Solomon Islands: Western Hub scoping report





SOLOMON ISLANDS: WESTERN HUB SCOPING REPORT

Authors

Gregory Bennett, Philippa Cohen, Anne-Maree Schwarz, Minnie Rafe, Helen Teioli and Neil Andrew

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TABLE OF CONTENTS

Executive summary	4
CGIAR Research Program on Aquatic Agricultural Systems (AAS)	6
Rollout of the AAS program in Solomon Islands	7
Scoping process for Western Hub	9
Scoping trip approach	10
Scoping findings and the development challenge	11
Research opportunities identified through scoping	13
Stakeholder consultation workshop	14
Appendix I: Profiles of current development programs and investments in Western Hub	15
Appendix II: Past and present activities within Western Province in different island groups	16
Appendix III: Stakeholders consulted	22
Appendix IV: Detailed findings from site visits	24
Tuki Village	25
Wao Village	26
Mase Village	28
Rendova Harbour Village	30
Noro Town	32
Notes/Bibliography	33
List of abbreviations	34

EXECUTIVE SUMMARY

Aquatic agricultural systems (AAS) are places where farming and fishing in freshwater and/or coastal ecosystems contribute significantly to household income and food security. Globally, the livelihoods of many poor and vulnerable people are dependent on these systems. In recognition of the importance of AAS, the CGIAR Research Program (CRP) is undertaking a new generation of global agricultural research programs on key issues affecting global food security and rural development. The overall goal of the research program is to improve the well-being of people dependent on these systems. Solomon Islands is one of five priority countries in the AAS program, led by WorldFish. In Solomon Islands, the AAS program operates in the Malaita Hub (Malaita Province) and the Western Hub (Western Province). This program and its scoping activities are summarized in this report.

This report summarizes one of several 'scoping' activities facilitated by WorldFish, which examined the landscape of AAS and determined the key development challenges faced in Western Province. This was a rapid scoping assessment that visited five rural communities in Kolombangara, North New Georgia and Rendova and the urban center of Noro. Although WorldFish has worked with people or with partner organizations in many of the villages in Western Province, the sites visited had not previously been part of WorldFish initiatives. The visits helped the AAS scoping team to better understand the development challenges and opportunities for AAS-dependent people within the province.

The common development challenges that were identified through this activity were related to a high proportion of youth in the population with variable access to services (e.g. health and education) and increasing rates of urbanization. For AAS-dependent people: geographical remoteness, unreliable transport services and fluctuating process for products (e.g. copra) resulted in poor market access. Productivity of natural resources is declining in some areas but management and new practices have had limited success to date. Marginalized communities (e.g. through geographical isolation and/or unclear land tenure) and marginalized groups within communities cannot equally access new opportunities. Population increase, historical alienation of some landowners from their land and migration and marriage into the province from other islands, has impacted on the land tenure system and local governance issues in some villages.

A further stage of the scoping process was a review of the AAS and development situation in Western Province, which was conducted by collating existing information related to AAS-dependent people in the province. Information sources included: published papers, meetings with stakeholders, project identification, and a review of partner involvement in activities in the province. A summary of present and past activities of AAS within Western Province was compiled from interviews with government and non-government agency representatives.

The final stage of the scoping process was a stakeholder consultation workshop, which was held in Gizo in November 2013. It brought together stakeholders with responsibility for and perspectives on, the provincial level development challenges. The hub level consultation workshop brought together a broad range of stakeholders and took them through a process where they identified and developed a common vision of success and nominated the opportunities and constraints in relation to achieving the different development challenges. This was also an opportunity to validate what had emerged from the scoping study.

The hub development challenge that was validated at the stakeholder workshop and that will be the basis of AAS activities in the province was as follows:

The situation:

Western Hub is spread over a wide area of sea and is comprised of small urban centers and many small, often isolated communities. Local and customary institutions are an important influence on people's lives. The hub supports major commercial industries including logging, tuna and tourism. These industries bring opportunities for employment but impacts are not universally positive or spread equitably across the hub. Rural people are vulnerable to external shocks and this can be compounded or ameliorated by their degree of isolation.

The development challenge:

We aim to improve the lives of people in Western Province by empowering local communities to increase the benefits they derive from their natural resources, while accounting for the diversity and variability in the way they lead their lives and access resources and services.

The research challenge:

We will work with AAS-dependent communities and other partners to improve management of resources; and to improve equity in value chains to increase benefits and resilience.

CGIAR RESEARCH PROGRAM ON AQUATIC AGRICULTURAL SYSTEMS

CGIAR is undertaking a new generation of global agricultural research programs on key issues affecting global food security and rural development. CGIAR Research Programs (CRPs) aim to fundamentally improve the ways that international agricultural research works with stakeholders to achieve large-scale impacts on poverty and hunger. The CRPs take a participatory approach to designing, implementing and assessing scientific research through partnerships between scientists, farmers, government and private sector and civil society stakeholders. Their comprehensive view of agriculture that includes technological, environmental, social, economic and institutional dimensions will be implemented through multidisciplinary partnerships that involve CGIAR centers and their national partners.

Several of the proposed CRPs focus on key single commodities of global or regional importance that include rice, maize, wheat, roots and tubers, livestock and fish, and legumes. Others are concerned with fundamental drivers of change such as climate change, markets and trade, and water. A third group focuses on understanding the main agricultural systems where these commodities and drivers of change interact; and on creating opportunities for the poor who depend on these systems, to improve their livelihoods and nutrition and enable them to climb out of poverty. One such holistic research program focuses on harnessing the development potential of AAS and includes within its mandate inland floodplains, major river deltas, and coastal environments. The AAS program is coordinated by WorldFish on behalf of CGIAR.

Solomon Islands is one of five priority countries in the Aquatic Agricultural Systems Program (hereafter called 'the program') and represents the Coral Triangle nations that are dependent on fish caught principally from coastal marine fisheries. The overall goal of the program is to improve the well-being of people dependent on these systems. It builds on an analysis of key constraints that drive poverty and vulnerability in aquatic agricultural systems, and identifies a preliminary theory of change (TOC) for the program:

that releasing the productive potential of aquatic agricultural systems to benefit the poor will require aquatic agricultural systems users, and their partners in development to generate innovations in farming, natural resource management, marketing, livelihood strategies and social institutions. The capacity and confidence to innovate will be greater if people are less poor and vulnerable, better fed, and better integrated into economic, social and political processes (Govan et al. 2013).

Six corresponding objectives and research themes have been identified that frame the research agenda as follows:

- increased benefits from sustainable increases in productivity
- increased benefits from improved and equitable access to markets
- strengthened resilience and adaptive capacity
- reduced gender disparities in access to, and control of, resources and decision-making
- improved policies and institutions to empower AAS users
- expanded benefits for the poor through scaling-up.

ROLLOUT OF THE AAS PROGRAM IN SOLOMON ISLANDS

The AAS program's emphasis on research in development requires commitment to places and relationships to establish the levels of trust and cooperation that are essential to implementing an action research approach. In order to achieve this, engagement in each country will be focused through hubs. A hub is defined as a 'geographic location providing a focus for innovation, learning and impact through action research'.

In Solomon Islands (Figure 1) hubs and geographical areas of work are defined by provincial boundaries. Rollout and implementation has occurred in stages, beginning with Malaita Hub in 2012; and in 2013 scoping was carried out Western Province. This phased rollout has enabled lessons learned from the first hub to be used in fine-tuning the approach to community level and scaling research for the Solomon Islands program. The details of program activities in Solomon Islands are consistent with the program research themes, but will be strongly guided by hub and community level gendered theories of change developed during the scoping and participatory diagnosis phases of rollout.

The AAS Program Rollout Handbook (CGIAR Research Program on Aquatic Agricultural Systems 2012) describes the four steps of

program rollout: planning, scoping, diagnosis and design (Figure 2). A five-month planning phase was carried out in Solomon Islands from August to December 2011. Scoping, diagnosis and design for the Malaita Hub was completed in 2012 and implementation began in 2013. Publications from the rollout of the program include a national situation analysis (Govan et al. 2013) that describes the Solomon Islands national setting and provides basic information on the operational context of the program in Solomon Islands. It includes an assessment of the program's relevance to existing national strategies and plans, with macro-level analysis and provision of baseline national-level indicators, policy context, power relationships and other factors relevant to program planning.

