Strengthening the role of women in community-based marine resource management: lessons learned from community workshops

Zelda Hilly,¹ Anne-Maree Schwarz² and Delvene Boso²

Introduction

Community-based resource management (CBRM) forms an important component of the Solomon Islands Ministry of Fisheries and Marine Resources (MFMR) inshore fisheries strategy. The strategy recognises that community-based initiatives will be the engine of sustainable economic development in the inshore marine resource sector. Key activities in the strategy include developing and refining community-based management plans and testing livelihood diversification/supplementation strategies. CBRM is now supporting more than 113 locally-managed marine areas in Solomon Islands (Govan et al. 2009) and all members of a community — men, women, youth and children — contribute to the success, or otherwise, of CBRM initiatives.

Women play important but often undervalued roles in fishing-dependent families and communities in Solomon Islands. They collect, process, prepare and market fish and other marine resources, contributing directly to the well-being of their families and communities (Weiant and Aswani 2006). In Solomon Islands, women are traditionally (as wives and mothers) also nurturers, caregivers and supporters. These roles ideally position women to teach and pass on concepts such as those related to resource stewardship. Despite these vital roles in the household, women have tended to have less access to secondary education than men and a greater proportion of women than men is illiterate (Solomon Islands census 1999). Along with cultural barriers (e.g. Vunisea 2008), this can create a perceived barrier to being actively involved in decision-making in marine resource management. Accordingly, in communities where the WorldFish Center has been active in working with resource owners and users to implement CBRM, only small numbers of women (and youth) have tended to be actively involved (Paul et al. 2010; Boso and Schwarz 2010).

The important roles that women can play in contributing to CBRM has been recognised as essential to achieving sustainable management outcomes in Solomon Islands (Weiant and Aswani

2006; Kronen and Vunisea 2009; Boso, Paul and Hilly 2010). In order to facilitate greater engagement, WorldFish has tested an approach to marine resource management awareness and training for women, driven by requests from women in rural communities. Through an Australian Centre for International Agricultural Research (ACIAR)-funded project titled Diagnosing, Strengthening and Monitoring Small-scale Fishery Resilience, WorldFish adopted an adaptive learning, trainthe-trainer approach and developed tools that can be used throughout the country.

Here we outline the process that has been undertaken to strengthen the CBRM role that women can play in several Solomon Islands communities in three provinces. We highlight key components of the training from which we have identified lessons learned. These are intended to inform the ongoing work of improving gender equity in community-based management.

Sites

All the workshops were conducted with representatives from rural coastal communities that had either begun or were in the process of implementing CBRM. The first was conducted with the women of Kia district in Isabel Province in 2009. This was a pilot community from which lessons learned were incorporated into the development of training resources for other communities. Subsequently, three further workshops were held: (a) in Gizo township for Jorio and Dovele women on Vella Lavella Island; (b) in Toumoa village for women from Toumoa and Kariki on Fauro and Shortland Islands, and (c) on the artificial islands of Lau Lagoon for Lau Lagoon women in Malaita (Fig. 1).

Workshop methodology and process

Training-the-trainers and selection of participants

The workshop facilitators were scientifically trained female staff working in the field of CBRM in Solomon Islands. The Gizo and Lau workshops were

WorldFish Center, Gizo, Solomon Islands

² WorldFish Center, Honiara, Solomon Islands



Figure 1. Solomon Islands with the target communities indicated by a star

facilitated by female Solomon Islands staff from the WorldFish Center with, in the case of Lau, assistance from a Solomon Islands staff member from the Federation of the Peoples of the South Pacific International (FSPI). In all cases this ensured at least one facilitator had familiarity with the local language and all were familiar with explaining biological concepts in English and pidgin.

For budgetary and resource reasons, only a limited number of participants from each of the communities was invited to participate. Selection was based on the following criteria.

