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**Assessment of the Microfinance Initiatives of the
Post-Tsunami Sustainable Coastal Livelihoods Program
Thailand**



2007

Brian Crawford

**The Post-Tsunami Sustainable Coastal Livelihoods Program
In Association with
The Sustainable Coastal Communities and Ecosystems Program
(SUCCESS)**



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Cover Photos:

Left: Green mussel farmer (Dawn Kotowicz)

Middle: Community meeting (Pam Rubinoff)

Right: Muslim women's headscarf making livelihood group (Pam Rubinoff)

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1. Introduction

Livelihood initiatives are an important element of almost all Integrated Coastal Management (ICM) Programs implemented in developing countries around the world. There is a growing body of empirical evidence which has demonstrated that successful livelihood strategies increase the probability of success of community-based coastal management programs (Pollnac et al. 2001a). More recent research has also demonstrated the link between tangible benefits and the sustainability of ICM programs (Christie et al. 2005, Pomeroy et al. 2005). Promotion of livelihood activities that generate increased income is an important form of tangible benefit. The premise is that if people obtain such tangible benefits they will be more willing to be involved in and support coastal resource and environmental management objectives. Indeed, ICM is often defined as improving quality of life of coastal residents while sustaining or improving the quality of the coastal environment. Therefore, it is not surprising that ICM programs consistently promote sustainable livelihood approaches.

There are many examples of ICM programs with livelihood components. For instance, the livelihoods approach is a major feature of the URI-USAID Sustainable Coastal Communities and Ecosystems (SUCCESS) Program. SUCCESS is not unique in the premise concerning connections between livelihoods and successful ICM. Environmental NGOs such as TNC and WWF as well as bi-lateral donors and development banks are pouring millions of dollars into livelihood activities as components of conservation and resource management initiatives. For instance, the USAID Tanzania strategy for conserving bio-diversity is through a livelihoods approach. A recent ICM and marine conservation initiative funded by ADB in the Philippines includes a large livelihood development component and the World Bank in Tanzania is also investing several million dollars in livelihood development as part of a large scale marine and coastal environmental management initiative.

The livelihood activities of coastal management programs are often referred to as alternative, diversified or supplemental livelihoods. The underlying assumptions of these terms are several. Alternative livelihood development often implies a switch of livelihoods with the either explicit or implicit attempt to exit fishers from fisheries that are considered fully exploited or overexploited. Most experts feel that almost all nearshore fisheries exploited by small scale fishers in developing countries are overexploited and therefore in need of effort reduction strategies (CRC 2006a). Therefore providing alternatives to fishing provides opportunities for these individuals to leave fishing for other occupations, thereby reducing pressure on the fishery resource. However, several studies (Pollnac et al. 2001b, Sievanen et al. 2005) have demonstrated that fishers often are unwilling to exit the fishery as they are satisfied or enjoy this type of occupational life style. Attempts to exit fishers often fail, where fishers may experiment with an alternative but then eventually wind up back at what they know and love to do so well – fish. A critical challenge for programs promoting alternative livelihood opportunities is finding strategies that successfully exit fishers from fishing and move them permanently into other occupational types.

Supplemental and diversified livelihoods is a somewhat different approach, with the intent being not necessarily to permanently exit fishers from fishing, but to reduce household dependence on fishing as a source of income and food. In this case reduction of fishing

effort may or may not come into play, with the hope that even if fishers do not exit, they may perhaps reduce their individual fishing effort. Diversification is also now evolving into another emerging concept referred to as community resilience, especially in the wake of the December 2004 Indian Ocean tsunami. The premise is that livelihood diversification allows households to rebound from a disaster faster than non-diversified households, making them more economically resilient.

Whatever the livelihood strategy may be, it is clear that this is high on the agenda of most policy makers and planners with respect to small scale fisheries management, ICM and marine conservation programs. With significant investments being made in livelihood strategies by national governments, international donors and development banks, ensuring a high degree of success is essential.

Unfortunately, there is also a growing body of anecdotal evidence that suggests many of the livelihood activities are not having the intended impacts on increasing household income in coastal communities, or reducing pressure on coastal and marine resources. Additionally, there have been very few rigorous assessments to date on livelihood activities in relation to marine conservation and resource management issues. For this reason, SUCCESS selected this topic as the main theme for a cross portfolio global learning agenda. Since the three field sites in Nicaragua, Ecuador and Tanzania as well as the associate award site in Thailand – The Post-Tsunami Sustainable Coastal Livelihoods Program - have significant livelihood components, they provide living laboratories for this learning agenda, and the local partners involved in their implementation are an important clientele of the learning outcomes.

1.1 Goals of the Assessment

The assessment of the Post-Tsunami Sustainable Livelihoods Program is part of a much larger multi-country assessment being undertaken by the SUCCESS Program. There are two main outcomes expected from the field-level assessments:

- A well documented assessment of the impacts of project livelihood strategies on coastal households, and ICM initiatives, and;
- An improved understanding of the factors that lead to successful and not successful livelihood components of ICM initiatives.

The learning agenda intends to take these findings to achieve another set of outcomes:

- A set of recommended strategies are formulated that improve the probability of achieving successful livelihood activities as part of marine conservation and resource management initiatives.
- Improved capacity built among our local partners for integrating successful livelihood strategies into on-going ICM initiatives.
- Information is made available to donors and practitioners on how to design and implement better livelihood strategies as part of marine conservation and resource management strategies through a series of products and outreach events.

This report narrows the Thailand assessment a bit further by just looking at the microfinance component which was a major feature of the livelihood component of the program.

1.2 Project Overview

The tsunami of December 2004 devastated Thailand's entire Andaman coast. A total of 392 villages and some 54,500 people were affected by the tsunami, with more than 5,000 deaths recorded and many others missing. The disaster devastated the local economy by crushing fishing boats, along with engines and gear. Destroyed too were homes, public buildings, and coastal infrastructure, including roads and bridges. The tsunami had its greatest impacts on rural coastal communities, many of which were already poor and economically vulnerable with few livelihood options. Recovery is especially difficult because many of those that survived lost the ability to practice their livelihoods.

The USAID Regional Development Mission/Asia responded with the Post-Tsunami Sustainable Coastal Livelihoods (SCL) demonstration project in five villages in the Province of Ranong that helps coastal communities of Southern Thailand rehabilitate livelihoods, become more resilient to future natural disasters, and adopt livelihood practices that use natural resources more sustainably. Instead of just building back the way it was, this project strives to build it back better. The project has a 30 month time horizon, with an end date of September 30, 2007. It is implemented as a partnership between the University of Rhode Island, the Asian Institute for Technology (AIT), University of Hawaii-Hilo and other local partners as an Associate Award under the umbrella of the SUCCESS Program. It is a demonstration project, meaning that knowledge and lessons learned from what is developed and put in practice can be applied to other at-risk coastal communities in Thailand or other countries in the Asia region.

The Thai government and other donors have addressed physical reconstruction needs. The SCL project fills a different niche by seeking to build coastal community resilience with a focus on rebuilding the economic basis of livelihoods and on giving coastal people the skills and resources for self-recovery. Key elements of resilience include building livelihood opportunities that do not degrade the natural environment, protecting ecosystems, reducing vulnerability to natural hazards, and strengthening local governance. Project interventions combine ICM and hazard management frameworks. This project has five fundamental and inter-related components:

Build a common vision for action. The project works closely with local government authorities and community leaders to build local ownership and establish a common vision for rehabilitation. The project's activities are accomplished by community efforts and collaboration. Actions that make a genuine difference in the quality of people's life are celebrated with public events and ceremonies that foster support for the project's goals and objectives.

