



Resource Extraction Monitoring

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Rainforest Rescue International
working for a sustainably managed world

**ASSESSING AND DEVELOPING THE ROLE OF INDEPENDENT
MONITORING BY CIVIL SOCIETY TO SUPPORT GOOD
GOVERNANCE OF THE FISHERIES SECTOR IN SRI LANKA**

Stakeholder Mapping Report



A project funded by



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Abbreviations

CBO	Community based organizations
CFC	Ceylon Fisheries Corporation
CFHC	Ceylon Fishery Harbors Corporation
DFAR	Department of Fisheries and Aquatic Resources
EEZ	Exclusive Economic Zone
FAO	Food and Agricultural Organization
FRP	Fiberglass reinforced plastic boats
FMP	Fisheries Management, Regulation, Conservation and Development Plan
MSY	Maximum Sustainable yield
RRI	Rainforest Rescue International
RFS	Rural Fisheries Society
IOTC	Indian Ocean Tuna Commission
IMUL	Inboard Multiday Boats
IUU Fishing	Illegal, unreported and unregulated fishing
MFARD	Ministry of Fisheries and Aquatic Resources Development
UNCLOS	United Nations Convention on the Law of the Sea of 10 December 1982

1.0 .Introduction

From the ancient times, fishing has been a major source of food and nutrition for humanity and a provider of employment and economic benefit. During this time the wealth of aquatic resources was assumed to be an unlimited gift of nature. However, with increased knowledge and the dynamic development of fisheries after the Second World War, this myth has faded in face of the realization that aquatic resources, although renewable, are not infinite and need to be properly managed.

Sri Lanka is a small island nation located in the Indian Ocean with 1730 Klm of shoreline with a growing population of 24 million. In the past thirty years the island has had a depressed fisheries sector, which was affected by the ongoing civil war in the North and East of the country. The ending of the civil war has led to calls for enhanced fisheries in the country. Coastal Sri Lanka has a total fishing households of 139,630 with nearly 700,000 people dependent upon the fisheries sector(Statistical Unit, MFAR, 2009). The fisheries sector is now regarded as an important protein supplier to the population of Sri Lanka. However ever increasing international demand for fish and marine products has resulted in more fisheries activity for export trade taking place in recent years.

The total marine sector fish production was recorded as 293,170 Mt. in 2009. The annual percapita fish consumption in Sri Lanka is 16.7kg per year (MFAR statistics, 2009). The government policy is to increase this annual percapita fish consumption and double fish exports (MFAR development plan 2007). To meet these targets government has planned to double the total fish production, which is now 320, 000 Mt. per year (Anon, 2011).

The development of a fishery should always be combined with the proper management of the fisher source (FAO, 1995) to minimize the depletion of fish stocks due to unplanned exploitation. This presupposes the need for good management measures, such as defining conservation zones, declaration of marine parks, introducing catch restrictions, regulating of mesh sizes of nets, closed seasons etc. During the past 100 years or so, various governments have enacted many rules and regulations from time to time in order to facilitate the implementation of fisheries actions and the exploitation of fish resources.

Fisheries legislation in Sri Lanka dates back to the end of last century and consists of an assortment of laws such as the enabling village communities Ordinance – 1889, Local Boards Ordinance- 1898, Game Protection Ordinance 1909, Local Government's Ordinance 1920 and finally and most importantly the Fisheries Ordinance- 1940. The Fisheries Ordinance was drawn up in 1940 when the limits of Sri Lanka's jurisdictional waters were set at three nautical miles and the local fishing operations were primarily artisanal (Compendium of fisheries legislation in Sri Lanka, 1998).

With the declaration of a 200mile EEZ in 1977, and plans for the development of the local fisheries industry to take advantage of the opportunities offered by the new zone certain major revisions to the existing ordinance became essential. Fishing Boats Regulation- 1978, Registration of Fishing Boat Regulation 1980, Beach Seine Regulation-1994, Purse Seine net Fishing Regulation- 1986, Fisheries and aquatic Resource Act No.2 of 1996 and the Fishing Boat Operation Regulation 1996 are some of the important regulations made since 1977.

The United Nation Convention on the Law of the Sea (UNCLOS) was adopted on the 10th of December 1982 in Montego Bay, Jamaica involving participation by more than 150 countries representing all regions of the world, all legal and political systems, all degrees of socio-economic development, archipelagic States, island States and land-locked States (United Nations 1996). A total of 145 countries has ratified or acceded to UNCLOS as of 12 February 2004 (United Nation, 2004). Sri Lanka ratified UNCLOS on the 19th July 1994.

The FAO Committee on Fisheries at its 19th Session held in 1991 agreed that new concepts leading to responsible fisheries are required to conserve and manage fish resources. This requirement was reiterated at the International Conference on Responsible fishing in Cancun (Mexico) in May 1992, and the United Nations Conference on Environment and Development held in Rio de Janeiro (Brazil) in June 1992. FAO is expected to monitor the implementation of the code by member countries, and assist member countries, particularly developing countries to implement the Code.

