives developed (end of year 3)			
Project component 4: **Ward level capacity strengthening**…							
Expected Accomplishment 4 Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	No of ward development plans that fully mainstream climate change	0	2	Ward councillors and communities support ward development planning	Review of ward development councils	Baseline, end of project	UN-Habitat
Output 4.1: Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go).	No of training events and % of women trained	0	2 At least 50% women	National government, HCC engaging in training	Review of reports	Baseline End of training	UN-Habitat
Output 4.2: Pilot best practice participatory approach to city government, NGO, and community collaboration in climate planning and enhance the understanding of adaptation pathways.	No of ward level structure established	0	2	Ward level capacity adequately raised	Review of Ward level structures	End of year 1, end of year 2	UN-Habitat

Output 4.3: Assess locally appropriate land administration options for peri-urban peri-urban settlements, and households, around Ngossi and Panatina wards.	No of ward level land administration options developed	0	2	National government, HCC and ward councillors engage in review	Review of land administration options	End of year 1, end of year 2	UN-Habitat
Activities 4.1.1 Training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings and capacity building. 4.2.1 Pilot best practice participatory approach in climate planning and enhance the understanding of adaptation pathways. 4.3.1 Assess appropriate land administration system options that seek to account for both Western and Customary laws when dealing with urban growth, secure and safeguard legitimate tenure rights, and inform decisions on resettlement.				Milestones Training for resilience officers / officials conducted (end of year 1), end of year 3 Ward level structure established, end of year 3 Land review conducted, end of year 3			
Project component 5: **City-wide governance and capacity strengthening**							
Expected Accomplishment 5 Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	Capacities of Honiara City Council (and the national government institutions supporting HCC) strengthened as expressed in the HCC corporate plan	0	1	HCC and Ward Councillors take comprehensive approach to climate resilience and integrate it into local development policy	Review of corporate plan	End of project	UN-Habitat
Output 5.1: Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC.	No of capacity needs assessments	0	1	Commitment of HCC and focal ministries	Document review	Upon completion of report	UN-Habitat
Output 5.2: Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping.	No. of capacity development workshops	1	3	HCC, MLHS, MECDM agree on joint curriculum	Review of workshops	Upon completion of trainings	UN-Habitat
Output 5.3: Employ a climate adaptation and resilience	Resilience officer employed	0	1	HCC changes institutional structure	Contract review	Upon on-boarding	UN-Habitat

officer, and constitute a multi-stakeholder steering group and provide support for regular meetings.	No of stakeholder meetings	0	8		Meeting minutes	ongoing	
Output 5.4: Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation.	Set up resilience working group with HCC and Guadalcanal Province	0	1	Political willingness can be continued	Meeting minutes	Ongoing	UN-Habitat
Output 5.5: Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes).	No of policy reviews	0	1	Executing agency can identify knowledgeable consultant	Review of document	After completion	UN-Habitat
Activities 5.1.1 Capacity development needs assessment in Honiara (planning, GIS risk mapping, land administration, engineering, data management, climate change adaptation, media and communications). 5.2.1 Initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University/UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities. 5.2.2 Development of tailored capacity building workshops for professional staff to build knowledge and required skill sets (HCC and focal Ministries) at RMIT University. 5.2.3 Two-week course of workshops designed to cater for planning, land administration, and GIS risk mapping for HCC and SI Ministry staff. 5.3.1 Employ a Climate Adaptation and Resilience Officer (CARO) for Honiara City Council, and constitute a multi-stakeholder steering group for implementation of the project. 5.4.1 Develop a formal mechanism for managing cross-boundary urban resilience issues between Guadalcanal Province and HCC, particularly taking into account cross-boundary flows of resources, people and the long-term urban expansion of the city. 5.5.1 Map and assess linkages between relevant stakeholders and initiatives for improved governance and institutional response to climate change impacts and natural disasters. 5.5.2 Conduct a whole-of-government policy review to identify areas for mainstreaming				Milestones City-level capacity needs assessments Capacity development workshops for planners (year 1, year 3) MoU with SINI (end of year 1) Resilience officer employed (year 1) HCC stakeholder meetings (year 1, year 2, year 3, year 4) Resilience working group with HCC and Guadalcanal Province meetings (year 1, year 2) Policy review (for mainstreaming) year 2			

of climate change considerations across urban policy (including a review of land use plans and the introduction of possible building codes).							
Project component 6: **Knowledge Management and Advocacy**							
Expected Accomplishment 6 Project implementation is fully transparent. All stakeholders are informed of products and results and have access to these for replication	All stakeholders are well aware of programme as documented through pre and post project survey	0	100	Political stability	Pre and end of project survey	Baseline, and end	UN-Habitat
Output 6.1: Climate change training and knowledge exchange.	Knowledge exchange mechanism is established	0	1	Engagement of stakeholders	Review of report	Regular	UN-Habitat
Output 6.2: Advocacy materials.	No of newsletters and web updates	0	4	Good communications consultant recruited by executing agency	Review of advocacy material	Annually	UN-Habitat
Output 6.3: Knowledge sharing platform	No of website updates	0	16	Good communications consultant recruited by executing agency	Review of web content	quarterly	UN-Habitat
Output 6.4: Project learning mechanism	No of lessons learnt documentation	0	1	Good communications consultant recruited by executing agency	Review of document	Regular	UN-Habitat
Activities 6.1.1 Develop climate change adaptation training and knowledge exchange programmes between HCC staff and ward councillors. 6.2.1 Advocacy materials 6.3.1 Develop and maintain a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key ministries. 6.4.1 Conduct and record a participatory joint learning event based on annual review of activities and make available project findings and recommendations.				Milestones Knowledge Programme Developed (end of year 1) Advocacy Material (end of years 1, 2, 3. 4) Website updates (end of years 1, 2, 3. 4) Lessons learnt report end of year 4			

Table 14: Activities and milestones (x)

Activity	Year 1				Year 2				Year 3				Year 4			
1.1.1 Identification of key issues and prioritisation of actions for two additional hotspot case studies (Nggosi and Panatina wards)																
1.2.1 In-depth profiling of all hotspot communities																
1.3.1 Carry out scoping and feasibility study. Assess the cost, feasibility and partnerships that will be needed to implement the actions suggested by the community				X				X								
1.4.1 Implement screened/agreed pilot-studies in each hotspot community				X				X				X				X
1.4.2 Provide technical support where necessary																
2.1.1: Training on surveys, data recording, and data management.				X				X				X				
2.2.1: Awareness and capacity building activity relating to key community issues.				X				X				X				
3.1.1: Development of theatre performances, radio broadcasts, and community newsletters.								X				X				
3.1.2: Work with women's groups in Honiara to determine the most effective means of communication about climate risk strategies, and which actions are likely to be most successful given the local context.				X												
3.2.1 Development of teaching modules relevant to the urban context, conducting lessons in schools and youth community settings, and contributing to the development of environmental curricula for schools.								X								
3.3.2 Translate/apply the Climate Change Child-Centred Adaptation approach to schools and youth programmes in Honiara.				X								X				
3.3.1 Conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area).												X				
3.4.1 Engage with Honiara City Council to identify and promote climate resilient public space e.g. using floodplains as sports areas, planting trees to increase shading in community spaces to combat heat stress, and the rehabilitation of community centres for use as safe places for evacuation.												X				
4.1.1 Training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings				X								X				

and capacity building.																
4.2.1 Pilot best practice participatory approach in climate planning and enhance the understanding of adaptation pathways.												X				
4.3.1 Assess appropriate land administration system options that seek to account for both Western and Customary laws when dealing with urban growth, secure and safeguard legitimate tenure rights, and inform decisions on resettlement.												X				
5.1.1 Capacity development needs assessment in Honiara (planning, GIS risk mapping, land administration, engineering, data management, climate change adaptation, media and communications).				X												
5.2.1 Initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University/UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities.				X												
5.2.2 Development of tailored capacity building workshops for professional staff to build knowledge and required skill sets (HCC and focal Ministries) at RMIT University.				X												
5.2.3 Two-week course of workshops designed to cater for planning, land administration, and GIS risk mapping for HCC and SI Ministry staff.								X								
5.3.1 Employ a Climate Adaptation and Resilience Officer (CARO) for Honiara City Council, and constitute a multi-stakeholder steering group for implementation of the project.			x													
5.4.1 Develop a formal mechanism for managing cross-boundary urban resilience issues between Guadalcanal Province and HCC, particularly taking into account cross-boundary flows of resources, people and the long-term urban expansion of the city.				X				x								
5.5.1 Map and assess linkages between relevant stakeholders and initiatives for improved governance and institutional response to climate change impacts and natural disasters.				X												
5.5.2 Conduct a whole-of-government policy review to identify areas for mainstreaming of climate change considerations across urban policy (including a review of land use plans and the introduction of possible building codes).								X								
6.1.1 Develop climate change adaptation training and knowledge exchange programmes between HCC staff and ward councillors.				X												
6.2.1 Advocacy materials				X				x				x				x
6.3.1 Develop and maintain a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key ministries.				X				x				x				x

6.4.1 Conduct and record a participatory joint learning event based on annual review of activities and make available project findings and recommendations.																X

