In the Solomon Islands, most island communities depend heavily on natural resources for both food security and livelihoods. Early climate change adaptation activities can help communities become more resilient to the impacts they face. Photo credit: © CTSP / James Morgan

Lessons Learned for Solomon Islands from an Early Pilot of the CTI LEAP Tool

The Coral Triangle is considered the global epicenter of marine biodiversity. The region possesses 76 percent of all known coral species, 37 percent of all known coral reef fish species, 53 percent of the world's coral reefs, and the greatest extent of mangrove forests in the world. However, coastal communities in the Coral Triangle are already experiencing the impacts of climate change. Severe storms, coastal inundation, rising sea level and sea surface temperatures are threatening safety and food security of more than 120 million people that depend directly on local marine and coastal resources for their income and livelihoods.

Six countries founded the Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI) in 2007: Indonesia, Malaysia, Papua New Guinea, the Philippines, Timor-Leste and Solomon Islands. The CTI Regional Plan of Action, launched in 2009, embodies a commitment and call to action by these countries to improve coastal resource management and food security. This commitment includes Climate Change Adaptation (CCA) as one of the five key goals, pledging to implement actions to reduce the impacts of and adapt to climate change.

In late 2011, two communities in the Western Province of Solomon Islands (SI) began a process to assess their vulnerability to climate change and develop an adaptation action plan. They worked with two NGOs, WWF-SI and WorldFish, and elected to use an early draft of the recently completed *CTI-CFF Climate Change Adaptation for Coral Triangle Communities: Guide for Vulnerability Assessment and Local Early Action Planning (LEAP Guide)*.

The early version of the LEAP Guide was selected for use because it was one of the first to emerge based on a community-based adaptation concept that is consistent with Solomon Islands Government's approach. The Solomon Islands Government endorses Community-Based Resource Management (CBRM) through the Ministry of Fisheries and Marine Resources (MFMR) Inshore Fisheries Strategy. The Government is, therefore, increasingly turning to

community-based solutions. At the same time, they are working to develop capacities and strengthen linkages between communities and the national and provincial government levels.

The primary objective of the pilot exercise was to develop community-based climate change adaptation plans in two communities. Through the process of using the early draft of the guide many important lessons were learned. These lessons, summarized in this factsheet, were informed by processes and decisions taken by the CTI-CFF CCA Technical Working Group, the Climate Change Division of the SI Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM), the SI Ministry of Fisheries and Marine Resources (MFMR), the SI National Climate Change Working Group within SI's CTI-CFF National Coordinating Committee, and other coastal community-based CCA practitioners to inform current and future activities.

Background

Two sites from the CTI Priority Geography at Ghizo participated in the pilot program to use an early version of the CTI LEAP Guide: Saeraghi and Paelonge. Each of these consists of several satellite communities. These communities had a long history of working with WWF to manage their coastal resources, however, that relationship had been suspended since the 2007 earthquake and tsunami, which resulted in the destruction of property and loss of life in the area.

Developing the LEAP involved six main steps:

1. Getting organized, including getting to know the community and understanding them
2. Raising community awareness about climate change
3. Participatory identification of priority social and natural resources
4. Participatory identification of threats, and characterizing the vulnerability of priority resources to climate change impacts
5. Community identification and prioritization of potential solutions (early actions) to address threats and reduce vulnerability to climate change impacts
6. Community identification of desired results, and measurable objectives, and development of an action plan to achieve those results

Each of the LEAP steps was undertaken over a series of community meetings throughout 2012.

At the end, WorldFish and WWF facilitated discussion, decision-making, and planning around options of adaptation actions to climate change tailored to community needs. Action plans were then presented and discussions about community based adaptation were conducted as part of a two-day workshop held in Gizo. The workshop was attended by various NGOs and national and local government stakeholders selected by the communities, as well as the community representatives themselves.

The two participating communities identified a range of adaptation options through the LEAP process. During the development of the community action plans there was a strong focus on "nature-based adaptation planning"

meaning building on and protecting the natural resources the communities had available to them, including sustainable resource use. Community adaptation options that were identified by communities testing the LEAP tool were categorized under four main headings (Table 1). Similar communities may select many of these same options across Solomon Islands.