Reestablish and diversify environmentally sustainable livelihoods. Microfinance, enterprise training and extension, demonstration of new livelihood practices, small grants, cash-for-work, and establishment of a Kamphuan Community Learning Center are strategies to

reestablish and diversify livelihoods. Environmental sustainability is supported through training and capacity building in marine resource co-management, environmental education, village recycling and composting, environmental screening of livelihood practices, and water quality monitoring.

Enhance community readiness and resilience to coastal hazards. The project builds readiness and resilience to natural hazards in coastal communities through establishment of local disaster preparedness committees, mapping of areas at risk to inundation, delineation of evacuation routes, training, village disaster management planning, evacuation drills, and First Aid training.

Build capacity for planning and decision-making in the coastal zone. The project provides training and facilitates planning with local and national partners.

Share experience and best practices. Regional learning workshops and study tours are convened to share lessons learned with others in tsunami rehabilitation and disaster preparedness.

These activities are designed to achieve the following objectives:

1. Negotiate with local and national Thai authorities, and most specifically with communities themselves, on a unified approach to rehabilitation in the targeted communities
2. Reestablish sustainable livelihoods that feature the reduction of pressures on overexploited fishery resources, promote low impact aquaculture practices, and make full use of the benefits of responsible tourism
3. Develop a diversity of alternative coastal livelihoods and micro enterprises that are viable and environmentally sustainable
4. Build capacity at village, Tambon and provincial levels for disaster prevention and preparedness, and improved integration of government policies and procedures in the coastal zone
5. Promote learning and the efficient exchange of techniques and experience in tsunami rehabilitation in Thailand and other tsunami-affected countries

Microfinance and Livelihood Activities: In Ranong Province, Thailand, the SUCCESS Associate Award funded Project has initiated microfinance revolving funds in five communities to restart and diversify livelihoods. Under the revolving fund, low-interest loans have been released to tsunami affected micro-entrepreneurs. As loans are repaid, additional micro-enterprises will be able to borrow ensuring that loans are available to a larger number of tsunami affected families to build back their livelihoods. So far, over 300 loans have been provided for microenterprise development within fisheries, aquaculture, livestock, tree farming, trading, food processing, and fish buying. Grants have also been given for boat replacements, catfish hatchery, an herb drying machine, and to start a food catering business that has provided catering services to organizations doing rehabilitation work in the villages. Implicit in the livelihood development approach of the program are two additional objectives that integrate with fisheries co-management and disaster prevention activities:

1. Provide opportunities for alternative livelihoods for fishermen willing to exit the overcapitalized and overfished fishery.
2. Build community resiliency through diversification of livelihoods among beneficiaries served.

1.3 Site Description and Beneficiaries

Five tsunami-affected villages in Ranong Province were selected for the demonstration initiative (Figure 1). Located within Laem Son National Park, these villages have a population of about 5,000 persons and are primarily dependent on fishing and agriculture for their livelihoods.

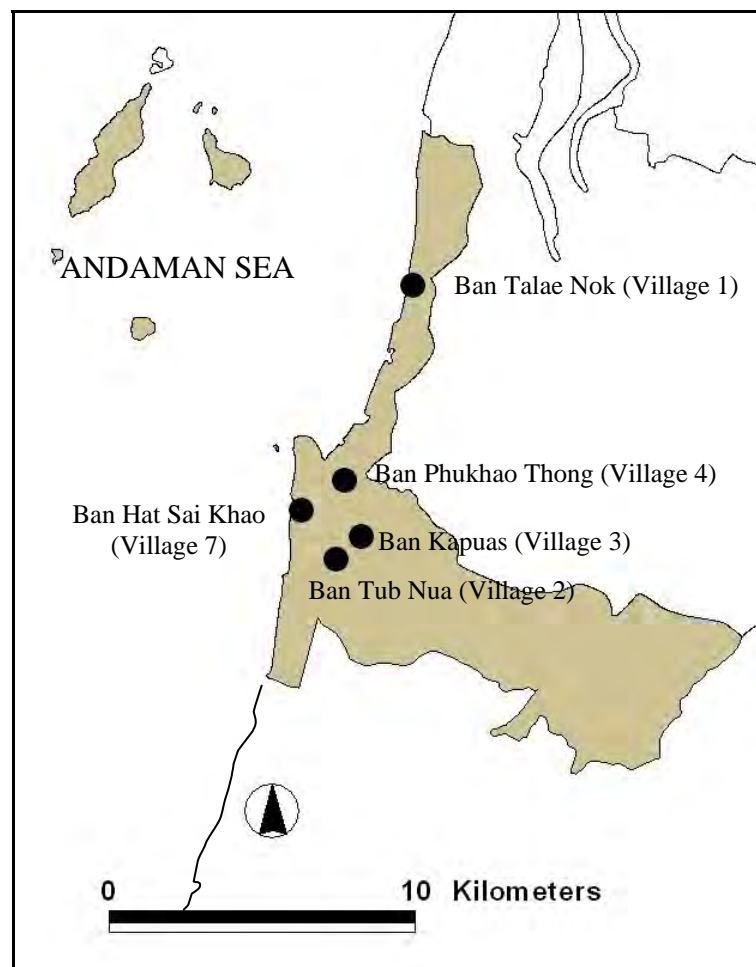


Figure 1: Map of the Tambon Khampuan and tsunami-affected villages assisted

Participants in the project's livelihood activities are individuals from four of the seven villages located in Tambon Khampuan. Three of these were directly affected by the tsunami where infrastructure and homes were damaged or destroyed and loss of life or injury occurred. One of the villages was indirectly affected as many victims moved into this area,

and some residents had property or where in the coastal villages at the time the tsunami struck. The Program targeted tsunami affected households. The total number of Program beneficiaries that were provided some form of livelihood support as of September 2006 was 1187 persons, with 770 persons received training and 417 received some form of grant package (CRC, 2006b). There is likely some overlap among individuals that received training and grant packages. Of those that received grant packages, 311 persons (60 % female) received microfinance loans (CRC, 2006b).

Livelihood types supported by the PSCL Program, either through the microenterprise loans or through direct assistance, make up a diverse occupational mix that reflects the diversity of livelihoods currently operating in the communities. These include:

- Fisheries, including fishing boat replacements, gear making and processing,
- Agriculture, including ginger, rubber and fruit production, cattle and goat raising and food processing
- Aquaculture, including finfish cage culture, green mussel, frog, catfish and tilapia farming
- Small shops and businesses, including headscarf making and trading

Most enterprises supported are individually owned or household enterprises. A few are more cooperative in nature, especially those supported through direct assistance in the form of subsidies, training and technical assistance. For instance, the catfish hatchery is group run and managed, head scarf making is done individually but the raw materials and sales are through a cooperative-like group. Few of the microenterprise business were identified as group businesses.

The PSCL Program utilized two basic strategies to promote livelihood activities. The initial objective was to restart, and diversify sustainable livelihoods affected by the tsunami. However, as the project progressed, the concepts of livelihood resiliency also cropped into the terminology used by project staff. The first strategy was the use of microenterprise loans which have been used extensively around the world to promote enterprise development in poor rural and urban community settings. The second strategy included a varying package of direct technical assistance, training and subsidies to small groups of individuals for selected enterprises. In this case, many of the enterprises assisted were new types of businesses for the participating beneficiaries or new types of enterprises being introduced to the area. This is in contrast to the micro-enterprise strategy which was primarily directed to restart or expand existing businesses.