This scoping report for Western Province defines the hub with respect to geographical boundaries and expected modes of program engagement. It outlines hub level development challenges, possible research questions, current initiatives in the hub and potential partnerships.

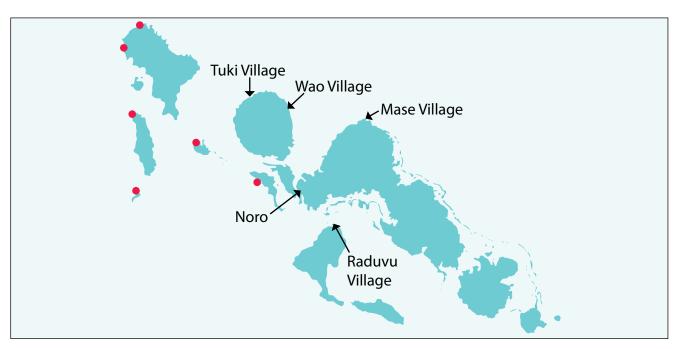


Figure 1. Map of Solomon Islands, indicating Western Province Note: The places where WorldFish has worked previously (either directly or through partner organizations) are indicated by red dots. The five locations visited as part of the rapid assessment scoping study are indicated by arrows.

Planning	Output, Gantt chart, staffing and resources
AAS depends on stakeholder input Scoping Stakeholder perspective obtained through scoping	Output National situation analysis report, scoping report
Deeper diagnosis of: governance, gender, partner analysis and nutrition Community perspective Construct the design team and formalize partnerships	Output Theories of change; research plans, partnerships, proposals
Design program initiatives Design Pesign Final community selection for action research	Output Program design document

Figure 2. Diagrammatic representation of the rollout process

SCOPING PROCESS FOR WESTERN HUB

WorldFish (previously called ICLARM) has been present in Solomon Islands since 1986 and has worked with a wide range of communities in different provinces, together with the Solomon Islands Government (Ministry of Fisheries and Marine Resources and Ministry of Environment, Climate Change, Disaster Management and Meteorology) and other institutions. Research projects have covered a diverse range of topics, ranging from community-based fisheries management and climate change planning, to mariculture (giant clams, post larval fish and invertebrates and corals), and aquaculture (pearls, sponges and pond aquaculture). Since 1991, WorldFish has worked in Western Province either directly with communities or through partnerships with organizations that include: WWF, Roviana Conservation Foundation and the University of Queensland (see Figure 1). The primary focus over the last five years has been on Vella Lavella, Shortland Islands and Gizo Island. Scoping for AAS rollout has enabled us to step back from our previous experience and review in a participatory way, the priorities for development for the government and people of Western Province; and explore how research in development through the AAS program can have a positive impact on poor people's livelihoods.

There were three main activities during the scoping phase:

Review and collation of existing information
 Existing information related to AAS-dependent
 people in Western Province was assembled by
 reviewing published reports and government
 strategies. Further interviews or focus group
 discussions with senior provincial officials,
 NGOs and the provincial government (see
 Appendix I) were conducted to understand
 and summarize past and ongoing projects

and activities that related to AAS in Western Province (Appendix II).

2. Scoping trip

- In early September 2013, a one-week intensive scoping trip was conducted that included visits to rural areas to talk with community leaders, communities provincial members and industry representatives (Appendix III). The scoping team comprised of WorldFish staff and officers from the Provincial Ministry of Fisheries and Marine Resources and the Provincial Ministry of Agriculture (Table 1). One week before the visit, the communities were informed in writing of the visit date and its purpose. The scoping team met at the WorldFish research station at Nusatupe a day before the trip to clarify the trip's purpose and to map the competencies, skills and strengths of the team members.
- 3. Hub-level stakeholder consultation workshop A workshop was held in Gizo in November 2013 to bring together Western Province development stakeholders. The hub-level stakeholder consultation workshop is described in the Rollout Handbook (CGIAR Research Program on Aquatic Agricultural Systems 2012) as a first opportunity for feedback by leading stakeholders through a process to develop a shared vision of development success, and to identify opportunities and constraints for reaching that vision. This was an opportunity to validate what has emerged from the scoping study and national study. The process and outcomes of that workshop are described in WorldFish (2013). Aquatic Agricultural Systems Western Hub, Stakeholder Consultation Workshop, Short Report for Participants, Gizo, 30 pp.

Name	Position	Institution
Dr. Anne-Maree Schwarz	Solomon Islands CRP leader	WorldFish
Dr. Neil Andrew	Pacific regional director	WorldFish
Dr. Pip Cohen	scientist	WorldFish
Ms. Helen Maefasia Teioli	gender analyst	WorldFish
Ms. Minnie Rafe	research analyst	WorldFish
Mr. James Tahopa	agriculture officer	Western Provincial Government
Mr. Kolo Hivu	acting chief fisheries officer	Western Provincial Government
Mr. Ambo Tewaki	senior technical aide	WorldFish
Mr. Regon Warren	principal technical aide	WorldFish
Dr. Gregory Bennett	postdoctoral fellow	WorldFish

Table 1. Members of the scoping team

SCOPING TRIP APPROACH

Five rural communities and the urban center of Noro (Table 2 and Figure 1) were selected for scoping visits based on the following five site criteria

- no previous experience of working with WorldFish;
- relatively good access to markets;
- access to market centres in Gizo, Noro or Munda to sell products;
- a heterogeneous cultural make up due to intermarriage and migration;
- issues associated with marginalization e.g. no customary rights to land.

Noro was selected as it represented an urban hub that had strong connections to the fishing industry. The purpose of the visit was to understand the differing perspectives of the challenges and opportunities for development for AAS-dependent people within Western Province. In each of five sites, the team spent one day talking with key informants and in the village sites, people gathered at community meetings to share their perspectives on: community governance, livelihoods, resources availability, pressing issues, prior projects and future visions. Coincidentally the Western Province ward profiling exercise was also being conducted at the same times so in one of the villages we were able to take advantage of that activity to continue discussions with a community group. The detailed findings from the scoping trip for each location are described in Appendix IV. Additional information about these sites are available in the ward profiles.

Villages	Location	Island
Wao	Northwest Kolombangara	Kolombangara
Tuki	Northeast Kolombangara Kolombangara	
Mase North New Georgia		New Georgia
Raduvu West Rendova		Rendova
Noro township	Vonavona/Kohingo	New Georgia

Table 2. Sites visited during the scoping trip

SCOPING FINDINGS AND THE DEVELOPMENT CHALLENGE

After the scoping trip, the team returned to Nusatupe and held a debriefing session to deliberate on their findings based on each person's experience of the trip. Each team member had the opportunity to share their observations and insights that they gathered from the interactions with the people they met in the respective places they visited and this was summarized on a whiteboard (Figure 3).

From the findings, the team summarized the common development challenges that were captured during the trip (Table 3). They were

- geographic remoteness that led to high transportation costs and long distances from main markets;
- higher cost of provision of public goods per capita;
- lack of diversification of the economy due to small domestic markets and low private sector capacity and isolation – leaving the economy vulnerable to external economic and environmental shocks.

In addition, increasing population pressure has negatively impacted on the land tenure system; the marginalized people in the villages; and the governance issues in each village. Based on the common challenges, we proposed a draft development challenge for AAS in Western Province:

Western Hub is spread over a wide area of sea and is comprised of small urban centers and many small, often isolated communities. The hub supports major commercial industries including logging, tuna and tourism. These industries bring opportunities for employment but impacts are not universally positive or spread equitably across the hub. Rural people are vulnerable to external shocks and this can be compounded or ameliorated by their degree of isolation.

The development challenge is to improve the lives of people in Western Province by empowering communities to increase the benefits they derive from their natural resources, while accounting for the diversity and variability in the way they lead their lives and access resources and services.

The research challenge we will address in Western Hub is to work with AAS-dependent communities and other partners to improve management of resources; and to improve value chains to increase benefits and resilience.