To address specific conservation and management issues that have been identified by the international community as problems needing urgent attention, FAO has developed International Plan of Action (IPOAs) within the framework of the Code of Conduct of Responsible Fisheries. The four IPOAs individually address the following issues (FAO 1999, 2001).

- Reducing incidental catch of seabirds in long line fisheries (IPOA – Sea birds)
- Conservation and management of sharks (IPOA- sharks)
- Management of fishing capacity (IPOA- Fishing capacity)
- Prevention, deterrence and elimination of illegal, unreported and unregulated fishing (IPOA- IUU Fishing).

IUU fishing was defined by the FAO (Annex I) as well as the IOTC (Annex II) and Sri Lanka ratified the IOTC agreement which includes taking action against IUU fishing activities.

The present project IM-FiLEG is examining civil society based fisheries monitoring systems and their potential to overcome the challenges of IUU fishing in Sri Lanka. This DIFID funded project is also expected to enhance fisher's income generation, governance and fisheries sector development by avoiding IUU and unsustainable fishing methods. The project goals also expect

to help Sri Lanka meet the millennium development goals such as goal No.7 to ensure environmental sustainability.

1.1. Scope of the survey

The IM –FiLEG stakeholder mapping was carried out to identify the levels of interest and of fisher involvement in potential self-monitoring actions in the local fisheries sector.

2. Methodology

The stakeholder survey was carried out at Mirissa, Dewndara, Nillwella and Gandara fish landing sites in the Matara areas and Negombo in the Gampahadistrict. Negombo is the largest fishing harbor in the Gampaha District. The surveyed locations were selected with a special focus on the presence of tuna fishing. The survey focused on the CBOs which were located close to the pre-identified landing sites. The CBOs details were collected at district DFAR offices and DCOOP offices in two districts.

Rainforest Rescue International developed a survey questionnaire to meet the activity objectives and assess the present situation of fishing folk in identified locations and to identify the present rates of self monitoring in the fishing sector Refer Annex iii.

Fisher CBO 's Assessed over the Stakeholder Mapping
Matara District
Mirissa One day-Multiday fisheries co-operative society
Mirissa Rural Fisheries Society
Dodamphala fisheries co-operative
Nillwella Rural Fisheries Society
Dewinuwara Rural Fisheries Society
South Pitipana Rural Fisheries Society
Gandara Rural Fisheries Society
The National Fisheries Federation -Matara district
Matara Multiday Fisheries Organization
Negombo District
Members of Fisheries co-operative Negombo
North Pitipana Rural Fisheries Society
South Pitipana Rural Fisheries Society
MadaPitipana Rural Fisheries society

Matara district has 5134 active fishermen while Gampaha/Negombo district has 10146 according to MFAR statistics, 2009. The level of sampling intensity for the survey was 2% of the fishermen of both sites.

3.0 Results and Discussion

3.1 Government Institutions

Sector involvement of government institutions engaged in the fisheries sector was also considered the survey. The 11 DFAR offices located in the Matara region are the main fisheries law enforcement providers located in Matara District. Alongside the law enforcement actions provided by the DFAR offices, training, research as well as monitoring and fishing equipment registration takes place through this structure. The law enforcement by such a small group can be a challenge, especially at the practical field monitoring level as local DFAR offices have no access to boats and other infrastructure essential to carrying out appropriate enforcement actions.

In addition to the DFAR structure a Fisheries Harbor Co-operation office is located at Mirissa and Dewndara. They also provide a harbor facility, water, fuel, ice and fish weighing facility for multi-day boats.

The University of Ruhuna which is located in Matara is involved in research and training in the fisheries sector. The University has a separate fisheries and marine science department that is being developed to address the challenges and future research needs in the sector. They provide limited fisheries training, fisheries research and fish identification service.

The Sri Lanka Navy supports all institutions to address IUU concerns at present. However the Navy is expected to relinquish this duty when the newly formed Sri Lanka coast guard has the capacity to begin managing local areas. Negombo has a similar Government support structure in the district office of DFAR that 15 FI offices coordinate.

3.2 Fishing Community

In the recently completed community stakeholder mapping survey three groups were identified as a sub section of the main fishing community stakeholder group.

1. Fishermen without boat ownership.

-Mainly akin to day laborers' this group have limited rights and tend to move from boat to boat.

2. Fishermen with boat ownership.

-Fishermen who had small one-day boats that they worked on.

3. Boat owners.

-Larger multi day boat owners who did not necessarily go out to sea

The survey found that in the random sample taken 68% of the survey group fished for a living while 32% owned and ran boats but did not go to sea

Most of the boat owners were multi day boat owners, large craft suitable for landing tuna.

In both sites close to 50% fished near shore while 50% traveled to deeper waters.

Boat owners tended to privately own boats, cooperatives and joint ownership of boats did not exist.

Of these boat owners 6% were women

The sectoral experience that each fisherman had was quite varied within the sample group. However there is a clear interrelation with the time spent fishing and interest in civil society taking an active role in fisheries management Table 1. Highlights the incidence of positive responses.

