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ECONOMIC DRIVERS OF ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING

by

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1. Introduction

Illegal, Unreported and Unregulated (IUU) fisheries activities are a worldwide problem, affecting both domestic waters and the high seas. IUU activities are undertaken by all types of fishing vessels, regardless of their size or gear. However, the way fisheries authorities¹ deal with these issues varies substantially in terms of the processes that are used and, not surprisingly, in terms of outcomes.

IUU fishing is an activity driven by economic factors. When the expected net benefit from IUU fishing is positive, the activity will continue somewhere, somehow in the world's oceans. The geographical scope for illegal fishers to move around is limited only by their geographical "spheres of interest", technical equipment and the profitability of undertaking IUU activities as well as legal and technical conditions regarding foreign direct investments, services and flagging. This underscores the importance of cross border cooperation to ensure that the potential benefits from IUU activities are reduced and costs raised by making sure that potential loop holes are identified and fixed. It is imperative that the international community collaborate and cooperate to ensure that the problem is contained as much as possible.

A potentially confusing factor in the international debate about IUU fishing has been the tendency to group all the elements of the problem into one. From an analytical perspective, a more tractable way forward may be to discuss and analyze each of the three elements of IUU fishing separately, i.e. the illegal, unreported and unregulated elements. This will help identify appropriate economic and policy instruments that are cost-effective and likely to have a measurable impact on addressing each element.

The purposes of this paper are to 1) provide a short overview of the IUU problem; 2) discuss the economic, social and institutional drivers of IUU activities; 3) discuss possible actions against illegal, unreported and unregulated fisheries activities respectively; 4) provide an overview of actions taken so far to combat IUU activities; and finally, 5) provide some ideas about future challenges in the combat against IUU.

This paper is primarily based on work in progress by the OECD Committee for Fisheries. That work focuses on identifying alternative strategies that are based on the economics of the IUU activity. As a first step in this process, the OECD Committee for Fisheries hosted a workshop on IUU Fishing Activities which took place in April 2004². An immediate outcome of this workshop was a set of key observations and findings by the Workshop Chairs. These "Observations and Findings" are reproduced in Annex 3. While the focus of the OECD has been mainly on the international high seas IUU problem, many of the observations are applicable to illegal, unreported and unregulated fishing activities in domestic and regional waters as well.

The OECD's Committee for Fisheries is currently in the process of finalising its work on illegal, unregulated and unreported fishing activities. With its unique focus on the economics of the IUU, this work has provided important insights and contributed to other international efforts in the combat against IUU fishing. In particular, the work of the OECD's Committee

¹ Refers to national, regional as well as international authorities, including regional fisheries management organisations.

² The proceedings of this workshop are published as "*Fish Piracy: Combating Illegal, Unreported and Unregulated Fishing*" (OECD, 2004).

for Fisheries is a timely input into the endeavour of the High Seas Task Force³ that has been set up on the initiative of fisheries ministers from Australia, Canada, Chile, Namibia and New Zealand under the direction of the Rt Hon Simon Upton, Chair of the OECD Roundtable on Sustainable Development.

2. Why IUU is a major international issue for fisheries policy makers.

Governments around the world have recognised the negative effects of over-fishing on resource sustainability⁴. In addition to a direct impact on the fish stocks themselves, which in some cases have been severe and to the point of collapsed fish stocks (e.g. the Patagonian toothfish in the late 1990s), IUU fishing activities have a direct impact on the amount of fish that is left for legal fishers to harvest and make a living on. There are therefore important economic and social sustainability issues for fishing communities that rely on the same, or associated, fish resources over and above stock and biodiversity concerns. IUU fishing activities undermine the interests of fishers and the fishing industry that follow the rules.

The direct effects of IUU fishing concern the fish stocks themselves. Being either illegal or unreported, such fisheries activities have an impact on the state of the stocks but the extent of impact is often not known due to the illicit character of the activity. This affects the accuracy of fish stock assessments which are a key for ensuring the sustainability of fisheries. IUU activities also have negative eco-system effects as by-catches are not accounted for and hence the effects on the broader eco-system cannot be assessed and included in the work of the fisheries manager.

IUU activities are often associated with poor social working conditions for the fishers employed on IUU vessels. Several reports (Greenpeace, ILO and ITF) suggest that living and working conditions on board IUU vessels are dangerous. Salaries are dismal and deckhands and fishers are mostly hired from the developing world where alternative job possibilities are few and far between. The combination of poor working conditions, poor vessel standards and generally lower levels of education of fishers make IUU fishing a potentially dangerous activity. The possibility for fishing vessel owners and operators to engage in these activities under such poor conditions is sustained by the possibilities offered by “flag of convenience” states which often also provide tax shelter (tax havens).

The result of the above makes IUU fishing a serious challenge to fisheries policy makers and undermine the credibility of fisheries management. For Regional Fisheries Management Organisations (RFMOs), an additional issue relates to the fact that IUU operators, as non-members of the RFMO, “profit” from efforts that complying members of the RFMO pay for in ensuring a sustainable fishery, including the financial costs of RFMO membership. RFMO members thus have a vested interest in ensuring that their efforts are paying off to themselves and not to non-members or non-complying vessels.

³ The High Seas Task Force is hosted by the Round Table on Sustainable Development which in turn is hosted by the OECD. See www.high-seas.org for further details.

⁴ At the June 2003, G8 meeting in Evian, Heads of State adopted a G8 Action Plan that calls for the urgent development and implementation of international plans of action to eliminate IUU fishing. More globally, the World Summit on Sustainable Development (WSSD) meeting in Johannesburg in September in 2002 also addressed IUU fishing and through the 1990s, a variety of laws, regulations and measures against IUU fishing have been elaborated by the United Nations and in particular the UN’s Food and Agriculture Organisation (FAO). A listing of the important international actions and initiatives taken to combat IUU fishing activities is provided in Annex 2.

3. Economic, social and institutional drivers of IUU activities

Despite efforts by the international community to stop IUU fishing most observers agree that the IUU activities continue unabated, suggesting that the actions taken have not been particularly successful. Earlier attempts to address IUU activities have largely been based on measures of legal and jurisdictional character not necessarily the most appropriate for targeting the economic foundation of the activity. Hence, an important objective for the OECD work is to move the analysis forward observing that an economic model provides a more realistic analytical framework to understand and addressing the factors driving the IUU activity.