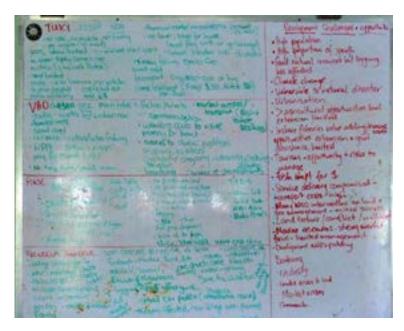


Figure 3. Findings and common development challenges highlighted from the scoping trip

Population	Population growth			
- opulation	Urbanization			
	High proportion of youth			
Industry	Logging, commercial fisheries, tourism			
,	Opportunities (employment, income)			
	Pressure on resources			
	Competition for land use (e.g. logging versus gardens or copra versus food crops)			
	Banking and money management (e.g. for clearing checks or saving money)			
Tenure	Insecure tenure (e.g. where government owns land where people reside)			
	Contested tenure and conflict [also in Governance]			
	Competition for land use (e.g. between different users and different uses) [also in Industry]			
Markets	Fluctuation in price (e.g. copra)			
	Access to markets (e.g. high cost of transport) [also in <i>Isolation</i>]			
	Demand/extraction versus productivity			
Isolation	Distance to markets, health and education services [also in Markets]			
	Communication and access to information			
	Interventions and external assistance (in some places but none in others)			
	High dependence on AAS (but variable over time and space)			
Productivity	Limits to land and sea productivity			
	Management or new practices have had mixed or limited success			
	Productivity decline (e.g. due to resource decline or soil degradation)			
	Harnessing productivity (e.g. new methods, technologies)			
	Pests (e.g. insects, giant snail threat)			
[Environmental]	Climate change			
shocks	Disaster (e.g. tsunami, cyclone)			
	Related to industry (e.g. environmental consequences of logging, mining) [also in Industry]			
	Other shocks (e.g. markets, policies) [also in Markets and in Institutions]			
External institutions	Partnerships or interventions – NGOS, provincial government, provincial member, industry			
	Benefits from partnership variable over time and space			
	Fluctuations in government policy (e.g. agriculture export, beche-de-mer)			
	Access to information/technology			
	Human and financial capacity (e.g. extension) versus scale (geographic and issue)			
Services	School, health, water, communication, transport – all variable geographically [also in <i>Isolation</i>]			
	Access to services a major concern for communities regarding well-being and livelihoods			
Marginalization	Men, women, youth or different cultural groups			
	Regarding decision making and access to resources			
	Differences can result in jealousy/conflict			
Governance	Leadership			
	Cohesiveness [also in Marginalisation]			
	Coordination (e.g. ability to work together to address issues)			
	Roles and inclusion differ between men, women, youth, different factions [also in <i>Marginalisation</i>]			

Table 3. The challenges identified during the Western Province scoping study

RESEARCH OPPORTUNITIES IDENTIFIED THROUGH SCOPING

An initial set of research questions (listed below) under each of the thematic headings of the program was identified in response to the challenges and opportunities mentioned above.

- How and to what extent can existing management effort be enhanced to deliver improvements in the productivity or sustainability of fisheries?
- 2. What is the cost and added value to 'learning' from prior interventions (e.g. CBRM) and ongoing learning and coordination? [including networking]
- 3. How can community governance (participation in decision-making; leadership; visioning and planning; conflict resolution; adaptive capacity etc.) be 'improved'? [includes youth, women, factions]
- 4. How do these changes lead to increased benefits from AAS?
- 5. If productivity or access to livelihoods/ markets is improved, how are benefits distributed among the community or to achieve community-identified development goals (e.g. health, education etc.)
- 6. How can markets be used to accelerate development?
- 7. What are the unintended consequences of improving productivity or access to markets? Are these perceived as negative or positive and how can they be reduced/maximized?
- 8. Does embedding agricultural and fisheries interventions in a community empowerment (action planning) approach improve adoption and durability?
- 9. Where are the opportunities for improving agriculture and fisheries value chains for men and for women to reduce risk or take advantage of increasing urbanization and industry development?



STAKEHOLDER CONSULTATION WORKSHOP



The hub level stakeholder consultation workshop (SCW), held in Gizo, Western Province from 11 to 12 November 2013, was the last formal activity in the scoping process, and the first stakeholder feedback event for program rollout in Western Province. The purpose of the workshop was to bring together a range of stakeholders who could give a perspective across the hub or province level, rather than from an individual community perspective (hereafter referred to as hub-level stakeholders). A separate process is planned for incorporating the perspective of stakeholders from sectors where the program expects to work and from communities, during a diagnosis phase in 2014. One of the aims of the SCW was for hub (in this case synonymous with province)-level stakeholders to ensure that the development challenge was consistent with development priorities and strategies of the Western Province Government and to validate and amend the development challenge if necessary.

During the workshop, hub-level stakeholders were facilitated to identify and develop a common vision of success and to nominate opportunities and constraints within the areas of the draft development challenge. This workshop aimed to build an understanding of the AAS program and to build stakeholder commitment to the AAS hub development challenge through producing a shared vision of success, and broadly agreed list of constraints and opportunities. The workshop activities were documented and a report was disseminated to the participants in December 2013.

Appendix I. Profiles of current development programs and investments in Western Hub

Technical focus	Implementing partners (lead institution, partners, donors)	Duration	Location	Possible links with AAS programs	Contact person
Fisheries strengthening	MFMR, NZAID	2015+	National/ Province	core partners	Dr. Chris Ramofafia
Fish aggregating device (FAD)	WWF	ongoing	Province	extension partners	Shannon Seeto
CBRM networking and coordination	MFMR, MECDM, SILMMA Network Support /NGOs	ongoing	National/ Province	Core partners and joint projects	Agnetha Karamui/ Peter Kenilorea
Food security gardens	Kastom Garden	ongoing	National	extension partners	Clement Hadosia
Sustainable livelihoods/gender/ training	Live and Learn	ongoing	Province	extension partners	Doris Puiahi
Effective mainstreaming of CCA and DRR, policy enhancement, coordination and implementation of climate change strategy in line with its NAPA and National Disaster Risk Management Plan	MECDM	ongoing	National	Sharing of lesson learnt and alignment with national and provincial policies	MECDM
Disaster Risk Reduction Approach	Red Cross	ongoing	Province	core partner alignment of priorities	Ogier Kiko
Child rights & child protection	Save the Children	2014+	Province	joint projects with core partners	Joana Boso
Income generating projects, water and sanitation, building infrastructures, appropriate technology	ADRA	ongoing	national	core partners	Barry Chapman -30438
Sawmilling and SFM, FSC certification, reforestation, conservation and income generating projects	NRDF	ongoing	Province	extension partners	Wilco -60912
Provincial Government Strengthening Program	provincial government	Ongoing	Province	core partners	Adrian Toni -60250

Appendix II. Past and present activities within Western Province in different island groups

	Intervention	Lead organization	Name of villages involved	Ongoing?
	Logging	Asian logging companies	Gaomae, Toumoa, Kariki, Alu	Yes
	CBRM	WorldFish	Toumoa, Kariki	Yes
	Socioeconomic survey	WorldFish	Kariki	No
Shortland	Tsunami rehabilitation clinic	Caritas	Toumoa, Maleai, Pirumeri	No
Sho	Rapid assessment (coral survey)	WorldFish	Toumoa, Mono, Pirumeri, Gaomae	No
	Canoe VTT	WorldFish	Pirumeri	No
	Coconut oil production	RAMP/ADRA	Blache	Yes
	Fish aggregating device (FAD)	WorldFish	Toumoa	No
	CBRM	WorldFish	Jorio, Dovele	Yes
	Socioeconomic survey	WorldFish/ Shankar	Jorio, Dovele	No
	Tsunami rehabilitation	Red Cross/World Vision/Save the Children/ WorldFish	Leona, Irigila, Vatoro, Paramatta, Tiberus, Sabora, Karaka	No
	Youth program and awareness	Save the Children	Sabora, Karaka, Paramatta, Varesi	Yes
	Tsunami rapid assessment	WorldFish	Jorio, Lambu Lambu	No
	Conservation	WorldFish	Karaka	No
Vella Lavella	Forest management and rehabilitation	NRDF	Leona	Yes
Lav	Pineapple farming	Community	Kibiri	Yes
/ella	Cocoa farming	Community	whole island	Yes
	Reforestation	Community	Leona, Paramatta, Tiberus	Yes
	Rice farming	Community	Sibisopere area	Yes
	Coconut replanting	Community	Whole Island	Yes
	FAD	WorldFish	Jorio, Dovele	No
	Logging	Asian logging companies	whole island	Yes
	Child protection program	Save the Children	Vatoro, Paramatta, Leona	Yes
	Positive discipline training for parents	Save the Children	Karaka, Simbilando, Uzamba	Yes