Table.1: How fishermen with varying experience of the sector saw the benefit of involving civil society in governance action

Experience	3 -10 years	11 -20 years	21 -30 years	31 – 40 years
Positive response per experience group.	16%	22%	25%	100%

The survey further assessed the interest/awareness of involving civil society in resource management actions

As can be seen in Table 2 an average of 78% of respondents accepted that CBOs have a role in civil society based fish resource management

Table.2: Positive response to the civil society role in fish resources management.

Experience	3 -10 years	11 -20 years	21 -30 years	31 – 40 years
Positive response per experience group.	68%	64%	85%	75%

3.3 Fishing Area

Examining of fishing area is vital to understand the fishers' access to fish resources and potentials for the sector to develop sustainably. The surveyed fishermen responded to their fishing habits according to near shore (<10miles), off shore EEZ (10 – 200miles)and international waters, (>200miles).

The survey results showed that fishermen engaged in opportunistic fishing based on weather, information from other fishermen, fish stocks and technology. The majority of the fishermen(55%) fished in deep waters that are found more than ten miles from shore, this group extended their range to over 200 miles if needed. A smaller group consisting of 28% of respondents with small craft limited fisheries between 10- 200 miles.

The fishing grounds that were exploited by the fishermen can be classified as the following general areas.

These are the Bay of Bengal, Indian Ocean, Madagascar, Australia and the Arabian Sea. The main fishing destinations were the Bay of Bengal and the Indian Ocean area, however surprisingly 4% of the fishermen traveled as far ashore as Australia to fish.

The survey further indicated that 62.2% of the surveyed sample could migrate to overcome monsoonal weather patterns.

3.4 Fisheries Community Based Organizations

Fisheries Community Based Organizations provide fishers with an organized and legal community body, which represents their needs. Fisheries societies in Sri Lanka can be categorized as Fisheries Cooperative Societies, Rural fisheries societies, women fisheries societies and fisher welfare societies.

In the stakeholder mapping survey it was found that Fisheries Cooperative Societies and Rural fisheries societies were the most common types of CBO's in both areas. The fisheries cooperative societies were generally older and had been established under the Co-operative act of Sri Lanka however at present cooperatives are not officially integrated into the fisheries policy or covered under fisheries regulations.

In addition to local level cooperatives these Fisheries Cooperative Societies have formed The National Fisheries Co-operative Federation, which has power to influence national fisheries policy by articulating community needs. However the inclusion of the The National Fisheries Co-operative Federation in fisheries policy development has been weak. The survey found that local fishermen saw that this gap was due to challenges in the operating structure of the federation.

While the National Fisheries Cooperative Federation is functional the involvement of the federation on the Ministerial Advisory Committee (Fisheries Act. 02,1996) is seen by the respondents as weak and needing enhancement. This was highlighted as most of respondents being interviewed pointed out that they were not happy with the contribution of the federation and that they were not aware of or consulted on local representatives actions at the federation level.

67% of all the respondents have a membership to local fisheries societies. A further 33% of respondents had no CBO membership at all due to perceived limited benefits that CBO's provide.

Partly due to this low involvement in local CBO's, DFAR is proposing a new community representation structure; this is the Rural Fisheries Society (RFS) model. DFAR is in the process to establish a competing national fisheries federation, which is not governed by the cooperative act. In the past few years DFAR Matara has formed 32 RFSs within their administrative area. Due to the introduction of this new system and structure respondents were confused and found it difficult to understand what the best system to follow would be.

It was observed during this survey that the Fisheries Cooperative society in Negombo successfully manages a fish-landing centre, a fuel-filling centre, water filling centre and an ice plant. In addition to that it provides welfare facilities to members like loans; facilitate members to in approaching government institutions, etc.

The lack of coordination among relevant government institutions has resulted in unclear strategies and challenges in forming and managing community based fisheries organizations. Additionally policies imposed by the government such as taxes on profits and tax exemption could affect the potential performance of CBO management structures.

3.5 Main fishing methods.

In the examination of the IUU issues that have surfaced in the fisheries sector in Sri Lanka. The main local challenge was the use of unconventional fisheries gear. In order to assess the status of IUU, sample data on fishing gear was collected.

The following fishing methods were identified as the dominant methods in use by the fisheries sector in the sampled areas.

Table.3: Details of fishing methods

Name of the Gear	Definition	Legality	Fish caught	Environmental impact	Presence in survey
Gill nets	Any rectangular shaped net in which the fish is caught either by gilling or entangling	legal	Tuna , Reef fish, Crabs , Shrimps	Low	Used Commonly
Long line fishing	Constructed from various nylon materials, with multiple branches and hooks attached to the main line.	Legal	Large Pelagic tuna	Low	Used Commonly
Purse seine nets	Means a ring of net built like a long, shallow , curtain, which is shot to surrounded a shoal of fish in mid -water both from the sides and from underneath, and then closed underneath with a purse ring.	Legal	Small pelagic	High	Used Commonly and is legal, however CBO's see this method as a destructive approach.
Pole and line/Hand line	The simplest form consists of a line, sinker and hook.	Legal	Large pelagic tuna	Low	Used commonly and is considered a traditional and sustainable method by the local fishermen
Dynamite fishing	Fishing by sound and vibration shock of dynamite	Illegal	All kind of fish	High	Controlled in the past 10 years. Jail terms and fines apply
Trammel net	Comprising several panels, the inner panels being of smaller mesh size. Targets include: Shrimp, lobster and demersal species.	Illegal	Shrimp , lobsters demersal fish	High	In use in certain areas, however local Cooperatives are aware and report

3.6 Size of the boats and fish harvest

Boat types	Number used by survey group
7- 9 m Multi day boats	39
9-11m Multi day boats	81
>12m Multi day boats	72
Small one day boats	55

To calculate average annual fish catch of different boat types. It is necessary to gauge the annual fishing expeditions that the each craft carried out. The survey found that all multi day boats traveled an annual average 11 trips per year. These trips took on average 1 month to complete, traveling to various destinations in order to complete their fishing requirements.