The basic tenet of the OECD work is that by changing the economics of the IUU activity, e.g. by reducing the expected benefits of the activity or augmenting the expected costs, the net expected benefits may become so small that potential IUU operators will seek to deploy their efforts in other more profitable activities.

The framework for the analysis of drivers of IUU fishing is based on the simple observation that:

$$\text{Expected Profits from IUU fishing} = \text{Expected Benefits from IUU} - \text{Expected Costs of IUU}$$

The analytical framework draws heavily on the economics of crime and punishment⁵; the main outcome of this is that a risk-neutral individual will commit an offence if and only if his private expected benefit exceeds the expected sanction for doing so. In this case, IUU fishers are driven by the fact that the activity has a potential net economic benefit⁶.

A number of economic variables underpin the simple equation above. These are presented and briefly discussed in Table 1. Based on the analytical framework a number of key economic, institutional and social drivers have been identified by the OECD's Committee for Fisheries. Such drivers work to increase IUU revenue or decrease the costs relative to legal fishers thus continuing making the IUU fishing potentially profitable. The following briefly outlines and discusses these drivers.

3.1. Excess capacity

Excess capacity has the potential to be an extremely powerful driver for IUU fishing. There is considerable and growing concern that the developed countries' overcapacity problem, in some cases exacerbated by the provision of subsidies, is "exported" into IUU fishing activities. This is boosted by the ease of re-flagging vessels and also helped by the difficulties in tracking company structures and identifying beneficial owners of IUU fishing vessels.

It is also important to ensure that capacity reduction programmes are well designed and implemented and do not merely pass on the problem to other fisheries. Such programmes should also seek to provide alternative opportunities to redundant fishers.

⁵ The model is based on work by Becker G.S., "Crime and Punishment: An Economic Approach", *Journal of Political Economy*, 76 (2), pp. 169-217, 1968 and Stigler G.J., "Theories of Economic Regulation", *Bell Journal of Economics*, vol. 2(1), pp. 3-21, 1971.

⁶ For a more detailed and formalised discussion of the economic model see OECD website at www.oecd.org/agr/fish and http://www.oecd.org/document/28/0,2340,en_2649_33901_23649436_1_1_1_1,00.html

3.2. Market value of IUU fish

Most fish species subject to illegal, unreported and unregulated fishing are characterised by very high market value. This has in particular been the case for Patagonian toothfish, Orange roughy and tuna, but also less commercially important species reach prices that are sufficient to motivate IUU fishers. Other species may have lower market value (e.g. squid) but can be marketed through traditional channels where they can be easily mixed with “legal” fish.

As for high valued fish the economic gains from IUU fishing are often significant⁷. Estimates of IUU catches by the CCAMLR suggests that the cumulative financial losses arising from IUU toothfish fishing amounted to USD 518 million over the period 1996 to 2000 in the Convention Area; this compares to an estimated USD 486 million in turnover enjoyed by legitimate fishers over the same period (*Fish Piracy*, OECD 2004). Such species are also high in demand in many countries, developed and developing alike. In line with increasing demand for fish fuelled by population growth, increasing consumer awareness of health aspects and higher disposable incomes prices for fish are likely to increase further. Hence, there will be growing incentives for fishers to undertake IUU activities. One possible way of dealing with this is to use labelling schemes that clearly indicate when fish are from “legal” sources. Also, catch and trade documentation schemes where legal fish is followed from catch to consumer’s plate can be effective in segregating the legal catch from IUU catch.

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It should be noted that expected net benefits of individual vessels differ from cumulative financial losses for the entire fleet which is more closely related to the total economic loss for society of having the IUU activity.

Table 1: Economic Variables Underpinning IUU/FONC Fishing Activities

| Variables | Explanation | Outcome compared to vessels following the rules |
|---------------------------------|--|---|
| Quantity of fish | IUU/FONC vessels not bound by international regulations; Existence of excess or idle capacity; | Higher catches and revenues for IUU vessels (compared to vessels following the rules) |
| Price of fish | Insufficient premium for certified / labelled fish; Possibilities to disguise catches; | No price discrimination between IUU and legal fish |
| Company tax rate | Existence of tax haven; | IUU vessel operating costs reduced |
| Fuel cost | Tax system distortion; | IUU vessel operating costs reduced |
| Other running cost | Insufficient restriction to port / facilities access; Insufficient need for avoidance behaviour; | |
| Crew cost | Existence of ready and cheap labour, resulting from poor economic situation/outlook in developing countries; Existence of excess or idle capacity; No extra-territorial application of domestic rules; | IUU vessel operating costs reduced |
| MCS costs | IUU/FONC vessels are not bound by national and international regulations (if charged to committed vessels) | IUU vessels operating costs reduced |
| Flagging and Registration costs | Existence of FONC countries. Re-flagging international rules (IMO) | IUU vessel operating costs reduced |
| Insurance costs | IUU/FONC vessels are not bound by national and international regulations. Poor economic and social situation/outlook in developing countries (existence of ready and cheap labour) | IUU vessel operating costs reduced |
| Vessel purchase cost | Subsidies to build or export vessels; Existence of excess or idle capacity; Insufficient fiscal and foreign investment rules | Investments (capital costs) in IUU vessels lower |
| Repair and maintenance | IUU/FONC vessels are not bound by national and international regulations; Poor economic and social situation / outlook in developing countries | IUU vessel operating costs reduced |
| Safety equipment cost | IUU/FONC vessels are not bound by national and international regulations; Poor economic and social situation / outlook in developing countries | IUU vessel operating and/or investment costs reduced |
| Fraud Costs | Insufficient control of trade measures to circumvent (repackaging / re-labelling), Existence of global or local economic imbalances | IUU vessel operating (fraud) costs reduced |
| Moral/Reputation Cost | Lack of recognition of the gravity of the problem Lack of transparency in companies ownership | IUU vessel operating (moral) costs reduced |
| Avoidance Costs | Insufficient MCS capacities; Insufficient "listing" of IUU vessels | IUU vessel operating costs reduced and potential for being apprehended lower |
| Expected sanction | IUU/FONC vessels not bound by national, regional and international regulations. | IUU vessel operating costs reduced |

FONC refers to vessels flying flags of non-compliance
Source: OECD Secretariat.