	Intervention	Lead organization	Name of villages involved	Ongoing?
	Building infrastructures (dining hall)	RAMP/ADRA	JAC	Yes
	Building infrastructures (clinic & staff house)	RAMP	Boro	Yes
ella	Appropriate technology (solar panels)	RAMP	Leona	Yes
Lav	Water & sanitation (water supply)	RAMP/ADRA	Simbilando	Yes
Vella Lavella	Disaster risk reduction (first aid, disaster awareness, simulation exercise, community based disaster preparedness (CBDP), response plan (community based), scrapbook approach	Red Cross	Leona	Yes
	Tsunami rehabilitation	WorldFish	Jorio, Lambu Lambu	No
	Logging	Asian logging companies	Kongu, Suava	Yes
	FAD	WorldFish	Mondo, Pienuna, Kundu, Obobulu, Buri	Yes
	Conservation	WorldFish	Pienuna	No
	Tsunami rehabilitation	WorldFish	Lale	No
ga	Rehabilitation	Red Cross	Kundu	No
Ranonga	Disaster risk reduction (first aid, disaster awareness, simulation exercise, community based disaster preparedness (CBDP), response plan (community based), scrapbook approach (new approach)	Red Cross	Visale, Suvuru, Kundu	No
	Clam farming (Livelihood project)	WorldFish	Buri	No
	Logging	Asian logging companies	Kongu, Suava	Yes
	Rapid assessment on coral reef/ fisher survey	WorldFish	Tapurai, Lengana	No
	Disaster risk management and youths income generating program	Save the Children	Lengara, Tapurai, Masuru, Riguru,	Yes
Simbo	Rehabilitation	Red Cross	Lengara, Tapurai, Masuru	No
	Canoe VTT	WorldFish	Tapurai, Lengana	No
	Conservation (megapod egg)	WorldFish	Nusa Simbo	No
	Clam Farming (livelihoods project)	WorldFish	Tapurai	No
	Sponge farming	Yes - WorldFish	Tapurai, Lengana	No

	Intervention	Lead organization	Name of villages involved	Ongoing?
	Logging	Asian logging companies	Kuzi	Yes
	Reforestation	KFPL/CFC	North Kolombangara, Kena Hill	Communities & individual families commenced
	Coconut plantation	Levers Plantation	Jack Harbour - Vila	No
	Cocoa	Christian Fellowship Church (CFC)	Kena Hill	Yes
	Farmer Fresh	Kastom Garden	Vavanga	No
	Sanitation marketing	Live & Learn	Sausama - Kuzi (Kalibae)	Yes
	Livelihood program (setting up women's savings club)	Live & Learn	Sausama - Kuzi	Yes
	Gender work	Live & Learn	Sausama - Kuzi	Yes
	Natural resource management (setting up MPAs, conservation)	Live & Learn	Hunda, Sausama, Peoro, Kuzi	Yes
ē	Grassroots democracy - Solomon Islands	Live & Learn	Iriri - Kuzi	Yes
gar	Human rights	Live & Learn	Iriri - Kuzi	Yes
bar	Conservation	WorldFish	Nusa Tuva	No
Kolombangara	Mangrove Replanting & Rehabilitation	WorldFish	Hunda	Yes
	Coral farming (livelihoods project)	WorldFish	Nusa Tuva, Saragobe	No
	Clam farming (livelihoods project)	WorldFish	Nusa Tuva, Saragobe, Ilitona	No
	Fruit trees planting	KFPL	Rinngi, Poitete	Yes
	Poitete forestry school	SINU	National	Yes
	Vanga - RTC/Teachers college	Catholic Church	National	Yes
	Crime reduction	Save the Children	Kuzi, Niu Mala	Yes
	Disaster risk reduction (first aid, disaster awareness, simulation exercise, community based disaster preparedness (CBDP), response plan (community-based), scrapbook approach (new approach)	Yes - Red Cross	Ghatere	Yes
	Copra trading	KFPL	Tuki	No
	Logging	Levers	Vao	
	Sanitation (water supply)	RWSS	Vao	No
	Water & sanitation (water supply), building infrastructures (clinic renovation and staff houses)	RAMP/ADRA	Kukudu	Yes

	Intervention	Lead organization	Name of villages involved	Ongoing?
	Logging	Asian logging companies	Rarumana/Koningo Villages	Yes
	Reforestation	Church group	Madou, Rarumana	Yes
	Clam farming (livelihoods project)	WorldFish	Rarumana	No
	Seaweed farming	MFMR	Rarumana	No
0	Cocoa plantation	Community	Vonavona Lagoon	Yes
ing	Coconut plantation	Community	Vonavona Lagoon	Yes
Parara/Koningo	FAD	WorldFish/RCF	Madou, Rarumana	No
ara/	Conservation	Shankar	Vonavona Lagoon	Yes
Par	Coral farming (livelihoods project)	WorldFish	Rarumana	No
	Pearl farming	WorldFish	Kohigo, Boboe, Noro	No
	Child protection	Save the Children	Rarumana	Yes
	Income generating project (clam hatchery)	RAMP	Boboe	Yes
	Road rehabilitation	Downer	Noro	Yes
	Child protection program	Save the Children	Rendova Harbour	Yes
	Coconut plantation	Rendova plantation	Rendova Harbour	Yes
	Tetepare conservation	TDA	Tetepare Island	Yes
	Conservation	Shankar	Egholo	Yes
	Sponge farming	WorldFish	Egholo	No
Rendova	Tsunami rehab	World Vision	Rendova Harbour	No
Send	Building infrastructures (clinic)	RAMP/ADRA	Baniata	Yes
	Livelihood program (setting up women's savings club)	Live and Learn	Ughele, Egholo	Yes
	Gender work	Live and Learn	Ughele, Egholo	Yes
	Natural resource management (setting up MPAs, conservation)	Live and Learn	Ughele, Egholo	Yes
	Grassroots democracy	Live and Learn	Lokuru, Ughele	No
	Human rights	Live and Learn	Lokuru, Ughele	No
jia	Logging	Asian logging companies	Nono, Viru, Ramata, Masse, Baeroko, Rikriki,	Yes
eorg	Reforestation	CFC	Paradise, Koirao,	Yes
Š	Cocoa plantation	CFC	Paradise, Koirao,	Yes
Ne.	Betel nut plantation	CFC	Paradise, Koirao	Yes
North New Georgia	Rice farming	CFC	Paradise, Koirao	Yes
Z	Potato farming	CFC	Koirao	Yes

	Intervention	Lead organization	Name of villages	Ongoing?
	Coconut plantation	CFC	Paradise, Koirao	Yes
	Logging	Golden Spring	Mase/ Enoghae	No
	Mining	Pacific Porphyry (SI) Ltd	Mase	Yes
	Water supply project	Golden Spring International (S.I.) Co. Ltd.	Mase	No
	Water tanks	Pacific Porphyry (SI) Ltd	Mase	No
	Conservation	UQ	Tamaneke	Yes
	Palm oil plantation	CFC	Duvaha, Oliveh	Yes
	Poultry	CFC	Duvaha	Yes
	Conservation	Shanker/RCF	Roviana Lagoon	Yes
	FAD	WorldFish	Baraulu	Yes
	Logging	Asian Company	Baraulu, Saikile	Yes
Roviana	Reforestation	Christian Fellowship Church (CFC)	Bulelavata, Baraulu	Yes
	Child protection program	Save the Children	Dunde	Yes
	Munda airport upgrade	Downer Construction	Munda	No
	Logging	Asian Company	Michi and other areas in Marovo	Yes
	Drugs, alcohol, youth awareness program	Save the Children	Penjuku, Sasaghana, Patutiva	Yes
	Conservation	UQ	Biche, Chumbikopi, Zaira	Yes
	FAD	UQ	Chumbikopi, Biche	Yes
	Conservation	Shankar	Bareho	Yes
	Reforestation	NRDF	Vakambo	Yes
	Palm oil plantation	Sullivan	Gatokae	Yes
Marovo	Building infrastructures (clinic staff house)	RAMP	Seghe	Yes
Ž	Income generating project (Lucas mill)	RAMP	Kongukolo	Yes
	Water and sanitation (water tank)	RAMP	Bareho	Yes
	Income generating project (honey bee)	RAMP	Billie	Yes
	Building infrastructures (clinic)	RAMP/ADRA	Viru	Yes
	Environment and resources, sustainable livelihoods, culture & traditions, infrastructure and services. Current focus - governance (holistically)	MINBALT	Marovo Island + nearby islands (Petu Island, mangrove protected area, Ghire Ghire Island, Chea, Chumbikopi, Sasaghana	Yes