F. Project alignment with the Adaptation Fund results framework

Table 15: Project alignment with the Adaptation Fund results framework

Project Expected Accomplishment	Project Outcome Indicator	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
EA4 and **EA5**: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	No of ward development plans that fully mainstream climate change; Capacities of Honiara City Council (and the national government institutions supporting HCC) strengthened as expressed in the HCC corporate plan	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. No. and type of targeted institutions with increased capacity to minimize exposure to climate variability risks	**590.000**
EA1: Reduced vulnerability of hotspot communities to climate-related hazards and threats **EA2**: Strengthened awareness and ownership of adaptation and climate risk reduction processes and capacity to implement at local level **EA3**: Increased ward-level climate, disaster and ecosystem resilience in response to climate change and variability-induced stress.	A majority of community members (including women and youth) are empowered to directly contribute to local resilience building; Ward-level and community (with particular emphasis on women and youth) capacity strengthened in support of ecosystems-based adaptation and public space.	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	**330.000**
EA1: Reduced vulnerability of hotspot communities to climate-related hazards and threats **EA3**: Increased ward-level climate, disaster and ecosystem resilience in	Number of hotspot communities whose physical infrastructure has been improved to enhance climate resilience with particular emphasis on the poorest, women, youth, elderly and other	**Outcome 4:** Increased adaptive capacity within relevant development and natural resource sectors	4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	**2.030.000**

response to climate change and variability-induced stress.	vulnerable households; Ward-level and community (with particular emphasis on women and youth) capacity strengthened in support of ecosystems-based adaptation and public space.			
EA3: Increased ward-level climate, disaster and ecosystem resilience in response to climate change and variability-induced stress.	Ward-level and community (with particular emphasis on women and youth) capacity strengthened in support of ecosystems-based adaptation and public space.	**Outcome 5**: Increased ecosystem resilience in response to climate change and variability-induced stress	5. Ecosystem services and natural assets maintained or improved under climate change and variability-induced stress	**450.000**
Project Output	**Project Output Indicator**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Output 4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go) **(and outputs 4.2-3 and 5.1-5)**	No of training events;	***Output 2.1***: Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events	**590.000**
Output 1.1. In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements **(and outputs 1.2-4, 2.1-2. and 3.1-2)**	Community action plans as foundation for concrete adaptation action available	**Output 3**: Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at local level	**330.000**
Output 1.4.	Concrete climate	**Output 4:**	4.1.1. No. and type	**2.030.000**

Implementation of screened / agreed resilience actions in each hotspot community **(and output 3.4.)**	actions implemented.	Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type 4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	
Output 3.3. Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented	No of ecosystem-based adaptation	**Output 5:** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	5.1. No. and type of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type of assets)	**450.000**

Table 16: Indicative Core Indicator Targets

Adaptation Fund Core Indicators	Indicative Targets	Comments
1 Number of Beneficiaries	6,000	This only measures beneficiaries of the direct adaptation actions (Component 1 and 3)
2. Early Warning Systems		Whilst this is not foreseen at this stage, the vulnerability assessments and action planning may result in some villages prioritizing EWS
3. Assets Produced, Developed, Improved, or Strengthened	25	At this stage it is conservatively estimated that five infrastructure / infrastructure system will be produced per hot-spot community.
4. Increased income, or avoided decrease in income	750	Number of households that either directly benefit from the assets (employment during construction) or indirectly (e.g.

		water for irrigation, sick days avoided)
5. Natural Assets Protected or Rehabilitated	2	Two wards will benefit from eco-system improvements

Methodology to apply: https://www.adaptation-fund.org/wp-content/uploads/2016/04/AF-Core-Indicator-Methodologies.pdf

G. Detailed budget

Table 17: budget overview

Programme component	Outputs	Activity	Total budget	Year 1	Year 2	Year 3	Year 4	NOTES
Community-level actions	1.1 In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements	1.1.1 Identification of key issues and prioritisation of actions for two additional hotspot case studies (Nggosi and Panatina wards)	$40,000	$40,000	$0	$0	$0	A
	Output total		**$40,000**	**$40,000**	**$0**	**$0**	**$0**	
	1.2. In-depth community profiling for the hotspot communities	1.2.1 In-depth profiling of all hotspot communities - establish local survey teams - train local survey teams - conduct household and community-level surveys to establish baselines	$40,000	$40,000	$10,000	$0	$0	B
	Output total		**$50,000**	**$40,000**	**$10,000**	**$0**	**$0**	
	1.3. Scoping and feasibility studies of prioritized local actions for each hotspot community	1.3.1 Carry out scoping and feasibility study. Assess the cost, feasibility and partnerships that will be needed to implement the actions suggested by the community.	$50,000	$20,000	$30,000	$0	$0	C
	Output total		**$50,000**	**$20,000**	**$30,000**	**$0**	**$0**	
	1.4. Implementation of screened / agreed resilience actions in each hotspot communitY.	1.4.1 Implement screened/agreed pilot-studies in each hotspot community.	$1,500,000		$300,000	$700,000	$500,000	D
		1.4.2 Provide technical support where necessary.	$80,000		$30,000	$30,000	$20,000	D
	Output total		**$1,580,000**	**$0**	**$330,000**	**$730,000**	**$520,000**	
Community-level capacity strengthening	2.1. Training on conducting community profile self-assessment and monitoring	2.1.1 Training on surveys, data recording, and data management.	$60,000	$20,000	$10,000	$10,000	$20,000	E
	Output total		**$60,000**	**$20,000**	**$10,000**	**$10,000**	**$20,000**	
	2.2 Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	2.2.1 Awareness and capacity building activity relating to key community issues.	$120,000	$20,000	$30,000	$40,000	$30,000	F
	Output total		**$120,000**	**$20,000**	**$30,000**	**$40,000**	**$30,000**	
Ward-level actions	3.1. To develop a women-focused climate risk communications programme	3.1.1 Development of theatre performances, radio broadcasts, and community newsletters	$65,000		$30,000	$35,000	$0	G
		3.1.2 Work with women's groups in Honiara to determine the most effective means of communicating about climate risk strategies, and which actions are likely to be most successful given the local context.	$15,000	$15,000	$0	$0	$0	G
	Output total		**$80,000**	**$15,000**	**$30,000**	**$35,000**	**$0**	
	3.2. To integrate climate change into educational programs for youth and children	3.2.1 Development of teaching modules relevant to the urban context, conducting lessons in schools and youth community settings, and contributing to the development of environmental curricula for schools.	$40,000	$10,000	$30,000	$0	$0	H
		3.3.2 Translate/apply the Climate Change Child-Centred Adaptation approach to schools and youth programmes in Honiara/	$40,000	$10,000	$30,000	$0	$0	H
	Output total		**$80,000**	**$20,000**	**$60,000**	**$0**	**$0**	
	3.3 Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented	3.3.1 Conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area).	$450,000	$50,000	$150,000	$250,000	$0	I
	Output total		**$450,000**	**$50,000**	**$150,000**	**$250,000**	**$0**	
	3.4. Climate resilient community spaces developed, including productive open spaces and community evacuation centres	3.4.1 Engage with Honiara City Council to identify and promote climate resilient public space e.g. using floodplains as sports areas, planting trees to increase shading in community spaces to combat heat stress, and the rehabilitation of community centres for use as safe places for evacuation.	$450,000	$50,000	$150,000	$250,000	$0	J
	Output total		**$450,000**	**$50,000**	**$150,000**	**$250,000**	**$0**	
Ward-level capacity strengthening	4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)	4.1.1 Training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings and capacity building.	$100,000	$20,000	$40,000	$40,000	$0	K
	Output total		**$100,000**	**$20,000**	**$40,000**	**$40,000**	**$0**	
	4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate planning and enhance the understanding of adaptation pathways	4.2.1 Pilot best practice participatory approach in climate planning and enhance the understanding of adaptation pathways	$80,000		$40,000	$40,000	$0	L
	Output total		**$80,000**	**$0**	**$40,000**	**$40,000**	**$0**	
	4.3. Assess locally appropriate land administration options for peri-urban peri-urban settlements, and households, around Ngossi and Panatina wards	4.3.1 Assess appropriate land administration system options that seek to account for both Western and Customary laws when dealing with urban growth, secure and safeguard legitimate tenure rights, and inform decisions on resettlement.	$100,000	$25,000	$65,000	$10,000	$0	M
	Output total		**$100,000**	**$25,000**	**$65,000**	**$10,000**	**$0**	
City-wide governance and capacity strengthening	5.1. Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC	5.1.1 Capacity development needs assessment in Honiara (planning, GIS risk mapping, land administration, engineering, data management, climate change adaptation, media and communications).	$30,000	$30,000	$0	$0	$0	N
	Output total		**$30,000**	**$30,000**	**$0**	**$0**	**$0**	
	5.2. Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping.	5.2.1 Initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University/UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities.	$10,000	$10,000	$0	$0	$0	O
		5.2.2 Development of tailored capacity building workshops for professional staff to build knowledge and required skill sets (HCC and focal Ministries) at RMIT University.	$30,000	$30,000	$0	$0	$0	O
		5.2.3 Two-week course of workshops designed to cater for planning, land administration, and GIS risk mapping for HCC and SI Ministry staff.	$30,000		$30,000	$0	$0	O
	Output total		**$70,000**	**$40,000**	**$30,000**	**$0**	**$0**	
	5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings	5.3.1 Employ a Climate Adaptation and Resilience Officer (CARO) for Honiara City Council, and constitute a multi-stakeholder steering group for implementation of the project.	$150,000	$30,000	$40,000	$40,000	$40,000	P
	Output total		**$150,000**	**$30,000**	**$40,000**	**$40,000**	**$40,000**	
	5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation	5.4.1 Develop a formal mechanism for managing cross-boundary urban resilience issues between Guadalcanal Province and HCC, particularly taking into account cross-boundary flows of resources, people and the long-term urban expansion of the city.	$30,000	$10,000	$10,000	$5,000	$5,000	Q
	Output total		**$30,000**	**$10,000**	**$10,000**	**$5,000**	**$5,000**	
	5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes)	5.5.1 Map and assess linkages between relevant stakeholders and initiatives for improved governance and institutional response to climate change impacts and natural disasters.	$15,000	$15,000	$0	$0	$0	R
		5.5.2 Conduct a whole-of-government policy review to identify areas for mainstreaming of climate change considerations across urban policy (including a review of land use plans and the introduction of possible building codes).	$15,000	$15,000	$0	$0	$0	R
	Output total		**$30,000**	**$30,000**	**$0**	**$0**	**$0**	
Knowledge management and advocacy	6.1 Climate change training and knowledge exchange	6.1.1 Develop climate change adaptation training and knowledge exchange programmes between HCC staff and ward councilors.	$20,000	$20,000	$0	$0	$0	S
	Output total		**$20,000**	**$20,000**	**$0**	**$0**	**$0**	
	6.2. Advocacy materials		$70,000	$20,000	$25,000	$20,000	$5,000	T
	Output total		**$70,000**	**$20,000**	**$25,000**	**$20,000**	**$5,000**	
	6.3. Knowledge sharing platform	6.3.1 Develop and maintain a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key ministries.	$40,000	$10,000	$10,000	$10,000	$10,000	U
	Output total		**$40,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**	
	6.4. Project learning mechanism	6.4.1 Conduct and record a participatory joint learning event based on annual review of activites and make available project findings and recommendations.	$20,000	$5,000	$5,000	$5,000	$5,000	V
	Output total		**$20,000**	**$5,000**	**$5,000**	**$5,000**	**$5,000**	
Project Activities Total			**$3,700,000**	**$515,000**	**$1,065,000**	**$1,485,000**	**$635,000**	
Programme Execution Costs		Project team leader (part time)	$206,000	$51,500	$51,500	$51,500	$51,500	W
		ROAP Technical Support (Regional Climate Change Officer)	$60,500	$15,000	$15,250	$15,250	$15,000	W
		Office support staff	$37,000	$3,000	$3,000	$3,000	$3,000	W
		Office facilities	$25,000	$10,000	$5,000	$5,000	$5,000	W
		Travel related to execution	$18,000	$6,000	$4,000	$4,000	$4,000	W
		Evaluation	$30,000				$30,000	W
Programme execution total			**$351,500**	**$85,500**	**$78,750**	**$78,750**	**$108,500**	
Total Programme Cost			**$4,051,500**	**$600,500**	**$1,143,750**	**$1,563,750**	**$743,500**	
Programme Cycle Management Fee		PSC 7 percent on total operational budget including components below) approx 7.1 percent	$287,581	$42,624	$81,185	$110,997	$52,775	X
		Evaluation Support costs (HQ)	$10,000	$1,500	$2,800	$3,900	$1,800	X
		Project Support Cost (ROAP) - Project Management Committee Meetings - IE staff salaries / supervision of reports etc. - Project supervision missions	$46,797	$6,919	$13,234	$18,022	$8,622	X
Programme cycle management total			**$344,377**	**$51,043**	**$97,219**	**$132,919**	**$63,198**	
Amount of Financing Requested			**$4,395,877**	**$651,543**	**$1,240,969**	**$1,696,669**	**$806,698**	

