



**REGIONAL FISHERIES LIVELIHOODS PROGRAMME
FOR SOUTH AND SOUTHEAST ASIA (RFLP)**

The Good Fish Code – better fisheries through co-management

Post Consultation revision

For the Regional Fisheries Livelihoods Programme for South and Southeast Asia

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Executive Summary and proposed scheme

Incentive systems for improving performance are a part of everyday life. Acknowledgement of positive progress in natural resource management, for example, has become a tool widely endorsed by governments, NGOs and businesses. It fits the current push towards co-management in that, whilst sanctions are important, incentives can drive individuals and groups to take on issues themselves, thus complementing the role of government.

In the past ten years the main focus on incentive programs has been on market based incentives whereby some market benefit accrues to those that meet an agreed level of environmental performance. There is little doubt that such tools work and there is a growing interest in how to widen the scope of the whole concept to include other types of incentives and less demanding but still productive (in terms of driving improvement in agreed areas) approaches.

FAO's interest in this approach stems from its on-going promotion of good fisheries management as the basis for long term sustainable fisheries production. Good management helps protect fishing communities from the inevitable perturbations to catches and income that arise from natural changes in the environment and human induced changes such as market demand. In accordance with the FAO adopted definition of an Ecosystem Approach to Fisheries there are both environmental and human aspects to creating well managed fisheries.

There are two aims of a recognition scheme:

- Driving improved management – well managed fisheries benefit fishing communities.
- Encouraging resilient fishing communities – communities that are able to withstand and recover from external pressure. This involves ensuring preparedness and having a diverse portfolio of income sources.

Community driven development is central to the whole concept of co-management and is facilitated by tools such as Participatory Rural Appraisal which encourages communities to scope out the issues, develop and implement plans and then review progress.

This project proposes the adoption of a code (not a standard) called the Good Fish Code which is a so called 'stepwise' or improvers program designed to establish a series of agreed thresholds which define progress towards the two above aims. At each step there are defined incentives and these become more valuable the more a fishery progresses. As there are financial aspects to some of these incentives a system of external verification is proposed. However, the Good Fish Code is not designed to be a third party certification system and is not therefore subject to many of the rigours typically put in place for such systems.

Diagrammatically the proposed scheme is depicted as follows:



The entry level criterion is crucial – there needs to be a suitable fishery level governance regime in place that has the capacity, skills and commitment to making fishery level improvements.

The following table depicts the varying levels of audit scrutiny and rewards accruing at each step of the scheme.

	Website/ publicity	Government, national or RFLP endorsement	Financial (or other) access	Verification check
Governance in place	●			Self assessment - written statement by governance leader, plus one of local government leader or fisheries department director
Fishery evaluation finalised	●			Self assessment - written statement by governance leader, plus one of local government leader or fisheries department director and copy of audit as used as the basis for the plan
Plan in place	●	●	●	Trained verifier at local level or accredited certifier

				(ISO9000, ISO 14000 or ISEAL member scheme)
Input audits passed and no red criteria		●	●	Trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme)
Outcome audits passed			●	Trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme)

The principles and criteria which form the basis for the code and set out the verifiable steps are given in the following table:

Principles	Criteria	Green	Yellow	Red
Resources	Species retained by the capture fishery must be managed in a way as to minimise the risk of over-exploitation	There is evidence to support a risk based assessment that none of the retained species are at risk of being over-fished	There is reason to believe, based on risk based assessment that less than 20% of the retained species are at risk of being over-fished	A risk based assessment finds that over 20% of the catch (by number of species) is comprised of species that are at risk of over-fishing.
	The capture fishery must ensure that broodstock and juvenile fish (i.e. below age of maturity) are subject to low fishing mortality	There is evidence that the mortality of broodstock and juvenile fish is at a level which does not harm the recovery or sustainability of adult populations	Fishing gears and or fishing practices are in use, that ensure most fish below spawning age escape capture.	Either juvenile fish dominate the catch or some species in the catch are primarily represented as juveniles (below spawning age)
	Populations of Endangered, Threatened and Protected (ETP) species must not be adversely affected by the capture fishery	There is evidence available that demonstrates the effectiveness of measures to reduce the take of ETP species	Measures have been put in place which are aimed at reducing the catch of ETP species	ETP species are either targeted or utilised or there are no measures in place to reduce the catch of ETP species
Management	The capture fishery must have an effective basis for the implementation of regulations and rules for conserving all species involved in the capture fishery	There is evidence that the regulations and rules * are effective in controlling catches and minimising the catches of ETP species	There is evidence of legal/ administrative arrangements being in place, but there is evidence that these are not applied or are ineffective	There is no evidence of any legal/ administrative arrangements in place for the capture fishery
	An effective means	There is evidence	A framework for	A framework

Principles	Criteria	Green	Yellow	Red
	of monitoring, control and surveillance needs to be in place	that catches are reported and illegal activity has been reduced to tolerable levels	monitoring control and surveillance is established, but is either not being implemented or is ineffective	for monitoring control and surveillance is not established
	There is a co-management regime in place that actively facilitates stakeholder participation in decision making	Decision making in the capture fishery is based on actions agreed by stakeholders	The authorities consult with stakeholders	The authorities do not access the views of stakeholders prior to making decisions that impact the capture fishery
	Management of the capture fishery is supported by the collection of up to date data and information	Management decisions are primarily reliant on data and information obtained from the capture fishery and related research	There is limited data/ information available but management relies on expert judgement and risk based techniques	There is no management relevant data/ information available to assist in decision making
Participation	Both men and women contribute to the management and development of the capture fishery.	Women are active participants in decision making processes and participation in capture fishery activities is unfettered by gender considerations	Women are consulted on capture fishery decisions, but play no role in implementation	Women are not accorded equal status in the decision making processes associated with the capture fishery
	Those who work in the capture fishery are treated with respect and paid a living income	Evidence is available that agreements are honoured and workers have access to appeal avenues	Agreements are in place that accord workers in the capture fishery fair rights in accordance with international and national laws	Workers are not adequately remunerated, are indentured and/or mistreated
	The contribution of children to the capture fishery does not impede full time education opportunities	Children attend school and work in the capture fishery is restricted to light family assistance duties	Children attend school but before and after school hours spend time working most days of the week	Children are denied schooling as they are forced to work in capture fishery related activities
	Different stakeholders outside of the catching sector are involved in the management process	Stakeholders from outside the catch sector are actively involved in the management process	Stakeholders from outside the catch sector are consulted but are not equal stakeholders in the management process.	The management process actively excludes involvement from outside the catch sector
Safety (at sea)	Fishing communities	Training and	Plans are in place	No plans are in

Principles	Criteria	Green	Yellow	Red
and food safety)	are prepared to handle most high frequency natural disasters	simulation exercises or real world testing have resulted in the plan being put into effect	at the community level to deal with disasters	place at the community level to deal with major disasters
	Those that work in the fishery, including family members, have a safe workplace	Accident/injury rates are at an acceptable level	Measures to identify and mitigate risks are in place but accident/injury rates are still of concern	Safety risks are not addressed and there is an unacceptable occurrence of accident/injury.
	Fishers manage the risks associated with being at sea to acceptable levels	An electronic communications network for finding lost vessels and coordinating ship to shore communications is in place	Boat based safety equipment can be found on almost all vessels, but an electronic safety network is not in place	Fishers do not carry any workable safety equipment to sea
	Wastage is minimised and all sales opportunities maximised by keeping fish in good condition	Fish landed meet national standards for export	All fish landed are of a quality to be sold as human food	Product handling is inadequate to the extent that more than 20% is unfit for human consumption
Resilience	The capture fishery is able to demonstrate to appropriate lenders and funders that it poses a low risk	Financial institutions are willing to make loans at market rates	Financial institutions are willing to make funds available, but these are subsidised or supported by government to reduce the risk	Financial institutions are unwilling to write loans as the capture fishery is considered to be a bad risk
	Fishing families have access to a diversity of sources of household income outside of the capture fishery	Households derive an income from multiple fisheries/farming ventures and non-capture fishery sources	Households derive an income from the fishery and non-capture fishery sources	Households are solely dependent on the capture fishery
	Income from the capture fishery is able to move households above the country poverty limit	There is evidence that income from the capture fishery is increasing in response to the measures taken	Measures are in place to stabilise and improve incomes	The income from the capture fishery is declining
Community development and environmental conservation	Fishing communities are able to demonstrate care for capture fishery habitats	Active measures are being taken to sustainably manage coastal ecosystems and to rehabilitate degraded habitats	Measures are in place to protect key habitats	Habitats are degraded and there are no efforts being made to protect and/or rehabilitate them

Principles	Criteria	Green	Yellow	Red
	Arrangements are in place to enable the wider community to benefit from a well managed capture fishery	The capture fishery generates a net surplus and a proportion is made available under an agreement to fund community facilities	The capture fishery generates a net surplus and this benefits the community via the purchase of goods and services	The capture fishery is a net drain on community resources
	Processing waste and household refuse is treated and disposed of in an environmentally friendly manner	Waste disposal facilities are both available and used	Waste disposal facilities are generally available but are either not used or are inadequate	Waste disposal facilities are not in place and there is widespread evidence of random disposal
Information exchange and management	Conflicts over the management of the fishery are resolved in a timely and suitable manner	There is a mechanism in place that demonstrably works to ensure that disagreements are addressed in a timely and suitable manner	A conflict resolution mechanism has been put in place but it has proven ineffective and management remains negatively affected by ongoing disputes.	Uncontrolled conflict and disagreement is preventing any effective management and decision making
	The ability of stakeholders to take advantage of opportunities is enhanced by access to appropriate capacity building.	Stakeholders have access to a range of capacity building opportunities that assist them to take advantage of opportunities to improve the welfare of the community via fishing.	Some capacity building opportunities are available to the community but they are infrequent or do not cover the range of opportunities needed.	No capacity building mechanisms are available to the community.
	Information important for the operation and development of the fishing community is made available in a timely and comprehensive manner	Mechanisms are in place to ensure that important information is made available to all interested parties in a timely fashion.	Some information of importance to fishers and stakeholders there are issues with timeliness and/or comprehensiveness	There is no mechanism in place to ensure that important information is made available to and distributed within the fisher community

The proposed scheme is designed to engage the private sector in a number of areas (sponsorship, funding, reward provision, financing) and seeks involvement from a variety of stakeholders including fishers, business, NGOs, research providers, fishery regulators, training providers and verification experts. The proposed scheme has a regionally based

governance structure that, in the first instance, will be run by FAO but should be transferred to an independent body once the scheme is operational.

Finally a series of milestones is proposed and an implementation timetable as follows:

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Inaugural workshop												
Establish advisory group												
Identify and engage 3 trial fisheries												
Establish governance bodies												
Recruit staff												
Promote the scheme widely												
Recruit and train verifiers												
Negotiate service providers												
Solicit sponsorship and funding												

Note: introduction to this September 2011 version

A discussion document describing the Good Fish Code was produced in May 2011 and circulated to interested parties prior to personal visits being made in August/September 2011. The main outcomes of the consultations, and the responses to the suggestions made, are documented in Appendix 2 of this September report. This report has been modified from the May 2011 version to implement the changes suggested, where appropriate.

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List of acronyms

APFIC – Asia Pacific Fisheries Commission

APRACA – Asia-Pacific Rural and Agricultural Credit Association

CPUE – Catch Per Unit Effort

CSR – Corporate Social Responsibility

EAF - Ecosystem Approach to Fisheries

EIS – Environmental Impact Statement

EMS – Environmental Management Systems

ESD – Ecologically Sustainable Development

IFFO – International Fishmeal and Fishoil Organisation

ISEAL – International Social and Environmental Accreditation and Labelling alliance

IUU – Illegal, Unreported and Unregulated

MEL – Marine Eco Label

MSC – Marine Stewardship Council

NGO – Non Government Organisation

PSA – Productivity Susceptibility Analysis

PRA – Participatory Rural Appraisal

RBF – Risk Based Framework

RFLP – Regional Fisheries Livelihoods Program

SICA – Scale Intensity Consequence Analysis

4C – Common Code for the Coffee Community

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Section 1. Introduction and scoping

Multiple pathways to well-managed and sustainable fisheries have been devised around the world but in recent years there has been considerable interest directed towards the development and implementation of mechanisms designed to recognise progress in the implementation of management measures by the aquatic product capture (wild harvest) sector. Typically this recognition may involve some form of incentives, financial or otherwise.

The reasons for this trend are diverse but can include the need to:

- Acknowledge the often painful sacrifices made by fishers to reverse the impacts of inadequate management;
- Address the loss of public support that can be created by perceptions of over-fishing and other fishing impacts on public resources;
- Access growing market demand for products from demonstrably sustainable and/or well managed fisheries;
- Increase the likelihood of accessing funding resources – recognition equals profile, which enhances access to funds; and,
- Empower those that have made tough decisions.

Much recognition is unstructured and very local. A fishery leader may receive some positive acknowledgement in the local media, for example, or a company or industry association may receive an award at an industry celebration. Such approaches may be well suited to situations where audiences are also local and the evaluation procedure used to make the decision is not widely contested.

Larger scale approaches, such as regionally managed fisheries or regional improvement programs, or schemes designed to attract market attention need a more rigorous approach, with transparent evaluation criteria and a greater degree of objectivity and independence in the evaluations. This needs to be balanced against the needs of fisheries seeking to implement co-management, which is based on partnerships and not only dependent on flexible approaches to implementation, but very reliant on stakeholder input and reporting.