	Intervention	Lead organization	Name of villages involved	Ongoing?
	FAD	WorldFish	Babanga, Titiana	Yes
	Climate change	WorldFish	Saeraghi to Paelonge	No
	Youth outreach partnership program	Save the Children	Mile 6, Saeraghi, Vorivori	yes
	Climate change	WorldFish/WWF	Saeraghi to Paelonge	No
	Income generating project (coconut crushing mill)	RAMP	Paelonge	Yes
	Income generating project (constructing bungalows)	RAMP	Epanqa	No
	Building infrastructures (Gizo community high school, netball stadium)	RAMP	Gizo town	No
	Post-Tsunami rehabilitation project	World Vision	Saeraghi to Paelonge	No
	Dengue prevention advocacy	Red Cross	Bibolo, Vorivori, Epanga,	No
Gizo	Women in politics, women's life skills, house management, financial management	Women's Resource Centre	All wards	Yes
U	Network for sharing seeds, plants	Kastom Garden	Saeraghi to Paelonge	yes
	Sanitation, aid assistance, AIDS awareness	Caritas	Around Gizo	No
	Tsunami rehabilitation	UNICEF	Titiana	No
	Tsunami rehabilitation	National Disaster Council	Saeraghi to Paelonge	No
	Livelihoods project (coral, clam, post larvae)	WorldFish	Saeraghi, Titiana, Paelonge, New Manda (around Gizo Island)	No
	Rehabilitation	Oxfam	Nusa Baruku	No
	Road construction, hospital construction	Kitano Construction	Gizo township	No
	Food value chain	WorldFish	Gizo market	No
	Early intervention childhood program	Save the Children	Bibolo, Kongu, Paelonge	Yes
	Nusa Tupe airport upgrade	Downer Construction	Nusa Tupe airport	No

Appendix III. Stakeholders consulted

Institution	Name	Position	Email and phone numbers
Ministry of Fisheries and Marine Resources	Kolo Hivu	acting chief fisheries officer	hivukolo@gmail.com phone: 60885
Ministry of Agriculture and Livestock	Samson Tim	chief agriculture officer	timsamsonc@gmail.com phone: 60464
Kezoko Accomodation (Noro)	Arnold	front desk officer	phone: 61368
Noro Town Council	Joseph Lioloko	caretaking town clerk	phone: 7631992
SolTuna Cannery	Larry Dion Patteson	admin officer	elarry@soltuna.com.sb phone: 61012
Western Provincial Government	Hon. Billy Veo	provincial Member of Parliament (MP)	phone: 7420484
Noro Town Council	David Mamupio	planning officer	
Ministry of Agriculture and Livestock	James Tahopa	extension agricultural officer	phone: 7650458
Western Provincial Government	Adrian Toni	provincial secretary	adrianmtoni@gmail.com phone: 60250 Ext 202/7736445
Western Provincial Government	Francis Angikinui	provincial environmental officer	angikinui@yahoo.com phone: 7599492
Western Provincial Government	Margret Moveni	planning officer	mmoveni@gmail.com phone: 60250 Ext 207/7611807
Save the Children, Western Province	Joanna Boso	program coordinator	Boso25@gmail.com phone: 7403941
Red Cross, Western Province	Ogier Kiko	program officer	Cogier.kiko@gmail.com phone: 7465900
WWF	Shannon Seeto	country manager	sseeto@wwfwm.org phone: 60191
RAMP (Rural Advancement Micro Project)	William Zorivo	project officer	phone: 60995
Rendova Harbour	Michael Bae	school chairman (community elder)	phone: 7704331 (Laska)

Institution	Name	Position	Email and phone numbers
Rendova Harbour	Samuel	village elder	HF- Radio (COM freq) Call ID: Rendova Divon
Mase Village	Piano Nagiti	village chief	
Mase Village	Fulton Besa	church elder	
Tuki Village	Zebdee Alezama	village elder	
Vao Village	James Ita	village chief	

Appendix IV. Detailed findings from site visits

Tuki Village

Tuki Village is located in Ward 26 on Kolombangara Island. It is relatively isolated from the urban centers in the province.

There are 25 households with an estimated population of 200 people; all households are members of the Seventh-day Adventist Church. The village was affected by the earthquake and tsunami in 2007. Prior to the tsunami, all the houses were built in the same area. Today, houses are scattered around the island with only two on the coast. Most of the houses standing today are up on the hill and inland, due to the impact of the tsunami that damaged many houses and traumatized the people.

Governance - The main leadership figure in the community is unclear as there is no tribal chief or elected village chief, but currently the brother of the late chief is acting as the village elder. There is only a single tribe (from the Alezama family). The church elder also acts as a leader in the community and usually works with the village elder. These two people are responsible for making key decisions and sorting out disputes within the community. It is the role of the church leader to disseminate information to the community regarding any decisions reached. Additionally, sometimes the community collectively discusses and makes decisions about community welfare. There are no formal leadership roles for women in the community.

Each family has been allocated a block of land to use for agricultural activities, but there are some disputes over landownership and gardens. The church plays a major role in the cohesiveness of the community. There is a women's group in the church called 'Dorcas' where women do fundraising by selling cooked food and organizing games such as volleyball.

Livelihoods - Gardening and fishing are the key sources of food and income for the people. Occasionally, people travel to nearby urban centers such as Poitete and Gizo to sell their garden produce. Accessing Poitete market is cheaper than travelling to Gizo, which is too costly. The fare to Gizo ranges from SI\$150 to SI\$200 per person. The charge for boat hire

is SI\$500, plus the cost of fuel. The women sometimes club together to pay the cost of travelling to Gizo for the market. The preferred transport method is by road to Poitete and Ringi at a cost of SI\$16 and SI\$80 return fare, respectively.

Copra, trochus and beche-de-mer also help to supplement the income earned from selling garden produce. Currently there is no (or less) production of copra in the community since the price of copra is low and transportation is unreliable. Each family is responsible for producing their own copra and the decision to produce copra is usually made by individual households (i.e. the wife and husband). Men sometimes harvest trochus and fresh fish to sell to a buyer in Poitete. Even when there is a relaxation of the ban, beche-de-mer is not always harvested as the nearest buyers are in Gizo. Selling of cooked food in the community is a means of earning income, especially for women.

Both men and women sometimes take contract employment with the Kolombangara Forestry Plantation Limited (KPFL) Company to clear hectares of land for which they normally receive cheque payments at the end of the contract. The cheques are usually cashed in Gizo. This method of payment is quite expensive as sometimes the employees are left with no cash after travelling to Gizo.

Resources - Land resources are limited to the small land areas that are used for gardening and agricultural activities. Most of the island's interior land is owned by the government. The community owns the land which stretches from the coast to the road. Local communities do not have access to enough materials such as sago palm and trees for building houses. The community continues to request land from the government and one family (at least) is illegally occupying government owned land (Figure 4).

Due to land shortages, gardens within the block of land allocated to each family were rotated on short cycles (i.e. shorter fallow periods). Land is also used for copra plantations. There are no logging activities on the land owned by the community.





Figure 4. Shows a house occupying government land

The reef areas are owned collectively by the entire community. Reef fisheries resources are declining as observed by local people. They claimed that this is due to excessive diving activities, which includes night diving, by people from Tuki and poachers from Gizo.

The community has limited communication, medical, transportation and sanitation facilities and services. Verbal communication is the main way the community gets in information from outside. Although a VHF radio was previously used for communicating, the reception is always poor. Likewise, radio broadcasting is limited to the SIBC broadcasts but the reception is good only in late evenings and at times there is no reception at all.

As there are no water tanks in the community, the drinking water is collected from a spring in a nearby stream. The water source is not reliable when the water level rises during heavy rains (Figure 5).

The nearest medical center in Poitete is about a two-hour walk from the community. There is transportation that only operates on Mondays and Thursdays and a fare applies. There is a primary school run by the SDA Church that has sixty-five students in grades one to six and employs one qualified teacher and two untrained teachers. There are no kindergarten or preparatory classes. Boat transport services in the community are inadequate. There is an outboard motor (OBM) in the village but there is no boat. Thus people intending to travel by OBM have to rent a boat or pay a fare on a boat from the nearby community. This inadequate boat transport service is of great concern to the community.