- active member in the community/ leader in church activities, based on the assumption that such women would already possess some level of confidence in public speaking and could carry out subsequent awareness activities with relative ease;
- able to read and write ideally, in English as well as in pidgin, so that they could effectively translate new concepts into their local language for their community members.

In the Gizo workshop, 17 women were selected by their leaders from eight communities in the Jorio and Dovele regions. In Kia district, a women's group affiliated with the local church, the Mothers Union, approached WorldFish requesting training for the women on marine resource management. The Mothers Union already had a local community awareness programme planned about other aspects of family life and they thought that information on marine resources would be a useful component to add to their topic of 'healthy families'. The group was already organised, so women from within the group were selected to attend the training. For the remaining workshops, the selection of women to participate in the training was made by community leaders and marine resource management committees.

Training location

Workshops were held either in a CBRM participating community or, in the case of the Vella Lavella communities, in the nearby town of Gizo. One of the advantages of holding the workshop outside the community was that accommodation was easy to arrange (especially as there was a large number of participants from different communities, and village accommodation may have been difficult to provide) and women were comfortable in a neutral environment away from household chores.

There were, however, many advantages to holding workshops within the community. Firstly, the number of women participants could be increased because of fewer budget constraints (transport, town accommodation) and, secondly, other women from interested neighbouring communities were able to attend. For example, for the workshops held in Toumoa, a community that is remote from urban centres and therefore costly to visit, women from a neighbouring community who were interested in considering CBRM were able to attend. In Lau lagoon, 20 women from a number of different artificial islands participated. In Kia, on the final day, the trainers invited interested women from the community to come and be a test audience. The participants presented everything they had learned in the local language and answered questions from their audience, with the trainers at hand to clarify any concepts that were not clear.

In the village, women were given small per diems as compensation for earning opportunity lost during the time they spent at the workshop, and lunches and teas were provided by hired village caterers. Catering activities and accommodation for the project team within the community provided an opportunity for women in the village to earn some cash.

Workshop topics

The workshop content was developed around six key messages derived from topics of interest to the women and related to the goals of community management plans. Topics included: health and family, community management plan rules, and general marine resource and resource management information.

The overriding goals of most CBRM plans are to maintain or increase marine resources to provide for community needs into the future. Socio-economic surveys conducted by WorldFish (Boso and Schwarz 2009; Paul et al. 2010) show that women tend to have an understanding that resources need to be looked after and managed but that they often lack knowledge and information about the reasons behind management decisions and what needs to be done in order to achieve successful management. Often, women report that they are the last ones to hear current information about resource management in their communities as men do not always pass on information received from awareness meetings or workshops. The participants were, therefore, strongly focused on wanting to understand basic marine biology facts, such as the life and reproductive cycles of key marine resources and how these interact with marine resource management goals and activities.

Every attempt was made to sequence messages in a cohesive way so that each message led on from the

previous one and participants could easily follow the logic. The key messages around which the training was developed are given below.

- 1. Marine resources are important for a healthy family and a healthy community.
- 2. Healthy habitats are important for our marine resources
- 3. Coral is an animal. A healthy reef is made of live coral.
- 4. Marine animals have a life cycle
- 5. If there is overfishing, there will not be enough food or money from marine resources in the future
- 6. Management of marine resources is important for community well being

Modes of delivery

The training was designed to cover the six messages over three or four days. Before starting each message, the women were given an exercise to do that explored their own knowledge. For example, for the 'Healthy habitats are important for our marine resources' message, before the trainers undertook to explain what habitats were, the women were asked to break into small groups and draw a map of all the places where they collected marine resources or knew that marine resources were to be found. After presenting their map to the whole group, the trainer gave a presentation on habitats, and the technical information was matched with the information the women had collected. The key message about habitats (in this example) was then distilled in a group discussion and the related printed materials distributed.