1.4 Methodology

This report is based on key informant interviews of several dozen individuals undertaken in February of 2007. Key informants included project field staff, Siri Consult who provided assistance in setting up the village banks, village banking committee members from each village bank, as well as loan beneficiaries from each of the four villages and representing different livelihood types that were provided support through loans. These interviews included both men and women and were conducted in the villages at interviewee homes as

well as a few interviews conducted in the project office or at local eateries. Interview information was supplemented by secondary data contained in project reports, office records and databases.

2. Micro-Enterprise Development through Village Banking

2.1 Objectives of the microfinance loan activities

One of the main objectives of the PSCL Program was to help households affected by the tsunami restart and rebuild their livelihoods. The Participatory Rural Appraisal conducted in the beginning of the program identified lack of capital as a key constraint to restarting and diversifying livelihoods (Soparth and Crawford 2005). Establishment of community revolving funds was a central feature of the Program's microenterprise development strategy to achieve this aim.

2.2 The "Village Bank" Concept

Conventional banks that could provide loans to local businesses in the Program area are located approximately 25 kilometers from the villages. However, they rarely provide credit to the type of small-scale entrepreneurs or such small "micro-loans" targeted by the Program which require conventional assets such as property to secure a loan. In addition, there are no alternative lending institutions in the area, such as FINCA or a Gramin Bank style micro-finance institution, that provide microfinance loans to borrowers through solidarity group lending schemes, other than traditional money lenders. Therefore, "village banks" were created to provide this institutional role. These are semi-formal lending institutions created at the community level and governed by a set of by-laws agreed to by its members. These village banks then serve as the lending institution to small scale entrepreneurs through a number of solidarity groups. They are not just lending organizations but also savings associations as well. Since the five village banks established are not registered with the Thai government, these are not legal or formally constituted rural savings and credit associations, but nonetheless, serve as semi-formal rural savings and credit associations. The community revolving fund relies on the principle of 'social collateral'. In other words, a loan will be disbursed for which a group of peers from the same vocation and same community will guarantee the repayment of each member.

Other tsunami projects have used similar microfinance lending schemes, and many local NGOs are active in Tsunami areas and all over Thailand in setting up these types of lending organizations. The Thai government has also promoted revolving fund schemes. However, local key informants expressed the opinion that previous government administered programs have not been very successful. They also suggested that the NGO and donor record is spotty in this regard, so a revolving fund strategy is considered somewhat risky if the goal is to have local micro-credit institutions sustained beyond the life of tsunami relief and reconstruction projects. The PSCL Program strategy is described in detail below.

2.3 Establishing Village Banks

SiriConsult, a Thai NGO, was contracted in October 2005 to establish and build the management capacity of community-level microfinance institutions using the revolving fund and solidarity group lending model in all five of the targeted Program villages. The community microfinance institutions (called “village banks” in this report) were capitalized with 1,000,000 Baht (approx. US\$ 28,000) each. SiriConsult conducted a series of four training courses on institutional development, business planning, accounting and loan management and provided four follow-up assistance visits over several months (SiriConsult 2006). These activities were followed by an evaluation of the loan program efforts. In February 2007, they conducted a set of workshops with each village bank to trouble shoot problems and to recommend a final six-month wrap up strategy for the Program (Siri Consult, 2007). A Crisis Corps Volunteer assisted the loan program activities for several months to follow up after the village banks were first established. After her service was completed, a full time senior Thai staff member was hired on-site to continue mentoring and oversight of this effort. SiriConsult also continued to provide technical support for the duration of the program through periodic visits, meetings and workshops.

2.4 Village Bank By-laws

Each village passed by-laws for their respective village bank based on a standard template provided by SiriConsult. They established committees and completed the series of trainings. The by-laws are essentially the same for each village with a few variations on the common theme. Variations include how the fees collected are used. There is also some variation between villages in the duration of loan repayment and when start of repayment must occur. The by-laws set the terms of the loans, payback schedule, loan approval procedures, and member contributions (see Appendix 1 for an English version of the by-laws for village 2 as an example). The by-laws do not include any environmental or social equity criteria concerning group membership or as criteria for loan approval.

2.5 Village Bank Committees

The Village Bank Committee includes a chairperson, secretary, treasurer, accounting committee, lending committee and public relations committee. These officials are elected by members and can be replaced by majority vote at any time or after the initial term of office expires. Committee members manage the village bank account. The Village bank is required to open a bank account at the nearest formal bank – located 25-30 km away in either Kuraburi or Kapur –by three committee members, and requiring two signatures for withdrawals.

2.6 Membership

Each village established 10 groups consisting of five members in each group. Initially, for the first batch of borrowers and as stipulated in the by-laws, they had to be tsunami affected households. Each solidarity group consists of individuals of the same occupational category. Each member of the solidarity group guarantees the repayment of all members and each is

represented on the village lending committee (SiriConsult, 2006). Membership in the microfinance groups is voluntary. Village 3 does not allow relatives to be in the same solidarity group as they feel the social pressure in this case would work against repayment if one member defaulted. All members are required to open bank accounts with the village bank and small bank books indicating deposits are kept. While the first batch of members needed to be tsunami affected households, as membership expands in some of the villages, this rule is being relaxed and is no longer a requirement for new members. Members are required to make an initial payment of 100 Baht to join the bank and acquire “shares” and annually thereafter of 50 Baht. They are also required to make a minimal 50 Baht savings deposit monthly to the village bank. New members are queued for loans based on their membership enrollment date. However, they can be passed over if meeting attendance is poor and they must form a solidarity group of five persons, so individual new loans are let five at a time.

2.7 Emergency Fund

All of the villages maintain an emergency fund for any individual in need. This is generally up to Baht 3,000 but in village 3 they allow up to Baht 10,000 to be borrowed through the emergency fund. This fund must be approved by at least six members of the committee. Fee for use of the emergency fund in Village 7 is 50 Baht and must be repaid in three months. In Village 3 the fee is 200 Baht but is rolled into a monthly repayment plan.

2.8 Social Services

All of the village banks have provisions whereby a portion of the fees collected can be used for social services. Examples include contributions to children and elderly welfare funds and community events.

2.9 Loan Approval and Repayment Terms

Loans of a maximum amount of 20,000 Baht (US\$ 575) were provided to each initial member to develop livelihood activities. Approximately 50 individuals from each village were provided loans during the initial round of loaning. Almost all loans are for this maximum level as this amount of funds is generally perceived as too low for starting new businesses using this finance alone. Therefore, most borrowers use the funds for expanding or restarting affected businesses with few if any loans used for new businesses. Many borrowers also use personal capital as well as the loan capital to get the business expanded or restarted. One borrower couple (husband and wife team) interviewed said that they invested about half of their own capital in their fish cage culture farm and then used 40,000 Baht in borrowed funds for the remaining investment. Since rules allow only one member per immediate family unit to borrow at one time, they asked their mother to also borrow Baht 20,000 and invested her loan capital as well as their loan capital, and personal funds in the fish farm. As loans are fully repaid, additional loans can be obtained from existing members. As capital from repayment and savings accumulates, additional groups members that join the program can also start borrowing. New members must make savings payments for at least three months before they become eligible for loans. Individuals who access loans must be

members of a solidarity group. The maximum loan is set at 20,000 Baht per member (US\$570). Payback is generally set at over a 20 month period, with 1,000 Baht due each month. However, village 7 has a 30 month payback and Village 3 has a flexible schedule depending on the enterprise type with loan durations from 12 to 18 months. For instance, fish cage culture groups which take six months before they earn revenue are required to payback in three installments every 6 months rather than monthly. In Village 2, first payment is delayed for 9 months. While the maximum loan amount at present is 20,000 Baht, some villages seem to be considering increasing the maximum loan amount to 30,000 Baht for borrowers fully repaying a first loan and then taking a second loan.