3.3. The level of monitoring, control and surveillance and the demonstration effect

The demonstration effect achieved by governments and RFMOs through monitoring, control and surveillance (MCS) in fighting IUU activities may be significant; it provides positive signals to legal fishers and sends the message to IUU fishers that their activities will not be tolerated. In terms of the economic variables listed in Table 1, the level of MCS operations work primarily on the *expectations* of being apprehended and fined. A particularly effective way of dealing with this may be to require on-board observers on all fishing vessels as well as the use of vessel monitoring systems (VMS).

However, such an approach is not cost free and it may be necessary to undertake cost benefit analysis which may also provide some further insights and help achieve overall cost effectiveness. The key question to answer is if the cost of MCS outweighs the benefits achieved from improved stocks and perhaps better returns to legal fishers. A challenge that may come up in the discussion, however, is to decide who is to pay for the benefits that such a system may create (i.e. the Government or the fishers who benefit?); the way the fisheries management system is constructed and whether cost recovery exists are important issues to consider.

3.4. Level of sanctions against IUU fishing

The absence of sufficiently severe penalties, combined with limited enforcement, enhances the lucrative rewards of IUU fishing. One case study⁸ presented to the OECD IUU Workshop suggests that the maximum penalty structure should be increased by as much as 24 times (compared to the current system) to eliminate the expected positive net profits and thus have an economic effect on IUU fishing activities. A review of the OECD countries' penalty levels suggests a wide range of applied penalties and fines, but that the level of fines are not sufficiently effective deterrents. Since the net profits per fishing trip of each vessel usually exceed the value of the vessel, abandoning that vessel once apprehension occurs is not a major problem for most operators. Furthermore, many vessels use fake operating companies to avoid having to pay fines. The true identity of the vessel may never be detected and the company name could change many times.

In some cases, extreme poverty can be a driving force for engaging in IUU activities, particularly with respect to the crew. Under these circumstances, fines and other penalties (including imprisonment) may not be enough of a disincentive to IUU fishing. It could be that, in such cases, development policies could play a more important role in mitigating the economic and social pressures to participate in IUU activities.

3.5. Management regimes

The design of domestic management regimes is an important determinant for the income that individual fishers will be able to make from legal activities and, other things being equal, the higher the income from domestic fisheries, the lower the incentive for engaging in IUU activities. Poorly defined and enforced national fisheries management regimes may therefore be an important driver for IUU fishing activities (both through low incomes and through

⁸ See *The Costs of Being Apprehended for Fishing Illegally: Empirical Evidence and Policy Implications* by Sumaila, Alder and Keith, in *Fish Piracy: Combating Illegal, Unreported and Unregulated Fishing*. (OECD, 2004).

excess fishing capacity). Countries with inefficient fisheries management regimes may be a likely source of vessels that would be candidates for IUU operations. Conversely, countries undertaking fisheries sector reform or adjustment, and in this process “releasing” excess fishing capacity, may be exporters of that capacity into the world market for vessels. This underlies the importance of physically removing fishing capacity through capacity restriction programs when contemplating fisheries management reform.

3.6. *Weak international framework*

A major issue relating to international legal frameworks is that they are only applicable for states that have acceded to the various conventions. This makes it difficult to enforce rules of RFMOs, as well as rules related to vessel safety and vessels registration. A number of loopholes are therefore created as it is possible to re-flag fishing vessels without significant constraints. In addition, countries may simply not have the sufficient means to ensure that vessels flying their flags operate according to the rules⁹. An issue that needs further investigation is rules applied to foreign direct investments which may ease the re-flagging of vessels. With regard to the international legal framework it should also be highlighted that there are a number of “hot spots” on the high seas for example where adjacent EEZ do not cover fully the area of concern (e.g. “Smuthullet” in the North Sea). The existence of such areas may help underpin the profitability of IUU vessels.

3.7. *Poor economic and social conditions*

In a number of fisheries, IUU activities are carried out by fishers from developing countries living under poor economic and social conditions. The poor vessel safety and working conditions on IUU vessels is made possible, *inter alia*, as there is no widely accepted global convention on safety and personnel requirements for fishing vessels and no ILO (or other) instruments on labour conditions for fishers. It is important to ensure that development policies also address issues related to reducing overall poverty in fishing communities prone to be available for IUU activities and creating alternative income possibilities in the coastal zones.

4. Possible Actions Against Illegal, Unreported and Unregulated Fishing

A wide range of policy measures are available to reduce the expected net benefits from undertaking IUU operations. As part of its work on the issue, the OECD Committee for Fisheries developed a menu of such possible measures, categorized according to whether the measures were aimed at reducing the revenues of IUU fishing activities or increasing the capital and operating costs of the activities. These are briefly summarized in Box 1. As can be seen from the list, the range of policy measures is extensive.

However, there are considerable hurdles to implementing many of these measures, including issues of cost, political will and the need for international coordination on sensitive issues. Given the limited resources available to national governments and RFMOs in combating IUU fishing, determining the cost-effectiveness of alternative policy actions is essential. The following discussion addresses this issue. As already mentioned, a confusing feature in the

⁹ It is recognised however that Article 117 of UNCLOS provides that all States have the duty to take, or to co-operate with other States in taking, such measures for their respective national as may be necessary for the conservation of the living resources of the high seas.

IUU debate has been the tendency to group the separate elements of IUU into one analytical basket. However, it is more useful to address each element in turn, highlighting the way in which policy actions can address the particular features of the illegal, unreported or unregulated fishing activity.

4.1. Illegal Fishing Activities

“Illegal fishing” refers to fishing operations conducted by vessels of countries that are party to regional fisheries management organisations or belong to co-operating States, but which operate in violation of their rules, or foreign vessels operating in a country’s waters without permission.

Illegal operations have a direct effect on legal fishers as their unit fishing costs will increase due to lower catches. Also, if the illegal catch is marketed on the same market as the legal catch, the price received by legal fishers could come under pressure and reduce incomes. If undetected, illegal fishing activities will make stock assessments unreliable. When the precautionary principle in fisheries management is applied, this may result in significant costs to legal fisheries if their fishing capacity is restricted in order to conserve stocks. Evidence from practice within RFMOs indicates that allowable catches for members are reduced in relation to the assessed amount of IUU fishing to ensure sustainability and to avoid stock collapses.