3.7 Legal frame work

Boat license and Gear license

Fishermen do not need to obtain any license or training on IUU or other aspects of fisheries policy to engage in fishing activity. However fishermen who own boats are obliged to obtain boat licenses and gear licenses to engage in fisheries action(Fisheries Act, 1996). As a result of this all fishers that were surveyed had boat licenses and gear licenses. All boat owners were exempted from paying both license fees by the government with effect of the budget proposal for 2011.

Fishers' knowledge of existing laws

Almost 94% of total survey group responded that they have adequate knowledge regarding existing local fisheries legislation. However the survey results indicated that they were not aware of catch rights and other fisher sector rights which have been adopted by the government and international institutions.

The survey participants were not aware of IOTC regulations and any other fish catch reporting and fish conservation requirements mentioned in IOTC agreements. This clearly shows a lack of awareness of fishers in legal frame works agreed at International level by the Sri Lanka government. This can be attributed to a low access to relevant and up to date information and poor coordination with relevant government institutions.

Table. 04: Level of fishermen knowledge on fisheries laws

	Knowledge of legal requirements	
	Matara	Negombo
Boat licensing	Good	Good
Gear licensing	Good	Good
Catch rights	Very low	Very low
IOTC Agreements	Not aware	Not aware

According to FAO Compliance Agreements, all fishing vessels more than 24 m are generally obliged to fish under national flags in international water (Code of conduct for Responsible fisheries FAO, 1995). However the fishers covered by the survey had boats less than 24m of length. Therefore these fishing boats do not require a flag ship agreement with the IOTC.

3.8 Reporting fish catch

In this section fishermen were interviewed on fish catch reporting and their views of it. While all respondents stated that they were engaged in reporting the fish catch to boat owners and sales persons. An interesting fact was that none engaged in regular reporting to the government sector. However a slightly different result close to 50% of fishermen surveyed in the Negombo area, had reported their fish catch to the CBO.

According to IOTC agreement, the government of Sri Lanka is responsible to report national annual fish catch to the IOTC (IOTC, agreement). However in the IOTC annual report, 2010 it was stated that Sri Lanka had not reported the fish catch data according to the IOTC required standards. This clearly emphasizes the immediate need for catch reporting and monitoring systems that will assist the fishing sector development to support international agreements and safeguard the sustainability of Sri Lanka's fish resource.

3.9 Gender involvement in tuna fishery

The survey results indicated that 62% surveyed fishermen and their families were involved fish processing. Activities such as fish drying, making maldive fish and fermented fish were commonly practiced. In Sri Lanka, women engaged in all types of fish processing works and value addition while the male engaged in activities that were limited to fishing. So the sample result can be defined as 62% of fisher families engage both the male and the female heads of families in fisheries and value addition aspects. As stated earlier 6% of boat owners during the survey happened to be women and as such plays an important role in the employment of

fishermen. Regular CBO attendance and community based development actions were found to be carried out by the women in fisher families.

3.10 Observation of illegal fishing practices

A considerable number of respondents, 41% have observed illegal fishing in their day-to-day activity. However 20% observed illegal fishing that originated external to Sri Lanka. A large group 80.4% of respondents observed illegal fishing activity within the CBO, such as illegal net fishing.

3.11 Taking responsibility

95% of respondents accepted that they are responsible for reporting illegal fishing practices. While 98% of respondent have reported that they reported illegal activities to relevant institutions.

84% of respondents believe that controlling illegal activities will enhance the sectors sustainability

3.12 CBO and governance

Of the total surveyed 71.6% accepted that CBO's have a role in governance of fisheries sector. The survey further asked the fishers who replied positively regarding CBO role on how CBOs can involve themselves governance. 20% of them replied it could be done through management, 51% replied it could be done by reporting to responsible authorities 2% said it could be done through awareness, management and reporting.

3.13 Governance of Government sector

Of all respondents 94% had accepted that the government should play an active role in fisheries governance.

When questioned on the mechanism the government could use to improve the sector governance. 54% suggested the government should inspect resources.

The survey conducted with government institutions found that human resources such as FI officers were not in adequate for regular monitoring of community level fisheries activities. Inspection equipment such as boats, GPS capabilities and vehicle facilities are also not adequate at the district offices of the DFAR.

3.14 Sector perception on fisheries resource management

50% of respondents stated that it is necessary to have long-term fish resource management systems and 50% replied they have no clear reason for fish resource management systems for sector sustainability.