Important words and concepts were emphasised through repetition, and ample time was given for questions and general discussion, which was a useful way to evaluate the understanding of each message. Women who understood the concepts well were encouraged to use the local language to explain to other women who did not understand the concepts so easily. Finally, the participants worked in groups on each of the messages and prepared a presentation, which, on the final day, they presented back to the group (and any invited guests) in a local language or pidgin as they preferred. They were allowed to use the supplied posters and printed materials, as well as songs and drama, in their presentations.

In order to cater for the different learning modalities within the group, a variety of media approaches were used, including: discussions, group activities, video segments, singing and presentations. Local staff designed six A4 pages, each illustrating a key message. They were printed and laminated and

used as resource material (Fig. 2). Pictures and diagrams proved to be the preferred media for a range of learning styles and were used liberally. Power point presentations and videos were used opportunistically when a generator or power source was available, and posters from other sources (e.g. FSPI) were also used in the training. Printed and video materials were provided for women to take back to use in their village to facilitate the sharing of information with other women.

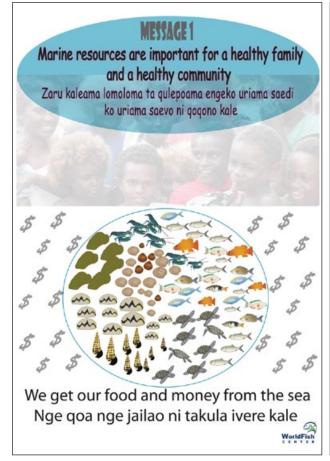
Resources and materials

The printed message materials were originally constructed in English and pidgin. Most text was translated into local language either during discussions or after each workshop. Participants requested that texts be made available in English as well as local languages, to ensure accurate understanding of local translations.

The idea was to provide key women from the community with the information and resources to go back to their community and explain what they had learned, particularly to other women and children. As funds would not necessarily be available for ongoing support of awareness-raising activities, this had to be achieved on an opportunistic basis.

Participants were encouraged to spread the messages and knowledge to their community at **any forum** where they felt comfortable conducting such informal training. Considering that women may not have time in their busy lives to fit in targeted training, the suggestion was to use any church gathering or women's meeting as an opportunity.

After the workshops, follow up assessments show that awareness conducted by the participants has ranged from informal discussions in the evenings as people gather together on the artificial islands of Lau, to funded and planned awareness tours by the women of Kia, where the Kia District Marine Resource Management Committee has registered as a community-based organisation and obtained a small grant from the Global Environment Facility to fund a number of activities, including this awareness raising. The participants from the Jorio region of Vella Lavella reported that they had been able to conduct awareness activities for women during church meetings and community gatherings. On Fauro Island, as a result of the participants from a non-project site (Kariki) attending the workshop, a marine resource management committee was formed and subsequently development of management plan got under way.



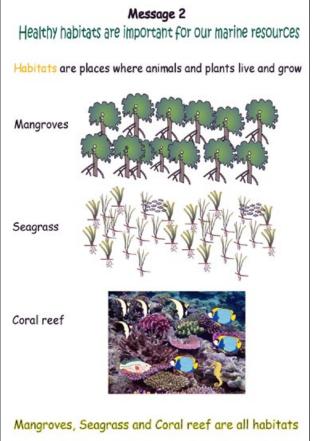


Figure 2. Message 1 (in English and Vella Lavella language) and Message 2 (in English)

Workshop evaluation

The women who participated in the workshops were asked to respond to a few questions before and after the workshops to evaluate their level of knowledge about marine resource management and their level of confidence in discussing this topic.

Eighty-one per cent of respondents indicated that they had never participated in a marine resource management workshop before. However, 23% of the respondents from both Vella Lavella and Toumoa had participated in a land resource conservation or management workshop. Twenty-one per cent had previously been involved in community discussions on marine or land resources, and 18% said that the reason for participating in community discussions was to contribute thoughts to the resource management in their area.

Prior to the workshop, participants expected to learn about marine resource management (48%) and marine resources in general (31%) and there was also some mention (14%) of learning about marine and land resources (Fig. 3). A minority of 7% had no expectation, as this was the first workshop they had attended.