This project aims to guide the development of a recognition scheme for those fisheries that are seeking to improve management by implementing co-management under the umbrella of the Spanish funded Regional Fisheries Livelihoods Programme (RFLP), which is being executed by the Food and Agriculture Organization of the United Nations (for terms of reference see Appendix 1). Once developed the scheme could be accessed by other fisheries that satisfy the agreed criteria, anywhere in the world.

1. 1 Structure of the report

The project brings together a diversity of factors that need to be considered when designing a scheme that is best suited to (generally) small-scale fisheries operating in developing countries. These factors are considered as follows:

1. The nature of recognition schemes;
2. Evaluating fishery status and progress in fisheries management improvements;
3. Co-management – key attributes for evaluating progress;

4. Influence of required design criteria such as the Code of Conduct for Responsible Fisheries and the Ecosystem Approach to Fisheries, ability to attract market interest and the social attributes of a fishery;
5. Options for designing a recognition scheme; and,
6. Recommendations for implementing a recognition scheme.

In conducting the research for this report it became apparent that some design needs do not necessarily work in a complementary fashion. For example, a scheme that is very prescriptive and involves a ‘tick the box’ approach for evaluation may work against the need for co-management to be flexible and adaptive in nature. Likewise a scheme that is rigorous and comprehensive may well be exposed to excessive costs and thus of no interest to the inshore small-scale fisheries targeted by the RFLP. As there is no single way of designing such a scheme the influence of these factors is discussed and the scheme that will finally be implemented may well differ from that put forward as a result of the trials that are recommended.

1.2 Recognition schemes

The easily accessible (i.e. web based) literature is bereft of material relating to recognition schemes for well managed (and/or co-managed) fisheries. Market based incentive schemes have dominated thinking on incentives for good or improving performance and this reflects a view by all sides of the fisheries debate that financial incentives are powerful motivators of change in a market driven society. This is a view not unique to fisheries but so widespread that market based drivers of change are enshrined in international agreements.

Market based incentives are not so simple as being restricted to obtaining a better price for a product or service that is produced in some approved way. ‘Market access’ has grown to be a major driver of demand for seafood products from well managed and sustainable fisheries. Thus sustainability has become a product attribute in much the same way as quality and, just as quality assurance systems met entrenched concern and opposition in their early years, the demand for sustainable produce has also been subject to opposition.

The term ‘recognition’ has various connotations as found in an online dictionary as follows:

- *The acknowledgment of something as valid or as entitled to consideration: the recognition of a claim;*
- *The acknowledgment of achievement, service, merit, etc.;*
- *The expression of this in the form of some token of appreciation; and,*
- *Formal acknowledgment conveying approval or sanction.*

<http://dictionary.reference.com/browse/recognition>

Thus for both a recognition scheme and for incentive programs there is a shared concept of acknowledgement of achievement, but it is left open as to what this acknowledgement may entail. In terms of a fishery, acknowledgment could take a wide variety of forms such as:

- A buyer recognising the achievement of a fishery (group of producers) having reached some agreed milestone via preferentially purchasing from them;

- The community associated with the fishery, society at large or government lending their name to some public acknowledgement of achievement;
- The fishery being able to demonstrate to a lender or funder that it has the capacity and the commitment to improve its circumstances; and,
- Higher prices being paid as the fishery has more options due to greater capacity and can seek out buyers for its differentiated products.

For a recognition program to be successful there needs to be a match between what the designers of the scheme want to achieve and what those who may be in a position to offer some form of recognition want to achieve. The clear aim of the proposed recognition scheme is to support the creation of co-management regimes for fisheries as a mechanism for improving resource management. Recognition would thus involve some acknowledgement that such regimes had been established and were operating in an effective way. The rationale for this approach is to encourage those fisheries that were not being effectively managed to become organised in a way that enabled the fishery participants to make decisions that favour sustainable use.

So, who would be interested in a co-managed fishery that was making progress, and why?

- Governments would be interested in promoting fishery management progress and success;
- Funders would be interested as it is more likely that their funds would have an impact if the fishery was organised and proactive. Although not a funder itself the Asia-Pacific Rural and Agricultural Credit Association (APRACA) (www.apraca.org), for example, explicitly explores the circular link between fisher community poverty and sustainability issues and, more importantly, the risks facing lenders when faced with this type of situation;
- Companies that may be purchasing seafood from the fishery, are keen to be assured that supplies are well managed – explored in more detail below.

The drivers for company engagement in the status of fisheries are varied but can include one or more of the following:

1. Public risk mitigation: the fishing industry has been subject to consumer activism for a number of years but the range of issues has increased and has included species which may in some areas be over-fished or are caught using certain types of fishing gear which are claimed to have an unacceptable environmental impact.

Companies can also be at risk in public if they handle fish that are caught illegally or in fisheries that are unregulated or for which catch reporting is inadequate (collectively called IUU fishing – illegal, unreported and unregulated). A species which was being badly affected in this way was the Patagonian toothfish and many companies in the United States were pressured to stop selling this fish.

2. Market opportunity: the market for sustainable seafood has grown enormously in the past ten years if the growth in Marine Stewardship Council (MSC) labelled product is

any indicator (see Figure 1.1). Proactive companies seeking to capitalize on this growing market are extolling the sustainability virtues of their seafood products. Some make self claims or adopt the view that if the government approves then its use must be sustainable, whilst others make use of independent third party certification and labelling schemes.

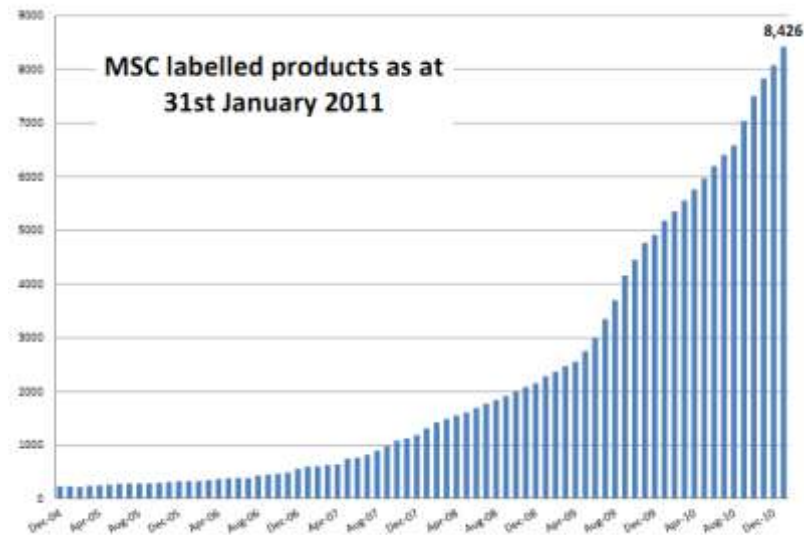


Figure 1.1. Growth in MSC labelled products. Source: Bill Holden, Pacific Fisheries manager, MSC, pers. comm

3. Being first to market is claimed to have advantages, but evidence for price premiums is currently lacking, in part because commercial in-confidence matters make access to data for independent evaluation very difficult. Anecdotal evidence is not hard to find.
4. Business obligation: seafood may pass through a number of companies before being sold to the consumer. Ensuring that supplies are traceable to prevent substitution and fraud, protect reputations and ensure that illegally caught/supplied product is kept out of the supply chain imposes obligations on some companies whether they have an interest in sustainability or not.
5. Business ethics and Corporate Social Responsibility: some companies have been in business for generations and have a strong tradition (sometimes family based) of seeking to ensure that supplies are sourced from suppliers that are ethical and committed to the long term.

In recent years the concept of Corporate Social Responsibility has grown as a guiding force enabling companies to coordinate the achievement of both commercial and social goals. Corporate Social Responsibility can be described as “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large” (World Business Council for Sustainable Development cited in Asongu 2007). Asongu (2007) notes that the four traditional arguments for CSR are moral (or ethical), reputation (or brand image), license to operate (or legal), and sustainability related.

Whilst there is much debate over the value of CSR and the underlying reasons behind the adoption of CSR policies (Roheim 2009) the fact remains that CSR policies are a mechanism for NGOs to engage with business (see for example Jonker and Nijhof 2006) and social and environmental NGOs are heavily engaged in the seafood supply world. NGO pressure on the retailers of seafood taps into CSR policies that are company-wide in scope, i.e. not limited to seafood (Leigh and Waddock 2006) and retailers engage in risk management behaviour when scrutinizing procurement decisions which may put perceptions about company ethics or reputation at risk.

In terms of seafood, retailers commonly operationalize their CSR commitments by establishing procurement policies aimed at both reducing the risk of adverse criticism in the public arena and bolstering their pursuit of improved image. As such, the policy commitments of such companies differ little from their requirements in other areas such as food safety and pricing and thus the CSR commitments of retailers, whilst not enforced in such a hard way as a food safety requirement, can be viewed by suppliers as either yet another requirement to be fought or an opportunity to gain market advantage.

As retailers are not fisheries management specialists they look to external sources of advice as to whether seafood supplies meet procurement policies as linked to CSR policies. Assurances by suppliers carry little weight as few, if any, would provide advice that the products being offered are illegal or from an unsustainable fishery.

6. Resource access – the catching sector in some areas is increasingly aware that access to public resources is becoming dependent, at least in part, on responsible behaviour and that a ‘social licence’ to operate is just as, if not more, important than a fishing permit. Resource reallocation to both conservation and recreational uses has had significant impacts on the viability of fishing sectors in Australia and the United States amongst other countries and part of the reasoning behind such reallocations is a perception that recreational fishing is inherently more environmentally friendly, an assumption that is increasingly under challenge (McPhee *et al* 2002).
7. Self preservation – a realization amongst industry leaders that unless action is taken to resolve sustainability issues, the viability of businesses and coastal communities will be at risk.
8. A loss of revenue arising from fish theft – IUU fishing undermines legitimate operators via several means, including undermining stock protection measures and undercutting markets. For example, the OECD estimated that IUU tuna were sold at a 30% discount on legal tuna (OECD 2003).

Certification programs are a subset of the wider consideration of recognition schemes and there is an enormous amount of literature and opinion available (e.g. Ponte 2006, Gardiner and Viswanathan 2004). In terms of developing countries a wide variety of concerns have been raised, but despite attempts to formally reject such schemes, the momentum behind certification and labelling has grown and there is probably a case for constructive engagement rather than outright rejection. It remains the case that incentive programs for progress on resource management improvements remain embedded as an endorsed tool by governments all over the world (and at the UN level). Well developed programs in agriculture (e.g. coffee, timber) make a difference and, most importantly, the implementation of suitable management

regimes in many countries remains bogged down by traditional issues, including a lack of shared goals by industry, community and government.

Although organisations like the MSC and Friend of the Sea have made some notable attempts to make their schemes more relevant to developing countries one of the more constructive steps forward came out of the APFIC eco-labelling workshop held in Ho Chi Minh City in 2007 (APFIC 2007) where recommendations covering the following areas were put forward:

- Harmonization and equivalence of certification schemes;
- Specifically addressing the issues relating to small-scale fisheries and farmers;
- Governance and stakeholder involvement;
- Involvement of regional organizations in the development and promotion of certification;
- Publicize the costs and benefits of certification schemes; and,
- Capacity building at both regional and national levels.

However, no work plan was developed and it is unclear what follow up there has been. The underlying issues of inadequate fisheries management remain and incentive programs remain an under-utilised tool.

There are thus a variety of reasons why a recognition program has merit. The central reason is that some form of acknowledgement for achieving a goal is important in any field of endeavour, including making progress on fisheries management. The nature of the acknowledgement can vary from a simple statement of appreciation to some form of financial reward. The level of certainty that the progress is real will increase as the value of the reward increases and as accountability for issuing that reward or making financial decisions based on that reward increases.

1.3 Implications for the proposed recognition scheme

There are several elements that are needed to make such a system work in an effective manner; namely;

- Designing a system that is relevant to the users (producers) and groups asked to acknowledge progress;
- Designing a system that provides incentives for introducing effective co-management;
- Implementing a robust, repeatable and transparent system for evaluating progress;
- Creating a cost effective verification system; and,
- Offering recognition and incentives that are motivational.

The following section reviews the variety of systems that have been devised for evaluating the performance of fisheries.

Section 2 Fishery Assessment systems

2.1 The Ecosystem Approach to Fisheries and Participative Rural Appraisal – key inputs to co-management

Evaluating the status of fisheries and documenting progress on issues of interest is a complex task and has been the subject of a growing volume of literature. Most approaches by fisheries agencies have focused on the status of exploited stocks and, where possible, are quantitative in nature. However, the growing interest in an Ecosystem Approach to Fisheries (EAF), has resulted in a broader approach that addresses fishing impacts, evaluates management regimes and considers social and economic factors as well. Some of these take the form of post hoc environmental impact assessments (e.g. Australia) whilst others satisfy ‘State of the Environment’ style of reporting requirements whereby the public has access to a series of indicators of fishery status and impacts (e.g. Pitcher et al 2006). A growing category includes systems that form the basis of advice to seafood consumers as to which species from which fisheries should be preferentially purchased or avoided. More traditionally the information is used to guide management planning and decisions which are increasingly taking account of environmental, social and economic factors in a more structured way.

In terms of implementing the Ecosystem Approach to Fisheries (EAF) the fishery assessment systems of interest need to address the following:

Definition (FAO Technical Guidelines):

An ecosystem approach to fisheries strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries.

