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Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP)

Lessons learned notes

Improving the quality of fishery products and market chains



Many small-scale fishers suffer considerable loss of income from fish and fishery products due to poor handling, preservation and processing practices, as well as inequitable returns from marketing systems. The Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) funded by Spain and implemented by the Food and Agriculture Organization of the United Nations has carried out a wide range of activities in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam to address these issues. This paper highlights some of the lessons, risks and recommendations RFLP has learned through this process.

The importance of clean water and good sanitation

Many coastal communities have limited access to clean water and poor sanitation. In addition to the basic health problems this causes it is also a major obstacle to improving catch quality or hygiene standards on fishing boats or at landing sites.



A typical scene in a small-scale fishing community

Enabling factors and recommendations

- ➔ Clean (potable) water and sanitation are prerequisites for improving post-harvest catch quality.
- ➔ Political will needs to exist at central and local levels to provide potable water and ensure better sanitation.
- ➔ Advocacy should take place to bring the water/sanitation needs of coastal fishing communities to the attention of relevant national agencies.
- ➔ Development project design should address underlying issues such as lack of infrastructure, sanitation, and potable water before attempting to carry out post-harvest improvement activities.
- ➔ If projects do not have resources to deliver clean water and better sanitation they should specifically target areas close to water treatment facilities or communities which do have access to potable water.
- ➔ Collaboration should be sought between, and with, various government ministries and agencies as well as the donor community and NGOs to tackle water and sanitation issues.
- ➔ Basic awareness needs to be raised within communities on the steps they can take to improve their own sanitation levels and reduce risks from contaminated water.
- ➔ Water quality needs to be systematically monitored.

Risks

- ➔ The cost of providing clean potable water or improving sanitation in coastal communities is too high.
- ➔ Projects attempt post-harvest improvement activities without addressing key underlying problems.
- ➔ An 'out of sight, out of mind' attitude prevails amongst the authorities.
- ➔ Communities are resigned to a 'this is the way things have always been' attitude.

The need for a cold chain and hygienic catch handling

Establishing a cold chain and the hygienic handling of catch will enhance food safety, catch quality and nutritional value. However unless consumers are willing (or able) to pay for better quality fish, adoption of better methods is unlikely.



Learning to correctly ice fish during training in Timor-Leste.

Enhancing hygiene

RFLP carried out a wide range of activities in all six countries in which it works aimed at enhancing hygienic catch handling. Training introduced basic techniques to actors along the value chain including fishers, their wives, fish transporters, processors, vendors and government staff.

Enabling factors and recommendations

- ➔ Basic capacity building on cold chains and hygienic catch handling is fundamental at all levels.
- ➔ Emphasis needs to be placed on enhancing consumer awareness of the food safety benefits of better quality fish products.
- ➔ Development projects should focus on introducing simple techniques and technologies that are practical, achievable and affordable as well as have the potential to bring about hygiene improvements in the short-term.
- ➔ Provision of basic training, ice and equipment such as ice boxes or aerators (to keep catch such as crabs) can make a considerable and immediate impact on fisher income, rapidly paying for itself and encouraging widespread adoption.
- ➔ A detailed feasibility study needs to be conducted to assess local demand, power and potable water availability, costs etc., before ice machines are provided.
- ➔ Provision of ice machines must be linked to a management plan for operation of the plant and ice sales and should be provided to a group or organization (e.g. Fisheries Association) rather than any individual.
- ➔ Provision of ice or cool boxes can be used as an incentive to join Fisheries Associations etc., or to have a boat licensed, safely equipped etc.
- ➔ Ice plants or machines and water quality should be monitored or licensed to ensure ice quality.
- ➔ By providing training to small and medium sized enterprises they can pass on better hygiene and sanitation techniques to their staff.