Programme component	Outputs	Activity	Total budget	Year 1	Year 2	Year 3	Year 4
Community-level actions	1.1 In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements	1.1.1 Identification of key issues and prioritisation of actions for two additional hotspot case studies (Nggosi and Panatina wards)	$40,000	$40,000	$0	$0	$0
	Output total		**$40,000**	**$40,000**	**$0**	**$0**	**$0**
	1.2. In-depth community profiling for the hotspot communities	1.2.1 In-depth profiling of all hotspot communities - establish local survey teams - train local survey teams - conduct household and community-level surveys to establish baselines	$40,000	$40,000	$10,000	$0	$0
	Output total		**$50,000**	**$40,000**	**$10,000**	**$0**	**$0**
	1.3. Scoping and feasibility studies of prioritized local actions for each hotspot community	1.3.1 Carry out scoping and feasibility study. Assess the cost, feasibility and partnerships that will be needed to implement the actions suggested by the community.	$50,000	$20,000	$30,000	$0	$0
	Output total		**$50,000**	**$20,000**	**$30,000**	**$0**	**$0**
	1.4. Implementation of screened / agreed resilience actions in each hotspot community	1.4.1 Implement screened/agreed pilot-studies in each hotspot community.	$1,500,000		$300,000	$700,000	$500,000
		1.4.2 Provide technical support where necessary.	$80,000		$30,000	$30,000	$20,000
	Output total		**$1,580,000**	**$0**	**$330,000**	**$730,000**	**$520,000**
Community-level capacity strengthening	2.1. Training on conducting community profile self-assessment and monitoring	2.1.1 Training on surveys, data recording, and data management.	$60,000	$20,000	$10,000	$10,000	$20,000
	Output total		**$60,000**	**$20,000**	**$10,000**	**$10,000**	**$20,000**
	2.2 Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	2.2.1 Awareness and capacity building activity relating to key community issues.	$120,000	$20,000	$30,000	$40,000	$30,000
	Output total		**$120,000**	**$20,000**	**$30,000**	**$40,000**	**$30,000**
Ward-level actions	3.1. To develop a women-focused climate risk communications programme	3.1.1 Development of theatre performances, radio broadcasts, and community newsletters	$65,000		$30,000	$35,000	$0
		3.1.2 Work with women's groups in Honiara to determine the most effective means of communicating about climate risk strategies, and which actions are likely to be most successful given the local context.	$15,000	$15,000	$0	$0	$0
	Output total		**$80,000**	**$15,000**	**$30,000**	**$35,000**	**$0**
	3.2. To integrate climate change into educational programs for youth and children	3.2.1 Development of teaching modules relevant to the urban context, conducting lessons in schools and youth community settings, and contributing to the development of environmental curricula for schools.	$40,000	$10,000	$30,000	$0	$0
		3.3.2 Translate/apply the Climate Change Child-Centred Adaptation approach to schools and youth programmes in Honiara/	$40,000	$10,000	$30,000	$0	$0
	Output total		**$80,000**	**$20,000**	**$60,000**	**$0**	**$0**
	3.3 Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented	3.3.1 Conducting training and piloting of closed-loop organic waste and urban food production activities, and reducing climate vulnerability through ecosystem services (enhancing food security, reducing storm water run-off, and reduced sensitivity to climate extremes due to reduced waste and rubbish accumulation in the local area).	$450,000	$50,000	$150,000	$250,000	$0
	Output total		**$450,000**	**$50,000**	**$150,000**	**$250,000**	**$0**
	3.4. Climate resilient community spaces developed, including productive open spaces and community evacuation centres	3.4.1 Engage with Honiara City Council to identify and promote climate resilient public space e.g. using floodplains as sports areas, planting trees to increase shading in community spaces to combat heat stress, and the rehabilitation of community centres for use as safe places for evacuation.	$450,000	$50,000	$150,000	$250,000	$0
	Output total		**$450,000**	**$50,000**	**$150,000**	**$250,000**	**$0**
Ward-level capacity strengthening	4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)	4.1.1 Training of resilience officers in both climate change adaptation and disaster risk reduction, and provide a platform for whole of city regular meetings and capacity building.	$100,000	$20,000	$40,000	$40,000	$0
	Output total		**$100,000**	**$20,000**	**$40,000**	**$40,000**	**$0**
	4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate planning and enhance the understanding of adaptation pathways	4.2.1 Pilot best practice participatory approach in climate planning and enhance the understanding of adaptation pathways	$80,000		$40,000	$40,000	$0
	Output total		**$80,000**	**$0**	**$40,000**	**$40,000**	**$0**
	4.3. Assess locally appropriate land administration options for peri-urban peri-urban settlements, and households, around Ngossi and Panatina wards	4.3.1 Assess appropriate land administration system options that seek to account for both Western and Customary laws when dealing with urban growth, secure and safeguard legitimate tenure rights, and inform decisions on resettlement.	$90,000	$25,000	$65,000	$10,000	$0
	Output total		**$100,000**	**$25,000**	**$65,000**	**$10,000**	**$0**
City-wide governance and capacity strengthening	5.1. Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC	5.1.1 Capacity development needs assessment in Honiara (planning, GIS risk mapping, land administration, engineering, data management, climate change adaptation, media and communications).	$30,000	$30,000	$0	$0	$0
	Output total		**$30,000**	**$30,000**	**$0**	**$0**	**$0**
	5.2. Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping.	5.2.1 Initiate new MoU's between Government departments, Solomon Islands National University (SINU), and RMIT University/UN-Habitat to provide training at capacity development workshops, and to establish new avenues for teaching and learning opportunities.	$10,000	$10,000	$0	$0	$0
		5.2.2 Development of tailored capacity building workshops for professional staff to build knowledge and required skill sets (HCC and focal Ministries) at RMIT University.	$30,000	$30,000	$0	$0	$0
		5.2.3 Two-week course of workshops designed to cater for planning, land administration, and GIS risk mapping for HCC and SI Ministry staff.	$30,000		$30,000	$0	$0
	Output total		**$70,000**	**$40,000**	**$30,000**	**$0**	**$0**
	5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings	5.3.1 Employ a Climate Adaptation and Resilience Officer (CARO) for Honiara City Council, and constitute a multi-stakeholder steering group for implementation of the project.	$150,000	$30,000	$40,000	$40,000	$40,000
	Output total		**$150,000**	**$30,000**	**$40,000**	**$40,000**	**$40,000**
	5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation	5.4.1 Develop a formal mechanism for managing cross-boundary urban resilience issues between Guadalcanal Province and HCC, particularly taking into account cross-boundary flows of resources, people and the long-term urban expansion of the city.	$30,000	$10,000	$10,000	$5,000	$5,000
	Output total		**$30,000**	**$10,000**	**$10,000**	**$5,000**	**$5,000**
	5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes)	5.5.1 Map and assess linkages between relevant stakeholders and initiatives for improved governance and institutional response to climate change impacts and natural disasters.	$15,000	$15,000	$0	$0	$0
		5.5.2 Conduct a whole-of-government policy review to identify areas for mainstreaming of climate change considerations across urban policy (including a review of land use plans and the introduction of possible building codes).	$15,000	$15,000	$0	$0	$0
	Output total		**$30,000**	**$30,000**	**$0**	**$0**	**$0**
Knowledge management and advocacy	6.1 Climate change training and knowledge exchange	6.1.1 Develop climate change adaptation training and knowledge exchange programmes between HCC staff and ward councilors.	$20,000	$20,000	$0	$0	$0
	Output total		**$20,000**	**$20,000**	**$0**	**$0**	**$0**
	6.2. Advocacy materials		$70,000	$20,000	$25,000	$20,000	$5,000
	Output total		**$70,000**	**$20,000**	**$25,000**	**$20,000**	**$5,000**
	6.3. Knowledge sharing platform	6.3.1 Develop and maintain a knowledge sharing mechanism at the city-wide scale, in close collaboration with HCC and the two key ministries.	$40,000	$10,000	$10,000	$10,000	$10,000
	Output total		**$40,000**	**$10,000**	**$10,000**	**$10,000**	**$10,000**
	6.4. Project learning mechanism	6.4.1 Conduct and record a participatory joint learning event based on annual review of activites and make available project findings and recommendations.	$20,000	$5,000	$5,000	$5,000	$5,000
	Output total		**$20,000**	**$5,000**	**$5,000**	**$5,000**	**$5,000**
Project Activities Total			**$3,700,000**	**$515,000**	**$1,065,000**	**$1,485,000**	**$635,000**
Programme Execution Costs		Project team leader (part time)	$206,000	$51,500	$51,500	$51,500	$51,500
		ROAP Technical Support (Regional Climate Change Officer)	$60,500	$15,000	$15,250	$15,250	$15,000
		Office support staff	$37,000	$3,000	$3,000	$3,000	$3,000
		Office facilities	$25,000	$10,000	$5,000	$5,000	$5,000
		Travel related to execution	$18,000	$6,000	$4,000	$4,000	$4,000
		Evaluation	$30,000				$30,000
Programme execution total			**$351,500**	**$85,500**	**$78,750**	**$78,750**	**$108,500**
Total Programme Cost			**$4,051,500**	**$600,500**	**$1,143,750**	**$1,563,750**	**$743,500**
Programme Cycle Management Fee		PSC 7 percent on total operational budget including components below) approx 7.1 percent	$287,584	$42,625	$81,186	$110,998	$52,775
		Evaluation Support costs (HQ)	$10,000	$1,500	$2,800	$3,900	$1,800
		Project Support Cost (ROAP) - Project Management Committee Meetings - IE staff salaries / supervision of reports etc. - Project supervision missions	$46,794	$6,918	$13,233	$18,021	$8,622
Programme cycle management total			**$344,377**	**$51,043**	**$97,219**	**$132,919**	**$63,198**
Amount of Financing Requested			**$4,395,877**	**$651,543**	**$1,240,969**	**$1,696,669**	**$806,698**