Initial borrowers were required by SiriConsult to develop business plans which were reviewed prior to approval. However, it is unclear how strictly this practice is now followed for subsequent borrowers. Among committee members interviewed from each village, it seems that no loan request has ever been rejected, so once a member joins and meets the general eligibility requirements, they are almost guaranteed they can obtain a loan if capital is available. In essence, the loan fund therefore functions more like a personal line of credit, whereby borrowers are free to use the loan for whatever they choose. One borrower interviewed said he had not yet decided on how to use the loan he received, but he also dutifully makes his monthly payments in full and on time. New loans are approved at monthly meetings. While initial borrowers received formal training as part of the services provided by Siri Consult, subsequent borrowers have not been receiving any formal training. In village 3 for example, they receive an orientation or briefing on the rules from committee members.

2.10 Loan Fees

As these are Muslim communities, rather than “interest,” Islamic banking principles are used. Members contribute a small amount as a fee. In most villages, the fee is 300 Baht per 10,000 Baht borrowed. However, in Village 3 the fee varies based on length of loan. For a 10,000 Baht loan of 12 months the fee is 200 Baht, and for an 18 month loan it is 300 Baht. This is equivalent to about a 4 percent per annum interest rate which is very low by most microfinance standards. The fee is required to be paid up front at the time the loan is taken. The fee is used for member dividends, compensation for the time committee members spend on fund administration, administrative and operational expenses, and a fund for member welfare, student scholarships and public donations. In village 7, while the by-laws state how the dividends should be distributed, in practice, the committee has not taken any fee, and it is generally only a dividend back to members (although none has been provided yet) and contributions to community events. As the fees are very low, the total amount of fees generated is generally quite small (30,000 Baht for the initial 50 loans released). In Village 3, fees cover administrative costs, contribute to an elderly welfare fund and a children’s welfare fund. The committee receives a share which last year was 372 Baht, and dividends to members last year were 95 Baht.

2.11 Cash Flow

Fees, savings and repayment make up the revenue or incoming stream of cash flow into the village banks. Since fees are spent on items outlined above, fees do not contribute to capital accumulation. Capital builds up based on savings accumulation and repayments on existing loans. Village 3 receives approximately 73,000 Baht monthly in revenues. The committee prefers to maintain a bank balance of at least 25,000 Baht. Therefore, at the current cash flow rate, at least one additional or new solidarity group of five persons can receive loans every other month.

2.12 Member Meetings

Monthly meetings are held of each village bank and should be attended by the committee and all members. In village 7, these are held in the late afternoon. Approximately two-thirds of participants attend these meetings. One of the committee members reports that the financial status of the village bank is discussed along with other business such as contributions to community events, and issues concerning individuals whose loans are delinquent. Payments to savings and for loans are made at this time as well.

2.13 Repayment Rates and Delinquent Borrowers

Reasons stated by committee members for high repayment rates in Village 1, 3 and 7 are that members are very responsible individuals, and they have a thorough knowledge of the rules. They feel the program will be sustained after the project ends and are requesting increased capitalization (Village 3 with a 100 percent repayment rate has already received an additional 500,000 Baht in capital from the PSCL Program). Village 2 and Village 4 on the other hand have a high rate of delinquent loans including several members of the Committees. In at least one instance, the chairman has not made repayments and has moved out of the area. One of the more active committee members blamed this poor example on creating difficulties of getting other members to repay as well. This person reported that those that fail to repay also tend not to make the required monthly deposits as well. In Village 2, there were rumors that individual members did not actually receive the full loan amount as funds were dispersed through the group leaders, some of whom then allegedly only paid the other group members 2,000 Baht. We were not able to confirm or deny this rumor. In addition, when asked, we were not able to physically see village bank books or other records that showed individual signatures for each borrower receiving 20,000 Baht.

In some villages, delinquent borrowers are asked to explain why they cannot pay back on time at the monthly meetings. Usual reasons stated are variability in income as many in these villages are fishers. While about one-third have had trouble making all payments on time, one committee member interviewed stated that only a very few have completely defaulted (at least in some villages). Most can catch up after another payment or two. Other members are generally sympathetic to those who miss a payment, but usually other members of their solidarity group are assigned to follow up with delinquent individuals. We found no instances where members of the solidarity group were asked to repay another group member's debt when they defaulted on a loan in spite of high default rates in several villages

and this condition being stated in the by-laws that members agree to as a condition of the loan. This may be a factor in why some of the default rates are so high. Local staff and consultants feel this is a difficult practice to enforce in Thai culture. In practice therefore, the solidarity group functions more as directed peer pressure to get an individual to pay back if in default, but the group are then not held accountable for paying defaulters debt. This practice therefore weakens the solidarity group concept and “social capital” guarantee.

3. Comparing Performance of the Village Banks

Information on a selected set of indicators for each village bank is provided in Table 1. Sixty percent of the borrowers are female. Three out of the five village banks are doing well according to SiriConsult, project staff and based on the data below showing relatively high repayment rates in Villages 1, 3 and 7. Villages 1 and 3 have the greatest expansion in membership. Villages 2 and 4 show significant problems with repayment. Project staff and SiriConsult attribute this problem to poor leadership and administration by these particular village bank committees who do not always follow the by-laws in carrying out business and do not meet regularly. In some cases, committee members have not paid back loans and this had made other members feel that they too therefore, should not be obligated to pay back. The data in Table 1 indicate that subsequent borrows, at least at this moment in time, have higher repayment rates than the initial borrowers. Their default rates may increase over time, but at present, this is a very encouraging sign that perhaps new members are being screened more carefully and the requirement of repayment being taken more seriously by these new individual borrowers.

The number of members reported in Table 1 is greater than borrowers. As new members come into the system, they must wait until additional capital is acquired before they are able to obtain a loan. However, members cannot make savings withdrawals like a regular bank but can only take a withdrawal in the form of loans. This approach forces a build up of local capital wealth in the bank, where this capital is then recycled within the community as loans for local businesses.

Key informants, including project staff and SiriConsult were asked to rank village banks on three success performance criteria considered important from a review of literature; leadership, management and sustainability. Leadership is the degree to which the institution encourages the community to be involved in the loan program and to follow the rules and procedures and degree that leaders set an example from their own actions. Managerial Ability is the degree to which the group administers the program, its efficiency in terms of record keeping, periodic meetings, and follow-up with participants on repayment. Institutional Sustainability is the probability the program will continue in the area after project assistance ends. These definitions were provided for each of these criteria and then individuals ranked each program and village bank. After the individual rankings were completed, results were shared and discussed until the group came to a consensus decision on each score. As additional village banks were scored, these scores were compared with other villages so that the final group rankings are ordinal ranks among the program and bank. Key informant rankings in Table 2 for PSCL village bank attributes track very closely with rankings based on default rates in Table 1.