Risks

- ➔ A lack of clean potable water results in ice being contaminated.
- ➔ High operating costs of ice machines (electricity, fuel, maintenance etc.) cannot be met.
- ➔ Due to local preferences/beliefs iced fish may not receive higher prices and therefore no incentive exists for the use of ice.
- ➔ Little if any price premium results from the use of hygiene measures such as gloves, boots or sorting tables which reduces likelihood of adoption and replication.
- ➔ The cost of gloves, boots, sorting tables etc., prohibits replication.
- ➔ Ice boxes provided are not appropriate to vessel size and may cause stability issues, particularly during rough seas.
- ➔ Ice boxes are inappropriate to the size or type of catch (e.g. fish need to be bent to fit inside).
- ➔ Seasonal fishing patterns result in ice plants/equipment not being cost effective.
- ➔ Increased profits from the use of ice and aerators etc., encourages over fishing.
- ➔ Fishers/vendors believe ice is not necessary as fish will be sold quickly.

Ice means income

In Cambodia RFLP worked with coastal communities to improve handling and address the loss of income from fish and fishery products. Training on fish handling, hygienic practices and chilling techniques were provided along with basic equipment including ice boxes. Fishers using the ice boxes reported considerable increases in the sales price of their catch as well as significant reductions in losses. Although most fishers initially believed that ice boxes were too expensive they quickly realized that by using them they could increase their income by around three times and that this equipment would quickly pay for itself.



The challenge of improving landing centres and fish markets

Landing centres and fish markets play a vital role with regard to the standard and value of fisheries products. Yet often they appear to be ‘out of sight and out of mind’ with poor facilities, little hygiene and inequitable access. In addition, influential or competing groups within landing centres can present an extremely difficult management challenge.



Management of Oeba fish market in Indonesia's NTT province was enhanced by RFLP

Enabling factors and recommendations

- ➔ Strong leadership and management as well as community cohesion is vital to fair and effective landing centre/market functioning. Without this, infrastructure upgrades should not take place.
- ➔ A management plan must be in place before any upgrades are made.
- ➔ It is vital that all stakeholder groups are properly consulted with regards to any proposed changes or upgrades.
- ➔ Make efforts to enhance ‘ownership’ of facilities by users.
- ➔ If possible, make the most of landing centres. Use them to provide fishers access to services, weather and fish price information, ice and buyers while also gathering data on catch etc.
- ➔ Carefully assess the feasibility and cost benefit of any improvements. Some landing centres or markets may be so badly sited or in such disrepair that they are not worth salvaging and money may be more effectively spent elsewhere.
- ➔ Improvement of facilities must take place in conjunction with efforts to raise awareness regarding hygiene and sanitation.
- ➔ Advocate for improvements to water supply, storage, drainage, waste (solid and liquid) disposal etc., that may be beyond the resources of any development programme.

Risks

- ➔ Lack of trust between traders and management hampers efforts to improve facilities.
- ➔ Promises of improved facilities, zoning, access, management etc., are not kept.
- ➔ Poor management sees upgrades or equipment go unused or stolen.
- ➔ Infrastructure improvements offer the chance for corruption.
- ➔ Powerful and well-connected operators dominate the landing centre.
- ➔ The scale of improvements needed is beyond the capacity of development projects, NGOs etc., to realistically tackle.
- ➔ Political pressure comes to bear on which landing centers or markets are renovated.

Landing centres play more central role in Timor-Leste communities

In Timor-Leste community landing centres known as 'Lotas de pesca' were unfit for purpose and unused by fishers. In four of the centres RFLP supported the provision of clean water and power supply as well as installed ice machines. The centres were also used to gather catch data as well as to hold various training sessions. This made them play a more important and effective role in the community.



Management before infrastructure

PPI Oeba fish landing centre in Indonesia's Nusa Tenggara Timur (NTT) province has been revitalized following the development of a management plan and basic infrastructure improvements supported by RFLP.

PPI Oeba faced a number of problems. The sales hall was unfit for purpose and unused due to a dangerously slippery floor, hygiene conditions were low, there was little management while mistrust existed between various user groups.

In collaboration with a local NGO, contracted by RFLP, consultations took place in a participatory manner with fish traders, fishers, boat owners, and the local government and a management agreement was subsequently drawn up.

Coordinators were appointed from amongst the fishers and vendors to better manage PPI Oeba. They were assisted by helpers to collect money from traders to be used to keep the landing centre clean.