One question on how catch reporting will help fisheries sector sustainability. None of the respondents accepted the need for catch reporting to establish sustainable FRM. This can be attributed to low knowledge of fisheries resources management. Additionally some fishermen perceived that the government could impose a tax on the fish catch through catch reporting systems. They also believe that international communities could try to restrict fish catch by the catch reporting system.

When questioned on the possibility of CBOs involving themselves in sustainable FRM a majority of respondents were not sure of the benefit of such an action.

However 70% of respondents did see the need to enhance the CBO's awareness on fisheries management and responsible national agencies such as universities that could offer support to further develop FRM were not identified.

87% of surveyed fisherman responded to the quota system in the negative and saw it as a restriction of their livelihood.

And when questioned further 15% of total respondents felt that the quota system is a difficult process, 30% felt that this could cause conflicts among the fishermen and 55% of them expressed that the process will lead to greater conflicts and confusion. This could be a serious issue when implementing a catch quota system as recommended by the IOTC. Therefore awareness on the benefit of quota systems needs to be immediately started.

3.15 Community involvement

The fishers were interviewed to identify the possibility of community representation at national level decision-making. All respondents suggested that the government had not adequately recognized the fishing industry and its development requirements. Of the total survey 84% mentioned there is no adequate community representation at national level and 16% said that they have no clear idea about community involvement in sector development. The Ministerial Advisory committee (fisheries and aquatic resources Act No.2) is one potential structure that could be enhanced and promoted with local communities as a mechanism to articulate their needs.

The importance and impact of civil society monitoring was unclear to many of the respondents. However 24% participants suggested that it would be possible to engage in some kind of

monitoring through the CBO structure. In this regard respondents pointed out that CBO's need a higher capacity for effective monitoring. While 34% felt that a civil society based management mechanism would not work, due to low capacity of CBOs and existing internal conflicts among officers and members.

3. Conclusion

The stakeholder survey that was carried out in 13 CBO's in the Matara and Negombo fishing precincts attempts to understand the civil society structure of the fisheries sector in Sri Lanka

The findings have resulted in a clearer picture of the fisher sector in both study areas. While both are as are in the South and West of the country and were not affected by the conflict in Sri Lanka. The reestablishment of fisheries in the North and East of the country, was not studied in this survey and could provide some additional information on the state and development of the fisheries sector.

The fisher groups in the Matara and Negombo landing sites could be defined in to two groups; as persons engaged in the fisheries sector owning boats and those that provide a labor force for the boat owners. Boats in use were mainly multi day boats capable of engaging in fisheries up to and beyond the EEZ. These boats can be considered as appropriate boats for the Tuna fishing industry. All boats engaged in monthly fisheries expeditions that lasted between 3-4 weeks. While a majority of fishermen did not travel further than the EEZ, small groups continued to fish in international waters such as Australian waters.

In Sri Lanka the use of dynamite and trammel nets are illegal and the fisher CBO's regularly reported any observations of these methods to authorities. However the use of Purse seine nets were considered harmful to immature fish by local fishermen, this method was still considered legal under the Fisheries Act.

Fisher CBO's have historically assisted fisher communities the world over to effectively engage in lobbying, resource management and to establish sales and marketing activities. This is the same in Sri Lanka where a majority of CBO's are based on a Cooperative system that runs independently to the fisheries ministry, a result of this independence is limited communication between government ministries that have led to challenges in the fisheries sector. Resulting in a lack of clear strategy at most levels to meet developmental goals within the fisheries sector. The new structures proposed by DFAR to overcome the communication and coordination challenges are the Rural Fisheries Societies. However the establishment of these societies must take into account the pre-existing structures such as the existing Cooperative fisheries societies and base any new activity on any positive achievements of the past. Low membership levels and participation of the fishermen who did not own boats has been identified as a gap in the present Cooperative structure. Due to a market orientation with a focus on infrastructure development

being pursued by the cooperative structure the fishermen/laborers working on the boat see a limited benefit in involvement. Any new models of fisheries organizations will have to address this issue.

The trends identified in the fisheries sector in regards to policy awareness were based on experience and involvement in the sector. Persons engaged in the sector for a period of time over 10 years had a better understanding of fisheries policy and were open to discuss policy improvement. Persons with a shorter term involvement and casual laborers were unaware of policy and legislation. Similarly persons with boats and nets had more awareness of the laws and IUU issues. The need for better dissemination of national level policy is necessary for the policy to be effective at community level.

On a positive note a majority of fishermen from both sites were happy to report illegal action. Furthermore the involvement of CBO's was considered positive by all groups provided that capacity building actions were delivered to the CBO's. As reporting of catch was mainly provided to the market sector by fisherman and the government sector reporting has been weak. The positive incidence of reporting within a well functioning Fisher CBO such as Negombo fisheries societies can point out the service a CBO could provide both the government and private sector monitor fisheries activities.

When the fishermen were directly questioned on the importance of catch quota and sustainable resource management most responses were in the negative, one reason for this could be the lack of good information that could help them make an informed decision. Furthermore fisher responses on reporting, governance and enforcement suggested that the fisher sector has a strong interest in managing their resource, however the need for CBO's and enforcement agencies to be increased in capacity is important for individual fisher folk to gain access to the best quality information that will help them make a better informed decision on the future sustainability of their sector.