However, the fact that the operation is illegal means that a legal framework is already in place but that it is ineffective in terms of surveillance and enforcement, and is therefore an insufficient deterrent. Depending on whether the responsibility for taking measures to improve the situation lies with nation states or RFMOs, the following actions could be considered.

Actions by nation states

The penetration of foreign illegal fishing activities can only be dealt with through improving surveillance and enforcement-related activities. Three options are available to national authorities:

- Increase the amount of surveillance to increase the risk of being caught;
- Increase penalty levels to reduce expected returns for illegal operators; and
- Apply trade measures.

Increasing the amount of surveillance could be a costly option but could, in certain circumstances, have the additional benefit of closer monitoring of the fishing activities of legal operators. A positive spill-over effect can thus be expected. There may also be synergies to other types of enforcement activities such as narcotics, immigration and terrorism; such links could usefully be exploited to lower the general cost of enforcement and surveillance to society. The introduction of compulsory observer coverage on board all fishing vessels, thereby increasing the chance of sighting IUU activities could be an avenue to follow. Such a policy could, however, carry considerable costs for legal operators unless financed by public authorities. Also, the recently developed MCS Network may offer some help in achieving improved surveillance, monitoring, and enforcement at a lower cost.¹⁰

¹⁰ Further information on the MCS Network see <http://imcsnet.org/> and <http://www.publicaffairs.noaa.gov/worldsummit/mcsdocument.html>

BOX 1: Possible Actions Against IUU

Reducing Revenues

- Reduce incompleteness of current international frameworks and reducing the possibilities for FONC¹¹ registration
- Provide non-party states with appropriate incentives for joining RFMOs and financial “compensation” for de-registering FONC vessels.
- Improve compliance with current national and international obligations through better Monitoring, Control and Surveillance (MCS) capabilities, including broader cross country cooperation.
- Measures that work on the trade of IUU products. This could include various forms of restrictions on trade on landings, on marketing including the introduction of catch and trade document schemes, and labeling¹²
- Listing of banned vessels/companies and countries of origin
- Encouraging education and promotional campaigns

Increasing Operating Costs

- Eliminate tax havens
- Restrict accessibility to goods and services for IUU operators (fuel, landing, insurance, communications and navigation services etc).
- Ratification and implementation of conventions relating to crews on fishing vessels.
- Improve the economic and social situation in countries/regions supplying cheap crews.
- Apply extra territorial domestic sanctions to citizens engaged in IUU operations.
- Make flag states legally liable for lack of appropriate insurance.
- Augment MCS capacities
- Increase penalties and sanctions (prison, confiscation of vessels and catch)
- Harmonise flag state fine levels
- Identify beneficial ownership of vessels
- Encourage private initiatives (including wanted rewards schemes)
- Improve knowledge of the social, economic and environmental consequences of IUU through education programs
- Use cooperate governance initiatives and guidance programs
- Apply the OECD Convention to combat bribery of foreign public officials.

Increasing Capital Costs

- Setting and enforcing minimum vessel standards (port state control)
- Reduce vessel capacity potentially available for IUU operations (scrapping and appropriate management regimes)
- Restricting outward investment rules on IUU vessel capital
- Restrict banking laws use of IUU vessel capital as collateral
- Make flag states legally liable for damage resulting from the lack of appropriate maintenance
- Improve macroeconomic conditions in countries supplying low cost crew.

¹¹ FONC refers to Flags of Non Compliance.

¹² This is a promising area that needs further attention. To some extent it has been successfully applied to tuna and Patagonian toothfish. More work is needed on understanding how traceability and responsibility can be ensured throughout the chain of custody i.e. from catch to consumer’s plate. Also more work is needed to understand the links between the use of trade measures and the rules of the international trading system. With regard to the latter see Bertrand Le Gallic “Using Trade Measures in the Fight against IUU Fishing: Some Preliminary Findings” paper presented to the XVI Annual EAFE Conference, Rome, April 2004.

It has been argued that the most cost-effective way of dealing with illegal activities is to raise the level of fines considerably so that they become an effective deterrent. By the same token, the international community needs to ensure that penalty levels do not vary much between countries as, otherwise, illegal fishers will move from one fishing area to another. Consequently, the co-operation and co-ordination of enforcement and surveillance between countries should be advanced. The right combination of the physical amount of surveillance, which would increase the possibility of being caught, and the level and type of fines/penalty are crucial if they are to work as an effective deterrent.

The marketing of illegal catches in competition with those of legal fishers poses particular problems, and information presented to the OECD Workshop on IUU Fishing Activities has highlighted that private initiatives are particularly “active” when such situations occur¹³. This can largely be explained by the incentive structure in place. The use of trade measures is one way public authorities can seek to stop illegal catches entering their markets and there are a number of cases where such measures have been shown to be effective (*e.g.*, embargoed tuna in the case of harvest by non-contracting parties under ICCAT and IOTC, and Patagonian toothfish in the case of CCAMLR).

Actions by RFMOs

Illegal operators in RFMO areas can include both vessels from countries party to the RFMO and vessels from states that co-operate with the RFMO¹⁴. Although dependent on the stocks situation, the impact of illegal fishing activities in an RFMO area is felt by fishers from all contracting countries as their fishing costs will increase. As less fish is available, the revenues of legal fishers will decrease as well. Concurrently, RFMOs ability to carry out reliable stock assessments will be impaired by non-verified illegal fishing activities.

As RFMOs mostly do not have their own surveillance nor fine capacity, the RFMO is wholly dependent on contracting parties to take action. In the meantime, RFMOs could consider reducing the allocations (collective penalty) or excluding the country of origin of the vessel involved in illegal activity. Onboard observer coverage may also offer some help, although such schemes will also have additional costs for legal fishers.

Illegal activities may be detected through catch and trade documentation schemes. Such schemes have shown to have tangible success in curbing illegal activities, in particular when followed up with trade measures. Trade and catch documentation schemes therefore offer a tractable way forward for dealing with illegal catch from RFMO areas.

4.2. Unreported Fishing Activities

Unreported fishing is defined as catches that are either not reported or misreported to national authorities or RFMOs. Unreported fishing takes place both within national EEZs by foreign fishing vessels and under RFMOs by vessels from state parties to the convention or co-operating parties.