Table 1. Microfinance Statistics for the village banks supported by the PSCL Program

<i>Item</i>	<i>Village 1</i>	<i>Village 2</i>	<i>Village 3</i>	<i>Village 4</i>	<i>Village 7</i>	<i>Total</i>
<i>Membership</i>						
Total number	93	95	90	82	56	416
Percent female	51	61	69	66	73	63
<i>Borrowers</i>						
Total number	57	50	85	57	56	311
Percent female	47	54	61	70	73	60
<i>Finances</i>						
Total loans (Baht)	1,200,000	1,000,000	2,473,000	1,140,000	1,120,000	6,933,000
Total savings (Baht)	28,711	53,900	54,450	24,380	44,830	206,271
<i>Default Rate</i>						
% total borrowers	26	82	0	88	20	37
% first borrowers	28	82	0	98	22	46
% subsequent borrowers	11	NA	0	0	0	2
<i>Business Category</i>						
No. new businesses	0	0	7	1	5	13
No. restarted/expanded	57	54	77	56	51	295

(SOURCE: PSCL Program field office data as of Feb. 2007, 35 Baht = 1 US\$))

Table 2. Ranking on performance criteria of several microfinance schemes

<i>Item</i>	<i>Leadership</i>	<i>Management</i>	<i>Sustainability</i>	<i>Total</i>
PSCL Village 1	4	4	5	13
PSCL Village 2	2	3	3	8
PSCL Village 3	5	5	5	15
PSCL Village 4	1	2	1	4
PSCL Village 7	4	5	5	14
PSCL Avg.	3	4	4	11
RakThai	3	3	3	9
TAO	1	1	1	3

(1 = very poor, 5 = very high)

Table 3 shows the types of businesses for which loans were taken and varied considerably between villages. The information in Table 3 is for what the loans were actually used for, rather than what was proposed in the loan applications. Project records show that at least for the initial set of borrowers, business proposals submitted vary considerably with what the loans were actually used for. Therefore, the loan proposal requiring a business plan to be reviewed as part of the loan approval process does not seem to serve the intended purpose of helping the committee or membership sort good versus poor loan prospects. However, it may at least get borrowers thinking in a more entrepreneurial manner even if does not help sort out potentially risky loans that should not be approved. It is unclear whether subsequent borrowers that were not part of the first round of loans, and that are no longer being trained by SiriConsult, are asked to submit business plans and whether there is any serious review applied.

Table 3. Types of microenterprises receiving village bank loans

<i>Enterprise type</i>	<i>Village 1</i>	<i>Village 2</i>	<i>Village 3</i>	<i>Village 4</i>	<i>Village 7</i>
Grouper culture		X	X		
Green mussel culture	X		X		
Catfish farming	X				X
Fishing	X	X	X	X	X
Frog farming					X
Head scarf making		X	X		
Ginger production		X	X		
Goat/Cattle	X	X		X	
Agriculture/rubber			X	X	
Rubber/fruit	X		X		
Trading		X	X	X	X
Small shop			X		X
Fishing gear making				X	X
Fish processing		X	X	X	
Food processing			X	X	

(SOURCE: PSCL Program field office)

4. Impact of the Microfinance Activities

4.1 Restarting and Diversifying Livelihoods

Table 1 shows the number of these businesses classified as new (4%) versus existing, expanded or restarted (96%). An overwhelming number of the enterprises assisted through the micro-finance scheme are for existing or restarted businesses. This is partially due to the fact that the loan amount is relatively small, and therefore insufficient to capitalize a new operation but large enough for expansion of existing businesses. Most microfinance schemes worldwide target existing businesses. In this way, there is a greater likelihood that the loan will be repaid as an existing business is already profitably operating and the borrower has existing skills and expertise to manage the operation. Financing new businesses is considered more risky.

There is no question that the micro-credit loan program has helped over 300 community members restart tsunami affected businesses and/or expand existing businesses. It is likely that some of these fledgling village banking institutions with high repayment rates will likely continue beyond the life of the project, and those with exceptionally low repayment rates, most likely will wither away. Existing business are also likely to continue beyond the life of the project as well. Therefore, continuing benefits are likely to accrue to some extent after the project is completed. However, new enterprises makes up only 4 percent of the livelihood projects assisted. Since new enterprises are considered as either new livelihoods supplementing existing ones, or new livelihoods that substitute as alternatives for old livelihoods, the impact on livelihood diversification and providing alternatives has not succeeded through the microenterprise strategy.

This presents a fundamental dilemma for ICM programs using micro-credit schemes. ICM programs are often attempting to provide “alternative” livelihoods to fishers in situations where overfishing is occurring (most small scale fisheries around the world are considered overfished), or diversify income whereby fishers are less dependent on an overfished fishery to sustain their livelihoods. In tsunami affected programs, the concept of resilience comes into play as well. This concept presumes that if coastal households and communities have more diversified sources of livelihoods, then in the aftermath of a large scale shock – a tsunami, typhoon, El Niño event, etc. – they will be able to bounce back or rebound faster than less diversified households or communities. Micro-financing schemes, by the nature of how they are set up, and as evidenced from this program, contribute very little to livelihood diversification. In fact, they may have the opposite effect by expanding one of many household productive livelihood activities, placing increasing reliance on a smaller set of livelihood activities.

4.2 Promoting Sustainable Natural Resource Use

ICM programs also try to offer alternative livelihoods to fishers so that they do not have to rely so heavily on fishing, or can help those willing to exit the fishery with resources and support for new livelihood opportunities, thereby reducing pressure on overexploited fisheries. Table 3 shows that in all cases, the Village Banks have provided loans for fishing. While not large enough to create new fishing ventures, these loans can provide sufficient capital to buy more gear or replace old gear, undertake boat repairs, or contribute to the costs of a new or refurbished engine. While the village banks are therefore unlikely to encourage much new entry into the fishery, it also is unlikely they encourage exit as well. They certainly help those in the fishery continue fishing and due to low fees compared to traditional money lenders, reduce costs to some degree. Therefore, they likely have little effect on reducing fishing effort or exiting existing fishers, and may slightly increase fishing effort through the provision of low cost loans.

These village banks do not undertake any form of environmental review. None of the by-laws has such a provision and Siri Consult mentioned that this is not performed by any village banks established within the country. Since these are very small loans and generally for existing businesses, any type of significant impact from any one project is extremely low. However, if we start to look at cumulative impacts of several hundred borrowers and over several years, the impacts could look much different. Since loans are supposed to be approved quickly, and community members who form the loan committees are likely to have little or no environmental review training, and loans applications have never turned down, building in an effective environmental review procedure into the loan review process could be quite difficult. Hence, as currently structured, these micro-credit institutions have no impact on promoting more sustainable natural resources use practices by themselves.

4.3 Reducing Dependence on Money Lenders

One implicit goal of the micro-finance scheme is to make people less dependent on local money lenders. In village 7, there are four money lenders that provide funds to the community. They do not necessarily charge a fee or interest, but instead, borrowers

(especially fishers) are required to sell their produce to the lender. For instance, fish that may sell for 80 Baht will be sold to the money lender for only 50 Baht. This arrangement continues until the debt is fully paid. This could last for up to 5 years. Money lenders generally will provide more capital (from 60,000 – 100,000 Baht) than the village bank limit of Baht 20,000. This is three to five times the maximum amount allowed by the village banks. One committee member interviewed in Village 3 felt that the village bank should consider raising this ceiling as it would free more people from relying solely on money lenders. Others felt that the maximum amount is reasonable and reduces risk to the bank if the amount is too high. One informant stated that she no longer uses the money lender now that she has access to credit from the village bank. In village 2, there are five money lenders. One informant in this village stated that they charge interest of up to 20 percent per month rather than require sale of produce to them. Since the village bank started operations people do seem to view it as a better and cheaper alternative. However, the fact that the repayment rates in Village 2 and 4 are very low has constrained its expansion in these localities and therefore mutes the potential impact as an alternative to the money lenders. Even where repayment rates are high, the total amount of lending for all village capital needs through the village banks, in all likelihood, represents only a small percentage of community money lending needs. The percentage of households currently served by the village banks based on number of households per village ranges from approximately two-thirds to one fifth. This is a small but significant percentage and if the village banks grow as some are, over time, they have a greater potential to become a more important and significant lending institution within each village. While it is unclear how many borrowers may have reduced dependence on the money lenders, anecdotal evidence suggests that it has had this effect to some degree, or at the very least has the potential to be an alternative if sustained over time. The village banks also provide some social services similar to what money lenders often provide beyond a loan. Quick access to emergency funds in a time of need and donations to local community welfare initiatives makes the village banks socially attractive alternatives as well.

