



WorldFish
C E N T E R



Project Brief 2015

Diagnosing,
strengthening and
monitoring small-scale
fishery resilience



Background

The political and social stability of Solomon Islands depends on the well-being of its rural communities, where more than 80% of the national population lives largely by subsistence agriculture and fishing. Small-scale inshore fisheries in Solomon Islands are under threat as the population expands and an intensifying need or desire for cash fuels the commercial harvesting of marine resources. Coral reefs have proved susceptible to overfishing and stock depletion when harvested commercially. Solomon Islanders' heavy reliance on inshore fisheries for subsistence and the paucity of income-generating alternatives mean that fishery degradation would have severe consequences.

Fish-reliant communities need to manage their fisheries to supply their needs today and in the future, when risk is likely to be exacerbated by climate change, according to the Solomon Islands National Adaptation Plan of Action.

Objectives

The project "Improving resilience and adaptive capacity of fisheries-dependent communities in Solomon Islands" uses participatory diagnosis to identify threats to rural coastal communities in Solomon Islands and sources of resilience.

The WorldFish Center, which leads the project, defines a resilient small-scale fishery as one that absorbs stress and reorganizes itself following disturbance, while still providing benefits for poverty reduction. Identifying sources of and threats to resilience is the first step in successfully managing risk, allowing the subsequent nurturing and preservation of ecological, social and institutional attributes that enable the fishery to endure, reorganize itself and renew its productivity.

The project has four specific objectives in Solomon Islands:

- (1) Identify, using participatory diagnosis, the key threats and vulnerabilities of fishery-dependent coastal communities, from both outside and within, and the strengths that can underpin their resilience.
- (2) Facilitate, in consultation with community members and other stakeholders including the government and nongovernmental organizations (NGOs), the successful establishment of a strong community-based management of coastal marine resources in five fishery-dependent community clusters, including two foundation clusters and three new ones—and identify, develop, and implement management and monitoring tools.
- (3) Influence the policy and planning of the government of Solomon Islands and regional agencies that pertain to small-scale fisheries and affect the livelihoods of rural communities.
- (4) Improve the capacity of national organizations to support communities' implementations of fishery management programs.

Duration and Donor Support

The project runs from July 2008 to June 2011. The Australian Centre for International Agricultural Research (ACIAR) is funding three project partners to a total of \$899,900. The project builds on an earlier 4-year project, "Improving sustainability and profitability of village sea cucumber fisheries in Solomon Islands," which received \$400,000 from ACIAR and ran from January 2005 to June 2008.

Partners

The project partners are WorldFish, the Solomon Islands Ministry of Fisheries and Marine Resources (MFMR), and the Foundation of the Peoples of the South Pacific International (FSPi). The MFMR is especially active at a site on the most populous island in the country, Malaita, where staff work

directly with WorldFish in communities. FSPI and WorldFish use this opportunity to collaborate and build on lessons learned to develop common approaches to effective community adaptive management.

Who Benefits

The project works with community groups in Western, Isabel and Malaita provinces. The two foundation community clusters—in Kia district on the island of Isabel in Isabel Province and in the Jorio region of the island of Vella Lavella in Western Province—are implementing management plans developed under the earlier ACIAR project. In 2008, WorldFish began to work with another group of communities on Vella Lavella, in the Dovele region; a community in the remote Shortland Islands of Western Province; and fishery-dependent communities in the densely populated province of Malaita.

A primary requirement for participation was a community's request to be included. Further selection criteria were a high dependence on marine resources for food security and subsistence; isolation in terms of having limited public transport or access to markets and little previous assistance from the government or NGO projects; and a high degree of community cohesion.

Community cohesion, traditional institutions that continue to influence small-scale fishery management, and well-defined customary rights to marine resources are traits that make some areas of Solomon Islands attractive for implementing community-based resource management, as they improve the potential for successful uptake. WorldFish and its partners ultimately aim to develop and test a generic adaptive management framework flexible enough to meet the needs of other, less-tractable environments and communities, as well as a set of diagnostic tools to directly guide framework application in the whole of Solomon Islands.