Annexes:

- Annex I : FAO definition of IUU Fishing
- Annex II : IOTC Definition
- Annex III : Survey Questionnaire
- Annex IV : Illegal Fishing

Annex I

1.0 FAO definition of IUU Fishing

In accordance with the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (FAO, 2001), the following fishing activities fall into the category of IUU fishing

1.1 Illegal Fishing

- (a) Fishing conducted in contravention of the national laws and regulations of a State;
- (b) Fishing conducted by boats flying the flag of States that are parties to a particular regional fisheries management organization in contravention of the conservation and management measures adopted by such organization or the applicable international laws;
- (c) Fishing conducted in contravention of the international obligations undertaken by a co-operating State to a particular regional fisheries management organization;

1.2 Unreported Fishing

- (d) Fishing that have not been reported or have incorrectly been reported to the national authority in contravention of the national law and regulations of a State;
- (e) Fishing conducted in the area of management of a particular regional fisheries management organization that have not been reported or have incorrectly been reported in contravention of the reporting requirements of such organization;

1.3 Unregulated Fishing

- (f) Fishing conducted in the area of management of a particular regional fisheries management organization by boats without nationality or flying the flag of a State that is not a party to such organization in contravention to the management measures adopted by such organization;
- (g) Fishing in areas or for stocks in relation to which no specific conservation or management measures are applicable, in a manner inconsistent with the responsibilities of a State for conservation of living marine resources under the international law.

Annex II

IOTC Definition

IOTC refers specifically to fishing of tuna and tuna-like species in its area of competence in defining IUU fishing activities (IOTC Resolution 11/03). The definition given by IOTC for IUU fishing also falls within the framework of FAO definition of such fishing. Fishing vessels that engage in following activities are considered carrying out IUU fishing in the IOTC area of competence.

- (a) Harvesting tuna or tuna-like species without registering in the IOTC Record of Vessels authorized to harvest tuna or tuna-like fish in the IOTC area of competence;
- (b) Harvesting tuna or tuna-like species when their flag state is without sufficient quotas, catch limit or effort allocation under IOTC conservation and management measures where applicable;
- (c) Activities that do not record or report their catches made in the IOTC Area of competence in accordance with IOTC reporting requirements, or make false reports;
- (d) Taking or landing undersized fish in contravention of IOTC conservation measures;
- (e) Fishing during closed fishing periods or in closed areas in contravention of IOTC conservation measures;
- (f) Using prohibited fishing gear in contravention of IOTC conservation measures;
- (g) Transshipping with, or participating in joint operations such as re-supplying or re-fuelling, vessels included in the IUU Vessels List;
- (h) Harvesting tuna or tuna-like species in the waters under the national jurisdiction of a coastal State in the IOTC area of competence without authorization and/or infringe the coastal state's laws and regulations (this is without prejudice to the sovereign rights of coastal States to take measures against such vessels);
- (i) Without nationality harvesting tuna or tuna-like species in the IOTC Area of competence;
- (j) Engaging in fishing, including transshipping, re-supplying or re-fuelling, contrary to any other IOTC conservation and management measures.

Annex III

Stakeholder Mapping – Fisherman

Date:	Form No.	
1. Name :		
1.1 Village:	1.2 District:	
1.3 Contact no :		
2. Membership of CBO,		
2.1 Y 2.2 N	2.3 Name of the CBO :	
3. Duration of the CBO membership (years) :		
4. Job details		
4.1 If Fisherman,		
4.1.1 How long (Years):		
4.1.2 Daily		
4.1.3 Maltly day		
4.2 If boat owner,		
4.2.1 Duration of ownership (years) :.....,		
4.2.2 Single ownership,		
4.2.3 Consortium		
5 . Length of the boat		
5.1 3.5 ton		
5.2 10- 12m		
5.3 >12m,		
5.4 GRP 5.5- 6m		
5.5 Non mach. Canoe		
6 Major fishing type:		
6.1 Gill net	6.4 Pole and line	6.7 Trawl net
6.2 Purse seine	6.5 Seine nets	6.8 Expl.
6.3 Long line	6.6 Trammel net	6.9 other
7 License		
7.1 Boat :		
7.1.1 Yes		
7.1.2 No		
7.1.3 If yes , License no :		
7.1.4 If no, Why :		
7.2 Gear license		
7.2.1 Yes		
7.2.2 No		
7.2.3 yes , License no :		
7.2.4 If no, Why		
8 Do you report your catch ?		
8.1 yes		
8.2 No		
8.3 If yes,		
8.3.1 Gov.		
8.3.2 Boat owner		
8.3.3 Sales person		
8.3.4 CBO		
8.4 If no why.....		