The major “cost” of unreported fishing is that it adds uncertainty to fish stock assessments and complicates quota determination. If the only alternative stock assessment method is direct

¹³ As evidenced by the experiences of OPRT and COLTO.

¹⁴ Keeping in mind that vessels from non-contracting parties are not bound by the rules of the RFMO their actions are therefore not illegal but rather unregulated. However, these States are (under UNCLOS and the UN Fish Stock Agreement) required to cooperate with the relevant RFMOs. In fact, on the high seas, only the flag State can intervene *vis-à-vis* vessels flying its flag.

verification (e.g., trawl surveys) both national states and RFMOs will have to bear additional costs as direct survey methods are more expensive. However, an advantage of direct stock assessments is that they could be more accurate, in particular if IUU catch levels are important.

Unreported fishing, whether in national EEZs or within RFMOs, could have an effect on the legal fisher's allowable catch as authorities make provisions for an "unknown" factor in their catch allocations. As a result, the revenues of legal fishing operators may be lower than they would have been in the absence of unreported fishing activities.

National states actions

Traceability concerns mean that in most developed markets, fish are traced through the chain of custody, (i.e., from landing to the consumer's plate) and major OECD fish consuming countries have now introduced some type of obligatory labelling of products with respect to origin (place of catch). It would thus seem that a framework is already in place which may allow for capturing the un-reported or misreported harvest. Closer co-operation between private operators in the chain of custody (processing plants, wholesalers and supermarkets) may offer some additional payoff.

Also, the increased use of on-board observers could be a way to improve the reporting of harvests. Such action carries a cost for fishing operations that follow the rules, however, and that cost needs to be balanced against the expected benefits, i.e., improved stock assessment and management which could result from better observations, and a possible deterrence effect.

RFMO actions

As in the case of national actions, the RFMO could introduce observer coverage. While full observer coverage is likely to improve the situation, fishing costs for all legal fishers will increase. There may, however, be related benefits generated through improved stock assessment and management, and a deterrence effect vis-à-vis potential "un-reporters".

4.3. Unregulated Fishing Activities

Unregulated fishing activities are activities conducted by vessels without nationality or flying the flag of states not parties to the relevant RFMO, and who therefore consider themselves not bound by their rules. Unregulated fishing also includes fishing activities that are conducted on the high seas outside RFMOs in a manner that may or may not be consistent with international law (e.g. UNCLOS).

The cost of such activity to members of the RFMO is increased harvesting costs as the unregulated fishing activity reduces the resources available to legal fishers. This type of activity is assisted by a number of arrangements, including the possibility of flying flags of convenience and the easiness to find crews that are willing to participate in such activities.

The basic problem with unregulated fishing activities in an RFMO area is that it is not illegal; apart from the general provisions of UNCLOS Article 117, there is no specific legal justification for stopping such activities. Actions by an RFMO and its members must include diplomatic demarches and co-opting the involved non-member country into membership or at least ensuring that vessels flying their flags follow the rules. In this regard the keeping of list of vessels that fail to co-operate and their countries of origin may put some pressure while also serving as a basis for the imposition of trade measures. However, such listing calls for improved vessel monitoring and surveillance which may be costly to members of the RFMO.

It would seem that a major international diplomatic effort towards making all relevant countries join the conservation efforts of regional fisheries management organisations is needed. In areas of the high seas where there are important resources but no management regime, such diplomatic efforts could also seek to build appropriate management bodies that could take the necessary actions. The issue of unregulated fishing is clearly a major international governance problem that urgently needs to be addressed.

5. Actions taken so far

As IUU fishing on the high seas has been recognised as a problem, several national and international initiatives have seen the light of day. Importantly, some measures have been taken by public authorities (national or international) while others are private initiatives taken by stakeholder groups which are intimately involved in fisheries operations or related fisheries issues.

It has become clear from the analysis of the IUU problem that only a massive effort involving all stakeholders, but in particular private operators that have a direct economic stake in the fisheries, is needed to limit IUU fishing activities. This follows from the role that each stakeholder group is able to fulfil, the type of information they are capable of collecting and their interest (economic, social or environmental) in seeing this activity stopped. Based on an OECD survey¹⁵, the following briefly reviews the major international, RFMO, national and private instruments and initiatives set up to combat IUU.

5.1. International instruments¹⁶

Although the high seas are open to all states (whether coastal or land-locked), freedom of the high seas and governance of high seas fisheries are subject to the basic conditions set out in the 1982 United Nations Convention on the Law of the Sea (LOS Convention). High seas fisheries include high seas stocks, highly migratory resources and straddling stocks. Such resources are usually managed through regional fisheries management organisations. In addition to the LOS Convention, the current international instruments related to fisheries are:

- 1993 FAO Compliance Agreement (Compliance Agreement)
- 1995 UN Fish Stock Agreement (Fish Stock Agreement)
- 1995 FAO Code of Conduct for Responsible Fisheries (the Code)
- 2001 FAO International Plan of Action on IUU fishing (IPOA-IUU)

The Compliance Agreement and the UN Fish Stock Agreement are legally binding international instruments and contain a range of requirements relating to flag State responsibilities, compliance and enforcement. On the other hand, the Code and the IPOA-IUU are voluntary and management oriented instruments. They were formulated to be interpreted and applied in conformity with the relevant rules of international law. While somewhat different in their focus and scope, each instrument share the same objective *i.e.* to ensure long-term, sustainable use of fisheries resources. These instruments are complementary. OECD member countries' status with respect to major international agreements is provided in Annex 1.

¹⁵ To be published in summer of 2005. A preliminary version of the work is accessible on www.oecd.org/agr/fish

¹⁶ See also Annex 2 which provides a history of the international actions and initiatives to combat IUU.

Some observers have pointed out that the most effective measure to curb IUU fishing on the high seas would be the earliest possible adoption or ratification of, or accession to, relevant international fisheries instruments, including the UN Fish Stock Agreement and the Compliance Agreement and full implementation of the Code, by all States and entities engaged in fishing. In this respect, it should be noted that while the instruments have now entered into force, one challenge remains: how to overcome the loophole that a country not adhering to a treaty is not bound by its provisions.