Cross-cutting Dimensions

Gender and youth. The project works with both men and women in community committees. As men tend to be the primary fishers, the project developed in Kia a marine-resource management training kit for women to ensure their involvement. The kit helps to train educated women in the concepts of marine resource management that are meaningful to their management goals, so that these women can pass the messages on to other women in the community, including those who cannot read or write. All women can then pass the messages on to their children in the traditional manner of storytelling. In a community that inhabits an artificial island in Malaita that is almost entirely dependant on marine resources, school children participate in monitoring biological indicators identified in their management plan. In the school project under development, they will create graphs monitoring community progress

using data on fish length and weight collected by fishers.

Environmental protection. A sustainably managed marine environment will contribute to maintaining a resilient ecosystem. This increased resilience should help communities better adapt to future socioeconomic and environmental changes.

Adaptive capacity for climate change. The project reflects WorldFish's recognition that climate change is inevitable and this will compound the stresses that already threaten small-scale fisheries globally. The project works to identify and sustain conditions that foster the ability of ecological systems to reorganize, both before and after crossing critical thresholds. The project's work in helping communities develop adaptation plans directly addresses climate change in Solomon Islands and it will be generalized for broader application in other Pacific island states.

Collaboration and capacity building. At least two MFMR or FSPI staffers have accompanied all field trips to communities in Malaita, and three officers have received training in participatory diagnosis. Project partners are involved in developing a strategy for locally managed marine areas in Solomon Islands. In 2010, training workshops similar to those in Kia (described three paragraphs above) will be held for women in all project communities. In a country where barely half a million people speak more than 70 languages, this technique will enable communities to work with the project to translate common resources into their language.

Key Project Deliverables

In the previous project, the WorldFish team began working on a recently proposed diagnostic framework for small-scale fisheries. The participatory project focused on adaptive management and began to test whether such a diagnostic framework was applicable to diverse fisheries, in this test case the Solomon Islands sea-cucumber fishery. The ultimate goal of this follow-on project is to develop a framework to guide stakeholders toward sustainably managing coastal marine resources in general.



Following an inception meeting in Gizo in August 2008, project staff visited all new project communities to establish relationships and collect information with which to profile the community. Participatory diagnosis began in subsequent visits with focal group discussions for men and for women. Staff presented summaries of the focal group discussions to the communities for verification and administered a household questionnaire on resilience.

Toward the second—and central—objective, the project worked with new communities to identify appropriate governance structures or committees for adaptively managing marine resources. The communities are considering the types of rules and norms they may want in a management plan and, with WorldFish assistance, determining the indicators of success that they want to monitor. Management plans are close to being finalized in all communities.

Meanwhile, the foundation site in Kia conducted its third annual reef invertebrate survey in November 2008. The resulting dataset is a valuable contribution to the MFMR's development of a national management plan for sea cucumbers and, consequently, toward the third objective of influencing policy and planning.

Partnership with the MFMR has provided many opportunities for exchanging ideas within; informal and formal meetings, planning meetings for the New Zealand funded Fisheries Sector Programme in Solomon Islands and joint field trips. WorldFish recently worked with the MFMR to produce a strategy for managing inshore fisheries and marine resources to guide MFMR activities in small-scale fisheries for the next 5 years.

Communications

In May 2009, WorldFish organized a resilience workshop in the capital, Honiara. With 28 participants from two Solomon Island government ministries, four in-country NGOs, and the Papua New Guinea national fisheries authority, the workshop was a major step forward in wedding the theory of resilient small-scale fisheries with the experience of practitioners. The workshop was an opportunity for robust discussions on such issues as how resilience in practice fits with better established frameworks for managing natural resources.

A workshop to train trainers among the women's church group in Kia produced an empowered and dedicated team of village women who are spreading the message about marine resource management and the Kia district management plan to other women throughout the district. Further workshops are planned for women in other provinces in 2010.



Action Research

The adaptive management framework and diagnostic tools that are being developed in this project will form the basis of the community management plans. These will help communities address threats from within the domain of the fishery, such as diminished fish stocks, degraded habitat and fishers' compromised economic viability, while reducing their vulnerability to such external threats as climate and ecosystem change, volatile prices for imported food and fuel, and unpredictable trends in world markets.

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