Supplementing conservation with appropriate livelihood activities: A case study of Vella La Vella, Solomon Islands

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Abstract

Community-based resource management (CBRM) has been widely used for inshore fisheries in the Pacific Islands region. In Solomon Islands, CBRM is recognised as a strategy to enhance food security, adapt to climate change, and conserve threatened species. Yet even with its national recognition, rural communities are still faced with economic and social challenges while trying to manage their resources. As such, it is vital that while communities are engaged in resource management, they are also involve in sustainable supplementary livelihood activities that will sustain their living. From a diagnostic workshop conducted at Pusiju Village in Southeast Vella La Vella in Western Solomon Islands, four generic strategies were formulated from the community's strengths, weaknesses, opportunities and threats. The diagnostic analysis was followed by assessment of six livelihood options to realise their suitability for supplementing the community's forest conservation initiative. From the assessment, it was evident that the four strategies form the basis for implementation of livelihood options identified during the workshop. Thus, despite variation of requirements and/or resources to make the livelihood options successful, the main goal is that these requirements will enable the livelihood options to continue into the future without failing.

Introduction

Throughout the Pacific Islands region, coastal communities are experiencing dwindling supplies of natural resources, which is being exacerbated by both direct and indirect anthropogenic effects. In Solomon Islands, population growth, changing climatic conditions, and unsustainable developments such as logging, agricultural activities, and human settlements among other factors pose a direct threat to both terrestrial and marine resources. Coupled with the challenges of limited access to financial resources, markets, political instability, global economic downturn, and the recent COVID-19 pandemic, these hurdles create a huge challenge to the health and livelihood of rural communities. According to a survey conducted in 2012–2013 (Solomon Islands National Statistics Office and World Bank 2017), 12.7% of the country's population live below the basic-needs poverty line. This, however, varies according to province, and depends on the population size and poverty rate.

Successive governments have developed centralised state control or top-down coastal protection and management approaches that are merely politicised, and most often do not meet the requirements of rural communities. Consequently, rural communities often have minimal engagement and support from the central government, which also contributes to a number of failed projects in the past. Many commercial fish stocks, and terrestrial flora and fauna, continue to dwindle in the islands while management policies are collecting dust on office shelves.

In most Pacific Island countries, top-down resource management efforts and livelihood-related approaches are too costly, both financially and in terms of scarce human resources, to be of much practical value for broad-scale national application (Ram-Bidesi et al. 2011). Incompatibility of inherited government systems with the social and geographical realities of some independent Pacific Island countries is also an issue (Govan et al. 2009). For Solomon Islands in particular, the diversity of cultures and remoteness of islands increase the difficulty of developing a generic top-down approach that can be applicable for all rural communities in the country.

A move from a top-down to a locally based management approach that is more adaptive would be more suitable for rural Solomon Islands communities. While the emphasis is for the management to be driven by communities, most often communities collaborate with partner organisations and/or government representatives for technical support. This approach corroborates a study by Wheeler and Root-Bernstein (2020) that emphasised co-management that leads to informed decision-making when indigenous and traditional knowledge are combined with science in the process. Currently in the Pacific Islands region, CBRM tends to dominate inshore fisheries management strategies. Specifically, for Solomon Islands, CBRM is recognised as a strategy that improves food security, adapts to climate change, and conserves threatened species by facilitating rural participation and enabling local people to make their own plans for managing resources (Sukulu et al. 2016). With the recent ecosystem approach to fisheries management, CBRM now extends from ridges to