Prior projects - A project on copra trading funded by KFPL had previously operated in the community in the 1980s but no longer existed at the time of the visit. There has been no other external assistance from the government or NGOs or no clear support received from national and provincial MPs to date. Accessing information and technology is limited since the community is isolated and inaccessible to transportation services.

Future vision - The increasing population growth is an issue for the community in the future. For example, the people doubted they would have enough land to cater for everybody's needs in the future. Additionally, they wished for better communication and transportation services in the community.



Figure 5. Water for drinking is collected from the water in the drum

Wao Village

The Wao community is located in Ward 12 on Kolombangara Island. There are 24 households with a population of approximately 200 people and all are members of the SDA Church.

Governance - The community is governed by a chief who is supported by the village chair, the village representative (RA) and the church elder. Key decisions are occasionally made collectively by the community. Women also reported that they could sometimes influence the decisions made by the elders. However, the key people in decision-making were the chief, church elder and the RA. The primary role of the community representative is to represent the community in any meeting organized by the KFPL company and disseminate information to the people in the community. There is only one tribal group in the community although there are two factions of people: those who are originally from Vao and a small group of people of Malaitan origin.

Generally, people respected the elders and leaders in the community and there is strong cohesiveness amongst the people. Youths participated well in community work, doing repairs and maintenance. The exception was the Malaitan settlers who are, reportedly, often reluctant to obey decisions made by the community.

Village disagreements are settled by the village chief and elders of the church. However, if the disagreements are serious, they will be reported to the police and this has occurred in several instances regarding issues with the Malaitan faction community. The Malaitan settlers and the community people have some outstanding issues between them,, which seemed to be of major concern to the women. Although attempts were made to mend relations with this group, these attempts were unsuccessful to date.

Despite these unresolved issues, the women in the community appeared to be very organized. They have a baking project, which they started with some money that was given to them by their MP. The women's group, called 'women's club', is ambitious and aims to raise money to buy a boat which would address the transportation problem and provide better access to market sites. The women's club saw transportation issues as of great concern to women. The women's club has

a chair, a treasurer and the ordinary members, which include all women in the community except those of the Malaitan faction. The women's group often assisted each other in their gardens and money paid for the group work is usually deposited into the club's savings box. The women have heard about the women's banking group and are keen to join but the banking initiative has not reached their village yet.

Livelihoods - The main livelihood activities include subsistence gardening and fisheries, copra production and contract employment with KFPL. Gardens are limited to a small land area (i.e. from the coast to the road) that is owned by the community people. The larger land area (i.e. from the road inland) is government owned and people are not allowed to cultivate it. Some areas have pests infestations (Figure 6) but generally the land is fertile and productive.

Fishing is carried out by both men (spear, line, diving) and women (line fishing) and the catch is mainly used for family consumption. However, men sometimes fish at the rafter (i.e. fish aggregating device [FAD]) for sale at Poitete market. The reef area that belonged to the community is quite small as the reef drops off quite near to the shore.

Copra production often adds to income earned from marketing, but this depends on the stability of copra prices and the availability of transport in their area, since it is too costly to hire a boat. The people in this community have ceased copra production as the price of copra is very low. The harvest and sale of bechedemer and trochus is not common but is done sometimes by young people to pay for their cigarettes or tobacco. There is a buyer in Ringi who buys bechedemer and the return fare to Ringi is \$50. Additionally, the harvest of beche-



Figure 6. Pests destroying gardens

de-mer depends on the government policy which regulates the period for harvesting (i.e. it was closed at the time of this discussion) and harvest sizes.

The contract work with KFPL enabled the community to have cash employment. Payment for clearing a hectare of land was SI\$200-SI\$300 depending on the size of the shrubs to be cleared. This work can be done by approximately 3 people in 3 days. Moreover, KFPL often employ the locals as stevedores and promised to provide materials instead of cash. This has already been done on a couple of occasions. On one occasion, the community earned 24 sheets of roofing iron for each household and about 46 solar power units (1 solar unit each for all households, 1 for the church and 1 for the school) from stevedore work, but the community is still waiting for KFPL to provide these materials. Women also contributed to this work by doing cooking for the stevedores. The area used to have a logging company operated by Levers in the mid-1970s but currently, there is no logging company operating in the area.

Resources – The land is restricted to the small land area that the community has the right to use. The reef resources are also constrained by the size of their communal reef area. The reef area is very narrow as the drop-off to deeper water is quite close to the shore. The community mentioned that there is a decline in their reef fish stocks and they suspected poaching to be the cause of this decline. Thus, they said they would like to have a Fishing Aggregating Device (FAD) to supplement them with protein. Both men and women rarely fish on the reef since gardening is considered by the community to be more important than fishing.

The community has poor access to health services; it is a 1.5 hour-walk to the nearest clinic in Poitete. Road transport to the health center is only available on Mondays and Thursdays and the fare is SI\$10 return. In terms of educational services, the nearest primary school is in Susele, which is about 2.5 km from the village and only accommodates grades 1–4 with three trained teachers. The school fee is SI\$200 per year and school children must walk to school every day. There are no kindergarten and prepatory classes for young

children. Communication is a problem as there is no mobile network coverage, radio broadcast reception is unreliable and not many people have SIBC radios. The community did not own any VHF radios so they do not have easy access to information outside of the community. The community used to have a good water supply, which was funded by the Rural Water Supply and Sanitation (RWSS project) in 2011, but the water pump had a mechanical problem in 2012 and water cannot be pumped into the header tanks that supply the taps. The community is still waiting for spare parts to arrive to fix the problem. The storage tank can still be filled with water and currently drinking water is collected from the spillover pipe that runs from the storage tank.

The village has been facing difficulty in getting access to transport to go to markets, health centers and schools for quite some time. They have a 15 HP engine but no boats and do not have other transportation services around their area.

Prior projects - The only project that has ever operated in this community is the RWSS (Rural Water Supply and Sanitation) that built the water supply. Rural Development Program is another external institution that visited the community and promised they would return but they did not.

Future vision - The dream of the community is to have visits from NGOs, government officers and MPs. The community would like to have a FAD to provide another productive place to fish and they also wished to have SIBC coverage in the village. They would also like to have a school and a clinic in their community. Their biggest worries for the future are: land shortage, increasing population and fear that additional problems might arise with the Malaitan settlers. The women would like the problems between them and the settlers to be resolved so that they are free to go alone to their gardens. The difference that they had seemed to be a major concern to them as they viewed it as a hindrance to development of their own families and the community as a whole. For example, the people feared that community developments might be sabotaged or damaged, and that if families purchased new things, they would be stolen.

Mase village

Mase community was the biggest village visited during the scoping trip. This community is located in Ward 4 on North New Georgia Island. The whole community attends the Seventh-day Adventist Church. The population is roughly 590, with over 60 households with an average of 9 people per household. Mase community is made up of two main tribes, one of which is the main landowning tribe. According to respondents, these two different tribal groups live and interact together.

Governance - The community was governed by a paramount chief who is the overall head of the community, two tribal chiefs (reportedly not very active in leading and working in the community), one pastor and the village spokesperson who represents the paramount chief in his absence. There is no clear formal leadership role of women other than the leader of the 'Dorcas women' (SDA church women's group) who is usually the pastor's wife. The Dorcas women is one of the main groups in the community where women come together to visit the needy to distribute clothes and food (e.g. in the Paradise community). The other groups in the community are Adventist women, Adventist men and youths. The 'Adventist women' group is similar to the Dorcas group (in fact they are the same group of women but have a different leader). The church youth group raises funds through the sale of cooked food and fresh vegetables. The school committee is also another group within the community, which consists of both men and women.

Key decisions are made by the paramount chief and the church pastor and it is the responsibility of the church pastor to spread information to the whole community. Information normally reaches the community through a letter, a SIBC radio broadcast and verbally. The community had an operational VHF-radio but the battery stopped working in 2012 and no one has taken the initiative to have the battery replaced. There is no mobile network coverage in the area.