4.4 The Multiple Donor Effect

The tsunami affected villages saw a large number of donors operating in the communities in the aftermath of the disaster. Many donors gave direct grants to individuals for restarting livelihoods without any expectation of repayment or any fees charged. This differentiation in donor policy is thought to have created poor attitudes in some villages concerning repayment and is thought to contribute to poor repayment in some communities. This is exacerbated somewhat by former revolving fund schemes initiated by the Thai government prior to the tsunami. These are generally considered to have been failures and no continuing institutions or revolving funds from these schemes are evident in the Program villages. Most people suggest that these were seen as nothing more than political handouts. An example of two other livelihood initiatives of other donors is provided below.

Other donors established revolving funds after the tsunami as well, but with different policies and degree of supervision. For instance, the CHARM (Coastal Habitat and Aquatic Resources Management program funded by the European Union) Program administered one livelihood scheme through the Department of Fisheries and the TAO (Tambon Administrative Office). This scheme has not been considered very successful by persons

interviewed in the site area and it is unclear if any funds revolved at all, with many considering it similar to past government revolving schemes – as a hand out. In addition, while funds were dispersed, the degree of training, follow-up and mentoring that the PSCL Program provided is not evident for the CHARM Program. RakThai (a Thai NGO) was also contracted directly by CHARM to help launch revolving fund schemes after the tsunami, but they have been unable to provide much follow-up as the Khampuan area is outside the normal CHARM project area. Hence, they have relied more on local government institutions, especially the Khampuan Tambon administrative office to provide continuing support. One informant reported that RakThai created banks do not set an upper loan limit but in practice, very few if any have exceeded 35,000 Baht. This is almost twice the maximum rate set by the PSCL Program. Another impression provided by informants is that RakThai bank committee members seem to be able to access larger limits than regular members as a benefit of serving on the Bank committee. Some informants suggest that the Rak Thai revolving fund schemes are considered fairly successful and on par with the PSCL Program efforts (see Table 5 for ranking of various revolving fund schemes by local key informants). However, when informants are asked about CHARM, they tend to score the success of these initiatives as lower. CHARM staff and their assessment reports indicate that approximately seven to eight of the 22 groups created are no longer active, but others are to some degree still active. However, CHARM groups were set up as large occupational groups of between 20-50 persons, and of those groups still active, membership in most has declined. CHARM staff stated that their scheme did not have a solidarity group lending strategy similar to the way the PSCL revolving schemes were set up. It would seem that having a constant physical presence for intensive follow-up increases the changes of livelihood activities being more successful.

While the large numbers of donors present in one area with different policies, goals and procedures can create confusion among the communities and result in unintended consequences on each other's project, multiple donors operating in the same area is not always bad. Some coordination among donors on revolving schemes is evident. Villages agreed that you could join one village bank or the other but could not take loans from more than one. This was an attempt to provide a greater degree of equity to community members in terms of access to such credit. However, we also heard rumors that some individuals were able to receive multiple loans. While we could not confirm this, it is well accepted knowledge that many individuals received sources of assistance from multiple donors, whether it was direct grants and/or micro-loans.

5. Problems and Issues

Some of the existing problems and issues reported by SiriConsult are delays in loan approval, as well as weak managerial, accounting and budgeting capacity. As shown in Table 4, low repayment rates in village 2 and 4 make these institutions unlikely to succeed in the long run. Most blame this on poor leadership among the committees and the perception that this is a donor grant rather than loan. SiriConsult believes that repayment rates should be better than 90 percent for these institutions to succeed in the long term. Only Village 3 meets these criteria at the moment but Village 1 and 7 are not far from this benchmark.

SiriConsult reports that approximately 20-30 % of loans were not used for the intended purpose stated in the original business plan. Examination of project data and discussions with project staff and several committee members suggest that the percent that used the loans for other purposes could be much higher. This is not unusual but does raise some issues of concern. Reasons given by committee members for this situation include delay in review and approval of loans by the committees (especially those with irregular meeting schedules) resulting in fund dispersal at the wrong time. For instance, if loans are delayed, a certain fishing season for a gear proposed may have passed, or the planting period for an agricultural crop may have passed. Loan applications are supposed to be approved or rejected at each monthly meeting, so in theory, a maximum delay in approval would be no more than one month. Another potential reason for the change in use of loan funds is that most of the rural households in this area have high occupational multiplicity (Pollnac 2005) and the loan amounts are small by Thai standards – too small to start a new business but sufficient to improve or expand an existing business or one damaged from the tsunami. Therefore, households often use the funds in an opportunistic manner for whatever the income or non-income generating activity needs are at the time the loan is released. However, some informants suggested that some borrowers also made up proposals for a business so they could get a loan and had no intention of either paying it back or using it for the purposes stated in their applications.

SiriConsult recommends that the village banks (at least those that are doing relatively well) be networked into a savings and loan association or cooperative that is legally constituted and registered with the Thai government. Project staff believes this will increase the probability that these community credit institutions will be sustained after the project, provide for greater accountability of committee members, and allow for on-going assistance from Thai government agencies.

6. Conclusions and Lessons Learned

Establishment of micro-credit institutions and small loans does help rural coastal households to restart livelihoods following a disaster and can help expand existing businesses. Since it takes a long time to build such institutions successfully and sustainably, micro-finance institution building is recommended as part of disaster planning and preparation strategies. If these institutions preexist before the next disaster, then infusions of capital into these institutions after a disaster would be a way to quickly deliver needed capital for restarting livelihoods. Since they take a good deal of effort and time to establish and make sustainable, unless they exist before a disaster occurs, they should be viewed as a medium to long term strategy for rehabilitation. Donors and governments promoting this as part of disaster relief and rehabilitation will need to plan rehabilitation project timelines long enough to enable such institutions to take hold and become sustainable. In addition, they need to ensure that short term grant aid does not undermine loan provisions schemes geared towards longer term goals (FDC 2007a). As relief efforts focused on grant aid wind down, micro-finance schemes can be phased in.

Providing micro-credit schemes using existing models is not likely to significantly diversify livelihoods or provide alternatives for fishers to exit the fishery. Other livelihood models

tailored more specifically to these objectives will need to be promoted. This includes direct grants coupled with training and extension services that are also being implemented by the program.

While at an individual or household level, micro-credit schemes contribute little to diversified livelihoods, they still have benefits in other ways. Micro-credit institutions can help make communities and households more resilient after a disaster as they provide a local institutional structure that can be used as a direct and rapid conduit of aid to affected enterprises and households. If in place before a disaster strikes, they can help households economically rebound faster than if they are not present. They can provide both loans as well as release of savings funds to help households reestablish livelihoods. Establishment of micro-credit schemes after a disaster is valuable, but the time needed to get them established and capacity building effort needed to make these sustainable – likely several years at a minimum - means that using these as a rapid relief strategy is not realistic, even though the long-term benefits are high. Some groups recommend that they not be started during the relief phase of recovery (FDC 2007b). Grants may be more appropriate immediately following a disaster. However, microfinance institutions are concerned that they be designed in a way that does not create dependency or undermine efforts at providing market-based financial services on a sustainable basis over the long-term (FDC 2007a) by microfinance institutions existing in the area before a disaster. As relief grants wind down, this would be the most appropriate time to phase in new micro-finance schemes.