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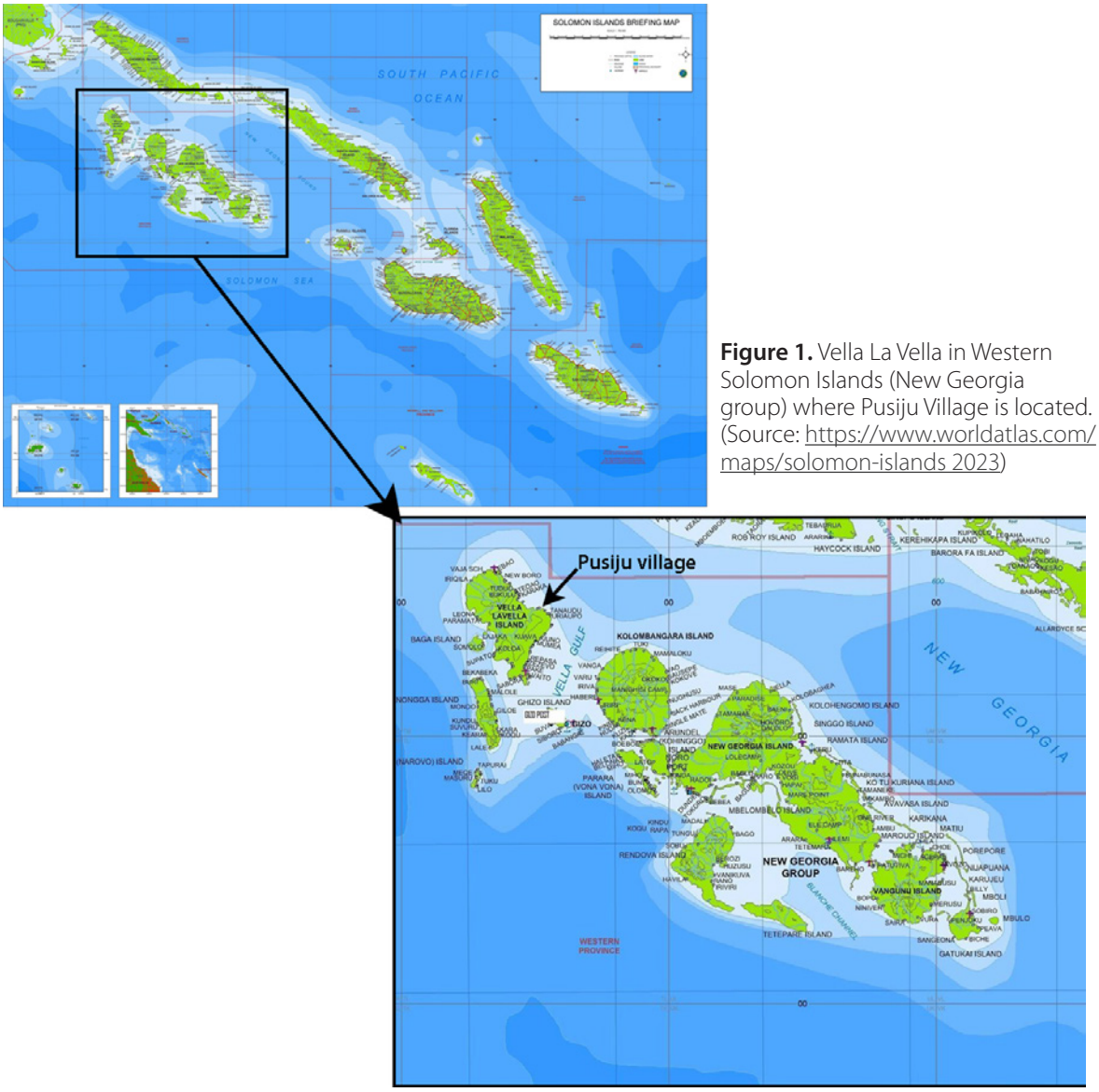

Figure 1. Vella La Vella in Western Solomon Islands (New Georgia group) where Pusiju Village is located. (Source: https://www.worldatlas.com/maps/solomon-islands 2023)

reefs where it builds on customary land and marine tenure, traditional ecological knowledge, and existing leadership structures to maintain resources. Nevertheless, even with this more holistic approach, communities are still faced with economic challenges with regard to increasing population, food insecurity, higher food prices, loss of foreign currency from imports, changes in culture due to influences from intermarriage, and pressure from destructive development that seduces people with high incentives.