The EAF adopted by FAO explicitly adopts two equal principles, the first relating to ecosystem integrity and the second to satisfying human needs. According to the FAO Technical Guidelines on an Ecosystem Approach to Fisheries, an EAF has the following attributes:

Participatory processes that allow consultation and input from an initial group of stakeholders must be developed in order to:

- *Identify the fishery, area and all relevant stakeholders;*
- *Identify broad social, economic and ecological (including the fisheries resource) issues for the fishery, based on the broad international and national policy goals and aspirations;*
- *Set broad objectives for these issues;*
- *Break down broad issues into issues specific enough to be addressed by an identified management measure(s);*
- *Rank the issues based on the risk they pose to the fishery;*
- *Set agreed operational objectives for the high-priority social, economic and ecological issues identified in step 5 and develop linked indicators and performance measures;*
- *Formulate management decision rules; and*
- *Monitor the fishery using the selected indicators, and regularly evaluate the performance of management in meeting operational objectives – by inference, because*

of the linkages developed between policy goals and operational objectives, this will provide an assessment on how well management is achieving the broader policy goals.

Within the EAF there are themes which unify both the current approaches to co-management (e.g. stakeholder involvement in management planning and implementation) (see Section 3) and tools such as Participatory Rural Appraisal (PRA), which is very participative (i.e. more than consultative), community owned and driven (Chambers and Blackburn 1996, Bhandari 2003, Chambers 1992). There is an explicit requirement for the consideration of social and economic factors. However, as noted by Chambers and Blackburn (1996) PRA is very subjective. This creates challenges for setting benchmarks for something that crosses cultures and continents and is acceptable from both an external scrutiny and market perspective.

PRA was developed to counter some of the flaws of surveys, questionnaires and rapid evaluations which may provide misleading information on what is happening in a given situation, what is needed and how things are going. PRA is about helping people analyse their own situations, devise solutions and evaluate progress. There are dangers – dragging people into participating in things they don't want to do, and there may be biases, driven by expectations of commercial gain. Thus the EAF and PRA are very much 'people centred' approaches. Dialogue with potentially affected stakeholders is needed to scope out the issues requiring a solution, collect and analyse information, devise and implement solutions and evaluate progress.

Such levels of interaction can be time consuming and thus costly. Once the scheme is underway there will need to be some trials of techniques that reduce time/costs without affecting the participatory nature and intent of the scheme.

This type of pattern ("analyse their own situations, devise solutions and evaluate progress") is typical of the standard 'Plan, Do, Check, Act' approach known as the Environmental Management Systems approach which underpins the ISO 14000 family of standards. Such systems are not unusual and have the advantage that stakeholders take ownership of the problems and solutions and make progress on them at a pace that is best suited to their own circumstances. The major failing of such systems is that there are no performance thresholds that are common across groups, i.e. one fishery may set a very low bar for itself compared to others. Where some acknowledgement is needed there needs to be some equity.

Self assessment may be suitable in some circumstances but for the purposes of a recognition scheme it has some potentially problematic biases. External verification is an obvious solution and for certification purposes progress on any agreed plan can be evaluated by an external provider if required and a certificate of compliance with the agreed plan can be issued.

2.2 Measuring progress in fisheries

Measuring progress on the EAF and the implementation of co-management has been poorly developed as far as the social and economic factors are concerned. Some approaches, such as the environmental impact statements (EIS) conducted on the small-scale fisheries in the state of New South Wales, Australia (<http://www.dpi.nsw.gov.au/fisheries/commercial/ea>) are qualitative in nature in their consideration of social and economic issues. However, although the EISs informed the preparation of Fishery Management Strategies almost all factors

relating to social and economic performance were dropped out, leaving traditional biological measures in place.

Similarly, Australia's National Ecologically Sustainable Development (ESD) Reporting System (Fletcher et al 2005 and see <http://www.fisheries-esd.com/c/pubs/index.cfm>) is comprehensive in its scope in that it includes a generic framework that covers social, economic and ecological issues but evidence of its application to be as diverse could not be found in two sample applications of the process available on the 'fisheries-esd' website (<http://www.fish.wa.gov.au/docs/esd/esd007/esd0007.pdf>, <http://www.fish.wa.gov.au/docs/esd/esd003/esd0003.pdf>). These two examples from Western Australia showed a similar pattern to the New South Wales situation in that social and economic issues recede to the background at the management level in favour of traditional biological management.

Like the Australian ESD reporting system, RapFish (Pitcher and Preikshot 2001) covers social, economic and ecological issues and does so in a semi quantitative manner. It has been extensively trialled in a wide variety of fisheries but has not found widespread adoption by fisheries (or other) agencies or other organisations. A possible reason is that RapFish hardwires certain judgements into the assessments, such as a judgement that tradeable rights systems are mutually incompatible to positive social performance for a fishery (Leadbitter and Ward 2007). Evidence that RapFish is used for management purposes could not be found.

Most assessment approaches thus focus on three factors; namely the biological aspects of key species of interest (stock status, vulnerability to fishing etc), the direct and indirect consequences of fishing activities (e.g. by-catch and wider ecosystem effects) and the effectiveness of management regimes. Many fisheries agencies tend to focus more on stock status issues (although this is not only changing but variable from country to country – Pitcher et al 2006) whilst Non Government Organisations tend to take a wider view.

In terms of evaluating the systems created these may be descriptive, quantitative or semi-quantitative in nature. As noted by Leadbitter and Ward (2007) in an evaluation of a sample of systems available at the time, not only do these systems vary in the range of factors considered but it is difficult to avoid various biases creeping in. For example, a system that gives primacy to the age of a fish species at first maturity will rank a species like orange roughy (*Hoplostethus atlanticus*) differently to a system that gives equal weighting to age along with other factors such as stock status, fishing mortality and management effectiveness. Systems which are highly prescriptive in nature may be clearer and provide more repeatable results but they may also fail to encompass the wide diversity of fisheries to be found and could thus be at best discriminatory or at worst result in perverse findings. On the flip side are those systems which are very broad in scope but are commonly accused of being expensive to operate or excessively variable in their judgments.

Of relevance to the proposed recognition system is the mechanism for making judgements as to whether performance meets some agreed threshold or benchmark. Whilst there are systems that simply report how a fishery is performing, the more challenging exercise is to use the evaluation as the basis for some tough decisions. NGO consumer advisory systems commonly stream species/fisheries into so called 'traffic light' categories whereby some species/fisheries are differentiated as good performers from those that are deemed of concern. Certification programs create thresholds that enable some species/fisheries to receive certificates of compliance with a standard. The point at which a 'pass' is defined by all these sorts of

systems can be very controversial with considerable debate between various stakeholder groups as to what is fair, realistic and will create confidence amongst those not directly involved. In the case of a recognition scheme whereby the recognition involves some reward or some comparison to others there is a clear need for thresholds – there is little value in having a system that rewards progress on the basis of minimalist thresholds set by the fishery itself.

The most common area where performance is evaluated against a standard is stock status where reference points are in place. The so called ‘Kobe’ plot (Figure 2.1) is increasingly used by management agencies to provide information on how stock status is tracking against reference points (in this case the reference points are not formally adopted).

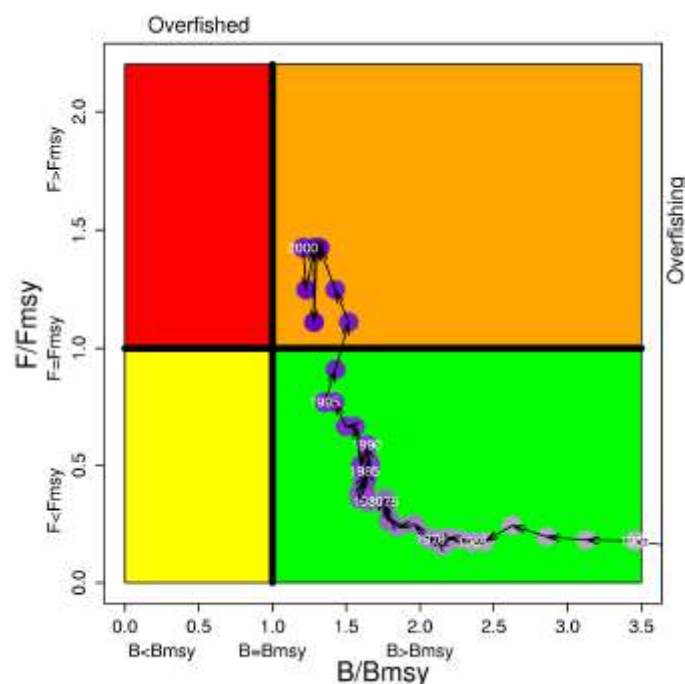


Figure 2.1 – ‘Kobe’ plot for Western and Central Pacific Bigeye tuna (*Thunnus obesus*). The performance thresholds are F_{msy} and B_{msy}

Where thresholds such as these are linked to an agreed harvest strategy there can be a clear link between performance based assessment and a management response.

For fisheries with limited data, triggers can be set based on expert judgement (see for example Australia’s Coral Sea fisheries) (Dowling *et al* 2007). In the case of the Coral Sea Trap and Line fishery there are triggers relating to fished area, key by-catch species (e.g. sharks) and total catch. There are no stock status data and so the catch or CPUE triggers are used to drive investigations into why the fishery has changed. Thus there may be no need for a management response (e.g. prices have dropped so a species is no longer targeted) or there may be a need for research (e.g. CPUE and catch is in decline but demand remains high).

2.3 Data poor fisheries

Data poor situations are common in fisheries and have bedevilled attempts to make management progress in many circumstances. However, there has been an increased focus on

the needs of such fisheries and a variety of tools explored that help move understanding and management forward. Such tools include risk assessment and harvest control rules specific to such fisheries (see Dowling *et al* 2008 and Smith *et al* 2009).

The risk based approach developed by Hobday *et al* (2011) was used by the Australian Fisheries Management Authority and adapted for use by the Marine Stewardship Council (where it is known as the Risk Based Framework). In the former case it was used to help focus management action and in the latter case to help evaluate data poor fisheries. There are two main components:

- Scale Intensity Consequence Analysis (SICA) – which evaluates the potential exposure of species to the type of fishing being considered. In broad terms, fisheries that significantly overlap with the range of a species and are either designed to target that species or the species is regularly taken, create a higher risk rating than the reverse.
- Productivity Susceptibility Analysis (PSA) – which is used to evaluate the vulnerability of species to the fishing activities being considered. In broad terms species that are slow growing, are low in fecundity or are relatively old when mature, are more of a concern than species with the opposite attributes.

It should be noted that management can (and should) mitigate the risk. For example, the intensity of fishing can be reduced via management controls and species that are inherently vulnerable (e.g. sharks) can be subject to some precautionary management.

An important aspect of the Risk Based Framework (RBF) is its reliance on stakeholder input, especially for the SICA component. Stakeholders are actively consulted for their views on the spatial scale and intensity of interactions which assists the establishment of priorities for action and the design of potential management solutions. Thus the RBF and PRA approaches have a great deal in common.

2.4 Fishery auditing

In data poor situations or for areas which do not lend themselves to quantitative analysis (e.g. management quality) some organisations (mainly NGOs) establish semi quantitative approaches whereby testable statements are created and assessors evaluate available information in order to make expert judgements. These can be converted into scores (as is the case for the MSC system), or allocated into categories (commonly coded as traffic light red, yellow and green).

An audit based approach is central to the MSC system and the following figure, extracted from the Fisheries Assessment Methodology (Fisheries Assessment Methodology Version 6 - http://www.msc.org/documents/scheme-documents/methodologies/Fisheries_Assessment_Methodology.pdf/view) shows how there is an increasing level of certainty and proof required to meet the guideposts (scores of 60, 80 and 100 which define performance thresholds). A change in language can be found in almost all of the indicators and is designed to provide greater certainty that the Criteria are being addressed as higher scores are warranted (see Figure 2.2).

Figure 2.2 Extract from FAM Version 6, MSC

Component	PI Category	PI	SG60	SG80	SG100
Fishery-specific management system	Fishery-specific objectives 3.2.1	The fishery has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2.	Objectives, which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <u>implicit</u> within the fishery's management system.	Short and long term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <u>explicit</u> within the fishery's management system.	Well defined and measurable short and long term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <u>explicit</u> within the fishery's management system.

This type of approach is also used in other similar, fishery systems such as that developed by the International Fishmeal and Fishoil Organisation (IFFO)(www.iffonet.net) as part of its Responsible Sourcing Certification scheme.

A final example comes from outside the world of fisheries. The Common Code for the Coffee Community (4C) (<http://www.4c-coffeeassociation.org/en/> - described in more detail in Section 4.2) makes use of a traffic light style of system (red, yellow green) where each ranking is defined by auditable statements (Figure 2.3 below). There is no scoring as such. A decision as to whether to recognise a coffee producer as having made progress against the defined performance thresholds is based on the number of red, yellow and green rated indicators.

Figure 2.3 4C Testable statements and ranking system extract

Working Conditions	5b	Working hours comply with national laws / international conventions and/or collective bargaining and overtime is fully remunerated.	Working hours comply with national laws/international conventions and working hours are recorded individually.	Working hours do not comply with national laws / international conventions and overtime is not remunerated.
	Working hours comply with national laws / international conventions and/or collective bargaining and overtime work is remunerated.	●	●	●
		INDICATORS		
Social dimensions		The working time of all workers and employees does not exceed eight hours daily and 48 hours weekly or fewer if provided by national law.	Deliberate efforts to remove children from work and get them into education are evident.	Working hours of workers and employees exceed 48 hours per week or provision of national law.
		and Overtime is voluntary, infrequent, fully remunerated according to national law and paid in due time.	and Overtime is not paid according to national law.	and Workers declare that overtime is not paid for, irregular and / or not voluntary.
		and Workers enjoy in a period of seven days a period of rest of at least 24 consecutive hours.	and Working hours of workers are registered.	and Working hours are not registered.
		and Documentation of working hours and voluntary overtime for individual workers is available.		