In addition to cleanliness and waste management, a number of other small improvements took place including the replacement of the dangerous floor, the installation of better lighting and the provision of garbage bins.

The main lesson learned was the absolute need for a realistic management plan developed through a participatory process with all users. Without such a plan it is highly unlikely that any infrastructure developments would have been effective.

Improving awareness and changing attitudes

Changing people's attitudes toward good hygienic practice is a long-term process that cannot take place overnight. However basic awareness of good hygiene practices amongst fishers, fish traders, consumers and government staff is another fundamental step to boosting health and establishing a value chain.



Risks

- ➔ Awareness raising activities attempt to reach too many people to be effective.
- ➔ Better practices are not adopted due to a lack of clean potable water, appropriate equipment etc.
- ➔ Awareness about more hygienic practices etc., may be raised but behaviour remains unchanged.
- ➔ Inappropriate placement of awareness raising materials (e.g. posters) results in little impact.
- ➔ Better practices are not adopted due to traditional preferences.

Enabling factors and recommendations

- ➔ Efforts should be made to raise hygiene awareness all along the value chain from the boat to the home.
- ➔ For development projects there needs to be a realistic appraisal as to what can be done to change attitudes and practices over a limited time period.
- ➔ Consumers need to be made more aware of the human health and food safety benefits of more hygienic products.
- ➔ Negative perceptions amongst consumers regarding the use of ice should be addressed through appropriate awareness raising campaigns.
- ➔ Fishers, consumers and government staff need to be made more aware of the potential dangers of using potentially dangerous chemicals to prolong fish life or make it appear 'fresh'.
- ➔ The links between sanitation, hygiene and health should be stressed for all, including children.
- ➔ Awareness raising activities need to be well targeted and on-going. Visibility or educational material should be linked with practical demonstrations.
- ➔ A considerable amount of awareness raising material on hygiene, fish handling etc already exists. Reprinting this with the copyright holder's consent can save time and money.
- ➔ A smaller number of longer-lasting awareness materials will be more effective than large numbers of posters etc., that are quickly destroyed.
- ➔ Links can be made with other organizations (e.g. health NGOs, schools etc.) which may also wish to raise awareness of what are basically health-related issues.

Markets, marketing and market information

Efforts need to be made to enhance the understanding of market chains. Emphasis also needs to be placed on building the capacity of government technical staff (in particular extension workers) with regards to fisheries product marketing as they have traditionally focused mainly on technical issues like improving productivity.



A product label designed with RFLP support

Enabling factors and recommendations

- ➔ Emphasis needs to be placed on understanding supply/market chains of raw materials. Price of raw materials may increase due to seasonality and access and this can impact cost/profit.
- ➔ Comprehensive analysis of the market for various products needs to be carried out. Sales need to be based on products with acceptance amongst consumers.
- ➔ Fisheries agencies need to have a marketing division as there tends to be a significant lack of these skills at provincial/district level. Special emphasis should be placed on building the skills of extension workers.
- ➔ Marketing skills need to reach communities in addition to government and NGOs.
- ➔ Participation in local or provincial trade fairs can create exposure for products while also giving producers the chance to see what other groups are producing and to gain confidence in dealing with potential customers.
- ➔ Basic marketing techniques can make a big difference. For example, helping groups produce business cards or putting telephone numbers on product labels. A simple list of fishers with their telephone numbers can make them more visible to prospective buyers.
- ➔ Support should be provided to communities to approach potential buyers/markets (especially larger scale ones such as supermarkets) as they often lack confidence to do so.
- ➔ Building a brand identity for products at a provincial level can make them more visible on the national stage and help drive sales.
- ➔ Groups such as women's collaborative groups or other NGOs may be able to help develop marketing channels.

Risks

- ➔ Market information systems require considerable buy in from the authorities, and fishers alike to ensure that data is comprehensive, accurate and useful. If commitment is insufficient then results will be poor and systems ineffective.
- ➔ Implementing new methods such as auctions will be difficult as they may upset long-established marketing patterns and fisher/trader relationships often dominated by powerful groups.
- ➔ Government work plans do not include marketing-related activities and are guided by targets and policies that emphasize increased production.