- 8.4.1 No system.....
- 8.4.2 .difficult.....
- 8.4.3 no measuring devices
- 9 Major fishing area:
 - 9.1 < 10 miles
 - 9.2 10 – 200 miles
 - 9.3 > 200 miles
 - 9.3.1 Bay of Bengal.....
 - 9.3.2 Centre of Indian Ocean.....
 - 9.3.3 Closer to Australia
 - 9.3.4 Closer to Madagascar
 - 9.3.5 Other ...
- 10 Do you process fish ?
 - 10.1 Yes
 - 10.2 No
 - 10.2.1 On board
 - 10.2.2 Sun drying
 - 10.2.3 filleting
 - 10.2.4 Maldive fish
- 11 What kind of monitoring technology you have access?
 - 11.1 Fish finder
 - 11.2 Fish aggregators
 - 11.3 Radar system
 - 11.4 Satellite
 - 11.5 GPS
 - 11.6 Radio message
 - 11.7 . On board fish processing
- 12 Do you migrate for fishing?
 - 12.1 Trincomale
 - 12.2 Negombo
 - 12.3 . Kalpitiya
- 13 How long do you
- 14 Frequency of trips :
 - 14.1 Per month .
 - 14.2 Per year
- 15 Total Catch per trip:
 - 15.1 Lowest(SW) (kg)
 - 15.2 Highest (SW) (kg)
 - 15.3 Lowest(SW)..... (kg)
 - 15.4 Highest (NE)..... (kg)
- 16 Fish species
 - 16.1 Bigeye tuna(Asgedikelawalla Yes
 - 16.2 Yellow fin Tuna(kelawalla
 - 16.2.1 Yes
 - 16.2.2 Average % caught
 - 16.2.3 % caught (SW)
 - 16.2.4 % caught (NE)
 - 16.3 Marlin (koppara) Yes

- 16.4 Skipjack tuna (Balaya) Yes
 - 16.4.1 Average % caught
 - 16.4.2 % caught (SW)
 - 16.4.3 % caught (NE)
- 16.5 Shark (Mora) Yes
- 16.6 Swordfish (Sappara) Yes
- 16.7 Reef fish Yes
- 16.8 Bullet tuna (Raguduwa) Yes
- 16.9 frigate tuna (Alaguduwa) Yes
- 16.10 Scad (Bolla) Yes
- 16.11 Russelsscad (Linna) Yes
- 16.12 Spanish makeral (Thora) Yes
- 16.13 Other Yes
- 17 Are you aware of your fishing rights ?
 - 17.1 Yes
 - 17.2 No
 - 17.3 If yes ,
 - 17.3.1 Catch rights
 - 17.3.2 Equipment legality
 - 17.3.3 Boats
 - 17.3.4 Other
- 18 Are you aware on IOTC regulations?
 - 18.1 Yes
 - 18.2 No
- 19 Do you get any government support?
 - 19.1 Yes
 - 19.2 b No
 - 19.3 Subsidy for boats and gear
 - 19.4 Fisheries housing scheme
 - 19.5 Fuel subsidy
 - 19.6 Fishing technique
 - 19.7 Processing
 - 19.8 Governance
 - 19.9 Ocean safety
 - 19.10 Other
- 20 What type of illegal fishing have you observed?
 - 20.1 Yes
 - 20.2 No
 - 20.2.1 Within CBO : Nets
 - 20.2.2 Boats
 - 20.2.3 Other
 - 20.2.4 External CBO.
 - 20.2.5 External to SL
- 21 How do you report illegal fishing
 - 21.1 Navy
 - 21.2 Coast guard
 - 21.3 DFAR
 - 21.4 Other
 - 21.5 Explain

- 22 . Is it your duty as you see it to report illegal fishing?
 22.1 Y
 22.2 /N
 22.3 /No idea
- 23 Do you see it as a benefit to your livelihood?
 23.1 Y
 23.2 /N
 23.3 / No idea
- 24 Should CBO's take more active role in governance of our fish resource?
 24.1 Y
 24.2 /N
 24.3 No idea
 24.4 How?
 24.4.1 Reporting
 24.4.2 Management
 24.4.3 Awareness
- 25 Should the Government officers take a more active role in governance ?
 25.1 Y
 25.2 N
 25.3 No idea
 25.4 If so how
 25.4.1 inspection
 25.4.2 Enforcement
 25.4.3 Management
 25.4.4 Marketing
- 26 Would you use a system of monitoring if you were introduced to it. ?
 26.1 Y
 26.2 /N
 26.3 /No idea
- 27 Do you see the need for more catch reporting programs for the purpose of identifying the health of our fish stocks. ?
 27.1 Y
 27.2 /N
 27.3 /No idea
- 28 Do you see potential for better involvement of Civil society in this action. ?
 28.1 Y
 28.2 /N
 28.3 / No idea
- 29 Do you think that the fisheries Civil society have sufficient understanding of the local fisher resource management?
 29.1 Y
 29.2 /N/
 29.3 No idea
- 30 What sector(Government,NGO) has strengthened knowledge of fisheries management ?
 30.1 Y
 30.2 /N
 30.3 / No idea
- 31 Do you see international fisheries regulations that are trying to establish new management systems such as the quota systems?
 31.1 Positive
 31.2 /Negative

- 31.3 why if negative
 - 31.3.1 Difficult
 - 31.3.2 Conflict
- 32 Do you think the fisher communities are adequately represented at national level discussions?
 - 32.1 Y /
 - 32.2 N
 - 32.3 No idea
- 33 Do you think that a system of monitoring by Civil society be effective to control illegal fishing?
 - 33.1 Y
 - 33.2 N
 - 33.3 Sometime
 - 33.4 No idea
 - 33.5 if Y examples:
 - 33.5.1 easy
 - 33.5.2 effective
 - 33.6 if no why :
 - 33.6.1 Instability of CBO
 - 33.6.2 Conflicts /
 - 33.6.3 Other

Annex IV

Illegal Fishing

- (i) Engaging in any prescribed fishing activity in Sri Lanka waters without a license obtained from Director General (Section 6 of FARA and Fishing Operations Regulations of 1996 published in Gazette, No. 948/25 of 07-11-1996).