Table 18: budget notes

Project item	Budget description and related output	Description of expenditures		
Community–level actions				
A	Contractual services, workshops, materials & goods and travel 1.1 In addition to existing community action plans developed as part of the HURCAP process, complete community climate action plans for White River and Tuvaruhu informal settlements	**Main partners MLHS, HCC, RMIT** Climate Change Planning Expert (int): Community Mobilizers Workshops Community & city consultations Update of HURCAP	USD USD USD USD USD	24,000 4,000 6,000 4,000 2,000
B	Contractual services, trainings, materials & goods and travel 1.2. In-depth community profiling for the hotspot communities	**Main partners MLHS, HCC, RMIT** Climate Change Assessment / Informal Settlements Expert (int) including travel: Community Mobilizers Enumerators Tablets, computer, software Communication (data for tablets / GIS etc) Consultations and local transport Production of maps, printing of profiles etc.	USD USD USD USD USD USD USD	28,000 9,000 3,000 3,000 1,000 4,000 2,000
C	Contractual services, workshops, materials & goods and travel 1.3. Scoping and feasibility studies of prioritized local actions for each hotspot community	**Main partners MLHS, HCC, RMIT** Climate Change Planning Expert (int) incl. travel: Settlements Upgrading Expert (int) incl. travel: Infrastructure financing expert (local) Planners (local) Community & city consultations	USD USD USD USD USD	16,000 16,000 6,000 6,000 6,000
D	Contractual services for the design and construction of infrastructure 1.4. Implementation of screened / agreed resilience actions in each hotspot community	**1.4.1 Main partners MLHS, HCC with communities** Budget of USD 1,500,000 is set aside to implement screened / agreed community resilience action priorities (building community assets). Community action plans so far include protection from climate and natural hazards, housing design, emergency shelters, resilient infrastructure, such as drainage, Jacob's ladders, waste management, early warning systems. An equitable distribution of resources based on need/poverty and household numbers will be ensured.		
		1.4.2 Main partners MLHS, HCC, RMIT Community planner / community infrastructure expert:	USD	80,000
Community capacity strengthening				
E	Contractual services, trainings, materials & goods and travel 2.1. Training on conducting community profile self-assessment and monitoring	**Main partners MLHS, HCC, RMIT** Climate Change Planning Expert (int) incl. travel: Training tools: Workshops	USD USD USD	30,000 10,000 20,000
F	Contractual services, workshops, materials & goods and travel 2.2 Awareness and capacity development support, including workshops relating to key issues (CCA/Community Early Warning/DRR/Health)	**Main partners MLHS, MECDM (incl. NDMO), MoH, HCC, RMIT** Climate Change Experts (int) incl. travel: Training tools: Workshops	USD USD USD	70,000 20,000 30,000
Ward-level actions				
G	Contractual services, workshops, materials & goods and travel 3.1. To develop a women-focused climate risk communications programme	**Main partners Vois Belong Mere, Development Service Exchange, RMIT** Gender / communications / theatre expert (int.): Local coordination Workshops for performance / performances Radio production Newsletter (consultant and production) Workshops for planning	USD USD USD USD USD USD	40,000 4,000 16,000 3,000 12,000 5,000
H	Contractual services, workshops, materials & goods and travel 3.2. To integrate climate change into educational programs for youth and children	**Main partners HCC, Honiara Youth Council, Ministry of Education, RMIT** Youth specialist / climate change educator : Curriculum Expert Pilot initiative with schools Material production Workshops for planning	USD USD USD USD USD	30,000 10,000 25,000 10,000 5,000
I	Contractual services for the design and development ecosystem options 3.3 Ecosystem-based adaptation options, in particular for food security, sustainable livelihoods, flood mgt. etc. implemented	**Main partners HCC, Ward Councillors, SPREP, RMIT** Budget of USD 450,000 is set aside for ecosystems-based adaptation. Urban ecologist: Local coordination / local planner Local workshops / design charrettes Implementation of hard EbA approach	USD USD USD USD	70,000 10,000 10,000 360,000
J	Contractual services for the design and construction of infrastructure 3.4. Climate resilient community spaces	**Main partners HCC, Ward Councillors, MLHS, RMIT** Budget of USD 450,000 is set aside for ecosystems-based adaptation. Urban planner / designer: Local coordination / local planner	USD USD	70,000 10,000