The advantages of expert judgement based, non quantitative or semi quantitative approaches are the fact that they are designed to deal with situations where data/information is incomplete and this will be common for the fisheries for which the recognition scheme is designed.

The disadvantages of such approaches are that they can be highly subjective and this creates the need for detailed guidance, training and supervision. There is thus a need for resource investment especially in the early days of the scheme being developed and implemented.

2.5 Implications for the proposed recognition scheme

Six design criteria:

- Comprehensiveness – need to cover ecological (stock, ecosystem, environment), management, social and economic issues;
- Need for performance indicators to be identified and, in a related fashion, benchmarks and goals to be identified;
- Need for a robust and transparent assessment methodology that enables progress to be tracked;
- Need to ensure comparability without excessively sacrificing flexibility;
- Existing tools such as the EAF, PRA and the RBF can actively involve stakeholders and are thus compatible with the aims of the co-management approach; and,
- Adequate support systems are in place to provide training and regular evaluation as required.

Section 3 – Co-management

Co-management is an approach to fisheries management that places emphasis on stakeholder participation in the decision making process and it is believed to be the preferred way forward in terms of management of many small-scale fisheries, especially in (but not limited to) developing countries.

It is not proposed here to revisit all the literature on co-management beyond making a few key points. The primary purpose in this section is to explore those issues that will have implications for the design and operation of a recognition system.

3.1 Main facets of co-management

Many authors have made the point that the term co-management refers to a range of responsibility sharing arrangements along a spectrum ranging from total government control to total industry/community control (Tyler, 2006 and Brown et al 2007). Although Sharma (2007) emphasises the participatory nature of co-management there are varying levels of participation which are described by Pomeroy and Rivera-Guieb (2006) as follows:

- *Instructive*: There is only minimal exchange of information between government and fishers. This type of co-management regime is only different from centralized management in the sense that the mechanisms exist for dialogue with users, but the process itself tends to be government informing fishers on the decisions they plan to make;
- *Consultative*: Mechanisms exist for government to consult with fishers but all decisions are taken by government;
- *Cooperative*: This type of co-management is where government and fishers cooperate together as equal partners in decision-making;
- *Advisory*: Fishers advise government of decisions to be taken and government endorses these decisions; and,
- *Informative*: Government has delegated authority to make decisions to fisher groups, who are responsible for informing government of these decisions.

The Australian Fisheries Management Authority, which manages the Commonwealth fisheries in Australia, places its co-management efforts (Mazur 2010) in the middle of this spectrum (figure 3.1). As to where a fishery is located on this spectrum has a bearing on the nature of the management system and thus the parameters which need to be evaluated by any recognition system. For example, if stakeholders have primary responsibility for setting benchmarks, goals and monitoring progress in a highly devolved co-management system how can this satisfy some external demands for independent verification of progress?

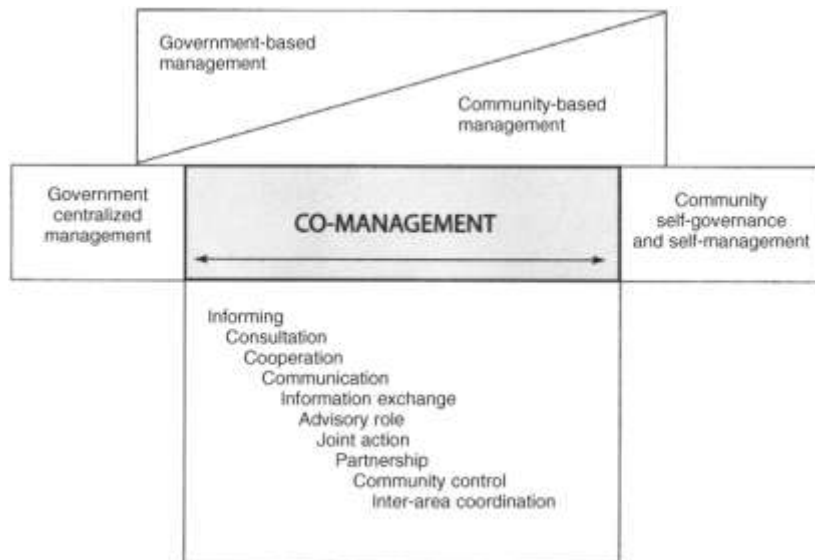


Figure 3.1. The Co-management spectrum (Pomeroy and Rivera-Guieb 2006)

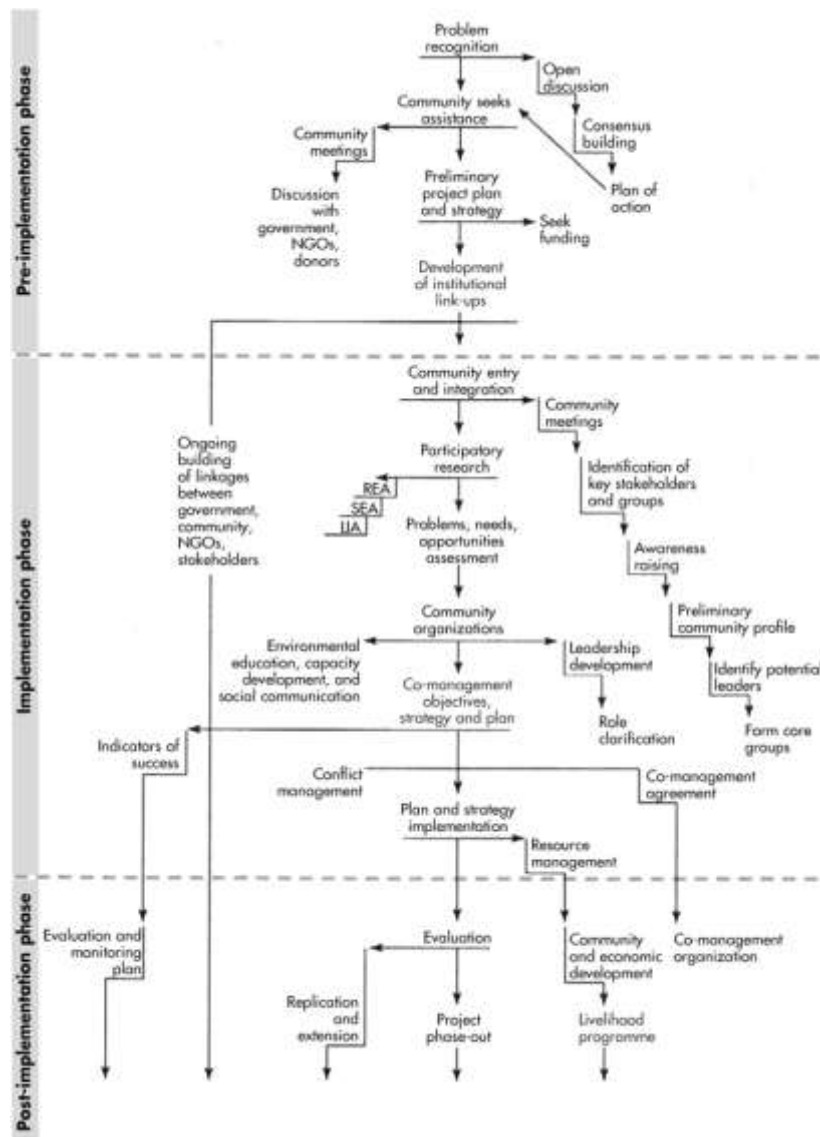
The implications of PRA (Section 2.1) are that it narrows the focus somewhat to at least the centre ground and, probably, with a greater emphasis on the Advisory and Informative styles and thus there is a role for external parties, be they government or private, to set performance benchmarks which can be audited/verified.

However, the challenges remain as the lack of any blueprint for co-management and its emphasis on ‘learning by doing’, consensus building and partnership creates some difficulties for recognition systems that generate some reward. Distilling the essence of co-management into a system that facilitates some form of objective evaluation and comparison will be challenging and may involve some compromises or at least, the adoption of a suite of progress metrics that may not cover all aspects and may not satisfy everyone.

Moreover, as was mentioned in the context of PRA there may be behaviours of concern that accompany co-management that is the subject of a recognition scheme and these include free riding, corruption and rent seeking. This would especially be the case if the recognition scheme had associated with it some financial benefit such as access to finance, increased product prices or exclusive market access. Clear specification of rights and responsibilities will help to counteract some of these unwanted outcomes.

Pomeroy and Rivera-Guieb (2006) provide analyses and categories that help the creation of assessable steps. Figure 3.2 emphasises the importance of community involvement in the discussions about the nature of the issues to be solved. The establishment of some form of coherent community structure (community organisations and leadership are specified) to progress these discussions is seen as a prelude to the preparation of a plan of action.

Figure 3.2 Development of co-management (Pomeroy and Rivera-Guieb 2006)



In regards to implementation, Pomeroy and Rivera-Guieb (2006) also list a number aspects of co-management, namely;

- Community entry and integration;
- Research and participatory research;
- Environmental education and capacity building;
- Community organizing;
- Co-management plan and strategy;
- Conflict management;
- Plan implementation; and,
- Evaluation.

The basic Plan, Do, Check, Act approach is again evident but there is a clear emphasis on organisational aspects in the form of community based governance.

From a process perspective the development of a workable co-management system is predicated on there being an adequate level of community dialogue that enables participants to take ownership of the process (Figure 3.2). Without this ownership no viable plan will emerge. Thus any recognition system needs to have a strong emphasis on having the right framework in place to enable the dialogue and ownership to take place. As put forward in Section 2.1 such dialogue and participation are keys to gaining management relevant data and information via PRA and risk assessment. Andrew and Evans (2009) note the benefits of working with fishers for research and monitoring and the list presented by Pomeroy and Rivera-Guieb (2006) extends the list of benefits.

Appendix A1.1 is a table made available as part of the project brief and includes a series of objectives derived from the FAO Code of Conduct for Responsible Fisheries. A series of suggested parameters suitable for evaluating and verifying the status of progress on these objectives is also provided. It should be noted that many of these are not necessarily attributes of co-management. Most are simply attributes of good fisheries management no matter what governance regime is used and thus the recognition scheme needs to reflect the fact that co-management is not the end point – it is merely the preferred pathway towards well managed fisheries where well managed encompasses a mix of resource management, social and economic goals.

This view, that co-management is a journey and is primarily about governance, underpins an assumption/hope that by getting such inputs right the correct outputs, such as healthy fish stocks, environmentally compatible fishing and socially and economically beneficial business activities will result. This opens up the possibility of a two tier system whereby the recognition scheme focuses on getting the governance right and empowers the stakeholders to make decisions that enable access to a variety of other systems that deal with the outcomes (e.g. market based recognition).

For example, Fair Trade certification may be a suitable objective for marketing the results of decisions made to become organised and take a collective, co-management approach to decision making. MSC certification may well be a suitable destination for marketing the success of decisions made to improve the status of the fishery. This concept of using the recognition system as a tool to open up options for the stakeholders is explored in more detail in Section 4.

3.2 Implications for the proposed recognition scheme

- The most important element is clearly the need for at the very least some forum for community discussion and, better still, a formal community based governance regime (e.g. fishers association, co-operative or similar).
- Getting organised is also important for enabling access to micro-finance.
- Co-management is about partnership and thus other members of the partnership (especially government) need to be willing to have in place power sharing and participative approaches to decision making. This can be evaluated in part (some

aspects such as livelihoods may not be a part of fisheries legislation or a fishery plan) via the management regime that is adopted.

Section 4 Scheme design

A wide range of options for designing a recognition scheme are available depending on the influence of factors such as costs, objectives, operator capacity and stakeholder interest, amongst others. The previous sections have emphasised the need for a participatory approach, for there to be thresholds against which performance can be measured and verified and for the assessment system to be both wide ranging (in terms of ESD) and flexible to deal with differing circumstances.

4.1. Some relevant models

Some of the existing models which have relevance include:

4.1.1. Modular approaches – the Global Aquaculture Alliance (<http://www.gaalliance.org/>) operates four certification standards for sustainable aquaculture that apply to different aspects of the production and supply chain. For example, farms can be certified separately from processing facilities, and recently, a feed mill standard has been adopted. Such modular approaches provide a great deal of flexibility especially when dealing with commercial supply chains. For example a system could be comprised of modules that focus on social aspects as the stakeholders feel that their first priority is getting organised and having a good governance system in place is a basis for moving forward. Another group may feel that enhancing market access is their priority and so they may focus on this.

In terms of the recognition scheme the traceability question will need to be explored once there are fish from suitability well managed fisheries made available. Given that there are a number of supply chain standards and verification/certification schemes available these should be explored as a first option rather than putting funds into the development of a new scheme.