- ➔ Access to market opportunities (e.g. selling at weekly markets) is denied to certain groups based on family, ethnicity and/or group allegiances.

Building capacity

Potential areas and beneficiaries for capacity building relating to fisheries post-harvest are extremely varied. Any training needs to be followed up with the provision of on-going mentoring support. Building a motivated body of trainers from varying backgrounds can help ensure sustainability.



Vietnamese fishing community members learn processing skills

Enabling factors and recommendations

Nature of capacity building

- ➔ Practical sessions and on-site instructions help beneficiaries understand and build confidence to implement new skills.
- ➔ Capacity building efforts need to be on-going. One-off training events are never enough. They must be followed up with refresher sessions so that trainees can seek advice about problems they have faced whilst trying to implement new techniques.
- ➔ Having government staff sit in and participate in community training activities (delivered by project staff or NGOs) helps enhance their skills and increases replication potential.
- ➔ Do not 'Stop and drop'. When providing equipment also provide instructions and mentoring on how to use and to maintain it. Do not assume people will know how things work.
- ➔ Slowly build the capacity of local trainers and let them put their new skills into practice early on. Make initial engagements with communities simple in order to help trainers gain confidence.
- ➔ Study visits can help by giving producer groups or community members the practical experience and confidence to carry out improvements to their own products.
- ➔ The successful development of a business will lead to new challenges. These will require additional training such as how to scale-up production, fund expansion, deal with customer complaints, financial management, etc.
- ➔ The daily calendar of fishers and their wives should be considered when setting training times.
- ➔ Training materials need to be simple, attractive and in the local language. The training methodology should be slow, easy to follow and participatory.

Nature of trainees and trainers

- ➔ The attitude of trainers is vital. They must have the motivation and commitment to share skills and experiences with trainees.
- ➔ Prior expertise in post-harvest is not always necessary to become a trainer. On-going support and the chance to put new skills quickly into practice can boost capacity and confidence.

Type of skills

- ➔ A comprehensive training needs assessment needs to be carried out.
- ➔ Areas of potential capacity building are widespread and varied and may include: basic hygiene and sanitation; enhanced recipes or new product development; packaging; certification; labeling; feasibility studies; business planning; operations and production planning and control; marketing; financial management and book keeping; preparation of proposals or applications for grants or support from government etc.
- ➔ Emphasis should be placed on building up marketing skills at provincial/local level which are often lacking amongst government staff.
- ➔ Involving staff from NGOs and education institutions in addition to government agencies helps inject new skill sets and widens the base of those with the ability to support communities.
- ➔ Lack of access to capital is a major obstacle for producer groups. Emphasis should be placed on enhancing financial literacy, building community savings groups and enhancing access to micro-finance.

Sustainability

- ➔ Training a body of trainers represents one of the best ways to build local mentoring capacity (government staff, NGOs etc.) and to ensure sustainability and replication.
- ➔ Knowledge and expertise will be lost if trained staff are moved to other roles / responsibilities. A commitment should be obtained from government departments that trained staff will remain in their post for an agreed period.
- ➔ Authorities need to commit sufficient budget and staff to ensure support can continue to be provided to producer groups once any development project ends.

Building a body of mentors

In Indonesia, RFLP worked closely with staff from local government, NGOs and educational institutions to develop a cadre of local post-harvest trainers. This has been integral to ensuring the success of RFLP's actions and will leave a legacy of well prepared, experienced and motivated staff, better equipped to respond to the needs of the communities they work for.

The main lessons learned from this initiative were the need to place as much emphasis on building local mentoring capacity as was placed on supporting communities; how the involvement of staff from NGOs and education institutions can help inject new skills sets and widen the base of those with the ability to support communities; and that motivation and not past experience or qualifications is the main criteria to become an effective trainer.



Motorcycle cool boxes designed and produced by RFLP in Indonesia helped fish traders in Rote Ndao district transport fish in more hygienic conditions. The fibre glass boxes also kept fish colder for longer allowing them to be transported to remote communities in good condition.