	developed, including productive open spaces and community evacuation centres	Local workshops / design charrettes Implementation of public space approach	USD USD	10,000 360,000
Ward-level capacity strengthening				
K	Contractual services, workshops, materials & goods and travel 4.1. Provide 'Planning for Climate Change' training for nominated 'resilience officers' in each of Honiara's wards, and integrate training with DRR knowledge (what to do and where to go)	**Main partners HCC, Wards, RMIT** Climate change planner / educator : Tool development (adaptation to Pijin) Workshops	 USD USD USD	 40,000 10,000 50,000
L	Contractual services, workshops, materials & goods and travel 4.2. Pilot best practice participatory approach to city government, NGO, and community collaboration in climate planning and enhance the understanding of adaptation pathways	**Main partners HCC, Wards, RMIT** Climate change planner / educator : Tool development (adaptation to Pijin) Workshops	 USD USD USD	 40,000 10,000 30,000
M	Contractual services, workshops, materials & goods and travel 4.3. Assess locally appropriate land administration options for peri-urban peri-urban settlements, and households, around Ngossi and Panatina wards	**Main partners HCC, Wards, RMIT** Land management experts for policy review: Workshops / consultations	 USD USD	 60,000 40,000
City-wide governance and capacity strengthening				
N	Contractual services, workshops, materials & goods and travel 5.1. Capacity development needs assessment to be conducted in Honiara with focal Ministries and HCC	**Main partners HCC** Capacity Development / climate change training expert: Workshops / consultations	 USD USD	 20,000 10,000
O	Contractual services, workshops, materials & goods and travel 5.2. Develop and run capacity development workshops for planners and other urban and related professionals in support of urban resilience: planning, land administration and GIS risk mapping.	**Main partners HCC, RMIT** Climate change planner / educator : Workshops	 USD USD	 20,000 50,000
P	Contractual services, workshops, materials & goods and travel 5.3. Employ a climate adaptation and resilience officer, and constitute a multi-stakeholder steering group and provide support for regular meetings	**Main partners HCC** Employment of full time resilience officer : Office operations (computer etc.)	 USD USD	 140,000 10,000
Q	Contractual services, workshops, materials & goods and travel 5.4. Develop and support more effective partnership networks, including for cross-border issues, and provide support for increased participation	**Main partners HCC** Workshops:	 USD	 30,000
R	Contractual services, workshops, materials & goods and travel 5.5. Policy and stakeholder mapping, and a whole-of-govt. review to identify areas for mainstreaming of climate change considerations across urban policy (including land use plans and building codes)	**Main partners HCC, RMIT** Policy review / consultant: Workshops / consultations	 USD USD	 25,000 5,000
Knowledge management and advocacy				
S	Contractual services, trainings, materials & goods and travel 6.1 Climate change training and knowledge exchange	**Main partners HCC, MLHS, MECDM** Consultant: Workshops / consultations	 USD USD	 5,000 15,000
T	Contractual services, materials & goods 6.2. Advocacy materials	**Main partners HCC, MLHS, MECDM** KM & Advocacy consultant: Printing / online presence	 USD USD	 50,000 20,000
U	Contractual services, materials & 6.3. Knowledge sharing platform	**Main partners HCC, MLHS, MECDM** KM & Advocacy consultant:	 USD USD	 20,000 20,000
V	Contractual services, materials & goods 6.4. Project learning mechanism	**Main partners HCC, MLHS, MECDM** Joint learning events	 USD	 20,000
Project execution.				

W	Project execution costs	Project team leader (part time)
		ROAP Technical Support (Regional Climate Change Officer)
		Office facilities
		Office support staff
		Office facilities
		Travel related to execution
		Evaluation
Project cycle management.		
X	Project cycle management costs	PSC 7 percent on total operational budget including components below)
		Evaluation Support costs (HQ)
		Project Support Cost (ROAP) - Project Management Committee Meetings - IE staff salaries / supervision of reports etc. - Project supervision missions

Table 19: Summary of the M&E costs

Type of M & E activity	Responsible parties	Source and Budget USD	Time frame
Measurements of means of verification (baseline assessment and M & E plans, including for M & E of measures in place for the management of environmental and social risks	Project Manager; Project team	From project execution: 205.000	First quarter of year 1
Direct Project Monitoring and Quality Assurance including progress and financial reporting, project revisions, technical assistance, risk management and M & E of measures in place for the management of environmental and social risks	Project Manager; With inputs from Project team; Provincial and district-level government, community level monitoring	From project execution: 20.000	Half-yearly and annually. Building on provincial and district level assessments and community level monitoring.
Independent terminal evaluation)	Project Manager; Project team; Provincial and district-level government and community-level monitoring UN-Habitat M&E Section and external consultants (from project execution and project cycle management)	From project cycle management: 10.000 and project execution 20,000	At end of project implementation
Project management committee meetings	Project Manager; Project team Project management committee	From project execution: 5.000	Inception meeting within first 2 months and bi-annual PB meetings (and sub-committee meetings)
Travel	UN-Habitat ROAP;	From project cycle management: 10.000	Quarterly, half-yearly and annually and as needed
Total		From project execution: 5065.000 From project cycle management: 20.000 Total: 7085.000	

H. Disbursement schedule

Table 20: disbursement schedule

	Year 1	Year 2	Year 3	Year 4	Total
Milestones	1st disbursement – upon agreement signature Milestones (by the end of year 1) • 3 community action plans • One adaptation action demonstration project • Baseline on awareness and capacity needs • Women focused communication programme outlined • Training for ward-level resilience officers / officials conducted • City-level capacity needs assessments • Capacity development workshops for planners • MoU with SINU • Resilience officer employed • HCC stakeholder meetings (year 1, year 2, year 3, year 4) • Resilience working group with HCC and Guadalcanal Province meetings (year 1, year 2) • Knowledge Programme Developed	2nd disbursement – One Year after project start ▪ Upon First annual Report ▪ Upon financial report indicating disbursement of at least 70% of funds Milestones (by the end of year 2) • 2 community action plans • 10 percent of community adaptation projects • Workshop series conducted (min 2) • Awareness building initiatives implemented (min 2) • Children and youth programmes conceptualized • HCC stakeholder meetings • Resilience working group with HCC and Guadalcanal Province meetings • Policy review (for mainstreaming) year 2 • Advocacy Materia • Website updates	3rd disbursement - Two years after project start ▪ Upon Second annual Report ▪ Upon financial report indicating disbursement of at least 70% of funds Milestones (by the end of year 3) • 40 percent (cumulative) of community adaptation projects • Workshop series conducted (min 3) • Awareness building initiatives implemented (min 3) • Women focused theater performances and publications documented • Children and youth programmes running (and documented) • EbA programme developed • Public / community space initiatives developed • Training for ward level resilience officers / officials conducted • Ward level structure established, end of year 3 • Land review conducted for wards • HCC stakeholder meetings • Advocacy Materia • Website updates	4th disbursement – Third Year after Project Start ▪ Upon Third annual Report ▪ Upon financial report indicating disbursement of at least 70% of funds Milestones (by the end of year 4) • 100 percent (cumulative) of community adaptation projects • Advocacy Materia • Website updates	

	• Advocacy Materia • Website updates				
Schedule date	June 2017	June 2018	June 2019	June 2020	
A. Project Funds (USD)	$650,000	$1,180,000	$1,500,000	$370,000	$3,700,000
B Programme Execution	61,750	112,100	142,500	35,150	351,500
C. Programme Cycle Mgt	60,499	109,829	139,613	34,438	344,378
B+C MIE Fee (USD)	$122,249	$221,929	$282,113	$69,588	$695,877
Total	$772,249	$1,401,929	$1,782,113	$439,588	$4,395,877

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government[34] *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

Chanel Iroi, Undersecretary, Ministry of Environment, Climate Change, Disaster Management and Meteorology	Date*: 23 December 2016*

[6.] Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Solomon Islands Government

Ministry Of Environment, Climate Change, Disaster Management & Meteorology
Post Office Box 21, Honiara, Solomon Islands

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: +1 202 522 3240/5

Honiara, 23rd December 2016

Dear Sir/Madam,

Subject: Endorsement of the Project: **Enhancing urban resilience to climate change impacts and natural disasters: Honiara (SLB/MIE/Urban/2016/1)**

On behalf of the Solomon Islands Government, I take this opportunity to thank the Adaptation Fund Board for the endorsement of the Concept Proposal, at its twenty-eighth meeting.

In my capacity as Designated Authority for the Adaptation Fund in the Solomon Islands, I confirm that the above national Project Proposal '**Enhancing urban resilience to climate change impacts and natural disasters: Honiara'** is in accordance with the government's national priorities in implementing adaptation activities to reduce the adverse impacts and risks posed by climate change in the Solomon Islands.

Accordingly, I am pleased to endorse the above project proposal for support from the Adaptation Fund. If approved, the project will be implemented by the United Nations Human Settlements Programme (UN-Habitat) and executed jointly with the Ministry of Lands, Housing and Survey (MLHS) and the Honiara City Council (HCC).

The project proposal builds on the collaboration between MLHS, HCC and UN-Habitat and support by the Ministry of Environment, Climate Change, Disaster Management and Meteorology whereby a participatory Climate Change Vulnerability Assessment and Climate Change Action Plan were developed for Honiara. The project supports the implementation of this action plan and the details of this project proposal were agreed upon by the above mentioned stakeholders during a consultation workshop on 30 June 2016. Since the endorsement of the concept proposal, consultations among the key stakeholders have taken place in order to develop the full project proposal.

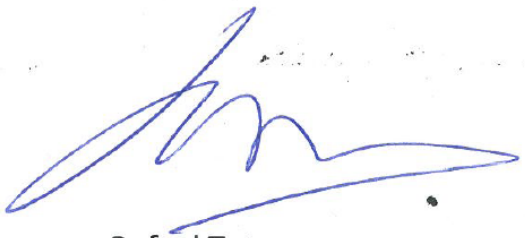
It is our hope that the Adaptation Fund will consider this full proposal favourably during its next board meeting.