Some partner organisations advocate that communities should be incentivised with alternative livelihoods to effectively manage their resources, although the sustainability of such an approach will depend entirely on the affiliation of the partner organisation to the project (Govan et al. 2009; O'Garra 2007). Therefore, unless community-driven sustainable supplementary livelihood options are in place, exploitation and dwindling resources will continue due to limited economic activities available for communities. As articulated by Blythe et al. (2014), Collins et al. (2009), Finkbeiner (2015), Hanh and Boonstra (2018), and Mills et al. (2017), sustainable livelihood options can improve living standards of rural households and empower their ability to face uncertainties. It is, therefore, important that while communities are actively engaged in resource management, they should also participate in sustainable supplementary livelihood activities that would help improve their wellbeing.

In this article, we present an investigation of how livelihood options are assessed in a four-day interactive workshop with Sirubai Voko Tribal Association (SVTA) communities using participatory diagnostic tools. SVTA is a community-based organiastion in southeast Vella La Vella in Western Solomon Islands (Fig. 1).

It is one of the few CBOs that firmly stands against unsustainable development such as logging to effectively conserve its rainforest. To date, the rain forest has been under protection for almost a decade with no human disturbance. In the analysis process, helpful and harmful factors in the communities were identified using a strengths, weaknesses, opportunities

and threats (SWOT) analysis followed by an assessment of six existing livelihood options using the Supplementary Livelihood Options for Pacific Island Communities (SLOPIC) tool. We draw on this investigation to explore how supplementary livelihood options could be supported by identifying what makes a livelihood option worth undertaking or rejecting (O'Garra 2007). This simple process can be replicated to other contemporary Pacific Island communities that are also challenged with the pressures of resource degradation, climate change and limited options to sustain livelihoods.

Methodology

SWOT analysis

The exercise was conducted by three groups (men, women and youth) to identify factors that are helpful and/or harmful to the communities of Pusiju and Valapata. This was done following the SWOT analysis protocol described by (Sarsby 2012). Information from the SWOT analysis was then used to develop the following action strategies: growth strategies, internal development strategies, external development strategies, and survival strategies. These generic strategies should be established before the two communities plan to seriously engage in supplementary livelihood activities. This tool was used purposely to help reduce communities' chances of failure by recognising what is lacking, and then eliminating the hazards that would otherwise cause harm to their livelihoods and wellbeing.

Pairwise ranking

Following the initial analysis above, the three groups ranked the threats from the SWOT to help facilitate the development of action strategies. Here we used the pairwise ranking tool described by Govan et al. (2008) to compare threats in pairs to choose which is the most critical. The most critical threats were identified by each group to help us match and convert the harmful factors from the SWOT into helpful factors. Thus, the pairwise ranking will help to direct where SVTA management should focus their efforts and time to prevent the threats identified from undermining their progress.

SLOPIC

Eleven livelihood options were identified but only six were assessed during the workshop due to time constraints. The assessment was conducted following the protocol described by (Govan et al. 2008). Basically, the SLOPIC tool is used to assess supplementary livelihood options that are appropriate and sustainable for communities. While it is seen as a guide towards success, the critical perception advocated in this tool is building on what the community has, and less so about depending on external sources. According to O'Garra (2007), most projects that are ongoing without relying on subsidies are those that have involved baseline studies and continuous monitoring all throughout. As highlighted by Govan (2011) in the SLOPIC guide, this tool is used to assist community members choose different livelihood options, most of which may be existing options, and assessing these options to see how promising they are for communities. A promising livelihood option is one that continues into the future, coping with changes and disasters, and without losing the things that make the livelihood possible.

Livelihood options

The assessment for sustainability of supplementary livelihood options was conducted by analysing the following resources: natural resources, equipment, people and skills, market and transport, finances, and support and information.

Figure 2. Participants during the diagnosis workshop at Pusiju Village, Vella La Vella.
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Results

SWOT analysis and pairwise ranking

We chose to analyse only the most critical threats and common opportunities, weaknesses and strengths. Outlined in Figure 3 are the generic strategies formulated from the diagnostic exercise.

SLOPIC exercise

Six livelihood options were identified in the SLOPIC exercise, and include betel nut, canteen, banana, piggery, kava and fishing. Figure 4 shows some important resources that the livelihood options being assessed will require in order to succeed. Most of the needs identified from the assessment are also covered under the four generic strategies shown in Figure 3.

Figure 3. Four generic strategies formulated from the diagnostic exercise.