Risks

- ➔ Attempts are made to train too many people resulting in poor quality training with little impact.
- ➔ Development projects do not have sufficient time to build capacity of producer groups to ensure sustainability.
- ➔ Trainees are unable to afford the equipment they have been trained to use or it is simply not locally available.
- ➔ Those trained to pass on skills to communities cannot do so due to insufficient funds or equipment.
- ➔ Government staff who have been trained are moved to different departments and their skills are lost.
- ➔ Those participating in training lack motivation and only do so to receive payment or free equipment.
- ➔ Government departments or extension offices in provincial areas lack capacity to provide any realistic on-going support to communities.
- ➔ Slow procurement of basic equipment results in new skills not being put into practice and being lost.
- ➔ Training takes place as a one-off event with no follow up from service providers.

Enhancing post-harvest capacity

RFLP carried out a wide range of capacity building activities relating to post-harvest issues in all six participating countries. Areas covered included basic hygiene, the use of ice and ice boxes, the improvement of fisheries products and recipes, developing better packaging and labels, obtaining product certification as well as marketing techniques. Importantly, the capacity of groups was also built with regards to operating small business enterprises. For example, efforts were made to strengthen group management and in skills such as book keeping and managing money.



Service provider selection

Service providers are the interface between projects and beneficiary communities. The success or failure of activities is firmly in their hands therefore careful selection is vital.



Staff of the Livelihood Skills Development and Enhancement Center (LSDEC) in the Philippines provide mentoring and support for trainees.

Scad drying pilot fails to take off in Viet Nam

In Viet Nam RFLP piloted an innovative scad-drying model in Phong Hai commune of Thua Thien Hue province. A service provider was engaged to design and install the drier however although they had previously designed rice and cassava driers this was the first time that they had attempted to design and operate a fish drier. Fish that were dried were of poor quality and could not be sold, leading to the pilot being abandoned and disillusionment amongst the community.

Enabling factors and recommendations

- ➔ It is important to carefully analyze the capability of the contracted party against the Terms of Reference and only engage them to undertake work for which they are capable.
- ➔ Where possible engage local trainers or resource persons who understand local context and can better manage interpersonal dynamics with coastal communities.

Risks

- ➔ A lack of trained professionals will greatly hamper implementation of activities.
- ➔ Trained service providers are engaged in full time posts and are unable to commit the time needed for project activities.
- ➔ Government service providers lack sufficient administrative and financial flexibilities necessary to comply with implementation.
- ➔ Poor service provider delivery results in community dissatisfaction and tarnishes the reputation of the project or donor.

Regulations and the role of government

National, provincial and district governments set and enforce regulations that govern post-harvest activities and development. Strong and committed action at government level is important yet often regulations can present an insurmountable obstacle for small scale-fishers and producers.



The use of potentially dangerous chemicals needs to be regulated and importantly, the regulations must be enforced.

Enabling factors and recommendations

- ➔ Advocacy needs to take place for stronger enforcement or inspection of standards at landing centres, ice production plants etc. Facilities such as ice production plants should be closed down if they do not meet basic standards.
- ➔ Better liaison needs to take place between various ministries or government agencies which may be able to support development of coastal communities. These could include ministries of industry, employment, education, social welfare, women's affairs, as well as SME development, micro-finance institutions, etc.
- ➔ There needs to be clarity regarding which ministry or agency is responsible for inspections, food safety etc.
- ➔ The use of potentially dangerous chemicals to prolong shelf life of marine products or to give the impression of freshness needs to be closely regulated.
- ➔ Regulations should exist and be implemented governing the management of landing sites and fish markets.
- ➔ Consideration should be made as to whether regulations need to be adapted to more realistically meet the circumstances of small-scale processors.
- ➔ Funding is needed to support small-scale producers to meet basic hygiene and sanitation requirements.
- ➔ Basic awareness material is needed to explain regulations in understandable language to communities.
- ➔ Development project actions should be in line with government priorities.
- ➔ Children should be taught about hygiene and sanitation at school. Post-harvest and small business techniques should form part of vocational training courses.