Sincerely,

The Common Seal of

Chanel Iroi
AF National Designated Authority

B. Implementing Entity certification

I certify that this proposal has been prepared in accordance with the guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans including the National Development Strategy 2016-2035, National Climate Change Policy 2012-2017, Intended Nationally Determined Contributions as well as Honiara specific Policies and Plans, including the Local Planning Scheme 2015, and the Honiara Urban Resilience and Climate Action Plan and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project / programme.
 Rafael Tuts Director, Programme Division UN-Habitat
Date: January 9, 2017 | Tel.: +254-20-762-3726 Email: Raf.Tuts@unhabitat.org
Project Contact Person: Bernhard Barth, Human Settlements Officer
Tel.: +81-92-724-7121 Email: Bernhard.Barth@unhabitat.org

Annex 1: Environmental and Social Management Plan (ESMP)

Environmental and social risks management framework: explanation of method and process of dealing with potential environmental and social risks.

The method to identify, assess, manage and mitigate the environmental and social risks of Unidentified Sub Projects (USPs) and related activities is based on a combination of UN-Habitat's Handbook on Environmental and Social Safeguards [35] and the AF Environmental and Social Policy.

The method/framework deals with the 15 Adaptation Fund safeguards in combination with 4 cross cutting markers and the 7 safeguard areas of UN-Habitat. The matrix below demonstrates where these safeguards align and where they are considered separately.

Table 21: Linking adaptation fund safeguards to UN-Habitat safeguard areas.

UN-Habitat Safeguard Areas/cross cutting markers		**Adaptation Fund Safeguard Areas**
❑ Youth ❑ Human Rights ❑ Climate Change and Environment ❑ Gender		❑ Compliance with the Law ❑ Human Rights ❑ Climate Change ❑ Gender Equity and Women's Empowerment
1	Promoting better labour and working conditions	
2	Enhancing community health, safety and security	
3	Safeguarding land, housing, resettlement and rights	▪ Access and Equity
4	Reducing the climate and environmental footprint	
5	Conserving biodiversity	▪ Protection of Natural Habitats ▪ Lands and Soil Conservation
6	Protection for Indigenous people	▪ Marginalized and Vulnerable groups
7	Protecting and promoting cultural heritage	

During the project proposal phase, these safeguards have been used to screen risks of all project activities ~~under components 2, 4, 6 and 7 of the project~~. During the project, these safeguard areas will be used to identify, assess, manage and mitigate social and environmental risks of USPs (which are site-specific, physical interventions).

Identified risks (if any) will be used as criteria to select, with communities, infrastructure sub-projects for construction. If selected/to be constructed sub-projects have remaining risks, they will be managed and mitigated. The flow chart below displays how to deal with risk on sub-project level. The flowchart below shows how environmental and social risks of USPs can be identified/assessed, managed and mitigated.

[35] Currently being tested before publication

Process of identifying/assessing, managing and mitigating environmental and social risks of (sub-) project

SAFEGUARD AREA

EXISTING LAWS AND PRINCIPLES TO WHICH S, UN-HABITAT AND AF ARE CONTRACTUALLY OBLIGED AND ALREADY ESTABLISHED ACTIONS THAT ARE TO BE IMPLEMENTED.

What are relevant laws/principles for the sub-project?

- Law / Principle # 1 — No / Yes
- Law / Principle # 2 — No / Yes
- Law / Principle # 3 — No / Yes
- Law / Principle # 4 — No / Yes

POTENTIAL OF NON-COMPLIANCE TO SPECIFIED LAWS/ PRINCIPLES, OR ACTIONS TO BE TAKEN

Are there potential risks/ areas of non-compliance? — No / Yes

Assessment includes using the Environmental a Social Safeguard non-compliance risk screening checklist (after determining location, scale and r based on outcomes Vulnerability Assessments.

MEASURES THAT MUST BE ACHIEVED TO ENSURE SAFEGUARD FULFILLMENT

How will you implement measures to safeguard against these risks?

Proposed measures to be achieve:

Through (sub-) project management plan.

SPECIFIC ACTIONS THAT NEED TO BE COMPLETED AT THE PROJECT LEVEL

What are the new recommendations?

- *Action # 1*
- *Action # 2*
- *Action # 3*

HAS THE ACTION BEEN COMPLETED?

Have the recommendations been successfully implemented? — No / Yes

Table 22: Outcome of the initial environmental and social assessment (to be updated prior to project start)

1. Safeguard Area		2. National Laws, UN Rules, principles and procedures to be upheld	3. Potential risks/areas of non-compliance	4. Impact & probability (1-5) and Significance (low, medium, large)		5. Measure to ensure safeguard fulfillment	6. Recommended action	Action completed?
UN-HABITAT PILLARS	Youth	▪ UN-Habitat Youth Advisory Board ▪ Solomon Islands National Youth Policy (2010-2015) ▪ SI National Children's Policy ▪ SI National Action Plan for Children (NAPC) ▪ Honiara Youth Council	Failure to engage youth in decision making and/ or of a lack of equity to project benefits.	I = 1 P= 1	Low	Ensure Youth have equal access to the benefits and outcomes of the project.	Involvement of youth within stakeholder participation meetings	☐
						Ensure equal participation of youth throughout project design and implementation	Channels to be available to report instances of discrimination in a safe and anonymous manner.	☐
						Consistency with the Implementation Mechanisms set out in the SI National Youth Policy	Involvement of the Youth Development Division (YDD), Ministry of Women, youth and Children's Affairs (MWYCA) in all stages of project design & implementation	☐
						Build skillsets and knowledge of SI young people to enhance long-term employment and the future skills base of the Solomon Islands	Embed training and youth facilitation throughout project components, using education capacities within the project team (RMIT University)	☐
	Human Rights	▪ Human Rights Based Approach (HRBA)	Failure to understand situation of and lack of proactively addressing the rights of the rights holders and responsibility of the duty bearers.	I = 2 P= 1	Low	Ensure HRBA through use of the human rights marker	Details of human rights markers to be included in MoU and AoC with government and contractors	☐
							Refresher training to be available and completed by all UN-Habitat staff every 2 years.	☐

			Rights abuses, including against indigenous people					
	Climate Change	▪ SI National Climate Change Policy (2012-2017) ▪ SI National Adaptation Plan of Action (2008) ▪ UN-Habitat Vulnerability Assessment ▪ Planning for Climate Change Guidelines	The project causes maladaptation either in the project sites or upstream or downstream	I = 3 P= 1	Low	Continued consultation of beneficiary groups	Continued consultations	☐
						Identify impact of identified actions	Conduct simple impact assessments of hard actions	☐
	Gender Equity and Women's Empowerment	▪ UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) ▪ ILO Conventions No. 100, 111, 156 and 183 ▪ SI National Policy on Gender Equality and Women's Development	Failure to engage women in decision-making. Women not enjoying equal access to resulting service	I = 2 P= 2	Low	Ensure the continued adherence to the specifications of CEDAW, ILO Conventions and the national women's policy Ensure gender equity throughout project design and implementation.	Quota system for female engagement	☐
							Equitable benefits of project outcome for men and women	☐
							Channels to be available to report instances of discrimination in a safe and anonymous manner.	☐
1	Promoting better labour and working conditions	▪ UN Secretariat Administrative Instruction ST/AI/2013/4 ▪ ILO Minimum Age Convention ▪ ILO Worst forms of Child Labour Convention ▪ SI Trade Unions Act 1988	Community contracts that are not implemented according to ILO standards	I = 1 P= 1	Low	Ensure transparency and accountability throughout project cycle.	All documents & minutes produced during the project cycle to be available online. Ensure that all consultants and staff are employed in line with UN rules. Promote employment of women and multiple ethnic groups.	☐
						Ensure the project is accordance with ILO Conventions.	Safeguard Officer to visit the project site and ensure ILO Conventions are being upheld.	☐

		▪ SI Safety at Work Act 1996 ▪ SI Labour Act 1996				Ensure that no underage staff or children are employed in the project.	MoUs, AoC and Community contracts to include standard clauses requiring the compliance with ILO conventions.	☐
	Compliance with Domestic & International Law	• SDG targets and indicators and technical standards for water supply, sanitation, etc. • Solomon Islands National Development Strategy (2016-2035)	Risk of non-compliance with standards	I = 2 P= 2	Low	Ensure clear communication between UN-Habitat project staff and the Solomon Islands government.	Written details of the proposed project to be shared with the host country.	☐
							Consistency with the SI NDS (2016-2035) objectives to be reviewed sub-annually in partnership with MDPAC	☐
						Ensure each person associated with the project is trained on domestic and international laws	Details of domestic and international laws to be included in contract for all project staff.	☐
							Provide training for all project staff.	☐
						Ensure project complies with the SDG technical standards	Project Manager will have read and understood SDG technical standards prior to project implementation	☐
2	Enhancing community health, safety and security	▪ International Civil Service Commission (ICSC) ▪ International Health and Safety Standards and SI health act ▪ Slum upgrading projects ▪ Building Back Better Principles Guideline for Shelter, Sanitation, etc.	Communities may use some machinery and/or not have protective equipment	I = 3 P= 1	Low	Ensure that ICSC and SI international health and safety standards are clearly accessible and understood.	Clearly visible signs detailing health and safety standards to be located at projects sites.	☐
							Project will provide all necessary safety equipment.	☐
						Ensure adherence to relevant UN-Habitat policy and programmes	UN-Habitat Slum & Housing upgrading specialist to provide advice and support to project design when necessary.	☐
						Ensure Compliance with the build back better principles	Project to be implemented in accordance with build back better principles.	☐