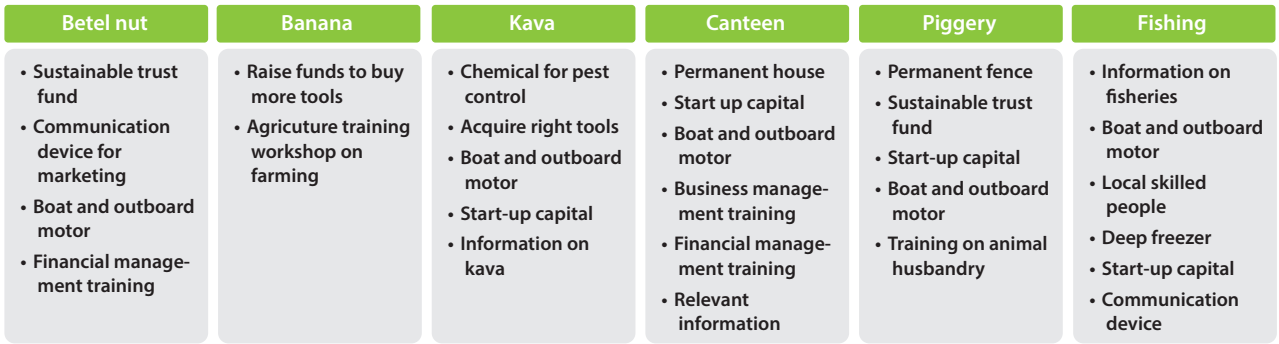

Figure 4. Resources identified during the assessment that will make the livelihood options more successful.

Discussion

The SWOT analysis indicated a number of helpful factors that, in principle, form the basis of the success of SVTA and previous community projects implemented by the communities of Pusiji and Valapata. Cooperation and/or oneness, good leadership, information sharing, and consultation (among other factors) were found to be the key strengths of the two communities. This may be because every individual in Pusiju and Valapata are closely related through common ancestry and inheritance. A study by Ross et al. (2019) corroborated with these findings by highlighting that community participation and collaboration is an important element in supporting management and sustainability in many communities in the Asia-Pacific region.

On the contrary, community weaknesses that were discovered during the exercise included issues of weak leadership, lack of communication, lack of education, and laziness. These issues usually lead to poor management that often affect the demand for a desired resource and weaken the cohesiveness of a community (Singleton 2000). Such situations may pose challenges to management in rural Solomon Islands communities, yet the associated weaknesses can be converted into strengths to expedite the development of internal factors that will help the community to progress. As highlighted in the internal development strategies in Figure 3, when these weaknesses are converted into strengths, a number of new opportunities will open up for the community to improve (Sarsby 2012). Moreover, the communities can move forward with internal developments by capitalising on the concept of "social capital" as proposed by Malherbe et al. (2020). Social capital in this context basically involves the norms and networks that allow people to work together towards common goals. The key attributes of social capital are oneness and/or social cohesion and good leadership, which in the case of SVTA, are key strengths. Thus, according to Gutiérrez et al. (2011) and Jupiter et al. (2017) these attributes, coupled with effective implementation and community ownership of the process, will determine success in resource management.

In rural communities, deliberation on opportunities is sometimes overrated and often raises expectations. Nonetheless, opportunities can be successfully matched with existing strengths to develop growth strategies that promote progress in the community. In fact, growth will only happen when the community does more on what it is good at, and invests on those factors that enhance its capability (Sarsby 2012). Given the technical capacity of SVTA to lead development initiatives, it is auspicious that enthusiastic individuals especially youths in both When our team visited the communities of Pusiju and Valapata, it was obvious that SVTA was investing more in education and sports, which are crucial for their progress. Social activities such as sports help to promote strong cohesiveness by increasing self-esteem, community identity, and unity that can advance other developments in the community (Skinner et al. 2008).