4.1.2. Business-to-business (B2B) approaches – although there has been a lot of focus on Business-to-Consumer (B2C) labelling systems (e.g. MSC etc.) there is a growing demand for B2B systems as companies increasingly seek assurances that their own business profile is not put at risk by problems in the supply chain. An example is companies wishing to be assured that they are not being sold IUU fish. A recently developed B2B program is run by the International Fishmeal and Fishoil Organisation (IFFO)(www.iffonet.net) which has established a Responsible Sourcing certification program for companies that buy and process wild caught fish for fish meal. Such schemes are valuable for those whose products do not get direct exposure in the public market place (e.g. fish meal) or for those who do not want to seek some consumer recognition. ISO (e.g. 14000 or 9000) systems are often used in this way as the business world understands the ISO system. It should be noted that, unlike the new social standard (ISO 26000), these standards are designed to support certification schemes and thus companies can seek independent assurance of suppliers claims, but note comments previously about performance thresholds.

4.1.3. International norms and laws – there are a wide variety of conventions and norms which apply to recognition schemes particularly those that form the basis for commercial transactions. In theory anybody can set up a scheme that supports a claim of some sort and self claims are very common in business. For example, many companies make claims about their own products and these are based on some attribute which are common across all

examples of that product – e.g. a car has the best mileage of its class. The weaknesses of such approaches are obvious.

In order to increase the veracity of claims various mechanisms have been devised to encourage transparency, accountability and external scrutiny of not only the basis for a claim (e.g. a standard), but also how performance is evaluated (verification, certification). Some examples include:

- a. Oversight/guidance of standards development: developers of standards can conform to guidance provided by the International Standards Organisation (ISO Guides 7 and 59) or the Internal, Social, Environmental, Accreditation and Labelling – ISEAL alliance). The latter is designed for international bodies involved in sustainable and ethical production. ISEAL guidance focuses heavily on stakeholder input and acceptance.
- b. Oversight of people used to verify claims: some organic certification bodies use in-house staff to audit claims by clients that standards have been met but this model is increasingly rare and has been largely replaced by ISO65 compliant systems which rely on verifiers accredited by an external body.
- c. International agreements on trade and labelling: the World Trade Organisation has a number of agreements that impact upon standards and certification and discussions regarding production processes (often the source of environmental concerns) are on-going. The views to date have been picked up in the FAO Guidelines on Eco-labelling of Fish and Fishery Products from Marine Capture Fisheries which set out clear expectations for the developers of such schemes regarding transparency, science based decision making, not impeding trade and accountability, amongst others.
- d. Requirements regarding product claims: many nations have strict laws regulating on-product claims to ensure that claims are grounded in verifiable fact and consumers are not misled. United Nations guidelines on consumer protection can be found at (http://www.un.org/esa/sustdev/publications/consumption_en.pdf).

The complexity of these requirements is one reason why a move to develop a consumer oriented certification scheme is deferred for further discussion. However, the design of the proposed scheme takes heed of the guidance available where ever possible, so as not to rule out future decisions and opportunities.

4.1.4. ‘Stepwise’ systems: a developing approach involves what are termed ‘stepwise’ systems whereby progress towards a goal may involve a series of linked modules and progression towards a goal may require the satisfaction of certain criteria that have to be met before moving to the next step. An example is the Fishery Improvement Planning process run by Sustainable Fisheries Partnership (SFP) (www.sustainablefish.org) that has 5 steps as follows:

- A committed party is identified and has become the nucleus of efforts to get others to join in;
- The main stakeholders have joined together to pursue better management;
- Supply chain partners are committed;

- There is evidence of policy change (e.g. a commitment to modify fishing gear); and,
- There is evidence of in the water change (e.g. increased number of fish).

This system is very close to that run by WWF as part of its fishery improvement work.

SFP focuses on working with the private sector, and hence has an interest in the supply chain. This has a number of benefits in that, for long supply chains, there can be some communication that improvements are happening (or not). It also means that should the catching sector seek some enhanced market access via certification then the supply chain is engaged.

Stepwise systems are very much under discussion in the NGO world especially via the international group of standard owners called ISEAL (International Social, Environmental and Labelling alliance) which covers a number of certification schemes such as fish (Marine Stewardship Council, Aquaculture Stewardship Council), forest products (Forest Stewardship Council), organic food (International Federation of Organic Accreditation Movements) and social issues (Social Accreditation International and Fair Trade).

The drivers for this discussion has been the realisation that high standards are good, but there needs to be a mechanism for engaging those entities that may not be certifiable in the immediate or even long term and that structured improvement programs can increase access to extension advice and funding.

Much of the discussion has focused on the need for performance thresholds as transition points from one step to another. This separates such systems from the better known ISO14000 EMS (Environmental Management Systems) approach whereby stakeholders identify their improvement needs, implement actions to address these and then check on progress (the so called Plan, Do, Check, Act loop). EMS's have great value but if comparability is important (e.g. comparing one fishery's progress against others) or if communicating achievements to third parties that are seeking certain outcomes is important (e.g. that By-catch Reduction Devices have been implemented) then the lack of agreed thresholds can be problematic.

4.2 Verifying progress

Having thresholds that define a transition from one step to another in an improvement program creates a number of issues such as;

- Who defines the criteria that define transition? Should they be agreed by all stakeholders (e.g. by all fishers/fisheries within a scheme) or by one group?
- Should the criteria and the overall scheme that defines an improvement pathway be codified in some way (e.g. as a standard or via a less formal document such as a code)?
- How can progress be verified? Should it be self checking, use of locally trained but external people, or formally accredited certifiers?

The answers to these questions are bound up in considerations of the aims of the scheme. For example:

- A simple, low cost scheme may have a small number of self defined criteria that specify improvements and these are either self verified or verified by a local provider. This type of scheme may be suitable for local recognition.
- A scheme that involves some wider (e.g. regional) agreement on what is expected to constitute good practice and improvements requires that the progress of participants is verified against a larger number of more detailed criteria. This may be more expensive, but is more robust and could provide stronger evidence of progress that may be suitable to a lending institution for example.
- A fully developed and formal third party standard against which progress is measured by independent certification bodies. The standard could be an existing one (e.g. MSC), a modified existing standard (e.g. Fair Trade) or a new one. There are costs and benefits associated for each of these options which are explored in more detail in Section 5.3.

A number of authors have noted the growing number of schemes that relate to fisheries. There is a lot of confusion though about what are true eco-labelling schemes (e.g. MSC and, possibly, Friend of the Sea), what are certification schemes (e.g. IFFO's Responsible Sourcing Scheme – which, it should be noted, does not certify a fishery, just the processing plant) and what are simply promotional labels. There are a number of other schemes about which little is known such as Japan's Marine EcoLabel (MEL) and new schemes developed by Alaska and Iceland but transparency is an issue for these. However, compared to the agriculture world the number of comparable schemes in fisheries is still very low.

One of the main areas where a discussion about stepwise systems has taken place is in coffee growing where there are several standards available, but it has been recognized that there is a need to engage those growers that are not yet at a certifiable standard.

The Common Code for the Coffee Community (<http://www.4c-coffeeassociation.org/en/>) has the following history:

“The Common Code for the Coffee Community project was conducted as a public-private partnership initiated by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and the German Coffee Association (DKV) in 2002. In 2004 SECO, the Swiss State Secretariat for Economic Affairs joined the BMZ as public partner in financing the project, while the European Coffee Federation replaced the DKV as the private partner. During the development process, more than 70 representatives from over 20 countries actively participated in the design of the concept, the majority of them coffee producers. Various international organisations have been involved in the development and implementation of 4C, such as the UN-affiliated [International Coffee Organization \(ICO\)](#), the World Bank, the [International Labour Organization \(ILO\)](#), plus several regional development banks.”

As mentioned above, the number of marine eco-labels is probably insufficient to justify a 4C type of approach but the primary lesson to be learned from this organisation is that stepwise improvement programs that are not as robust or rigorous as formal, standards driven approaches, are better suited to the circumstances experienced in SE Asia. As mentioned by David Gould (ISEAL consultant, pers. Comm. 3 February 2011) the advantages of such systems are as follows:

- They are flexible to establish and it is possible to start small and to expand both in terms of scope and robustness as confidence and experience allows;
- The focus is on adaptive learning rather than compliance – as these systems are not designed to be exposed to the full scrutiny of the market place;
- The emphasis is on verification not certification and thus the systems and rules governing those that check progress can be less onerous (and thus cheaper, thus enabling trained local people to undertake the verification tasks);
- There is still a strong emphasis on transparency – external parties should have access to verification reports, especially if some acknowledgment is to be an outcome;
- There is still a major emphasis on performance – this is key. It is one thing to recognise that activity has taken place (e.g. a meeting to discuss a management plan) it is another to recognise the achievement of an outcome that helps the fishery (e.g. a management plan has been adopted and decisions made that have an effect on issues of concern). Whilst an verifier who is verifying progress on a stepwise plan may recognise the meeting as a useful indicator of progress the threshold of interest is the adoption of the plan. This becomes important if there are to be relationships built with buyers in markets that seek assurances about fisheries management effectiveness; and,
- In the case of the 4C it was created as a public-private partnership and thus recognised the different but complementary roles of government, civil society and private business.

With the aims of co-management and PRA being to seek improvements in fisheries management, driven by stakeholders, adaptive in nature and conducted within a broad framework, there is a considerable degree of unanimity of purpose between these concepts and the sorts of stepwise systems described above.

As a fishery meets each of the thresholds there should be measurable improvements in management performance. The ultimate goal is a sustainable and well managed fishery but further recognition options may open up, including access to the booming market for eco-labelled seafood (see Section 1.3).

4.3 Implications for the proposed recognition scheme

- The adoption of co-management as the central aim of the recognition program sets some key parameters which affect the design, namely; the existence of community based governance structures, flexibility and adaptive learning. At least for the entry level aspects of the scheme there is a need to avoid being too prescriptive and formal, i.e. certification is probably not appropriate until a certain level of performance is achieved.
- Creating recognition and access to incentives generates the need for evaluation against agreed performance thresholds and these need to be created without being too prescriptive.
- Stepwise systems fill a need to be both performance based yet flexible. If exposure to market scrutiny is not a major goal then lower cost verification systems can be put into place.

- The option of either creating a new, or ensuring access to an existing, certification program needs to be preserved as some fisheries may want to avail themselves of whatever benefits these systems provide.
- The recognition scheme covers factors in addition to fisheries management and thus any certification scheme may need to take on board these other issues where appropriate, unless otherwise incorporated into an existing program.

5 Draft Scheme proposal and implementation

5.1. Main design elements

The proposed scheme incorporates the following key elements:

- Local ownership but regional application;
- A stepwise model that has as its core continuous improvement;
- A range of rewards/recognition linked to the steps that become increasingly valuable as higher stages are reached;
- Increasing rigour in the verification system as the rewards/recognition become more valuable and as the consequences of non-compliant behaviour increase; and,
- The option of progressing to a market based system if desired.

The scheme incorporates the following frameworks

- Ecologically Sustainable Development – it addresses the three pillars of ESD; namely Social, Environmental and Economic aspects;
- Ecosystem Approach to Fisheries – as per FAO Guidelines;
- Co-management – the system is heavily dependent on local governance and ownership in partnership with government and other stakeholders;
- Participatory Rural Appraisal – using the community as a key source of information and evaluation of performance;
- Conformance with international norms such as the FAO Code and Conduct for Responsible Fisheries and FAO Guidelines for Eco-labelling and ISEAL; and,
- The use of a risk based system as a mechanism for dealing with the often data poor nature of tropical multi-species fisheries.

In putting the above forward there are many areas where alternatives and variations could be explored and adopted. As is recommended below there should be some trials of the system conducted before it becomes fully operational and these need to be used to make any adjustments.

5.2 Scheme design

The scheme could be run along the following lines:

5.2.1 The adoption of a ‘Good Fish Code’ which sets out the main, verifiable steps that define the following:

- Step 1 Governance established – this is the critical threshold step that demonstrates the existence of a group of motivated fishery stakeholders with the capacity to make progress.
- Step 2 Plan in place – the plan will be based on an initial audit (could be self undertaken but better if done in consultation with an expert provider) using the Principles and Criteria (Table 5.2). Plan will have SMART (Specific, Measureable, Attainable, Relevant, Time-bound) based actions.

- Step 3 Plan finalised – meeting this threshold means that there is evidence that a plan has been agreed by stakeholders.
- Step 4 Check – inputs achieved – meeting this threshold means that laws, policies and/or other appropriate mechanisms have been adopted that should result in desirable outcomes in the fishery. Step 4 means that the plan is being implemented and verification exercises will take place on a regular (at least annual) basis.
- Step 5 Check – outcomes achieved - meeting this threshold means that there is evidence that input measures are actually working.

The overall aim is to create a climate of continuous improvement in the key aspects of Ecologically Sustainable Development – social, environmental and economic.

A code rather than a standard is suggested as the aim is a participative, ‘softer’ continuous improvement system which is less formal than a standards-based certification system. As it is suggested that the scheme be a source of advice as to how fisheries could meet the thresholds within a code rather than a standard helps address potential concerns about a scheme owner providing advice to participants. Moreover the code will provide the opportunity to either establish or move to another certification program once the basics are in place.

5.2.1.1 Working title

The Good Fish Code – better fisheries through co-management.

An alternative is:

Fish for Good – better fisheries through co-management.

The aim of these suggestions is to use the word Good to imply ‘doing good’, making things better, fishing for the long-term etc. It aims to be a ‘snappy’ title that lends itself to communication efforts.

5.2.2 A scheme governance system

The recognition scheme will need an appropriate governance system and the eventual nature of this depends on what aspects are adopted. For the moment it is assumed that the FAO will establish and run all aspects of the scheme except for a certification and labelling program. The elements which will require FAO oversight and management will include:

- Endorsement/Recognition committee and negotiations (e.g. for access to financial services or similar benefits outside of FAO);
- Coordination – establishing a work plan and ensuring all necessary partners are able to deliver on meeting the needs of the program;
- Systems oversight – ensuring that the operation of the scheme as a whole is monitored and modified as required; and,
- Fund raising – could include raising sponsorship money for awards, accessing grant funds to run the system, determining membership fees (if appropriate) and determining other fees as needed.