		▪ Honiara Local Planning Scheme 2015 ▪ SI National Disaster Risk Management Plan (2010)				Ensure adherence to Honiara Local Planning Scheme	Project Manager to have a clear working knowledge of Solomon Islands Building Code ☐
3	Safeguarding land, housing, resettlement and rights	▪ Right to Adequate Housing ▪ Free, Prior and Informed Consent (FPIC) ▪ SDG technical standards for water supply ▪ See also Human Rights crosscutting area; HRBA and Compliance with the law: Solomon Islands town and country planning act	Project actions lead to unintended resettlement consequences	I = 4 P= 2	Low	Ensure all project affected persons have free, prior and informed consent relating to project outcomes.	Accountability in administration with online access to reports. ☐
							Principles of FPIC to be adopted throughout project cycle with channels to review project plan. ☐
						Ensure that no (sub-) projects are undertaken that involve forced eviction.	No (sub-) project will be approved where there is the possibility, however small, of forced eviction. ☐
						Ensure Participatory planning	Project to operate with people's approach ☐
						Ensure SDG technical standards for water supply are adhered to throughout project cycle.	Project Manager will be responsible for project water supply is in accordance with SDG technical standards. ☐
	Access and Equity	▪ UN-Habitat Project Template	Failure to engage all relevant ethnic communities (incl. minorities) and people with vulnerabilities in decision-making. Certain ethnic minorities not enjoying equal access to resulting service	I = 3 P= 2	Low	Ensure continued use of UN-Habitat Project Template and equitable benefits of the project.	Project will be submitted to UN-Habitat's Programme Assurance Group (PAG) for quality assurance and review. PAG will offer guidance on ensuring equitable access. ☐
						Ensure project does not exacerbate existing inequalities.	Project will detail how project outcomes will produce equal benefits and Access and equity questions included as part of the VA. Key elements to be translated in Solomon Islands Pigin. ☐

4	Reducing the climate and environmental footprint	▪ Climate Change Marker ▪ Project Advisory Group (PAG) ▪ UN-Habitat Vulnerability Assessment ▪ Planning for Climate Change Guidelines	Mal-adaptation (as described above)	I = 2 P= 1	Low	Include impact monitoring through implementation of the project	Project Manager to have clear understanding of the Climate Change Marker.	☐
							Review and update the VA at the mid-point of the project	☐
						Ensure continued support of PAG throughout the project cycle.	Use UN-Habitat evaluation policy	☐
							Ensure key documents are available online	☐
5	Conserving biodiversity	▪ UN-Habitat Vulnerability Assessment ▪ Convention on Biological Diversity ▪ TEEB Guidance Manual	Impacts of local, upstream and downstream biodiversity as a result of project activities	I = 1 P= 1	Low	Ensure VA is completed to the highest standard.	VA assessment to be completed prior to project implementation.	☐
						Ensure adherence to the Convention on Biological Diversity.	Project Managers to have read and understood the Convention prior to project implementation.	☐
						Ensure all project outcomes respect the importance of ecosystems and ecosystem services.	Ecosystem services included as part of the VA	☐
							Provide information on ecosystem services within training to project staff[36].	☐
	Protection of Natural Habitats	▪ UN-Habitat Vulnerability Assessment ▪ Convention Concerning the Protection of World Cultural and Natural Heritage (1972) ▪ IUCN Red List Criteria	As above	I = 1 P= 1	Low	Ensure VA is completed to the highest standard.	VA assessment to include local/community map of natural habitats.	☐
						Ensure Compliance to Convention.	Provide clear information of Heritage sites to Project Managers.	☐
	Lands and Soil Conservation	▪ UN-Habitat Vulnerability Assessment	As above	I = 1 P= 1	Low	Ensure conservation of natural habitats and species included within	Provide Project Managers with links to IUCN Red List.	☐
							Utilize resources produced	☐

[36] In accordance with the TEEB Guidance Manual: http://www.teebweb.org/media/2013/10/TEEB_GuidanceManual_2013_1.0.pdf

		▪ IUCN Environmental Policy and Law Paper No. 81				the IUCN Red List.	by IUCN for applying the Red List to project level.	
6	Protection for Indigenous people	▪ UN-Habitat Vulnerability Assessment ▪ Article 27 of the International Covenant on Civil and Political Rights (1966) ▪ UNDRIP Declaration on the Rights of Indigenous People ▪ ILO Convention 169 ▪ Free, Prior and Informed Consent (FPIC)	Example: Failure to engage indigenous people in decision making. Indigenous people not enjoying equal access to resulting service (see access and equity)	I = 3 P= 1	Low	Ensure VA is completed to the highest standard.	VA assessment to be completed prior to project implementation and to include vulnerabilities of indigenous people	☐
						Ensure that the details of International Covenant on Civil and Political Rights (1966) are respected and upheld.	Include measures to protect indigenous people in project plan.	☐
							Background research to be completed prior to initial project design.	☐
						Ensure that the components of the UNDRIP Declaration and ILO Convention 169 on Indigenous tribes and people, are respected and upheld.	Project Managers to have read and understood UNDRIP Declaration and ILO Convention prior to project implementation.	☐
							Provide summary of UNDRIP Declaration within ESS Handbook.	☐
						Ensure FPIC is granted to indigenous communities affected by project implementation.	Follow a pre-defined FPIC procedure	☐
							Allow 1 month for feedback to be gathered from consent letter.	☐
	Marginalized and Vulnerable groups	▪ UN-Habitat Vulnerability Assessment ▪ Free, Prior and Informed Consent	See access and equity	I = 3 P= 1	Low	Ensure VA is completed to the highest standard and clear linkages to the project plan produced.	VA will focus on the particular needs of vulnerable and marginalized groups.	☐
						Ensure all project affected persons have free, prior and informed consent relating to project outcomes	Accountability in administration with online access to reports.	☐
							Principles of FPIC to be upheld throughout project cycle with clear channels to review project plan. All research-based activities	☐

							conducted by RMIT University required to be approved through the institutions Human Research Ethics Committee	
7	Protecting and promoting cultural heritage	▪ UN-Habitat Vulnerability Assessment ▪ UNESCO World Heritage List	No damage to any heritage, including 'intangible heritage'	I = 1 P= 1	Low	Ensure VA is completed to the highest standard and clear linkages to the project plan produced.	VA to include local/ community map of tangible and intangible heritage areas.	☐

Risks assessment tool for Unidentified Sub-Projects: To identify, assess, manage and mitigate potential environmental and social risks of small-scale infrastructure investment projects and related activities.

The activities under Components 1 and 3 are 'hard' activities, and as such some activities have the potential, without an environmental and social safeguarding system, to create negative environmental and social impacts. At the project proposal phase, environmental and social risks under components 1 and 3 ~~and 5~~ cannot be comprehensively identified because the project includes unidentified sub- projects (USPs). As a result, this section explains how to identify/assess, manage and mitigate environmental and social risks when an USP is identified.

Scope of sub-projects

UN-Habitat will ensure that potential social and environmental risks, impacts and opportunities of supported sub-projects are systematically identified and assessed in an integrated manner. The type and scale of assessment and the agreed management and mitigation measures will be proportionate to the level of social and environmental risk.

In order to avoid large environmental and social impacts, sub-projects must fall into the category of medium (B) - or low (C) risk projects.

A1: High risk:	Activities with potential significant adverse environmental and/or social risks and/or impacts that are diverse, irreversible, or unprecedented.
B2: Medium risk:	Activities with potential mild adverse environmental and/or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.
C3: Low risk:	Activities with minimal or no adverse environmental and/or social risks and/or impacts.

The sub-projects will fall into the category of medium (B) - or low (C) risk projects because components 1 and 3 will include sub-projects that are numerous, but small scale and very localized, and managed by communities where possible, who have a stake in avoiding environmental and social impacts. This means that the potential for direct impacts is small and localized, that there can be few indirect impacts, and that transboundary impacts are highly unlikely.

To ensure sub-projects fall into the category of medium (B) - or low (C) risk projects, the scope of sub-projects has been narrowed by:

- Type of measure/housing/infrastructure
- Location (low risk)
- Scale (square meters and funding ceiling)

The outcomes of ~~climate change vulnerability and disaster risk assessments (conducted before sub-project identification)~~planning processes will provide valuable data regarding risks related to disaster and vulnerabilities and sensitivities of people, natural habitats, lands/locations, etc. The physical scale of sub-project will be limited so that they will not fall in SI defined risk categories for which Environmental and Social Impact Assessment are required according to SI standards.