Important Natural or Social Resource	High-priority Community-selected Adaptation Actions
Coral reefs and fish	• Protect and manage key marine habitats (reefs, lagoons and seagrass beds) • Protect spawning aggregation sites • Use nearshore fish aggregating devices to reduce pressure off the reef
Coastal vegetation	• Plant vegetation (mangroves) around coastline • Reduce cutting of mangroves for firewood • Construct sea walls to protect important infrastructure
Coastal land and gardens	• Preserve food (drying nuts, smoking fish) • Use traditional knowledge to manage freshwater during times of drought
Communities	• Use traditional knowledge and practices for adaptation • Install household tanks for freshwater storage • Relocate to higher ground • Improve education and awareness about climate change

Lessons Learned

In a workshop attended by the Deputy Director for National Climate Change Division, it was agreed that the early LEAP Guide and process would require adaptation-largely through simplification. Key considerations and suggested changes from this workshop, plus general observations by the implementation team, are described below.

Overall Lessons Learned for Community Based CCA in Solomon Islands

- Communities will require support when using vulnerability assessment and adaptation-planning tools. They also need to be provided with information and support on how to implement actions.
- Awareness materials should be simple, locally relevant, and draw on practical and contextualized examples. Scientific concepts need to be kept as simple as possible, but remain accurate.
- Community-based CCA planning tools need to be as simple and easy to use as possible. They should be adapted to country context.
- Accurate and effective information about climate change and adaptation is critical to the adaptation planning process.

- Resulting plans and activities should build on and be integrated into existing planning tools such as Disaster Risk Reduction (DRR) and CBRM plans.

Strengths of the CTI LEAP

1. The LEAP builds on existing frameworks and tools used in communities, including Community-Based Resource Management (CBRM) and Disaster Risk Reduction (DRR).
2. The LEAP is applicable to and inclusive of multiple sectors, including marine and terrestrial livelihoods and resources.
3. The LEAP promotes a thorough process and provides a comprehensive set of resources.

Challenges or Missing Elements of the CTI LEAP

1. The early version of LEAP was complex, requiring intensive engagement over a long period of time (in the case of this pilot, one year). This resulted in a financially costly process that raised the expectations of the communities about the level of support that would be provided for their resulting Action Plan.
2. Use of this toolkit required a strong, knowledgeable, and technically proficient facilitator (likely from an NGO or Government entity who has received training in facilitation of this process). Therefore, not all communities wishing to use the Guide would be able to do so.
3. The guide was only provided in English and would need to translated into Solomon Islands *Pijin* for local use.
4. The LEAP did not provide a clear mechanism to assess the vulnerabilities of particular social groups that were disempowered through the existing community structure (for example, women, the youth and elderly, or recent immigrants outside of a social hierarchy).
5. The LEAP stops once an adaptation plan has been created. Communities and facilitators felt that there needed to be greater emphasis on implementation of adaptation actions once the LEAP was completed.

Successful Modifications of the LEAP Guide for Use in Solomon Islands

Tools such as the LEAP will always need to be adapted and modified to fit with the local context (which includes consideration of language, culture, governance, economy, and history with natural disasters). Two examples of these modifications for the Western Province of Solomon Islands are:

1. The LEAP Guide's outreach and management planning sessions were shortened and adapted for local use. The focus for outreach was on demystifying climate change; clarifying the difference between climate change threats and non-climate-related natural disasters (such as the recent tsunami) or natural climate variability; and discussing the likely impacts climate change will have on coastal community livelihoods in Solomon Islands.
2. The LEAP materials highlighted the need to target men, women and youth separately; however it provided no further advice on effectively engaging these different groups. The Gizo team observed that the youth were particularly difficult to engage in the process, especially after the novelty wore off. They successfully instituted a Youth Environment Program, training youth in the use of the tool and encouraging them to develop a 'photo story'

using cameras to examine their relationship to climate and climate change through pictures. This ensured their ongoing engagement by providing them with a more active way to remain involved.