This will require a board of directors comprised of both government and non government representatives selected on the basis of merit, i.e. there is no need to have representatives of

every country government and industry group. A technical committee comprised of relevant experts should be convened to provide advice and interpretation as needed.

5.2.3 A graded suite of recognition opportunities that reflect progress past each of the steps with increasing reward accruing the further the fishery advances.

The Good Fish Code is designed to provide different grades of recognition depending on the level of improvement. At lower levels of performance the degree of assessment rigour is low and the recognition is passive, publicity related, i.e. acknowledgement on websites. As performance increases and further Steps are taken the publicity becomes more active.

Step 4 is also an important threshold for enabling FAO or country government supported access to finance either in the form of loans or grants. A fishery that is seeking funding assistance will be able to use a certificate of verification as proof that the fishery is sufficiently well organised and proactive to be a good investment opportunity.

Table 5.1 - Recognition options

		Website/ publicity	Government, national or RFLP endorsement	Financial (or other) access/reward
Step 1	Governance in place	●		
Step 2	Fishery evaluation finalised	●		
Step 3	Plan in place	●	●	●
Step 4	Input audits passed and no red criteria		●	●
Step 5	Outcome audits passed			●

Nature of recognition proposed:

- Website/public recognition – dedicated FAO website or area on national fisheries agency website. Approval to place announcement on other relevant websites. Coverage in the media, local or otherwise;
- RFLP or government endorsement – a permanent endorsement/recognition system be established by FAO to recognise and endorse those that have completed the Input Audit to a satisfactory standard;
- Financial (or other) access – completing this step provides assurance to lenders or funders that the fishery has a lower risk of problems and thus represents a good investment opportunity; and,

The incentives that were put forward in consultations with stakeholders included:

- Daily Service Allowances for those attending meetings
- Providing materials (could be education or structural – such as markers for closed areas)
- Direct financial support
- Loans, including subsidised interest rates
- Technical support
- Capacity building
- In-kind support
- Exclusive access rights
- Revolving funds
- Community financing
- Restricting access to incentives to members of participating governance bodies

In broad terms the general categories of incentives was found in each country although there were variations within each category.

Note that market based recognition is not a part of the GFC but market incentives are worthwhile considering once progress on fishery improvements is made. The GFC can be viewed as a spring board to an existing scheme (e.g. Fair Trade, MSC) or even a new scheme, whichever is deemed appropriate.

5.2.4 Fishery assessment table

The fishery assessment table is a crucial component of the scheme as it is the basis for evaluating the performance of the fishery against factors believed to be important for defining comanagement.

The main source of guidance is the FAO's Code of Conduct for Responsible Fisheries (CCRF) which provides a comprehensive list of factors that a well-managed fishery should take into account and the GFC has focused on those factors believed to be central to comanagement.

In terms of the numbers of principles and criteria there is a balance between being fully comprehensive and being cost effective. Feedback from developing country representatives (APFIC 2007) indicated a strong interest in adding a strong emphasis on the social aspects of fisheries.

Appendix 1 details the results of considerations of the abovementioned design needs as set out in the project Terms of Reference. Some changes were made following the consultation process undertaken in August/September 2011, as set out in Appendix 2.

Table 5.2 below provides the Principles and Criteria and auditable statements that help do the following:

- When implemented at the planning phase the audit highlights those areas that require urgent (red) action or improvement (yellow) action; and,
- When implemented at the verification stage will separate out those indicators which have been satisfied as inputs (yellow) or have satisfied the need for evidence (green).

For a fishery to meet Step 4 there should be no red rated criteria. For a fishery to reach Step 5 there should be no more than one yellow rated criterion per Principle.

Table 5.2 Fishery assessment table

Principles	Criteria	Green	Yellow	Red
Resources	Species retained by the capture fishery must be managed in a way as to minimise the risk of over-exploitation	There is evidence to support a risk based assessment that none of the retained species are at risk of being over-fished	There is reason to believe, based on risk based assessment that less than 20% of the retained species are at risk of being over-fished	A risk based assessment finds that over 20% of the catch (by number of species) is comprised of species that are at risk of over-fishing.
	The capture fishery must ensure that broodstock and juvenile fish (i.e. below age of maturity) are subject to low fishing mortality	There is evidence that the mortality of broodstock and juvenile fish is at a level which does not harm the recovery or sustainability of adult populations	Fishing gears and or fishing practices are in use, that ensure most fish below spawning age escape capture.	Either juvenile fish dominate the catch or some species in the catch are primarily represented as juveniles (below spawning age)
	Populations of Endangered, Threatened and Protected (ETP) species must not be adversely affected by the capture fishery	There is evidence available that demonstrates the effectiveness of measures to reduce the take of ETP species	Measures have been put in place which are aimed at reducing the catch of ETP species	ETP species are either targeted or utilised or there are no measures in place to reduce the catch of ETP species
Management	The capture fishery must have an effective basis for the implementation of regulations and rules for conserving all species involved in the capture fishery	There is evidence that the regulations and rules * are effective in controlling catches and minimising the catches of ETP species	There is evidence of legal/ administrative arrangements being in place, but there is evidence that these are not applied or are ineffective	There is no evidence of any legal/ administrative arrangements in place for the capture fishery
	An effective means of monitoring, control and surveillance needs to be in place	There is evidence that catches are reported and illegal activity has been reduced to	A framework for monitoring control and surveillance is established, but is either not being	A framework for monitoring control and surveillance is not established

Principles	Criteria	Green	Yellow	Red
		tolerable levels	implemented or is ineffective	
	There is a co-management regime in place that actively facilitates stakeholder participation in decision making	Decision making in the capture fishery is based on actions agreed by stakeholders	The authorities consult with stakeholders	The authorities do not access the views of stakeholders prior to making decisions that impact the capture fishery
	Management of the capture fishery is supported by the collection of up to date data and information	Management decisions are primarily reliant on data and information obtained from the capture fishery and related research	There is limited data/ information available but management relies on expert judgement and risk based techniques	There is no management relevant data/ information available to assist in decision making
Participation	Both men and women contribute to the management and development of the capture fishery.	Women are active participants in decision making processes and participation in capture fishery activities is unfettered by gender considerations	Women are consulted on capture fishery decisions, but play no role in implementation	Women are not accorded equal status in the decision making processes associated with the capture fishery
	Those who work in the capture fishery are treated with respect and paid a living income	Evidence is available that agreements are honoured and workers have access to appeal avenues	Agreements are in place that accord workers in the capture fishery fair rights in accordance with international and national laws	Workers are not adequately remunerated, are indentured and/or mistreated
	The contribution of children to the capture fishery does not impede full time education opportunities	Children attend school and work in the capture fishery is restricted to light family assistance duties	Children attend school but before and after school hours spend time working most days of the week	Children are denied schooling as they are forced to work in capture fishery related activities
	Different stakeholders outside of the catching sector are involved in the management process	Stakeholders from outside the catch sector are actively involved in the management process	Stakeholders from outside the catch sector are consulted but are not equal stakeholders in the management process.	The management process actively excludes involvement from outside the catch sector
Safety (at sea and food safety)	Fishing communities are prepared to handle most high frequency natural disasters	Training and simulation exercises or real world testing have resulted in the	Plans are in place at the community level to deal with disasters	No plans are in place at the community level to deal with major

Principles	Criteria	Green	Yellow	Red
		plan being put into effect		disasters
	Those that work in the fishery, including family members, have a safe workplace	Accident/injury rates are at an acceptable level	Measures to identify and mitigate risks are in place but accident/injury rates are still of concern	Safety risks are not addressed and there is an unacceptable occurrence of accident/injury.
	Fishers manage the risks associated with being at sea to acceptable levels	An electronic communications network for finding lost vessels and coordinating ship to shore communications is in place	Boat based safety equipment can be found on almost all vessels, but an electronic safety network is not in place	Fishers do not carry any workable safety equipment to sea
	Wastage is minimised and all sales opportunities maximised by keeping fish in good condition	Fish landed meet national standards for export	All fish landed are of a quality to be sold as human food	Product handling is inadequate to the extent that more than 20% is unfit for human consumption
Resilience	The capture fishery is able to demonstrate to appropriate lenders and funders that it poses a low risk	Financial institutions are willing to make loans at market rates	Financial institutions are willing to make funds available, but these are subsidised or supported by government to reduce the risk	Financial institutions are unwilling to write loans as the capture fishery is considered to be a bad risk
	Fishing families have access to a diversity of sources of household income outside of the capture fishery	Households derive an income from multiple fisheries/farming ventures and non-capture fishery sources	Households derive an income from the fishery and non-capture fishery sources	Households are solely dependent on the capture fishery
	Income from the capture fishery is able to move households above the country poverty limit	There is evidence that income from the capture fishery is increasing in response to the measures taken	Measures are in place to stabilise and improve incomes	The income from the capture fishery is declining
Community development and environmental conservation	Fishing communities are able to demonstrate care for capture fishery habitats	Active measures are being taken to sustainably manage coastal ecosystems and to rehabilitate degraded habitats	Measures are in place to protect key habitats	Habitats are degraded and there are no efforts being made to protect and/or rehabilitate them
	Arrangements are in place to enable the wider community to	The capture fishery generates a net surplus and	The capture fishery generates a net surplus and this	The capture fishery is a net drain on

Principles	Criteria	Green	Yellow	Red
	benefit from a well managed capture fishery	a proportion is made available under an agreement to fund community facilities	benefits the community via the purchase of goods and services	community resources
	Processing waste and household refuse is treated and disposed of in an environmentally friendly manner	Waste disposal facilities are both available and used	Waste disposal facilities are generally available but are either not used or are inadequate	Waste disposal facilities are not in place and there is widespread evidence of random disposal
Information exchange and management	Conflicts over the management of the fishery are resolved in a timely and suitable manner	There is a mechanism in place that demonstrably works to ensure that disagreements are addressed in a timely and suitable manner	A conflict resolution mechanism has been put in place but it has proven ineffective and management remains negatively affected by ongoing disputes.	Uncontrolled conflict and disagreement is preventing any effective management and decision making
	The ability of stakeholders to take advantage of opportunities is enhanced by access to appropriate capacity building.	Stakeholders have access to a range of capacity building opportunities that assist them to take advantage of opportunities to improve the welfare of the community via fishing.	Some capacity building opportunities are available to the community but they are infrequent or do not cover the range of opportunities needed.	No capacity building mechanisms are available to the community.
	Information important for the operation and development of the fishing community is made available in a timely and comprehensive manner	Mechanisms are in place to ensure that important information is made available to all interested parties in a timely fashion.	Some information of importance to fishers and stakeholders there are issues with timeliness and/or comprehensiveness	There is no mechanism in place to ensure that important information is made available to and distributed within the fisher community

* the term regulations is used to describe management arrangements that are codified into law. The term rules is used to describe arrangements which may be adopted at a community level to help control activities (and may be enforceable) but are not part of the formal legal system.

The above table provides a basis for the development of a more detailed suite of indicators within each criterion. This will enable verifiers to have some clear guidance of what will be the expected levels of performance.

In addition there also needs to be written guidance for assessors (whether these be stakeholders or verification professionals) to help interpret the auditable statements made above. This document will provide case studies, examples of auditable information and resource information.

5.2.5 Auditing, verification and certification

The current proposal does not involve the creation of a standard or certification scheme. It does however, create a series of performance thresholds (Steps 1 to 5) and the degree of evidence required to satisfy each step increases, but so too does the reward. There is thus a transition from self assessment to third party verification as the scrutiny and rewards increase. Note that Step 5 could either involve a new standard (created by either FAO, national governments, private interests or a mix) or it could simply be a stepping off point to an existing standard.

The term verification is used as it involves a lower level of rigour than a certification system and is better suited to a level of performance where there is a need to encourage learning and adaptation. The means of verification varies according to the Step threshold, as follows

- Step 1 – self assessment - written statement by governance leader, plus one of local government leader or fisheries department director;
- Step 2 - self assessment - written statement by governance leader, plus one of local government leader or fisheries department director. Copy of audit as used as the basis for the plan;
- Step 3 - trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme);
- Step 4 - trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme); and,
- Step 5 – trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme);

In terms of the Recognition aspects the following means of verification are proposed:

- Website or media – written statement by governance leader, plus one of local government leader or fisheries department director;
- RFLP or government endorsement – Endorsement Committee plus evidence of plan adoption;
- Financial access – trained verifier at local level or accredited certifier (ISO9000, ISO 14000 or ISEAL member scheme); and,

5.3 Market based recognition – attributes of interest

Moving to a market based system opens up a whole new arena of scrutiny and rigour. Seafood selling companies that want to be associated with fisheries need to be assured that their image is not going to be tarnished by poor performers. Supply chains need to be robust and able to keep out substituted products which damage suppliers and buyers alike. Most importantly (and expensively) the ability to build customer support depends on a significant input of resources into promotion and marketing.

Table 5.3 below is not intended to provide a comprehensive review of certification options. It simply compares a hypothetical purpose built system with one that emphasises sustainability (MSC) and one that emphasises social issues (Fair Trade) and uses these to explore some of the costs and benefits of each option.