Livelihoods - Subsistence gardening and fishing are the prime sources of income and food for the vast majority of the Mase populace. Only a small number of people have been employed by the logging company but they

have been since laid off. Marketing of garden produce is the only means of earning an income. The nearest market is in Noro and the paddling time to Noro is six hours. Other means of transportation (e.g. motor boat as there is no road) are too costly and this hampers their access to Noro market. There is only one boat and engine for hire. Women rarely get together to hire the boat for a market trip to Noro and respondents could not recall a time that a group of people had clubbed together to make that trip. Cooked food and fresh vegetables are sold by the church groups every month. The money raised is usually given to the church.

Fishing and gardening are sufficient to meet the nutritional and economical needs of the people in Mase. However, transportation to markets is the main obstacle to generating income from produce. Both men and women fish for family consumption. Diving for beche-de-mer and trochus is usually done by men and they are sold whenever a local buyer comes along. A few men in the community are carvers and they make carvings to sell, usually to occasional tourists and visitors.

Due to the lack of access to markets, not many people can afford to buy goods such as soap from the shops. Agricultural cash crops such as coconuts are grown and each coconut plantation is owned and worked on by a single family. Not all families have a coconut plantation, so only those that have plantations produce copra and this was ongoing at the time of the visit, despite the low copra price.

Sometimes men (with the skills) are employed casually as stevedores at the log pond. The people feel that money from logging should be another main source of income for the community, but unfortunately logging and prospecting proceeds have not benefited all the members of the tribe. Logging in the area did benefit the community by providing them with a good water supply. The mining company donated twelve water tanks to the community.

The respondents complained about lack of money and reported that fundraising for community projects does not happen while church fundraising does. It seems that church activities were prioritized higher than other developments. For example, respondents

mentioned they wanted a women's hall but there was no strategy for this to come about. The old church was being demolished (which we speculated could have made a useful hall) that the new church was being built around.

Resources - The reef fishing grounds are collectively owned by the community, and the land is owned by the Lupa tribe. These people are rich in terms of natural resources. No decline in fisheries resources were reported. There is also no current shortage of land and no concern about land shortage due to rapid population rise. Their soil is rich and fertile and they have a large land area.

Social services such as transportation and communication are scarce in the area. There is no mobile coverage and the reception of radio 'happy lagoon' is poor. The only HF radio in the community is currently not functioning. The community has a primary school, grades 1–6 and the nearest high school is in Gerasi. There was reported to be a problem with the high school principal (i.e. poor and inconsistent attendance and potentially issues with inappropriate use of school funds) hence the school is not operating well. At the moment the school principal is in Honiara thus the school is currently closed and students are hanging around in the village. Although there is no formal kindergarten class for young children, someone in the village has been conducting kindergarten classes, charging parents a fee of SI\$40.00 per semester. The women mentioned that the kindergarten is closed for this semester because no parents have paid fees. Reportedly, parents just could not afford the SI\$40.00 school fee for their children. The kindergarten classes are held at the teacher's house as there is no proper classroom for these young children.

The nearest clinic to Mase is in Paradise Village, a neighboring village that is two-hour walk away. People in Mase often find difficulty to get to the clinic by boat in bad weather as the sea is rough and travelling by foot is often hindered during heavy rains as the river is usually flooded. Proper sanitation is lacking in this community. Although funding for sanitation had been provided to the community by the MP, the person responsible for the money had not used it for the purpose it was intended.

Prior projects - The local people mentioned that in the past they had not had many projects working in their area, apart from the logging and prospecting operations in their vicinity. One of the other prior projects is the water supply project which was funded by the Golden Spring logging company and the water tanks provided by Pacific Prophyry, a prospecting company.

Most recently, they had a group of government officers who conducted the ward profiling plus a group of Taiwanese (working with the group 'Kastom Garden') that visited to collect plant specimens as part of a research study on herbal medicine.

Future vision - The women said they would like to have a clinic and a meeting hall built in their community in the future. However, there were no plans or ideas about how these developments could be progressed. The unreliable operation of their nearby high school is a worry for the women. Other issues of concern were the consumption of drugs and alcohol by youths, population expansion, land disputes and pests that attack their agricultural crops, as well as the threat of witchcraft.

Rendova Harbour Village

The village is located in Ward 18 on the southwestern end of Rendova Island. It is commonly known as Raduvu to the locals.

Governance - The Rendova Harbour community is a small community that consists of a group of people who comes from Malaita, mainly from Saua and Sulufou. The household number is less than twenty and in each house there are two families. There are ten or more people living in a house. Population is 150-200 or 300 if one considers all related surrounding houses. The community is well organized and life for them seems to be very peaceful. People all come together for church events. They keep some *kastom*¹ but balance with modern life.

The community lives under the leadership of a chief or village organizer (VO) [or someone who is old enough to take a leadership role]. There is no other tribal group living in the community except for the people alone who regard themselves as one family. The people of Rendova Harbour stated that they do not intermarry with surrounding communities; they marry within their own community. Their main denomination is Anglican, Church of Melanesia.

Most of the people in the community have access to cell phones and those who have access to radio listen to SIBC. The introduction of using cell phones came after the 2007 tsunami disaster happened in the Western Province.

Livelihoods - The people rely on coconuts for copra; they have gardens, weave mats and fish and collect other sea resources for daily survival and living. Women, men and young people depend largely on coconuts for making copra to sell to earn an income since none of them are involved in cash employment. The primary livelihood for the village is copra. Both men and women process copra.

In terms of agricultural activities, both women and men make gardens and plant staple food crops such as potato, cassava, taro and banana mainly for consumption and sometimes for selling at the nearby markets in Munda. The gardening jobs were mostly done by women and men were reported to go to work in the gardens occasionally.

Just as much as they depend on the land for gardening, people rely on sea resources to fish, find clam shells and trochus. Women and men fish for their daily consumption and often for selling at the market on Fridays in Munda and Ughele. It was reported that before the tsunami disaster there was good catches of fish. Today, it is difficult to catch a good number of fish, clam shells and trochees due to damage to corals and other sea creatures. The fishing methods used is hand line, use of spears and diving and there is no net fishing as no one owns a net.

There are logging activities around the community harbor but people do not consider this to be a big problem. During the rainy seasons, gardens can be affected by sediment in the river from logging operations further up the catchment behind the village, but this was regarded as only a minor issue.

Resources - The people have access to natural resources (land and sea) through permission of the customary owners on Rendova (sea) and permission of the provincial government (land). However, there is no ownership of land by the people since it is owned by the provincial government and they are afraid to develop the land until they have certainty of tenure. Currently the Anglican Church in the community is negotiating with the provincial government to resettle the people somewhere else on the land of Rendova Harbour.

There is lack of infrastructure within and near to the community. The primary school (Madali School) is a 2-hour canoe ride away. Children often attend class for only one day or two and stay home the rest of the week since the school is too far for them to travel to each day.

There are no health centers or clinics in or near to the village. Hospitals and clinics are very far from where most people live and they paddle to the end of the point of the harbor to seek health assistance when needed. Just like education, there is difficulty in getting access to proper health and medical services.

There is no proper sanitation (i.e. toilet, shower room or water supply). The community gets access to water through a spring which is a few minutes walk from the main village. The people would like to have proper water supply

but it is not possible to carry out water projects as yet until the land tenure issue is resolved. This appears to be a significant barrier to development. There is one community-owned canoe and OBM; the fares go to the church fund.

Prior projects - There were not many prior projects run by external institutions or NGOs in this community. People said they felt that they had missed out in receiving any livelihood development projects. It was reported that after the 2007 tsunami aftermath, World Vision visited and distributed basic supplies (i.e. food, housing materials) to the community. Save the Children and Red Cross made connections with the people but only for a little while. After the earthquake/tsunami, Red Cross built a house for a disabled person in the village. Save the Children now have an ongoing program in the village. The descendants of their original pre-independence benefactor Scott Elliot - the original owner of the copra plantation that they now live on, visit each year from the UK to give gift supplies to the village. This was the only external organization identified.

Future vision - The people of the Rendova Harbour community are uncertain about their future development in terms of livelihoods, infrastructure, education, health and governance. The big problem for them is land tenure. There was no formal agreement with the government since 1982 after Solomon Islands Independence Day. It was reported that people wanted to make their community a better place to live in but they were worried that if they did, they would be asked to move and resettle somewhere else. The main problem faced by the people is that they were unsure as to where to go to seek advice or get assistance about the development and ownership of land. Their church leader is currently in negotiations with the provincial government on these issues.