A particular note should be made of the 2001 FAO International Plan of Action on IUU Fishing. The purpose of the IPOA-IUU is to prevent, deter and eliminate IUU fishing by providing countries with a set of comprehensive, effective and transparent measures on the basis of which they may act either directly or through the relevant RFMOs. The IPOA-IUU seek to address IUU fishing in a holistic manner and provide a comprehensive “toolbox” as a checklist so that States can select those measures that are most relevant to their particular situations. The implementation of the IPOA-IUU focuses on the elaboration of national plans of action on seven types of measures such as coastal State measures, port State measures, and market related measures. Under the IPOA countries are supposed to develop a national plan of action by June 2004 on a voluntary basis. However, according to the FAO, around forty-one countries world-wide are expected to have national plans in place in the near future.¹⁷ Among them, only 18 member countries reported to FAO that they would be completed before the 2004 deadline (FAO C 2003/21). As of March 2004 only four countries (EU, Spain, United States and Japan) have submitted their national plan to the FAO.

Albeit a voluntary instrument, the IPOA provides international support for various types of action against fishing by flags of convenience vessels. Under the Plan, in addition to detailed requirements for the flag State, there are provisions for port States to collect specified information on fishing activities and possibly to deny the landings or trans-shipment of catch to IUU fishing vessels. States can impose trade-related measures such as import bans, as well as adopt legislation making it an offence to trade in fish caught by IUU fishing vessels¹⁸. The IPOA also urges countries to adopt multilateral catch documentation and certification requirements as a means of eliminating trade in fish derived from IUU fishing. By the same token, coastal States are to implement effective control and surveillance in their waters. With the full and effective implementation of flag State control, the development of complementary port State control would possibly also contribute to a reduction in IUU fishing on the high seas. In this sense, and when properly implemented into national legislation, the IPOA-IUU has the potential to play an important role in addressing IUU fishing activities.

5.2. Measures taken by Regional Fisheries Management Organisations

Regional fisheries management organizations play a crucial role in the combat of IUU high seas fishing activities. RFMOs are at the forefront of the fight as it is they and their member ships that initially feel the brunt of IUU activities directly through fewer harvesting opportunities.

Increasingly RFMOs have taken steps to combat IUU in a number of ways. The most important of these have been the establishment of catch and trade documentation schemes which have been central elements in CCAMLR, ICCAT and CCSBT. Although these schemes have different names and modalities, they all seek to promote a way of keeping track

¹⁷ FAO (2003), Progress Report on the Implementation of IPOA-IUU, November 2003 (C2003/21)

¹⁸ See WTO work on MEAs on http://www.wto.org/english/tratop_e/envir_e/mea_database_e.htm

of “legal” catch. In the market place, information on origin has increasingly been asked for by the industry and commerce and the implementation of such schemes offer the additional advantage that data and information can be collected by RFMOs. Such information can be particularly useful in identifying markets and trade flows.

While trade and catch documentation schemes offer some possibilities for tracking fish from legal activities, some markets and ports may still be open for fish from IUU sources. In response a couple of RFMOs have actively pursued the possibility of introducing trade embargoes of fish from certain origins. For example, under the auspices of ICCAT, member countries have agreed to embargo tuna from certain origins as there was fear that the traded tuna was from IUU activities.

A number of RFMOs have recently developed both a list of vessels permitted to fish within the RFMO area as well as lists of vessels that are not in possession of a permit to fish. The extent to which this will be an effective manner to counter IUU activities remains to be seen. In the meantime, if collected on a comprehensive scale, such information could be the backbone towards the development of an international fishing vessel register, including information on ownership and control.

As mentioned above, the role of RFMOs is crucial in the combat of IUU activities. To make this even more effective and efficient in combating IUU fishing, more harmonisation of legislation and the creation of new regional initiatives such as vessel databases, or agreements on the minimum terms and conditions for the access of foreign vessels is needed. If not there is a risk of IUU vessels moving between RFMO areas to pursue their activities in the area with the least effective control.

5.3. National measures

With a view to ascertain the diversity among member countries pertaining to the way IUU is treated, the OECD Committee for Fisheries compiled an inventory of national measures, including on:

1. Legal measures and regulations dealing with
 - IUU fishing activities by national vessels/fishers
 - IUU fishing activities by foreign vessels/fishers within EEZ
 - Registration of fishing vessels
2. Economic measures i.e.
 - Investment rules
 - Trade rules
 - Rules regarding landing, trans-shipments and marketing
 - Penalties, fees and restrictions to GFTs
3. Other measures i.e.
 - Moral measures
 - Ethical measures
 - Other measures

Most OECD countries¹⁹ control and monitor national flagged fishing vessels activities by such tools as vessel registration, permits, catch quotas, reporting obligations, high technology VMS and observer coverage. Increasingly, the information derived from VMS and catch reports is used to feedback into real-time fisheries management decisions. There is

¹⁹ A survey of national positions will be published in summer 2005.

nevertheless a need to ensure better mechanisms for tracking vessels through re-flagging, information on which is only kept by very few national authorities.

In general, OECD countries have very strict requirements for foreigners in the process of vessel registration. However previous IUU history of the vessels seeking registration is not considered in most countries except in Norway, New Zealand and Australia. Registration processes therefore serve a relatively limited filtering role in preventing IUU fishing activities and “hopping” of vessels from registry to registry.

Ensuring that a country’s own national respect the rules clearly offers some prospects in the combat against IUU activities. Among OECD countries, such an “arms length approach” is used by Spain, New Zealand and Norway that apply domestic sanctions to extra-territorial fishing activities by their nationals and/or national flagged vessels. A very powerful tool is the United States Lacey Act which makes it an offence for any person subject to the jurisdiction of the United States to “import, export, transport, sell, receive, acquire, possess or purchase any fish ...taken, possessed or sold in violation of any foreign law, treaty or regulation.²⁰” If such legislation were to be more widely in use this could be an important contribution towards combating IUU activities.

Most OECD countries apply penalties for offences by foreign vessels in national waters. However, the survey of OECD countries shows that the penalties (especially fines) imposed by most member countries are considered to have little impact on deterring IUU fishing activities. When compared to the high values of IUU catches fines are not a sufficient deterrent. This is a serious concern which needs to be addressed and will help ensure that IUU operators do not seek areas of fishing where the fines are lowest and where the monitoring and surveillance is weakest.

With some notable exceptions, most countries are not actively using other measures such as encouraging private sector movement, establishing non-economic and social mechanisms to discourage IUU fishing involvement by their nationals and national flagged vessels.