Considerations for Use of the LEAP
Site and Community Selection

1. As a first step, identify and select priority areas or sectors that are most vulnerable to climate, first at a national and provincial level. There will be a tendency towards locations where NGOs already work and where logistics are easier, which are not necessarily the most vulnerable areas to climate change.
2. Additionally, community selection should be a consultative process between implementers, decisions makers and stakeholders. A combination of top-down and bottom-up site selection processes is likely to be required.
3. Selected communities should be cohesive and have demonstrated strong leadership for the LEAP process to be effective.
4. There needs to be a general consensus from the community to engage in adaptation planning and agree to 'take action' to prepare themselves for their own future.

Communications about CCA and the LEAP Process

1. Awareness about climate change and adaptation is the most important part of the adaptation planning process.
2. Awareness materials for climate change need to be translated into and presented in the local language or pidgin.
3. Scientific concepts need to be kept as simple as possible, but remain accurate.
4. In Solomon Islands, seeing is believing. When using the adaptation planning tools consider inclusion of activities such as "look and learns" where communities learn what climate change impacts might look like, so they can have an indicator and conduct their own monitoring over time.
5. Ensure sufficient time is given to awareness-raising sessions in the community. It is important for communities to take time to understand, process the information, and discuss amongst themselves (*stori*), step by step.
6. Repeat awareness-raising sessions in each community to encourage more attendance and ensure messages are understood.

Before Starting the LEAP

1. Gather all previous information and data that have been collected about the community and geographic area. The communities themselves may hold this information, or it may be held by local and international NGOs, or by various levels of government. Gather information from a broad set of sectors (fisheries, aquaculture, forestry, agriculture, planning, health, etc.) before starting the adaptation planning process. Ensure that you get copies or summaries of any relevant maps, management plans, or development plans.
2. The jurisdictional and geographic boundaries of each 'community' should be known and clearly defined before starting the LEAP process.
3. Spend time getting to know the community, gain trust, get permissions, and engage with all sectors.

4. Avoid only engaging the usual people that are involved in decision making, but also include the more marginalized groups, including a mix of older and younger people who will remember the past and look to the future.

5. Understand the community structure, how the community functions and makes decisions, and how this relates to vulnerable and marginalized groups. Incorporate this knowledge into your facilitation approach.

6. Be aware that a geographically small community (for example, one or a few small villages over a small geographic area) faces important challenges when considering threats, resources at risk, and adaptation options that may not be within community control. This is an important consideration when creating a LEAP that is actionable by community leaders or participating government or non-government stakeholders.

Facilitation and Facilitators

1. The LEAP requires motivated team with a solid understanding of natural resources and climate change.

2. Manage community expectations of what will happen after the action plan is developed. This needs to be explicitly addressed up-front and openly discussed throughout the process. It is important to be clear about the goal of the process, how the action plan will guide implementation, and what resources are available for implementing priority actions after the plan is complete.

3. It is important that youth are engaged and that they come together with the elders to exchange knowledge and ideas. They will be the ones who will need to implement actions to reduce their vulnerability to climate change impacts, which are likely to occur in their lifetime. This may require alternative mechanisms.

4. Ensure there is continual feedback between the core stakeholder group and the communities as a whole. Communities should be able to access quality and accurate information about climate change science, predictions about climate hazards, and resources available for adaptation.

5. It is important for local government officials to actively participate and be accessible to communities so they can respond to community questions and be ready to support implementation.

6. Adaptation leaders require technical support and information while action plans are being developed and when communities are ready to implement them. This is to ensure effective and sustainable implementation. Adaptation leaders should understand what resources are required for each adaptation, as well as what support is available from NGOs, government, the private sector, and technical experts.

7. The LEAP was developed primarily to focus on marine and coastal resources and livelihoods. However, there are opportunities to consider other sectors such as health, education, agriculture, forestry, infrastructure, and planning, which required specialist knowledge outside the facilitators' expertise. The facilitator must have the willingness, support, and opportunity to engage topical experts when communities identify and prioritize vulnerabilities related to these resources.

8. Wherever CBRM, DRR, and CCA are implemented, every effort should be made to integrate climate change adaptation planning into existing or established processes.

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