Noro Town

Noro is a fishing town located in Ward 25 on North New Georgia Island. It has roughly about 3365 inhabitants (Solomon Islands Government 2011). It has a cannery, which is jointly owned by SolTuna and the Solomon Islands Government. In the early 1980s, the major commercial fishing company Solomon Taiyo was a joint venture between the government and the multinational corporation Taiyo Gyogyo of Tokyo (Barclay et al. 2013). Its fishing and canning operation, exclusively tuna, ceased due to the social unrest in 2000 but has recovered since the arrival of RAMSI in 2003 and has started its fishing and canning operation again. National Fisheries Development's (NFD) parent company Tri Marine in 2010 acquired a controlling shareholding of the processing factory and it is now called SolTuna. Since taking over, SolTuna has expanded its operations and hired more personal, particularly locals who lived in and around Noro and surrounding villages as far as the Roviana Lagoon to work in the cannery. In 2012, terms of longline fishing licenses were changed to require that fish caught in Solomon Islands waters should be unloaded and processed in the country, creating 500 new jobs to handle tuna in Noro (Table 4). The current plan is to increase processing throughput from 90 tons (t) of tuna per day to between 140 to 150 t per day, whilst meeting stringent EU and US quality standards (Barclay et al. 2013). Through the International Finance Corporation (IFC), Soltuna has acquired a US\$10 million loan, which will go towards improving its infrastructure such as wharves, a wastewater treatment plant and housing (Mr. Adrian Wickham, general manager SolTuna, personal communication 2013).

Today Soltuna and NFD are amongst the most successful local fishing companies, which come from humble beginnings. NFD was a government enterprise in 1977 but was privatized in 1990. It was first sold to a Canadian company BC Parkers of Vancouver and then sold to a multinational tuna trading company - Tri Marine.

Noro Church Women Group Discussion -

The church women group in Noro township comprises of women representatives from the five main denominations: the Anglican (Church of Melanesia), Roman Catholic, Seventh-day Adventist (SDA), Methodist/United and South Seas Evangelical Church (SSEC).

Livelihoods - Noro Township relies heavily on the tuna fishing industry. A few people (women and men) fish to sell at the market, but most people said they buy fish from the market vendors or canned fish from the shops. Fish is the main source of food, and as land in Noro Township is becoming scarce, agricultural activities are in decline around the town. This was a concern raised by the women who noted that they are becoming more reliant on the cash economy. They said that tuna was their main food as it is cheap to buy from SolTuna. Agricultural products are brought into town from surrounding villages.

Most people in Noro are employed by one of the fishing or processing companies. The SolTuna fishing company provides accommodation for young girls (girls' hostel) and young girls working at the cannery were described as being Form 3 and 5 high school leavers (age 18 and above) who come from communities around Western Province and other provinces.

Prior projects - According to the women, Save the Children had worked in the town for 2 to 3 years but it was not clear what projects the organization was working on during their time in Noro. The Ministry of Health promoted health awareness a few years ago. There was no other involvement or partnership with other external institutions mentioned.

Future vision - The church women's group is concerned about the social issues in Noro Township. While developmental activities bring progress to the people, many of the social impacts seen and experienced are beyond the control of the church ministries. Noro Township is diverse and negative social influences are of great concern to the women of the churches.

The church women's group has its own programs and activities but not everyone attends them. The perception of people was that the achievements of women from the five main churches were not widely recognized. The women felt that the status of young girls was negatively perceived by some people.

Year	Soltai/Soltuna	NFD		
2001	748	45		
2005	850	75		
2008	600	120		
2012	1265	280		
Source: (Barclay et al.) 2013				

Table 4. Solomon Islander employment in tuna fishing

NOTES

¹ Kastom is a Melanesian pidgin expression used to refer to traditional culture, including religion, economics, art and magic (Ipo 1989).

BIBLIOGRAPHY

Barclay, K., H. Parris, S. Tolvanen, D. Williams, S. Nabou, H. Bours, E. Lee, K. Thomas, and L. Gray. 2013. "Transforming Tuna Fisheries in Pacific Island Countries. An Alternative Model of Development." NSW, Australia: Greenpeace Australia Pacific.

CGIAR Research Program on Aquatic Agricultural Systems. 2012. "CGIAR Research Program on Aquatic Agricultural Systems Roll-Out Handbook, Ver 1.0, May 2012, Penang Malaysia. AAS 2012-05."

Govan, H., A. Schwarz, D. Harohau, and J. Oeta. 2013. "Solomon Islands National Situation Analysis. CGIAR Research Program on Aquatic Agricultural Systems. Penang, Malaysia."

Ipo, J. 1989. "Land and economy." Pp. 121 -136 in *Ples Blong lumi: Solomon Islands, the past four thousand years*, edited by H. Laracy. Suva: Institute of Pacific Studies, University of the South Pacific.

Solomon Islands Government. 2011. "Report on 2009 population and house census." Honiara, Solomon Islands: SIG.

LIST OF ABBREVIATIONS

AAS CGIAR Research Program on Aquatic Agricultural Systems
ACIAR Australian Centre for International Agricultural Research

ADB Asian Development Bank

ARDS agriculture and rural development strategy
ADRA Adventist Development Relief Agency

AusAID Australia Agency for International Development

AVDRC The World Vegetable Center

AVI Australian Volunteers International
Canoe VTT Canoe Village Technology Trust
CBDP community based disaster preparedness
CBRM community based resource management

CCA climate change adaptation
CFC Christian Fellowship Church

CGIAR A Global Research Partnership for a Food Secure Future

CRP CGIAR Research Program
CTI Coral Triangle Initiative

CTSP Coral Triangle Support Partnership

DAL Department of Agriculture and Livestock

DMF Dutch Millennium Foundation

EU European Union

FAD fish aggregating device

FORCERT Forest Management and Product Certification Service

FSC-AU Forest Stewardship Council Australia

FSPI The Peoples of the South Pacific International GEWD Gender Equality and Women's Development

HDI Human Development Index

IFC International Finance Corporation
IRD Research Institute for Development

IWMI International Water Management Institute

JAC Jones Adventist College
JCU James Cook University

KFPL Kolombangara Forestry Plantation Limited

KGA Kastom Gaden Association

KIBCA Kolombangara Island Biodiversity Conservation Association

LMMA The Locally-Managed Marine Area
MAL Ministry of Agriculture and Livestock
MDG Millennium Development Goals

MDPAC Ministry of Development Planning and Aid Coordination

MECDM Ministry for Environment, Climate Change, Disaster Management & Meteorology

MFMR Ministry of Fisheries and Marine Resources

MINBALT Marovo Indigenous Natural Biodiversity and Livelihoods Trust

MLST Marovo Lagoon Sustainable Timbers

MOI Malaita Outer Islands

MoU Memorandum of understanding

MP Member of Parliament
MPA marine protected areas

MSSIF Mekem Strong Solomon Islands Fisheries

MWCYA Ministry of Women, Youth and Children Affairs

NAPA National Adaptation Plan of Action NCC National Coordinating Committee

NDC National Disaster Council

NDMO National Disaster Management Office

NFD National Fisheries Development NGO non-governmental organization

NRDF Natural Resource Development Foundation

NRM natural resource management

NZAID New Zealand Agency for International Development

OFT on farm trial

OXFAM Oxford Committee for Famine Relief

PGSP Provincial Government Strengthening Programme

PNG Papua New Guinea

PRA Participatory Rural Appraisal

RAMP Rural Advancement Micro Project

RAMSI Regional Assistance Mission to Solomon Islands

RCF Roviana Conservation Foundation
RSIPF Royal Solomon Islands Police Force

RTC rural training center

RWSS Rural Water Supply and Sanitation

SDA Seventh-day Adventist

SIBC Solomon Islands Broadcasting Corporation
SICHE Solomon Islands College of Higher Education
SILMMA Solomon Islands Locally Managed Marine Areas

SINU Solomon Islands National University
SPC Secretariat of the Pacific Community

SSEC South Seas Evangelical Church
TDA Tetepare Descendants Association

TOC theory of change UK United Kingdom

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund USP University of the South Pacific UQ University of Queensland

VATA Value Added Timber Association

VHF very high frequency VO village organizer WATSAN water and sanitation

WPIC Western Province Investment Corporation

WWF World Wide Fund for Nature



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Contact Details: CGIAR Research Program on Aquatic Agricultural Systems Jalan Batu Maung, Batu Maung, 11960 Bayan Lepas, Penang, MALAYSIA www.aas@cgiar.org

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