Micro-credit institutions may have negative impacts on sustainable resource use (by providing loans for increased fishing effort, cutting of mangroves, or pollution from small cottage industries). Therefore, this potential negative impact needs to be mitigated through environmental sensitivity training among members and particularly among the leadership committees. In addition, provisions for simple environmental review should be considered for incorporation into village banking by-laws.

Establishing micro-credit institutions in rural coastal communities increases the potential to reduce reliance on money lenders and increase economic empowerment among coastal communities. This will only have a real impact if they offer social and emergency services along with financial loans, and only if they are eventually capitalized at a level large enough to reach a majority of the population in need of credit.

7. Recommendations

Future provision of additional loan capital to the individual village banks should be performance and incentive based. Two criteria are recommended: repayment rate and savings rate. Ideally, repayment rates should be above 90 percent. Villages 1 and 7 are close to that benchmark and should be told that additional capital will be provided when they reach the 90 percent repayment benchmark. Savings rates also vary among the village banks and unless higher savings rates are achieved, internal capital accumulation for additional loans will be lessened. Benchmarks should also be set for savings rates – when it reaches a certain amount, additional project capital will be provided as well. In this way, the potential to obtain additional loan capital is tied to two of the most important benchmarks of successful

village banks. Of course, to achieve these benchmarks, the members and committees will need to improve leadership and management performance. For those least performing village banks, an interim incentive could be provided, where a small amount of additional capital would be available if they achieve a 50 percent repayment rate by a certain date, and additional capital provided again when they reach the 90 percent level of repayment. This sets several scaled targets as an encouragement which then may not make the targets seem so far away and unreachable. If some of the village banks do not achieve these benchmarks by certain dates, then the total pool of funds allocated for loan capital is allocated to those village banks that are performing best and meeting expectations with respect to the benchmarks. Once the pool of funds is used, no more capital will be provided. This does set up competition between the village banks for the available pool of funds, but this should be viewed as healthy competition whereby all the village banks can be rewarded to some degree if they meet certain goals.

Continue to provide technical support to all the village banks through SiriConsult.

SiriConsult should continue to work with each of the five village banks to strengthen their capabilities. They will need to design specific strategies and interventions based on the different problems and issues they face and degree to which they are achieving expected benchmarks or not.

Do not consolidate all five village banks into one cooperative. Village 3 is most ready to move up from a semi-formal village bank to a formal rural savings and credit association or cooperative duly registered with the Thai government. Village 1 and 4 could likely consolidate with them. This should only be done if Village 3 agrees to such a consolidation and it should not be forced on them by the program or SiriConsult. However, the dismal repayment rate of Villages 2 and 4 and managerial problems would make it very risky to include these village banks in a consolidated cooperative. Their poor performance could bring down the overall performance of a consolidated cooperative and result in it failing, and it is not fair to burden those well performing banks with the problems and debts of the poorly performing banks. The poorly performing banks should be consolidated only if and when the repayment and savings targets are reached, when long term defaulters are removed from membership, and only if the other village banks agree to consolidate with them.

Conduct environmental assessment training for the village banking committees. While we cannot guarantee that these small village banks can develop the skills to incorporate environmental review procedures into their existing loan review and approval procedures, the program should make an effort to provide them with tools whereby they can do so if they so choose. This would likely require revisions to the bylaws of each village bank. Additionally, if a consolidated cooperative is to be formed, it is at this more institutionally sophisticated level that environment criteria could be incorporated. To this end, environmental training for existing committee members, and the possibility of drafting environmental language into the cooperative by-laws should be considered and coordinated with SiriConsult.

References

- Christie, P., K. Lowry, A.T. White, E.G. Oracion, L. Sievanen, R.S. Pomeroy, R.B. Pollnac, J.M. Patlis, and R.V. Eisma. 2005. Key findings from a multidisciplinary examination of integrated coastal management process sustainability. *Ocean & Coastal Management* 48 (2005) 468–483.
- CRC. 2006a. Fisheries Opportunities Assessment. Coastal Resources Center, University of Rhode Island. 104p.
- CRCb. 2006. Thailand Post-Tsunami Sustainable Coastal Livelihoods Program. Workplan for the Period October 1, 2006 – September 30, 2007. Coastal Resources Center, University of Rhode Island. 30p.
- FDC. 2007a. Capacity Building for Microfinance in Post-Tsunami Reconstruction. Foundation for Development Cooperation in association with Citigroup Foundation and the Banking with the Poor Network. Spring Hill Queensland, Australia. 5p.
- FDC. 2007b. Microfinance Institutions and Disaster Relief. Brief 1, The Foundation for Development Cooperation.
http://www.bwtp.org/arcm/mfdm/Web%20Resources/Briefs/Brief_1.pdf
- Pollnac, R.B. 2005. Socio-economic Baseline. Post-tsunami Sustainable Coastal Livelihoods Program. Coastal Resources Center, University of Rhode Island. 44p.
- Pollnac, R. B., B.R. Crawford, and M.L.G. Gorospe. 2001a. Discovering Factors Influencing the Success of Community-Based Marine Protected Areas in the Visayas, Philippines. *Ocean and Coastal Management* 44: 683-710.
- Pollnac, R.B., R.S. Pomeroy and I.H.T. Harkes. 2001b. Fishery policy and job satisfaction in three Southeast Asian fisheries. *Ocean and Coastal Management* 44:531-544.
- Pomeroy, R.S., E.G. Oracion, , R.B. Pollnac, and D.A. Caballes. 2005. Perceived economic factors influencing the sustainability of integrated coastal management projects in the Philippines. *Ocean and Coastal Management* 48:360–377.
- Sievanen, Leila, Brian Crawford, Richard Pollnac, and Celia Lowe. 2005. Weeding through assumptions of livelihood approaches in ICM: Seaweed farming in the Philippines and Indonesia. *Ocean & Coastal Management* 48 (3-6):297-313.
- SiriConsult. 2006. Summary Report: Training for the Establishment of Microfinance in the tsunami-affected coastal communities, Tambon Khamphuan, Suk-Samran Sub-district, Ranong Province. Post-tsunami Sustainable Coastal Livelihoods Program.
- SiriConsult. 2007. Report on the result of the assessment of the operation and the result of the study trip of the economic revival microfinance groups in the coastal disaster area affected by tsunami, Khamphuan sub-district, Suksamran minor District, Ranong Province. The Siri Consult. 62p.
- Soparth and B. Crawford. 2005. Participatory Rural Appraisal. Asian Institute of Technology and Coastal Resources Center, University of Rhode Island. 70p.

Appendix 1: By-Laws for the Village Bank in Village 2

Revolving Fund's Structure, Rules and Regulations

Section 1: General

- 1.1 Occupational group title: Occupational Group Livelihood Improvement Moo 2
Office address: 320 Moo 2 Haad Prapas, Khamphuan Sub-district, Suk Samran Minor, District Ranong Province
- 1.2 Purpose of evolving fund
 - Supporting funds for occupational development and improvement of, income generating activities
 - Cash saving deposit and credit services for members
 - Member services supporting
 - Awareness and community learning support
 - Group's motto: Move forward for the future development
- 1.4 Regulations revision
 - Any revision of regulations stated in the revolving fund by-law document requires the agreement from more than half of the total member.