Table 5.3

	New scheme ¹	MSC	Fair Trade
Scope – sustainability	If designed to include	Main strength	Needs developing ²
Scope – social	If designed to include	Needs developing ³	Main strength
Costs – administration ⁴	High	Only to MSC	Only to Fair Trade
Costs – audits	Could be kept low if scheme is simple	High	Low
Costs – labelling	Would depend on cost recovery policy ⁵	No cost to catchers. Modest in supply chain (0.5%)	? Higher logo licence fee than MSC
Market recognition	Recognition would need to be developed, high costs ⁶	Well recognised (in some European countries)	Well recognised in a wide range of countries
NGO support	Would need to be developed ⁷	Variable - higher in Europe than elsewhere	Generally high
Establishment	Would need time ⁸	Already in place	Already in place

Notes

1. Could be established by FAO or another body, public or private.
2. Fair Trade's main focus is on the social aspects of production in developing countries. It has explored fisheries and is willing to get involved as long as the standard is workable in developing country fisheries.
3. The MSC Standard does not address many social aspects of fisheries. Changing this would require the consent of the Board of Trustees.
4. This section is oriented towards considering which entity would bear the administration costs. If FAO established a market based standard then it would have to bear the costs. The MSC raises about 50% of its operating costs from donations and grants.

5. The MSC logo licence fee is generally not paid by the catching sector. A new standard owner would have to decide whether to charge a logo licence fee, at what stage in the supply chain it would be levied and how much it would be. Such a fee would be important for offsetting scheme operating costs and generate revenue for promotions. Fair Trade's licence fee is generally paid at the wholesale level and the amount is variable depending on sales volume and capacity to pay.
6. Market recognition requires significant investments in marketing and promotion. Fair Trade has been in operation for some 23 years and the MSC for 11. This has helped them achieve a great deal of recognition in their target markets.
7. NGO's not only help promote labels they support, but they also work with retailers and others to encourage commitments to ethical and sustainability oriented purchasing policies. Securing support from NGO's can be challenging. Adherence to expected norms such as ISEAL compliance in terms of standards development is important.
8. New standards take time to develop, trial and implement. Adherence to the consultative requirements of international norms such as the FAO Code and ISEAL, amongst others takes time.

5.4 Cost centres and funding

At this stage a full costing has not been conducted as preferred options have not been discussed. It is assumed that, at least for the first five years that the scheme will be regional and designed to have sufficient respect and authority to be a driver for change, i.e. it will be adequately funded.

No assumption is made regarding funding sources. The scheme has elements that could attract private sponsorship (e.g. the annual awards, websites), base load government or donor funds (e.g. governance structures and systems oversight) and private investment (if certification labelling is developed).

Based on the nature of the scheme put forward and the proposed governance structure, funds will be required for the following:

- Administration: funds will be required for a co-ordinator position and staffing (a technical person with a fisheries background and one with experience in stepwise programs). The governance committees (board of directors, technical committee, and Endorsement Committee) will require staff support and funds for meetings.
- Support and advice: participating fisheries will require advice and support to assist in the development of improvement plans and options for making progress. This support can either be provided by an organisation like SEAFDEC, NGO's, country level agencies or external providers. The scheme will need one person at least, to facilitate access to advice by a candidate fishery and to assist providers to seek funds to enable the advice to be provided in a timely fashion.
- Audits and verification: this is an area which will require not only close supervision by the FAO, but training as well. This is an important investment if a key outcome is to have qualified verifiers in participating countries and thus cut the costs associated with having external parties provide such services at foreign country rates. FAO needs to consult with schemes that have such skills. As mentioned above, there are a number of alternatives but preference should be given to schemes that are not so commercially

driven as to make the audit costs excessive. In terms of the latter, if audit costs are borne by the scheme (possibly funded out of donations, funded for several years, then a transition, or some other arrangement) then a budget would be needed for verification audits.

- Membership option: the type of scheme being proposed is relatively new and although the fundamentals are well tried and tested there are few existing models available to provide a basis for advice as to whether it should be a membership based scheme or not. Membership is a potential source of funds, ideas, skills and support. The 4C Coffee initiative is a membership based body with very low fees for producers (7.50 euro) and far higher fees for commercial members. Membership will create the demand for involvement in governance and this needs to be managed carefully. The Forest Stewardship Council has been criticised as having a very unwieldy decision making system due to its membership base. The MSC is criticised for being unaccountable as it is not a membership based body. Both of these are players in controversial issues in the marketplace and thus the dynamic would be very different from the Good Fish Code. A membership scheme will require funds to run but, if structured properly could give the scheme the support base and funds to enable it to grow significantly.

5.5 Implementation strategy

The proposed implementation strategy is not complex. As the scheme is not based on a standard and does not have an eco-labelling component the sort of lengthy consultation exercises employed by rigorous schemes such as the MSC or the Aquaculture Dialogues are not needed. However this does not mean that consultation should not take place!

5.5.1 Milestones

As will be seen below not all milestones are sequential. Some can be set to drive in a parallel progress. As the scheme is low key, for its early stages then progress can be made without having some of the more important rewards fully negotiated. For the audits that drive the preparation of plans it may be valuable to use consultants in the first instance, until suitable locally based verifiers are trained. These consultants could also be used to train field staff on plan preparation. Note that the skill set for auditing may be different to that for management planning.

- Milestone 1: Discussion about preferred option – workshops.
- Milestone 2: Seek funding for establishment phase – need a 3 to 5 year funding horizon to ensure the scheme gets bedded down properly.
- Milestone 3: Establish a scheme development advisory group to oversee the development of the scheme until the governance structures and staffing are in place. This will require a project coordinator, a person with expertise in fisheries assessment systems and a person with expertise in stepwise systems, an FAO representative, a government representative and one from a small-scale fisher's representative body (e.g. ICSF).

- Milestone 3: Seek involvement of 3 potential candidate fisheries to run a trial and evaluate via peer review. For this it would be good to find fisheries at different levels of development.
- Milestone 3: Establish governance structures – need to ensure that rules of turnover are established upfront.
- Milestone 4: Recruit staff.
- Milestone 5: Promote the program and solicit involvement – create links to similar programs and those that may be able to provide support.
- Milestone 5: Recruit and train verifiers.
- Milestone 5: Negotiate service provider arrangements – e.g. will need trainers and capacity building advisors.
- Milestone 6: Consider market based system – whether to have and how to run (new or existing) – although this is the last milestone it is possible that the issue should be discussed early on as there may be a lead time involved if a new system is to be created or existing systems have to modify their standards.
- Milestone 6: negotiate with finance providers arrangements that facilitate access to those groups participating in the program.
- Milestone 6: Solicit sponsorship and donations – the private sector should be approached for program sponsorship, to sponsor specific items such as awards or to sponsor equipment etc.
- Milestone 6: establish membership program if desired.
- Milestone 7: scheme review – the first review should be held after the first year, then 3 years and then on a five yearly basis.

5.5.2 Timetable

Table 5.4 An indicative timetable for the first year is as follows (where M=month):

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Inaugural workshop												
Establish advisory group												
Identify 3 trial fisheries												
Establish governance bodies												
Recruit staff												

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Promote the scheme widely												
Recruit and train verifiers												
Negotiate service providers												
Solicit sponsorship and funding												

The first evaluation of progress should be held at the end of the first year.

5.5.3 Preliminary SWOT analysis

The Strengths/Weaknesses/Opportunities/Threats associated with the proposed scheme are as follows:

Strengths

- Very focused on co-management governance as an entry level requirement
- Implements ESD and an EAF
- Based on an adaptive approach and continuous improvement ethos
- Flexibility
- Low cost

Weaknesses

- Level of interest amongst fisheries and agencies unknown
- Funding not secured and a moderate level will be required to make it work effectively
- Feasibility of financial incentives proposed has not yet been explored

Opportunities

- The scheme has the potential to provide some much needed incentives for the implementation of management in the region
- As the scheme develops there may be opportunities to tap into the growing market for eco-labelled or ethically labelled seafood
- The scheme could address multiple outcomes (e.g. finance, management, better livelihoods) by focusing on getting communities together

Threats

- Inadequate or no funding
- As yet, does not find support amongst member governments and industries
- Expectations may be too high.

5.5.4 Suggested stakeholder groups

Fisheries management now involves a ‘broad church’ of stakeholders and, even though the catching sector remains of critical importance the input and support for other stakeholder groups, including the post-harvest sector and NGOs needs to be sought, especially if their support will be needed for promotion, sponsorship and, potentially, market benefits.

The suggestions below are merits based and not representative of any particular country or group.

5.5.4.1 Steering committee membership

Some suggested stakeholders for appointment to a steering committee and areas of required expertise include:

- Science and training - SEAFDEC
- Country based fisheries association or livelihood NGO
- Business – suggest a company with a demonstrated history of supporting well-managed fisheries, e.g. Golden Fresh from Malaysia, Philipps Seafoods (US based but operates in Indonesia)
- Conservation NGO – WWF, SFP
- Stepwise system design (audit/verification) – ISEAL
- Small-scale fisheries – ICSF
- Finance sector – representative from APRACA

5.5.4.2 In terms of in-country consultation

- Governments – regulators and science providers
- Catching sector representative bodies
- In-country NGO offices – both international groups (e.g. WWF) and any local groups
- Finance sector
- Funding bodies
- Development NGO

References

- Andrew, N. and Evans, L. (2009). Approaches and Frameworks for Management and Research in Small-scale Fisheries in the Developing World. The WorldFish Center Working Paper 1914. The WorldFish Center, Penang, Malaysia.
- Asongu, J.J. (2007) The History of Corporate Social Responsibility. *Journal of Business and Public Policy*, Vol.1(2) 1-18.
- Bhandari (2003). Participatory Rural Appraisal. Institute for Global Environmental Strategies.
- David Brown, Derek Staples and Simon Funge-Smith (2005) Mainstreaming fisheries co-management in the Asia-Pacific. Paper prepared for the APFIC Regional Workshop on Mainstreaming Fisheries Co-management in Asia-Pacific Siem Reap, Cambodia, 9-12 August 2005
- Chambers (1992). Rural appraisal: rapid, relaxed and participatory. *IDS Discussion Paper* 311.
- Chambers, R. and Blackburn, J. (1996) The power of participation: PRA and policy . *IDS Policy Briefing Issue* 7, August 1996. Institute of development Studies.
- Dowling, N. A., Smith, D.C., Knuckey, I., Smith, A.D.M., Domaschenz, P., Patterson, H.M., and Whitelaw, W.. (2008). Developing harvest strategies for low-value and data-poor fisheries: case studies from three Australian fisheries. *Fisheries Research* 94:380–390.
- Fletcher, W.J., Chesson, J., Fisher M., Sainsbury, K.J., Hundloe, T., Smith, A.D.M. and B. Whitworth (2002) National ESD Reporting Framework for Australian Fisheries: The 'How To' Guide for Wild Capture Fisheries. FRDC Project 2000/145, Canberra, Australia.
- Gardiner, P.R. & Viswanathan, K.K. (2004) *Ecolabelling and fisheries management*. World Fish Centre Studies and Reviews 27, Penang, Malaysia.
- Hobday, A.J. Smith, A.D.M. Stobutzkib, I., Bulman, C, Daley, R., Dambacher, J.M., Deng, R.A., Dowdney, J., Fuller, M., Furlani, D., Griffiths, S.P., Johnson, D., Kenyon, R., Knuckey, I.A., Linga,S.D., Pitcher, R., Sainsbury, K., Sporcic,M., Smith, T., Turnbull, C., Walker, T.I, Wayte, S.E., Webb, H., Williams, A., Wise, B.S. and Zhou, S. (2011) Ecological risk assessment for the effects of fishing. *Fisheries Research* 108: 372–384
- Jonker, J. and Nijhof, A. (2006) Looking Through the Eyes of Others: assessing mutual expectations and experiences in order to shape dialogue and collaboration between business and NGOs with respect to CSR. *Corporate Governance* Volume 14 Number 5 September 2006, 456-466.
- Leadbitter, D. and Ward, T.J. (2007) An evaluation of systems for the integrated assessment of capture fisheries. *Marine Policy* 31: 458–469.

Leigh, J. and Waddock, S. (2006). The Emergence of Total Responsibility Management Systems: J. Sainsbury's (plc) Voluntary Responsibility Management Systems for Global Food Retail Supply Chains. *Business and Society Review* 111:4, 409-426.

Mazur, N. (2010) *Evaluating fisheries co-management trials: a discussion paper*, Bureau of Rural Sciences, Canberra, Commonwealth of Australia 2010

McPhee, D., Leadbitter, D. and Skilleter, G.A. (2002). Swallowing the bait: is recreational fishing in Australia ecologically sustainable? *Pacific Conservation Biology*, 8:40-51

OECD (2003) *Liberalising fisheries markets: scope and effects*. Organisation for Economic Co-operation and Development, Paris, France.

Pitcher, T.J., Kalikosk, D. and Pramod G. eds (2006) *Evaluations of Compliance with the FAO (UN) Code of Conduct for Responsible Fisheries*. Fisheries Centre Research Report 2006 Volume 14 Number 2

Pitcher T.J., and Preikshot, D. (2001) RAPFISH: a rapid appraisal technique to evaluate the sustainability status of Fisheries. *Fisheries Research* 49 (2001) 255-270

Pomeroy, R; Katon, B M and Harkes, I (2001) Conditions affecting the success of fisheries co-management: lessons from Asia. *Marine Policy* 25 197-208

Pomeroy and Rivera-Guieb (2006). *FISHERY CO-MANAGEMENT: A Practical Handbook*. International Development Research Centre 2006.