At the end of the workshop, all the participants indicated that the most important topics learnt at the workshop were marine resources and habitats (74%), management (17%) and general marine awareness (9%).

Participants were also asked to identify subjects they had found difficult to understand (Fig. 4). These were marine resources,

specifically biology (46%) and life cycles (27%). For example, additional time was required to understand the relationship between polyps and zooxanthellae, the fact that a clam is hermaphroditic but cannot fertilise its own gametes, and the fact that coral reefs are made of living animals. While these are neither straightforward nor easy to grasp in a short time and needed to be described in the various languages, they were nevertheless of great interest

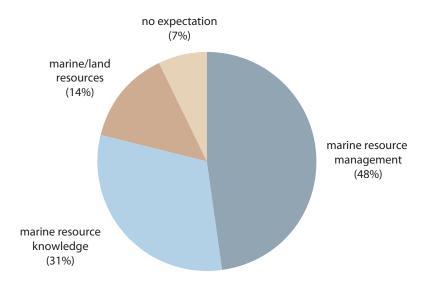


Figure 3. New things participants hoped to learn from the workshop. Some respondents gave individual responses before the workshop and group responses after it. Group responses have been treated as an individual response. (n = 31)

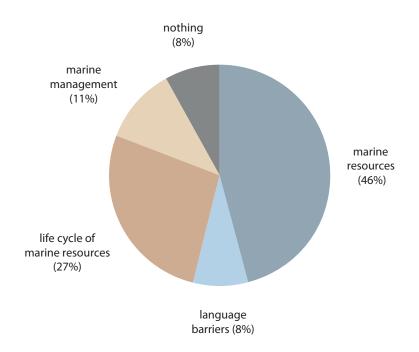


Figure 4. Subjects that participants found difficult to understand in the workshop

to the participants, particularly if they contrasted with common local understanding — that corals are dead stones, for example, and that different coloured clams of one species represent males and females.

In addition to marine biology and life cycles, a further 11% indicated that marine management was a difficult subject and 8% of participants (all from the Lau workshop) reported that language barriers

made things difficult during the workshop. Eight per cent of the participants felt that they had understood all the subjects dealt with in the workshop.

Before the workshop, the participants were asked about their confidence in speaking on marine resource management issues; first on the community level, which would include men in the audience, and, second, to a targeted group of just women and children. All the women said they were very confident or confident in speaking to a full community, and more than half (67%) said they were very confident and 33% said they were confident about speaking to a targeted group. When asked how they felt after having completed the workshop, 92% said they felt more confident, while 8% said they felt the same as at the start of the workshop.

Participants identified additional topics that they would like to have included, such as marine resource and life cycle information on specific animals (60%); aquaculture and fishing methods (20%) and economic issues (10%). Having completed the training, the women expressed their desire to see changes in their community as a result of their feedback and contributions after the workshop. Changes include: improvements in marine resource management (53%), more cooperation in management of resources (20%), replenished marine resources (20%) and protection of marine resources (7%).

Discussion

A number of lessons have been learned from the experiences of the Solomon Islands trainers in conducting the workshops.

- 1. Selection criteria. The selection criteria were necessary as there was rapidly increasing interest when word about the workshops spread. In the latter workshops where the group size was increased, it was necessary to tailor training further to effectively address different levels and styles of learning in the group. To retain the intention of the train-the-trainer's approach, it is important not to turn these workshops into a general awareness programme, which should be handled separately.
- 2. Training location. Although there are benefits to conducting the training in a nearby urban centre, facilitating workshops for women within the community is our preferred approach, as the number of women can be increased and money can be spent in the community to support cash flow. To date we have experienced a high degree of support among other community members for the workshops, such that the attendees were well supported in terms of childcare and other daily tasks. Moreover, cash-compensation for lost opportunities to go to the garden, for