Risks

- ➔ Regulations are too difficult or expensive for small-scale producers to comply with and are an insurmountable obstacle for the development and sale of local products by producer groups.
- ➔ Lack of government resources results in little or no monitoring or enforcement of hygiene/ production standards. As a result, regulations are simply ignored.
- ➔ Regulatory requirements change over time and are hard for small producers to keep abreast of.
- ➔ Different districts or provinces have different health and safety regulations.
- ➔ Government at the local level is badly under resourced and hence rendered ineffective.

Difficulties meeting food safety regulations in the Philippines

In the Philippines it is extremely difficult for small-scale food processors to meet minimum requirements set out by the Philippines Food and Drug Administration relative to food safety and quality. RFLP post-harvest livelihoods projects (e.g. bottled shrimp paste, bottled sardines etc.) have been especially constrained by the lack of a basic production area or through lack of access to potable water which are minimum requirements for a License-to-Operate. In response RFLP supported the construction of common processing facilities where groups can go to cook their products in hygienic conditions.



In Sri Lanka RFLP has helped develop management plans for Puttalam, Chilaw and Negombo lagoons. These bring together all concerned stakeholders including various government ministries and agencies as well as fishing communities. One of the key areas tackled by the plans is the dumping of waste in the lagoons which leads to unsanitary conditions, especially around landing sites.

Scaling up production

Producer groups which have achieved success in developing and marketing products often face the additional challenge of being able to produce sufficient quantity to fulfill orders.



Mama Fons with seaweed snacks.

Enabling factors and recommendations

- ➔ Scaling up production capacity is a challenge for small-scale producers. 'Centers of production' should be supported where producers can group together to maximize economies of production scale.
- ➔ Producer groups need help to establish production planning and control.
- ➔ On-going capacity building and support is still required for those groups which face the challenges of 'success'.

Risks

- ➔ Success may bring producers into competition with larger SMEs.
- ➔ Groups are unable to produce their products in sufficient quantity or on a regular basis to establish sufficient market demand.
- ➔ Lack of access to capital prevents scaling up of production.
- ➔ Producers do not want to want to collaborate or share recipes.

Mama Fons scales up production

In Indonesia's Nusa Tenggara Timur province RFLP worked with 20 women's groups to improve the quality of their seaweed and fish products. One producer group led by 'Mama Fons' saw her 'pillus' seaweed snacks go from being sold only locally to being included in a programme that marketed the products nationally. The challenge for Mama Fons and her group is to raise production from some 10 kgs of product a week to the 200 kgs needed for the national sales.

The need to network

No project or community works in a vacuum. Efforts should be made to forge links and collaborate with a variety of partners in order to create synergy, share lessons and maximise the chances of success.



The body of trainers built by RFLP in Indonesia included fisheries agency officials, members of NGOs as well as staff of fisheries colleges. By bringing together a wide variety of participants different skills sets could be drawn upon to maximise the impact of training to communities.

Indonesian producers learn from fairs

In Indonesia producer groups were supported by RFLP to take part in provincial and national trade fairs. This helped the participants gain in confidence and provided the opportunity to meet potential customers as well as to learn from other producers. By taking part in such events, brand awareness of products from NTT province was also boosted on a wider stage.

Enabling factors and recommendations

- ➔ Collaborate closely with the authorities with regards to planning to generate more ideas, ensure better quality implementation and avoid past mistakes. Collaboration can also help raise the profile and boost motivation of local authorities.
- ➔ The involvement of government staff in actions to introduce new approaches (e.g. awareness on food safety) can help enhance their skills and increase the potential of replication in other government programmes.
- ➔ Look for real signs of support from partners such as willingness to commit staff to be involved with project activities.
- ➔ Encourage partners to enter into a Memorandum of Understanding or other agreement in order to formalise collaboration and to specify the responsibilities of the concerned parties.
- ➔ Seek to establish a network of local experts and food specialists from government, NGOs, educational institutes and the private sector that can facilitate assistance for producer groups, collaborate on product development, and build relationships with buyers etc.
- ➔ Encourage producer organisations to maintain good working relationships with networks.