Sub-project assessment and management principles

The UN-Habitat Project Manager will ensure that all executing entities (in particular the responsible officers / staff) will be fully aware of the ESMP and that they can articulate this plan to the communities and other stakeholders and that they can contribute to the monitoring of the ESMP. As such the Project Manager as well as the key team members of the executing entities will ensure that assessments adequately include and/or reflect the following:

- ✓ Address impacts on physical, biological, socioeconomic, and cultural resources, including direct, indirect, cumulative, and induced impacts in the sub-project's area of influence, including associated facilities. Utilize strategic, sectoral or regional environmental assessment where appropriate.
- ✓ Assess adequacy of the applicable legal and institutional framework, including obligations under Applicable Law and confirm that the sub-project would not be supported if it contravenes (inter) national obligations.
- ✓ Assess feasible investment, technical, and siting alternatives, including the "no action" alternative, as well as potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and the institutional, training and monitoring requirements associated with them.
- ✓ Enhance positive impacts and avoid, minimize, and/or mitigate adverse impacts through environmental and social planning and management. Develop a management plan per USP that includes the proposed measures for mitigation, monitoring, institutional capacity development and training (if required), an implementation schedule (including maintenance), and cost estimates.
- ✓ Ensure compliance with international standards and, where appropriate, use independent advisory panels during preparation and implementation of sub-projects that contain risks or that involve serious and multi-dimensional social and/or environmental concerns.
- ✓ Examine whether particular individuals and groups may be differentially or disproportionately affected by the sub-project potential adverse impacts because of their disadvantaged or marginalized status, due to such factors as race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. Where such individuals or groups are identified (through the vulnerability assessment),

recommend targeted and differentiated measures to ensure that the adverse impacts do not fall disproportionately on them.

- ✓ All proposed sub-projects with environmental and social risks will be assessed and managed with the purpose to identify potential application of requirements of the Overarching Environmental and Social Policy (ESP) and Principles.

SUB-PROJECT ASSESSMENT SHEET

Steps:

1. Please fill out table 1 and provide the specific details for each sub project.
2. Complete the checklist (table2), to assess the potential risk areas.
3. Identify risks mitigation measures by filling table 3
4. Classify the risk of the sub-project in table 4
5. Determine relevant safeguard areas for the sub-project in table 5
6. Sign of the project when above is completed

TABLE 1: SUB-PROJECT INFORMATION	
1. Project title	
2. Project number	
3. Project location (village, districts)	

TABLE 2: CHECKLIST OF POTENTIAL RISK AREAS OF NON-COMPLIANCE WITHIN THE ADAPTATION FUND'S ENVIRONMENTAL AND SOCIAL SAFEGUARDS	ANSWER (Y/N)
Adaptation Fund Safeguard Area 1: Compliance with the Law	
1. Is there a risk that the project will fail to comply with national laws in SI, UN rules, principles and procedures?	Yes
2. Could the proposed project lead to a failure of trust between UN-Habitat and the SI Government?	No
Adaptation Fund Safeguard Area 2: Human Rights	
1. Is there a risk that the proposed project will negatively impact the human rights of the affected population?	No
2. Could the implementation of the proposed project lead to conflict or violence within the affected community and surrounding regions?	No
3. Is there a risk that marginalized groups will be ignored and excluded from stakeholder engagement and community participation?	Yes
4. During initial engagement with the local population, were objections raised objections or concerns relating to human rights issues?	No
5. Is there a risk that community members and marginalized groups do not have a channel through which to raise an issue of grievance?	No
Adaptation Fund Safeguard Area 3: Climate Change	
1. Is there a risk that the proposed project will lead to increased GHG emissions?	No
2. Could the proposed project lead to maladaptation either in the in the project sites or upstream or downstream	Yes

3. Is there a risk that the outcomes of the proposed project will be highly susceptible to impacts of climate change into the future?	No
Adaptation Fund Safeguard Area 4: Gender Equity and Women's Empowerment	
1. Is there a risk that the proposed project will exacerbate any existing gender imbalance?	
2. Would the proposed project lead to an increase in discrimination towards women and girls especially during participatory processes of project design and implementation?	
3. Is there a risk that the proposed project will lead to decreased access to water related infrastructure?	
4. Is there a risk that the project will fail to engage women in decision making regarding project design?	
Adaptation Fund Safeguard Area 5: Promoting better labour and working conditions	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures?	
2. Could the project lead to a reduction in the working standards of the local community?	
3. Is there a risk that the project related staff for the proposed project will be unfairly remuneration for their work and contribution to project implementation?	
4. Is there a risk that community contracts will not be implemented according to ILO standards?	
5. Is there a risk that underage persons will be employed during the project cycle?	
6. Could the proposed project lead to a situation where a project worker is unable to report any instance of grievance?	
Adaptation Fund Safeguard Area 6: Enhancing community health, safety and security	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures?	
2. Could the local community be exposed to risk from unsafe machinery during the project cycle?	
3. Is there a risk that community members may use some machinery without sufficient training or knowledge and/or not have protective equipment?	
4. Would the outcomes of the project be likely to malfunction and cause injury to members of the community?	
Adaptation Fund Safeguard Area 7: Safeguarding land, housing, resettlement and rights	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures?	
2. Could the proposed project lead to unintended resettlement consequences?	
3. Is there a risk that during the (unlikely) instance of unintended resettlement that affected populations will not have the chance to raise objections or concern?	
4. Will communities affected by unintended resettlement be refused their right of free, prior and informed consent?	
4. Will the proposed project neglect to uphold the components of Participatory Land Use Planning, as detailed by the Adaptation Fund?	
Adaptation Fund Safeguard Area 8: Access and Equity	
1. Could the proposed project result in the unequal distribution of benefits between different groups in the affected community?	
2. Could the proposed project lead to a situation where there is not a channel available to report instances of grievance or unequal access to benefits?	
Adaptation Fund Safeguard Area 9: Reducing the climate and environmental footprint	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures?	

2. Could the proposed project lead to mal-adaptation? 3. Is there a risk that the project will not adequately monitor its environmental footprint and impact throughout the project cycle?	
Adaptation Fund Safeguard Area 10: Conserving biodiversity	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures? 2. Could the proposed project be constructed in a conservation or protected area? 3. Is there a risk that the proposed project will negatively impact upstream or downstream biodiversity?	
Adaptation Fund Safeguard Area 11: Protection of Natural Habitats	
1. Is there a risk that the proposed project will fail to protect natural habitats? 2. Could the proposed project lead to a detrimental alteration of surrounding natural habitats?	
Adaptation Fund Safeguard Area 12: Lands and Soil Conservation	
1. Could the proposed project lead to the depletion of soil nutrients in the affected area? 2. Is there a risk that the proposed project will adversely impact the surrounding land area?	
Adaptation Fund Safeguard Area 13: Protection for Indigenous people	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures? 2. Is there a risk that the proposed project will lead to increased levels of discrimination against indigenous peoples? 3. Is there a risk that the proposed project will fail to engage indigenous people in decision making. 4. Could the proposed project lead to unequal outcomes where Indigenous people are not able to enjoy equal access to the resulting services?	
Adaptation Fund Safeguard Area 14: Marginalized and Vulnerable groups	
1. Is there a risk that the proposed project will cause detrimental impact to the lives of marginalized or vulnerable groups? 2. Could the proposed project lead to increased discrimination against marginalized or vulnerable people? 3. Will the proposed project limit the access to natural resources or project benefits for marginalized and vulnerable groups?	
Adaptation Fund Safeguard Area 15: Protecting and promoting cultural heritage	
1. Is there a risk that the project will not be implemented in compliance with national laws, UN rules, principles and procedures? 2. Is there a chance that the proposed project will cause damage to a cultural heritage UNESCO site? 3. Could the proposed project be implemented without having completed a vulnerability assessment?	

Table 3: Identifying risks mitigation measures

Table partially filled out, to provide examples for project staff to complete the table fully. Please use the checklist (table 2) to identify risks

WHAT ARE THE POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS?				
Description of Risk	**Impact (I) and Probability (P). Score 1 - 5**	**Significance (low or medium)**	**Comments**	**Safeguard measures that have been incorporated to address potential risk**
Risk that the project will fail to comply with national laws in SI, UN rules, principles and procedures.	I = 1 P= 1	Low	UN-Habitat is a signatory of UN Conventions and the proposed project has been designed to adhere to national SI law.	Project Manager to work in cooperation with relevant Department …and written details of the proposed project will be shared with SI government
Risk that marginalized groups will be ignored and excluded from stakeholder engagement and community participation?	I = 3 P= 1	Low		
Risk that the proposed project will lead to maladaptation either upstream or downstream from the project site	I = 1 P= 1	Medium		

Classification of sub-projects

TABLE 4: PROJECT CATEGORIZATION		
Select risk level:		Comments
A1: Low Risk **B2: Medium Risk** **C3: High Risk**		The proposed project has been classified as Medium Risk because…

TABLE 5: RELEVANT SAFEGUARD AREAS FOR PROJECT IMPLEMENTATION			
	Select all that apply		Comments
1	Compliance with the Law		
2	Human Rights		
3	Climate Change		
4	Gender Equity and Women's Empowerment		
5	Promoting better labour and working conditions		
6	Enhancing community health, safety and security		
7	Safeguarding land, housing, resettlement and rights		The proposed project will not involve resettlement of any kind.
8	Access and Equity		
9	Reducing the climate and environmental footprint		
10	Conserving biodiversity		
11	Protection of Natural Habitats		
12	Lands and Soil Conservation		
13	Protection for Indigenous people		
14	Marginalized and Vulnerable groups		
15	Protecting and promoting cultural heritage		

TABLE 6: FINAL SIGN OFF		
Signature	Date	Description
Assessor of sub-project		
Project manager		
M & E officer		