Section 2: Membership

- 2.1 Qualification of member
 - A resident of and currently living in Moo 2
 - Be a member of an occupational group
 - A person who has been directly or indirectly affected by Tsunami
 - Be employed in an honest occupational
 - Highly responsible person and, agrees to the laws and regulations of the revolving fund
- 2.2 Application scheme
 - Applicant must invest in a stock sharing occupational group for before being admitted, with at least 10 sharing-stocks or 100 Baht.
 - Applicant must be a occupational group's member and certified from at least 6 committee members
 - New member recruitment will be held every 6 months
- 2.3 Roles and duties of member
 - Do regular cash deposit as own saving money as schedule of revolving fund group
 - Must attend meetings or participate in group activities regularly, absentia-member requires to inform the group in advance
 - Pay regular installments for loan payback (if taken) according to the condition of agreement document
 - Agreed to and follow the rules and regulations of the fund
 - Be united with and helpful others member
 - Be a part of project's proposal consideration and loan guaranteed for other members in occupational group

2.4 Membership termination

- Death
- Resignation and received the approval from committee
- Nervous disorder or psychotherapist or person who judged to be mentally incapacitated by court
- Been punished and processed to be in jail or to be in bankruptcy judged by court
- Voting require by at least half of total members attended the meeting
- Not carry on cash saving deposit for 3 months continuously, and without informing the revolving fund committee
- Past overdue date on loan payback installment three times consecutively
- Intentionally breaking the rules and regulations of revolving fund or act in opposition to the groups, create conflicting among the group's member

Section 3: Occupational Groups

3.1 Characteristic of occupational groups

- A group of at least 5 people who have the same or similar occupations, close relation among occupation i.e. same marketing, productivity integration, resources utilization etc. They requested the service for funds and be spirits to work fork for revolving fund group
- A group of 5 people who represent the other occupational groups in the village to receive services and contribute to the managing group of revolving fund

3.2 Roles and duties of occupational groups

- Value assets as loan guarantee of other group members
- Occupational and social activities supporting within the group
- A tool to direct the practicable guideline for members by following the rule and regulation of revolving fund
- Assign the selected member to be a committee member of revolving fund

Section 4: Revolving Fund Committee

4.1 Qualification of committee member

- Be an occupational groups' member, selected and assigned by the occupational group members to be a revolving fund committee member
- Contributor and encourage mindset to work for community
- Be a good leader, honest, focused and priority on groups and community benefit
- Knowledgeable, capable and support the revolving fund administrative and management
- Good reading and writing skill

4.2 Terms of position appointment

- Committee appoint for 1 year. After term ending, they could be able to apply and elect by member to be a new position and committee, continuously.
- In the initial year of revolving fund, a half of revolving fund committees will randomly ending from the position. New election conducted to replace committee members

4.3 Ending term of committee

- Completed term
- Death
- Resignation
- Membership ending
- More than half of members vote to end the term of appointment for the position.

4.4 Term of duties

- group's income and expenses budgeting
- Drafting group's rules and regulation proposal, propose for the consideration by groups meeting
- Do loan approving for members, require voting through the decision making of at least 6 of 10 of committee members
- Implementation consideration for a new alternative enterprise investment or other activities that is considered by member in the regular meeting agreement by voting of more than half of total member

4.5 Specific duties of:

- Committee chairman: perform as meeting chairman, supervise the committee on tasks to achieve the goals and policies of the fund; coordinate to outsiders and have approval signature in the financial document
- Deputy of committee chairman: acting chairman and supervise the tasks assigned by chairman
- Treasure: supervise and manage accounting, finance management, financial document signature authority, in-charge of the bank account and revolving fund budgeting draft preparation.
- Treasurer assistant: support tasks as assistant by treasurer, treasurer acting or other task assigned by treasurer
- Secretary: a group registration, conduct group meeting, general group secretary, keeping records and prepare meeting report, in charge of revolving fund's asset management
- Public relations: disseminate the information of revolving fund group, build good relationship among the members and outside organizations, support the coordination tasks of chairman
- Inspection committee: checking for the complete and accurate work of accounting, including loan and credit checking and monitoring the work of revolving fund group according to their project's plan, ensure that goals and policies are met, make suggestion and recommendation from members and outsiders, make recommendations about issues that could discuss in meetings
- Loan follow-up committee: follow up, monitoring, supervised the use of loans, payback installment of members according to the planning of project proposal. Initiate new ideas and do policy development for credit and loan services

Section 5: Advisory Board

5.1 At annual meetings members vote for 5 persons and appoint an advisory board to;

- Give advice to committees and members in order to manage the fund in a sustainable way.
 - Follow up monitoring and inspection and support funded activities in term of policy and methods.
- 5.2 Termination of advisory board members prior to 4 year term following;
- Death
 - Resign
 - More than a half of voting by members

Section 6: Fund

- 6.1 Source of revolving fund of Ban Tubnua Village No. 2
- Donation fee
 - Share holder
 - Saving
 - Subsidized by other organization
 - Dividend
 - Other sources of revenue, fine fee and from selling goods
- 6.2 Members should put yearly share at least 5 shares or 50 Baht/year maximum 10 shares or 100 Baht/year by putting the first share as becoming a member, for the next share can be put at the next annual meeting.
- 6.3 Members should have monthly saving with the fund at lest 50 Baht with maximum 100 Baht on 15th of monthly meeting at 09.00-12.00.
- 6.4 Money will be deposit at Krungthai Bank Ltd., Kuraburi Branch
- 6.5 Opening account, deposit or withdraw money should be done by 3 committees; chair person, assistant and treasury in the name account of Ban Tubnua Village No. 2. Withdraw money can be done 2 of 3 of those committees
- 6.6 Treasury is allowed to keep cash maximum of 2,000 Baht (two thousand baht only) for activities or emergency needs of the group

Section 7: Loan

- 7.1 Member can take loans as needed according to business plan maximum 20,000 Baht (twenty thousand baht only), must be paid back within 12 months by monthly installment. First batch members who participated in revolving fund training can be take loan immediately after the group is funded by donor. New member can propose to take loan after saving at least 3 months or according to the vote of the committees.
- 7.2 Member who receive loan, agree to donate money to the fund at 5% annually from received loan, those additional donated funds will used for management, dividend, welfare and other expenses according to regulations.
- 7.3 Loan approval, member should fill loan application together with business plan and propose to the committees at least 15 days before monthly meeting, committees will approve loan according to following criteria,
- Objective and needs
 - Possibility of business plan
 - Ability of paying back

- Amount of shares and saving
- Behave and follow regulation
- The amount of existing fund
- Voting of committees 6 of 10

Section 8: Benefit and Dividend Sharing

8.1 Benefit sharing as follows:

- Dividend 20%
- Reserve fund 30%
- Welfare; sickness or death 5%
- Public fund 10%
- Scholarship for children and youth education 10%
- Training or study tour expenditure 10%
- Committees compensation 15%

Section 9: Meeting

- 9.1 Yearly annual meeting 1 time/year within 15 days after closing the yearly account and approved yearly budget and financial.
- 9.2 Normal meeting can be held anytime according to member needs by half of voting members
- 9.3 Monthly meeting will be held on date 15th every month at 09.00-12.00 at multipurpose building, Hat Prapas
- 9.4 Committee meeting will be held at least once a month (1 time/month) the same day as group meeting, chair person can call for committees in case of emergency needs

Section 10: General Regulations in Case of Member Against the Regulations

- 10.1 Members absent the meeting 3 times continuously without informing anyone but still saving, committees must send a letter, if not attending 4 meetings the member will be terminated and have to pay back the rest of the loan
- 10.2 Members come for a meeting late 20 minutes, committees consider for punishment as suitable consideration.
- 10.3 Members do not put saving 1 time have to add for next month and 3 times absent continuously must pay fine 10 Baht
- 10.4 In case members do not pay back the loan;
 - Loan can not be paid by member in time with good faith, have to be fined 10 Baht/month, if 3 months continuously, committee will consider that member that member to be terminated and have to pay back the rest of loan
 - With bad faith to pay back loan, responsible will be by guarantees,
- 10.5 In case of member death, descendent must take responsibility of loan