Risks

- ➔ Security issues or remote locations result in an absence of potential partners.
- ➔ Counterparts have negative attitudes or different interests/agendas.
- ➔ Counterparts lack the capacity and resources to effectively engage.

The role of women

Women play a hugely important role in fisheries post-harvest activities. As a result, any activity aimed at enhancing production or product quality must facilitate the participation of women and at the same time avoid overburdening them.



Post-harvest fisheries trainees in the Philippines

Enabling factors and recommendations

- ➔ Post-harvest activities are mainly carried out by women. Therefore it is vital that a gender assessment/analysis takes place prior to designing interventions.
- ➔ Post-harvest activities provide a sense of economic empowerment to women as well as improve their community status.
- ➔ Post-harvest activities provide a good opportunity for government staff to interact with women in fishing communities.
- ➔ Any training or capacity building activities need to be organized so as to accommodate women's household or family commitments.

Risks

- ➔ Women are already overburdened or do not have time to participate.
- ➔ Husbands do not allow wives to participate.

Fisher wives gain in confidence

Mainly comprising the wives of shrimp fishers, the Nina Kasih group based in Oebelo, a small fishing village in Indonesia's Kupang District processed shredded shrimp for home consumption. On the whole the women felt they had been left behind and their feeling of self-worth was low.

Things changed when they started working with RFLP. The group received training and technical assistance to improve their product quality and packaging. They also received advice on how and where to sell their shredded fish as well as basic book keeping and financial literacy training.

Although the path has not been easy the group members are now earning a regular income and have greater confidence in their abilities. Initially sceptical, their husbands have also become supportive of their efforts.

Technology and techniques

Communities or producer groups need to help identify or be fully supportive of any new products, techniques or technology that are introduced; ‘parachuting’ something in from outside is unlikely to lead to success.



Women in Timor-Leste learn basic fish drying techniques

Risks

- ➔ Uptake of new fish processing technologies or value addition techniques may be slow due to the entrenched predominance of traditional processing/vending/trading practices.
- ➔ Although basic equipment/techniques may be effective and low cost they may still be rejected by community members as they can represent/symbolize under-development.
- ➔ Equipment such as steel sorting tables may be too expensive for communities to buy themselves unless they are provided for them. As a result, replication or widespread uptake is highly unlikely.
- ➔ Producers may become disillusioned if a new technology or techniques do not quickly deliver good results.

Enabling factors and recommendations

- ➔ New products should be proven to be technically, economically, environmentally and socially feasible and acceptable by the local community. This may take considerable time.
- ➔ If resources are an issue, emphasis can be placed on introducing simple techniques that are cheap, simple and easy to implement such as improving hygiene when drying fish by using a mosquito net to keep flies off.
- ➔ It may be more realistic to improve existing post-harvest technologies or livelihoods rather than introduce something completely new.
- ➔ Do not provide electrical equipment (such as vacuum sealers etc.) unless a reliable and stable power source is available and affordable.
- ➔ Don't stop and drop equipment. Provide mentoring on how it should be used and seek to build lasting relationships with the recipients and suppliers. Make sure instructions are available in the local language.
- ➔ New techniques may need considerable trial and error in order to attain good results. Time, staff resources and budgets should be planned accordingly.
- ➔ Equipment or techniques will have better adoption or uptake if they deliver increases in income (e.g. aerators to keep crabs alive).
- ➔ Buy locally if possible to support the local economy and for ease of equipment maintenance, repair and servicing.
- ➔ It is important to open trainees minds to new recipes, raw materials, packaging etc., as well as the ability to innovate e.g. to add colours to products.
- ➔ Compare new products with those already existing then test them in the market to get feedback.
- ➔ Look for new product opportunities or niches rather than producing those which will bring competition with established producers or SMEs.

Time and resources

Developing products and supporting producer groups is a slow process. A realistic approach needs to be taken as to what can be done (well) with the time and resources available.