5.4. Private sector initiatives

A number of non-governmental organisations have been active in the combat of IUU, including TRAFFIC, Greenpeace and the WWF. These organisations have undertaken a number of studies of the IUU problem and in this regard been a valuable source of information. Some studies have also been useful in showing alternative approaches in how to address the IUU problem. Meanwhile, two private initiatives have been particularly successful in combating IUU activities in their respective area of operation i.e. the Coalition of Legal Toothfish Operators (COLTO) and the Organisation for the Promotion of Responsible Tuna Fisheries (OPRT).

As an international alliance of legal fishers formed to eliminate illegal fishing for toothfish, COLTO is committed to working with governments, conservation groups and the general public to highlight the need for urgent action to combat illegal and unregulated toothfish poachers. COLTO, based in Australia, launched an international ‘Wanted’ reward scheme in

²⁰ The Lacey Act states: It is unlawful for any person—

(1) to import, export, transport, sell, receive, acquire, or purchase any fish or wildlife or plant taken, possessed, transported, or sold in violation of any law, treaty, or regulation of the United States or in violation of any Indian tribal law;

(2) to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce—

(A) any fish or wildlife taken, possessed, transported, or sold in violation of any law or regulation of any State or in violation of any foreign law,

2003 through which an amount of up to USD 100 000 is offered for information leading to the conviction of illegal fishers and companies. In addition, through promotional campaigns and through its official web site (www.colto.org) COLTO advises the public about the problems of IUU fishing for toothfish. The COLTO furthermore is an effective deterrent as market information and intelligence can be gathered close to the source and from commercial interests.

Established in Japan to promote responsible tuna fisheries, members of OPRT include large scale tuna fishing organisations from China, Chinese Taipei, Indonesia, Korea, Ecuador and the Philippines in addition to Japanese tuna operators. In total 1460 tuna long-line fishing vessels were registered with OPRT by March 2004. The main function of the OPRT is to engage in promotional campaigns and disseminate information on IUU tuna fisheries. In this respect it should be noted that the Japanese market plays a key role as the world's largest tuna market. Clearly, in the case of tuna, the IUU combat is helped by this characteristic of the market.

Both these private initiatives are important evidence of the very high value that legal operators attach to operating in these markets without the interference of IUU fisheries operators. It underscores that when the incentive structure is right, it is possible to get private operators involved in combating the IUU fisheries operations which hitherto have largely been addressed through governmental measures. This is a key lesson from the OECD work. The involvement of private operators could be further advanced and deepened in the future combat of IUU activities.

6. An agenda for the future

Despite the many initiatives and actions that have been taken, national and international, IUU is still an on-going problem. As outlined in this paper the reason is primarily economic in nature; IUU fishers, when confronted with new limitations or regulations on their business, will explore alternative ways of continuing their operations as long as the expected benefits from IUU activity exceed the expected costs. In reality, it will not be possible to completely eliminate the IUU problem, but there is certainly scope for reducing and restricting its scope and effects.

It would also seem that the measures taken so far by the international community are largely a legal patchwork with different geographical and jurisdictional scope. Combined with the fact that a variety of states subscribe to the measures, the loopholes in the present system allow IUU activities to move around and seriously undermine the effectiveness of measures taken.

An important item on the future agenda is to ensure that the regional fisheries management bodies are sufficiently empowered to cooperate across organisation/oceans in the fight of IUU activities. This is at present not the case and is exploited by the IUU fleet. More cooperation across fisheries organisations exchanging data and information on vessels and fishers (captain and fishing masters) involved in IUU activities is crucial. Ultimately, such information could be used to build an international "naming and shaming" database and, concurrently, be the basis for a more active "arms length policy" in dealing with illegal operations by nationals.

In the meantime, it is important to consider alternative strategies that focus on the economics of the activity. In devising new strategies and measures to combat IUU, it is essential to identify instruments that either reduce the income stream or alternatively increase the costs of the activity. Such actions will help make the IUU operations less profitable. To change the "expected benefit" of IUU operations, monitoring and surveillance of IUU fishing activities need to be stepped up and the use of increasingly sophisticated VMS systems will help in this

endeavour. However, only when combined with sufficiently restrictive levels of fines and penalties do such actions become effective from an economic point of view. In considering investments in the area of MCS, cost effectiveness is of key importance both for States and for fishers that may have to carry the cost.

In the longer term, it is also important to consider ways to ensure that fishing capacity does not spill over into other areas. This may be achieved through capacity reduction schemes where vessels are destroyed, combined with fisheries policy reforms that ensure fishers face a decent income prospect. Concurrently, emphasis is also needed on more general economic development and education activities that can provide fishers with alternative employment opportunities.

**Annex 1. OECD Member Country Status with respect to
Three Major International Agreements (as of March 2004)**

| OECD Member Country or Entity | LOS Convention | Compliance Agreement | UN Fish Agreement | Stock |
|----------------------------------|------------------|-------------------------|----------------------|----------|
| Entering into force | 16 November 1994 | 24 April 2003 | 11 December 2001 | |
| | Ratified | Acceptance | Signed | Ratified |
| Australia | 5.10.94 | — | 4.12.95 | 23.12.99 |
| Austria | 14.07.95 | Yes | 27.06.96 | 19.12.03 |
| Belgium | 13.11.98 | Yes | 3.10.96 | 19.12.03 |
| Canada | 11.07.03 | Yes | 4.12.95 | 3.08.99 |
| Czech Republic | 21.06.96 | — | — | — |
| Denmark | — | Yes | 27.06.96 | 19.12.03 |
| European Community | 1.04.98 | Yes | 27.06.96 | 19.12.03 |
| Finland | 21.06.96 | Yes | 27.06.96 | 19.12.03 |
| France | 11.04.96 | Yes | 4.12.96 | 19.12.03 |
| Germany | 14.10.94 | Yes | 28.08.96 | 19.12.03 |
| Greece | 21.07.95 | Yes | 27.06.96 | 19.12.03 |
| Hungary | 05.02.02 | — | — | — |
| Iceland | 21.06.85 | — | 4.12.95 | 14.02.97 |
| Ireland | 21.06.96 | Yes | 27.06.96 | 19.12.03 |
| Italy | 13.01.95 | Yes | 27.06.96 | 19.12.03 |
| Japan | 20.06.96 | Yes | 19.11.96 | — |
| Korea | 29.01.96 | Yes | 26.11.96 | — |
| Luxembourg | 05.10.00 | Yes | 27.06.96 | 19.12.03 |
| Mexico | 18.03.83 | Yes | — | — |
| Netherlands | 28.06.96 | Yes | 28.06.96 | 19.12.03 |
| New Zealand | 19.07.96 | — | 4.12.95 | 18.04.01 |
| Norway | 24.06.96 | Yes | 4.12.95 | 30.12.96 |
| Poland | 13.11.98 | — | — | — |
| Portugal | 3.11.97 | Yes | 27.06.96 | 19.12.03 |
| Spain | 15.01.97 | Yes | 3.12.96 | 19.12.03 |
| Sweden | 25.06.96 | Yes | 27.06.96 | 19.12.03 |
| Switzerland | — | — | — | — |
| Turkey | — | — | — | — |
| United Kingdom | 25.07.97 | Yes | 27.06.96 | 10.12.01 |
| United States | — | Yes | 4.12.95 | 21.08.96 |