- example, also made it easier for the women to concentrate on the training.
- 3. Workshop topics. Having short key messages helps participants remember the main points when spreading these messages to other women and children at a later time, whether through informal story-telling or facilitating a village workshop. Short messages that cover basic concepts are suitable for participants with different learning skills and educational backgrounds. Messages developed around subject areas that were known to be of interest to women proved to encourage effective engagement.
- 4. Modes of delivery. The more time spent on getting the women to explore their own knowledge rather than trainers giving lectures or presentations, the greater their confidence was in their own understanding and ability to pass on the right message. The participants in these workshops preferred diagrams and pictures, finding them easier to understand than having to interpret meanings in a lot of words. Language translations of key points by participants (or trainers when possible) were well received. Group activities promoted more constructive discussions than individual work and enabled participants with better writing skills to assist others in the group. Group activities also utilised the various skills of the talkers and the non-talkers. Mixing the women to balance these characteristics encouraged the quiet and shy women to contribute to discussions.

Summary

The women's train-the-trainer workshops that specifically targeted the role that women can play in supporting their communities' marine resource management initiatives have been very well received by the participants and in general have received support from the wider community resource management committees. This is evidenced by some of the women joining men who represent the committees or technical teams in conducting awareness activities in neighbouring communities, and/ or being supported to undertake such initiatives. Although all the women had relatively high levels of confidence at the start of the workshops, they felt still more confident after the workshop about discussing marine resource management concepts in their communities. Each group has made some effort to talk about what they learned in formal and informal settings. Useful feedback from the participants on materials and techniques used; and lessons learned on effective candidate selection, methods of delivery and location of workshops will be incorporated into recommended training materials and protocols for CBRM in Solomon Islands.

Acknowledgements

We are very grateful to the women who participated in the workshops for their enthusiasm to learn more about marine resource management and for their feedback, which will improve future delivery of this programme. We thank Joanne Pita (FSPI) for being a co-facilitator at the Lau workshop and for providing useful insights; WorldFish Center team members from Gizo and Honiara for logistical support in getting the team and participants to and from workshops, and Ministry of Fisheries and Marine Resources and provincial fisheries officers for providing logistical support and staff on field trips.

This work is generously funded by the Australian Centre for International Agricultural Research (ACIAR) through project FIS/2007/116: Improving resilience and adaptive capacity for fisheries dependent communities in Solomon Islands.

References

- Boso D., C. Paul and Z. Hilly. 2010. Lessons learned from community-based adaptive marine resource management in Solomon Islands. Honiara, Solomon Islands: WorldFish Center.
- Boso D. and A. Schwarz. 2009. Livelihoods and resilience analysis in two community clusters; the Funa'afou and Foueda artificial island communities. WorldFish Center Report to ACIAR, project FIZ/2007/116.

- Govan H. et al. 2009. Status and potential of locallymanaged marine areas in the South Pacific: meeting nature conservation and sustainable livelihood targets through widespread implementation of LMMAs. SPREP/ WWF/WorldFish-Reefbase/CRISP. 95 p. + 5 annexes.
- Kronen M. and A. Vunisea. 2009. Fishing impact and food security Gender differences in finfisheries across Pacific Island countries and cultural groups. SPC Women in Fisheries Information Bulletin 19:3–11.
- Paul C., Hilly Z., Bennett G. and Schwarz A. 2010. Livelihoods and resilience analysis in Dovele, Western Province Solomon Islands. WorldFish Center Report to ACIAR, project FIS/2007/116.
- Solomon Islands Governement. Report on the 1999 housing and population census. Statistics office.
- Vunisea A. 2008. The 'culture of silence' and fisheries managment. SPC Women in Fisheries Bulletin 18:42–43.
- Weiant P. and S. Aswani. 2006. Early effects of a community-based marine protected area on the food security of participating house-holds. SPC Women in Fisheries Information Bulletin 19:16–31.