A shrimp paste producer group which has benefited from RFLP support in the Philippines

Building on the work of others

On a number of occasions RFLP built upon capacity building work carried out by other organizations or projects with fisheries communities. For example in Viet Nam groups which had already been trained in better fish sauce production techniques were helped to actually put these skills to use. By working with existing groups and building upon their skills RFLP was able to deliver considerable improvements to groups within the limited time frame of the project.

Enabling factors and recommendations

- ➔ It is important that work plans are not over ambitious and take into account the considerable length of time necessary and the high level of hands-on mentoring needed to implement post-harvest activities.
- ➔ Strengthening a group, improving its product, gaining certification, carrying out marketing activities will need in the region of 2–3 years.
- ➔ The time needed to procure equipment must also be considered.

Risks

- ➔ If the project is too big and too ambitious or if communities are too numerous or widely dispersed it will be impractical to provide the level of on-going support necessary for objectives to be achieved.
- ➔ Equipment is procured too late and activities planned to be carried out miss the season when fish or other marine resources are plentiful.
- ➔ Groups do not receive sufficient mentoring support and so by the end of any development project are unable to operate sustainably.
- ➔ Due to the degree of support needed marginalized or weaker producer groups are not included in project activities.
- ➔ Political interference and government processes delay or unduly influence activities.

Beneficiary selection

Considerable emphasis should be placed on beneficiary selection as it is the foundation upon which the success of activities will rest.



A producer group from Indonesia supported by RFLP gained first place in a contest recognizing Small and Medium Enterprises producing fish and seaweed-based products.

Enabling factors and recommendations

- ➔ The beneficiary selection/screening process needs to be strong. Key criteria (either for individuals or groups) include attitude, motivation, perseverance and entrepreneurial spirit.
- ➔ An assessment should be made regarding the level of accountability that producer groups are willing and able to assume when provided with a grant or donation of project equipment.
- ➔ The requirement for producer groups to provide counterpart funds (e.g. for a production facility) would motivate the groups to take support more seriously.
- ➔ Transparency and communication are important when it comes to beneficiary selection.
- ➔ The list of beneficiaries with full contact details needs to be provided for follow up and to ensure linkages with other interventions.
- ➔ Strong group management is vital to success and should be a key requirement.
- ➔ TOT trainers should include a mix of representatives from educational institutes, private sector, NGOs etc., who have different skill sets and all of whom will be able to pass on skills such as hygiene or better handling practices to their respective audiences.

Risks

- ➔ Beneficiaries are not selected in a transparent manner.
- ➔ The prime motivation for participants to take part in training is to receive payment or free equipment.
- ➔ Potential beneficiaries who need help most are not selected as they will need too much support for a project to realistically deliver.
- ➔ Conflicts within groups lead to slow progress or result in activities failing to meet their objective(s).

Participatory selection in Viet Nam

The selection of fishers to be provided with on-board preservation equipment by RFLP in Viet Nam is a good example of a transparent beneficiary selection. The process started with consultations to discuss and agree on selection criteria among local authorities and communities. It was led by the local Fisheries Association (FA) in order to reinforce its role as the representative of local fishing communities as well as to help it build organizational and coordinating skills.

The selection was then undertaken by FA members to ensure that it was transparent and that the members agreed. The results of the selection were then recorded and endorsed by the FA.

RFLP's activities

This publication synthesizes the experiences and lessons learned by RFLP relating to its activities in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam.

More detailed information on RFLP's activities including case studies, reports, presentations and publications can be found at www.rflp.org

Additional material can be found at the web site of the Food and Agriculture Organization's Fisheries and Aquaculture Department at www.fao.org/fishery/en

Please also see the website of the Asia Pacific Fishery Commission at www.apfic.org

About RFLP

The Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) sets out to strengthen capacity among participating small-scale fishing communities and their supporting institutions in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam. By doing so RFLP seeks to improve the livelihoods of fishers and their families while fostering more sustainable fisheries resources management practices.



The four-year (2009–13) RFLP is funded by the Kingdom of Spain and implemented by the Food and Agriculture Organization of the United Nations (FAO) working in close collaboration with national authorities in participating countries.

For more information about RFLP, see www.rflp.org or contact steve.needham@fao.org (Information Officer)