Ponte, S (2006) Ecolabels and fish trade – Marine stewardship Council certification and the South African hake fishery, TRALAC Working Paper 9, 2006

Roheim, C. (2009) Who or what is driving the global market for sustainable seafood: with applications for tuna. Presentation to Green Tuna workshop, University of Technology, Sydney, 18 November 2009.

Sharma, C. (2007) *Fisheries co-management: The International Experience* International Collective in Support of Fishworkers. Expert Consultation on Coastal Fisheries and Area Co-management, Veraval-Mangrol region of the Saurashtra Coast, Gujarat, 3rd and 4th August 2007

Smith, D., C., Punt, A, Dowling, N., Smith, A., Tuck, G. and Knuckey I (2009) Reconciling Approaches to the Assessment and Management of Data-Poor Species and Fisheries with Australia's Harvest Strategy Policy. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 1:244–254, 2009

Stephen R. Tyler (2006) S.R. (Co)management of Natural Resources. Local learning for poverty reduction. Published by the International Development Research Centre

APPENDIX 1 – Terms of Reference

A1.1. RFLP Co-management recognition scheme

	Objective	Basis for assessment and means of verification
Resources/Environment/ Management	Specific identifiable fishery	The operational fishing ground provides livelihoods for a coastal fisher community or communities
	Fishing activity is selective Fishing does not cause 'collateral damage'(?)	Non-destructive fishing method Low impact fishing method Specific gear type/types Specific gears/methods are prohibited
	Fishing activity is regulated under officially approved co- management mechanisms and therefore fishing activity is commensurate with the state of the resource	Some sort of access limitation and/or licensing Some sort of effort limitation e.g. boat registration and professional fisher unions or associations Seasonal closure/critical periods/moratorium Closure/limitation of fishing in broodstock/spawning areas Evidence/monitoring of biological sustainability (some simple indicators - catch size/length, age class, CPUE, etc.)
	Working towards a sustainable fishery objective (similar to the above?)	Is suitable for the development of, or has a fisheries and coastal zone co-management plan, which would lead to reduced fishing effort and fleet and the loss of fishing livelihoods Plan to resolve over-fishing/excessive effort Basic system to review/monitor status of target species
	Evidence of habitat management/ restoration/ conservation (other environmental objectives specifically linked to the fishery?)	Closed area Protected/conserved area Restoration of degraded areas (land/water – mangrove, reef , sea grass, mud flat)
Governance	The fishery is spatially defined	Clear geographical location Map of the area Boundaries demarcated / recognized Recognizes both land and water (if relevant) Stock focussed/gear type (unusual but possible e.g. swimming crab fishery, clam fishery, sardine fishery / gill net, trap or other).

	Objective	Basis for assessment and means of verification
	The co-management fishery is legitimate / recognized by local government	Co-management group is registered / documented in local government office (fisheries unit or other) Legally recognized (under local by-law or national law) Fishery management plan/group regulations is documented/recognized by local government The members of the group have necessary licenses/permits/registrations.
	Co-management 'group' is organized	Cooperative Fisher's group Traditional /customary practice (sasi/panglima laut etc.) Group membership is defined/specified and documented. (e.g. membership list / inhabitants of village, etc.)
	Co-management group has (documented) rules of procedure	Procedure for conflict resolution (within the membership, but also particularly regarding conflict with other resources users/stakeholders who are not members) Procedure for rule setting/management plan development Procedure for working with local government or representation in local decision making. Membership requirements Penalties/disciplines/obligations of members
Best practices - raising the bar, working towards a goal , focussing on improvement	The fishery is operated safely The group has basic safety systems in place	Best practice for sea safety observed by membership Basic vessel worthiness/ minimum standards (for communications, weather warning) Group has early warning system(?) or access to such a system (radio/mobile phone/focal points to national system)
	The products of the fishery are safe to eat	Hygienic handling according to basic best practice
Safety and vulnerability	Fishers follow better safety at sea practices	Number of fisher boats using life-jackets, carrying flares, fire extinguishers, and first aid kits and using proper internationally recognized lighting colours at night

	Objective	Basis for assessment and means of verification
		Numbers of fishing boats with communication systems Community has a
	Vulnerability reduced	Community disaster risk management plan being drafted and/or approved Climate change mitigation activities being piloted
Livelihoods	Livelihoods in fishing communities strengthened and diversified	Training on, and piloting of strengthened existing livelihood activities on-going Training on and piloting of new income generation opportunities on-going Adaption of strengthened and/or new income generation opportunities
Micro-finance services	Access to micro-finance services facilitated	Savings groups operational Fishers aware of the MFS available in their local area Formal credit is available to fishing communities
Social and gender issues	Basic labour standards ('best practices') are observed	No child labour (note that child work may be allowed, as per ILO definitions) No forced labour Minimum national labour standards observed for crews (irrespective of whether national or foreign crews; national standard may not apply for owner-operators?).
	The roles of both men and women in the fishery are recognized and women are fully involved in decision making processes Men and women have equal opportunities to engage in different activities within the fishery sector, if they so wish There are equitable sharing of benefits from the fishery amongst both women and men	Men are fully aware of, and value the contribution of women activities in the fishery, and vice versa Women and men actively participate in co-management; both attend meetings and are fully involved in decision making processes Value chain approaches are used to make management decisions that will promote greater equity of benefit sharing among the key stakeholders in the aquatic product supply chain

	Objective	Basis for assessment and means of verification
	A proportion of income from the co-managed fishery and/or other payment for environmental services (PES) provides benefits for community welfare	Profits from the fishery are invested in community projects like: <ul style="list-style-type: none"> • Water supply; • Toilets; • Roads; • Schools and school grants; • Health clinics etc.

A1.2 How will the system work?

- Each group to be assessed must be uniquely identified (i.e. to a specific location and linked to its spatial definition (e.g. Ban Don Bay blood cockle farmer co-management group, Kanchanadit District, Surat Thani Province, Thailand; Ben Tre Clam Fishery, Viet Nam etc.).
- The objectives listed above form the guidance basis for the assessment. The objectives can be interpreted, according to local contexts (accompanying explanatory notes will be developed).
- The assessment must make a justification as to how the group complies with the objective. This should be evidence-based (to avoid subjectivity – e.g. based on documentation where possible).
- Local knowledge can be used in support of assessment (and is encouraged) - but caution will be used in basing the entire assessment on local knowledge (local knowledge has a lot to do with placing of refuges, closed areas and seasonal restrictions – in some cases these are not based on an scientific/biological effect, but are merely social controls to limit effort/exploitation are critical periods or areas).
- Each of the objectives is given a rating. The aggregate score is then taken.
- If the score is below a certain level, or certain key objectives are rated too low) then the fishery cannot be considered to be co-managed.
- Once a fishery achieves a basic score recognizing that it is co-managed; there will be a requirement to demonstrate incremental improvement. There will be priority attached to objectives that have very low ratings.
- The objective of ecologically sustainable fishing will not be a primary requirement, however there must be demonstrated action in support of this as a long-term goal.
- The fishery should be assessed regularly¹.
- The “co-management recognition criteria” are recognized by RFLP (initially) and APFIC/SEAFDEC/MRC (subsequently) any other inter-governmental fishery agencies. The assessment based against these criteria can be undertaken by any group or agency that considers itself competent to undertake such an assessment (e.g. government fishery agency, local government administration, or local government fishery unit², NGO working with fishery groups, a private initiative as part of a supply chain/marketing venture (e.g. a supermarket chain, fish dealership etc.).
- It is not foreseen that a co-management group would recognize itself, it would have to request to be assessed by some (essentially) independent body.

¹ Time period to be agreed.

² There may be a conflict of interest if the same department is involved in the co-management arrangement.

- The documentation from the assessment for a recognized co-management group would be made publicly available on a website. Groups that were not recognized (i.e. did not make the basic score necessary for recognition) would not be posted.

A1.3 Terms of Reference

- Review the attached documents for a pilot recognition scheme for ‘well co-managed small-scale fisheries’;
- Arrange a tele-conference, early in the consultancy, with key FAO RAP fisheries and RLFP staff to get feedback on the proposed approach to this consultancy and on the framework for the report;
- Outline gaps and/or considerations missing from the draft recognition scheme and make recommendations for inclusion;
- Suggest a title for the recognition scheme that is likely to encourage co-managed small-scale fisheries, whether managed by communities and/or fisher groups to join, and buyers of aquatic products to buy from;
- Give recommendations on the nature of recognition for the scheme;
- Give recommendations on what are desirable features of well co-managed small-scale fisheries that are making efforts to move towards the ultimate goal of being sustainable;
- Give recommendations for co-management best practices which the recognition scheme should promote;
- Indicate which of the draft criteria for ‘well co-managed small-scale fisheries’ are likely to be practically possible to evaluate against, and suggest other more practical criteria as appropriate. Resource criteria should focus on risk based management approaches, while social and institutional criteria should emphasize PRA approaches;
- Suggest indicators for the most appropriate criteria and suggest how the indicators for each can be best measured;
- Recommend a process to implement the scheme which emphasizes the use of an ecosystem risk based approach (covering resources, environmental, human and governance issues) to identify priority management areas and the development of performance reports for each prioritized management areas;
- Give a recommended road map and timetable for a consultative process which RLFP could undertake to advance this process;
- Suggest key stakeholder groups, including fisher groups, government institutions, NGO and INGO’s, and private sector representatives who should be involved in the process; and,

Appendix 2 Major findings of the consultation process held in all six RFLP project countries in August/September 2011. A response to each suggestion is provided.

3.0 Findings

The findings from the consultation sessions have been grouped into six categories and these are detailed as follows:

3.1 Structural changes to aspects of the GFC

- 3.1.1 Step 2 should only cover the completion of the fishery assessment. Step 3 adequately covers the finalisation of the resulting plan.

Response: change made as suggested. Step 2 now only covers the completion of the fishery assessment. Step 3 covers the completion of the plan.

- 3.1.2 Delete Step 5 – whilst access to external market based incentive schemes may be desirable the labelling of this option as Step 5 implies it is part of the GFC.

Response: Step 5 has changed. It is now not a market based option but part of the GFC as what was once Step 4 is now Step 5. This was done to take into account changes to Steps 2 and 3.

- 3.1.3 Rewording of Step 4 to reflect the intent that it is a mechanism for evaluating implementation of the plan and will be repeated on a regular basis. It is not a one-off step and is not designed to only measure the transition of an indicator into the green zone.

Response: wording added to clarify this.

3.2 Changes to the Principles and Criteria

Wording changes to the Principles and Criteria are covered in 3.3. Several structural changes were proposed.

- 3.2.1 Need to have a Principle or Criterion relating to capacity building, information exchange and the like.

Response: new Principle added

- 3.2.2 Safety of children in a fishery (not just educational aspects) was identified as a need and this needed to be fitted into the right Principle/Criterion.

Response: new Criterion added that covers safety of children, family members in general and workers

- 3.2.3 A Principle or Criterion is needed to cover the need to have in place mechanisms for resolving conflict.

Response: covered in the new Information principle

3.2.4 On two occasions there was a great deal of discussion about habitat matters that are not related to the impacts of fishing. Habitat was suggested as a ‘Resource’, as one example. At the moment the habitat issues are dealt with in the Community Development and Environmental Conservation principle where the focus is on habitat effects of fishing. Loss of habitat by external influences is a common problem. The question is whether to link access to incentives to adequate control over factors beyond the direct control of the fishery.

Response: the basis for these suggestions are understood. Many inshore and freshwater fisheries are affected by habitat damage that is not caused by the fishery itself. Fishers often struggle to encourage those responsible to reduce or mitigate the impacts as healthy habitats are a fundamental component of a well managed fishery. However, the Good Fish Code is designed to encourage fishers to better manage their own impacts and in doing so, have access to incentives. Linking access to incentives to the activities of others beyond the direct control of the fishing community puts the fishers at a disadvantage. If those responsible for the habitat damage do not make changes then the fisher community may not get access to much needed financial resources, for example. For this reason it was decided not to have a Principle or Criterion addressing external habitat damage.

3.3 Incentives

The incentives that were put forward in consultations included:

- Daily Service Allowances for those attending meetings
- Providing materials (could be education or structural – such as markers for closed areas)
- Direct financial support
- Loans, including subsidised interest rates
- Technical support
- Capacity building
- In-kind support
- Exclusive access rights
- Revolving funds
- Community financing
- Restricting access to incentives to members of participating governance bodies

One comment was made was that there needs to be a distinction between incentives at a community level versus those available at an individual level.

Response: these suggestions have been incorporated into the text and need to be dealt with on a case by case basis.

3.4 Wording changes

The following wording changes were suggested:

- Use the phrase ‘capture fisheries’ rather than fisheries throughout the report

Response: changes made throughout the report

- Add the word ‘government’ and/or ‘national’ to the words ‘FAO Endorsement’ in Table 5.1

Response: changes made

- Add the word ‘spawners’ to the Resources Principle, Criterion dealing with juvenile fish.

Response: change made

- Distinguish lenders from MFI, especially local money lenders that charge high interest rates.

Response: the term ‘appropriate’ has been added to help draw a distinction between lenders of concern and those that are appropriate.

- Change ‘wage’ to income, Participation Principle, criterion dealing with income.

Response: change made

- Clarify that rules includes regulations, Management Principle, criterion dealing with rules.

Response: explanatory note added

- Participation Principle – explain that this is not just restricted to the capture sector.

Response: new criterion added that expands scope to include stakeholders outside of the catching sector.