When rating the threats identified from the SWOT analysis (using a pairwise ranking tool), land disputes, high illiteracy rates, poor leadership, and poor management stood out as the most critical threats that SVTA management must prevent at all costs. Land is a very important natural resource that all livelihood options will depend on to operate (Govan 2009). In Solomon Islands, land is a tribal inheritance. Descent-based land ownership, however, has hindered quite a number of development projects in the past when disagreements arose from unfair distribution of livelihood assets (Hviding 1993). To prevent land disputes, SVTA must be proactive to establish cordial working relationships with sister tribes as indicated in the survival strategies in Figure 3. Correspondingly, rural communities such as Pusiju and Valapata will move away from threats to poor leadership and poor management when their leaders are empowered with the appropriate capacity (Warner 2000).

Besides the SWOT analysis above, quite several requirements were identified from the assessment of livelihood options using the SLOPIC tool (Fig. 4). The most common requirements highlighted were: sea transport, farming and fishing equipment and tools, communication, relevant information, capacity building, and establishment of a sustainable trust fund. While the latter is paramount for the sustainability of the other requirements, information and capacity building are equally important to ensure that technical knowledge and skills are available in the community (Warner 2000).

Although it is important to specify the resources required for each livelihood option, this also depends entirely on the personal judgment of whoever is doing the assessment. Despite minor variations in the assessment process, the important prerequisite for sustainability is that communities build on what they have instead of depending entirely on external sources. Apparently, some of the requirements must be acquired elsewhere outside of the community, although the generic strategies in Figure 3 should offer a useful guide to focus only on what is more appropriate for the community. Thus, livelihood options that are community-led, and build on community innovations are very likely to be successful.

For the case of SVTA, assessing the sustainable supplementary livelihood options is very important as communities had already been bombarded twice in the past 10 years to give in to logging. Hence, in order to progress further, SVTA must capitalise on its key strengths that corroborate with Albert et al. (2010) who also emphasised that community support and leadership are key factors for success in resource management. Specifically, from the assessment, betel nut, banana and kava will not require much financial resources to start although they will require some funds for transport and marketing. Unlike the first three options, canteen, piggery and fishing will require some initial capital to start and operate. According to the community group assessing banana as a livelihood option, banana is very sustainable because there are two types: the one that is quickly harvested (*meqora naka*) is quite suitable for larger households, and the other, which

takes longer to before it can be harvested (*qole naka*) is farmed mainly for food security. Unlike banana, betel nut and kava are long-term economic activities that normally take more than three years to be harvested, although comparatively, the financial benefit of kava is far better than all the other economic activities. Piggery and canteen will succeed when the requirements highlighted in Figure 4 are met. Moreover, fishing is a sustainable livelihood option that can continue as part of the day-to-day activities of the community. Fishing is not only done for income generation, but also contributes to food security, which is essential for future generations.

Regardless of the different costs incurred for each livelihood option, the important goal is sustainability. As indicated by O'Garra (2007), the key indicator of success is that the livelihood activity is able to persist long after subsidies and/or external funding is utilised. Although the assessment of livelihood options to identify the most appropriate option is vital, it is also important to diversify options as a form of self-insurance so that when one option fails, the community still has other options (Haider et al. 2018). All in all, the requirements highlighted above are important for the success and sustainability of these different livelihood options.

Conclusions

A management scheme that combines traditional and indigenous knowledge with modern-day science is very likely to succeed. This is possible for contemporary communities in the Pacific Islands region because such an approach will reflect local knowledge, and will help communities make plans that build essentially on what they have. From the study, it was obvious that despite the weaknesses identified during the diagnostic workshop, the development strategies formulated from the strengths and opportunities will help SVTA management and member communities to overcome their weaknesses and progress. The most crucial strategies that may leverage sustainability in any conservation programme in Pacific Island countries include: capacity building to enhance quality leadership and technical skills within the communities; collaboration and networking; and sustainable supplementary livelihood options. Implementation of these strategies will promote social cohesiveness, growth, development and effective management of natural resources. Despite threats such as land disputes, high illiteracy rates, poor leadership, and poor organisational management with regard to resource management, we have seen that contemporary community-based organisations such as SVTA can build on their most important strengths, and utilise every possible opportunity to move away from these threats. In addition, identifying the most appropriate supplementary livelihood options that are fitting for the communities is also crucial. Thus, despite any cost that can be incurred to start and/or operate the livelihood options, the important objective is that the options that are chosen are realistic and sustainable.

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