The following fishing operations have been prescribed as fishing operations that require license from DG.

- Fishing operations carried out by seine nets, beach seines, *madel*, or Danish seine nets
- Fishing operations carried out by trawl nets
- Fishing operations carried out by surrounding nets
- Fishing operations carried out by trammel nets
- Fishing operations carried out by gillnets
- Fishing operations carried out by drift gillnets
- Fishing operations carried out by long lines
- Fishing operations carried out by cast nets
- Fishing operations carried out by fish traps
- Fishing operations carried out by stake nets (*kattu del*)
- Bivalve mussel fishing operations
- Beche-de-mer fishing operations
- Chank fishing operations
- Fishing operations carried out using bundles of *Pilaatu* (*Tephrosia* plants)
- Fishing operations carried out using fish aggregation devices
- Fishing operations carried out by lift net (*atoli*)
- Fishing operations carried out by diving including free diving, SCUBA diving and HOOKAH diving

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 3000 or to both such imprisonment and fine (Section 49 (2) FARA)

- (ii) Use of a fishing boat that has not been registered as a fishing boat by DG for fishing in Sri Lanka waters (Section 15 of FARA and the Registration of Fishing Boats Regulations, 1980 published in Gazette, No. 109 of 10 March 1980).

Penalty: Fine not less than Rs. 2000

- (iii) Use of poisonous, explosive or stupefying substances (including dynamite) or other noxious or harmful material for fishing (Section 27 of FARA as amended by Act, No. 4 of 2004).

Penalty: Imprisonment of either description for a term not less than three years and not exceeding five years and to a fine not less than Rs. 100,000 or on a second or subsequent conviction to imprisonment of either description for a term not less than five years and not exceeding seven years and to a fine not less than Rs. 500,000 (Section 49 (3) FARA as amended by Act, No. 4 of 2004)

- (iv) Engaging in fishing operations, which have been prohibited (Section 28 of FARA).

The following fishing operations have been prohibited (Fishing Operations Regulations of 1996 published in Gazette, No. 948/25 of 07 November 1996)

- Push net fishing operations
- Harpooning for marine mammals
- Moxi net fishing operations
- Gillnet or trammel net fishing operations on coral reefs or rocks

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 3000 or to both such imprisonment and fine (Section 49 (2) FARA)

- (v) Engaging in fishing operation in an area specified by Minister during a closed season (Section 34 of FARA).

Months of February, September and October have been declared as closed seasons for fishing of lobster (Notification published in Gazette, No. 1601/36 of 15 May 2009).

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 3000 or to both such imprisonment and fine (Section 49 (2) FARA)

- (vi) Engaging in a fishing operation without a permit from DG in an area declared by Minister as a fisheries reserve (Sections 36 and 37 of FARA)

Penalty: Violation of the Sections 36 and 37 of FARA has not been listed as offences under the Part IX Offences and Penalties in FARA perhaps due to an oversight

- (vii) Engaging in spiny lobster fishing operation in the sea area belonging to the Southern coastal belt between the estuaries of Bentotal River and Kumbukkan River (Lobster Fisheries Management Regulations of 2000 published in Gazette, No. 1123/2 of 13 March 2000).

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 2000 or to both such imprisonment and fine (Section 49 (5) FARA)

- (viii) Engaging in a dredging operation or a trawling operation for the purpose of taking chank (Chank Fisheries Management Regulations, 2003 published in Gazette, No. 1298/1 of 21 July 2003).

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 2000 or to both such imprisonment and fine (Section 49 (5) FARA)

- (ix) Landing of fins of shark or skate which are not attached to the bodies of such fish (Landing of Fish (Species of Shark and Skate) Regulations, 2001 published in Gazette 1206/20 of 17 October 2001).

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 2000 or to both such imprisonment and fine (Section 49 (5) FARA)

- (x) Using a foreign boat for fishing or related activities in Sri Lanka waters except under the authority of a permit issued by DG with the approval of the Minister (Section 4 of FFBA)

Penalty: Fine not exceeding Rs. 1.5 million (Section 15 (a) of FFBA)

(xi) Landing of fish taken outside Sri Lanka waters at any port in Sri Lanka by a boat not registered under FARA without a landing permit obtained from Director General (Landing of Fish Regulations, 1997 published in Gazette 972/4 of 21 April 1997).

Penalty: Imprisonment of either description for a term not exceeding six months or to a fine not less than Rs. 2000 or to both such imprisonment and fine (Section 49 (5) FARA)