Annex 2: History of international actions and initiatives against IUU/FOC fishing activities

Since 1992, the international community has promoted major initiatives and actions for the long-term sustainable management of fisheries resources.

In 1992 International Conference on Responsible Fishing (Cancun, Mexico) adopted the *Cancun Declaration*, which called upon FAO to develop an International Code of Conduct on Responsible Fishing. Following the Cancun conference, United Nations Conference on Sustainable Development (UNCED, Rio, Brazil) adopted *Agenda 21*, programme of action for sustainable development. Among Agenda 21, Chapter 17 pointed out problems of unregulated fishing, vessel re-flagging to escape control and lack of sufficient co-operation between States in the management of high seas fisheries.

Based on the Cancun Declaration and Agenda 21, FAO supported technical consultations on high seas fishing that provided technical input for the UN fish stock conference in September 1992. As a result, the Compliance Agreement was approved by the 24th session of the FAO conference (November 1993). The motivation for the negotiation of the Compliance Agreement was directly related to the IUU fishing issue. The Agreement seeks to ensure that flag States exercise more effective control over their vessels while fishing on the high seas by requiring vessels to be authorized to engage in such fishing. In this way the Agreement would deter unauthorized vessels from high seas fishing and from not complying with conservation and management measures that have been agreed by competent organizations.

The United Nations General Assembly considered, for the first time in 1994, the issue of unauthorised fishing in zones of national jurisdiction and its impact on living marine resources of the world's oceans and seas. In so doing the Assembly adopted 'UN Fish Stock Agreement' in 1995. Also in 1995 the FAO Code of Conduct which was adopted. Although voluntary, the Code embrace all fisheries while the Compliance Agreement and UN Fish Stock Agreement, respectively, are more restricted in application in terms of area (high seas) and stocks (straddling fish stocks and highly migratory fish stocks).

In the evolution of terminology, the first formal mention of IUU fishing appeared during a CCAMLR meeting in 1997. At this meeting the international community showed an interest not only in the illegal fishing but also unregulated and unreported fishing. Since 1997 the term IUU fishing has been used regularly at CCAMLR meetings, and it has subsequently been diffused into other international fisheries discussions such as FAO, IMO, UN CSD and regional fishery bodies (CCSBT, IOTC, ICCAT, NAFO and NEAFC).

IUU fishing was addressed at length in the 1999 Secretary-General's Report to the UN General Assembly on Oceans and the Law of the Sea. In November 1999 the general Assembly adopted Resolution 54/32 which included references to combat IUU fishing. These reports and references to IUU fishing have clearly placed the issue on the international fisheries and oceans agenda. Concurrently, the Seventh Session of the UN CSD in April 1999 underscored the importance of Flag State and Port State issues in combating IUU fishing and invited IMO to develop relevant measures.

The International Plan of Action for IUU fishing was developed as a voluntary instrument, within the framework of the Code of Conduct for Responsible Fisheries, in response to a call from the 23rd Session of the FAO Committee on Fisheries. A draft text for IPOA-IUU fishing was elaborated at an Expert Consultation (in Sydney, Australia, in May 2000) and followed by Technical Consultations (FAO, in October 2000 and February 2001). The IPOA-IUU fishing was adopted by consensus at the 24th Session of FAO fisheries committee in March 2001 and endorsed by 120th Session of the FAO Council on 23 June 2001.

The World Summit on Sustainable Development (September 2002, Johannesburg, South Africa) recognised that protecting and managing the natural resource base for economic and social development are an essential requirements for sustainable development. From the Johannesburg Plan of Implementation, the Summit also set targets and timetables for the management of the natural resource base regarding fisheries activities as follows, including “Put into effect the FAO international plans of action to prevent, deter and eliminate illegal, unreported and unregulated fishing by 2004”²¹. In September 2002, WSSD reaffirmed to put the IPOA-IUU into effect by the agreed dates (June 2004) and have agreed to eliminate subsidies that contribute to IUU fishing for sustainable fisheries management.

In November 2002, the Santiago de Compostela International Conference was held in order to give political impetus and follow up the International Plan of Action against IUU fishing. The Conference formulated initiatives and views as how best to stamp out IUU fishing at regional, national and international level.

Overview of International Developments of IUU fishing Issue

| Year | Event | Result |
|-------------------------------|--|---|
| May 1992 | International Conference on Responsible Fishing (Cancun, Mexico) | Cancun Declaration |
| June 1992 | UN Conference on Sustainable Development | Agenda 21 |
| November 1993 | 24 th Session of the FAO Conference | Compliance Agreement |
| November 1994 | Entry into force of UNCLOS | |
| August 1995 | United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks | UN Fish Stocks Agreement |
| October 1995 | 28 th Session of the FAO Conference | Code of Conduct for Responsible Fisheries |
| October 1997 | CCAMLR Meeting | First formal mention of IUU terminology |
| March 1999 | FAO Ministerial Meeting on Fisheries | Rome Declaration on Responsible Fisheries |
| November 1999 | UN General Assembly | Resolution 54/32 (references to combat IUU fishing) |
| May 2000 | Expert Consultation on IUU fishing (Sydney, Australia) | A draft text for IPOA-IUU fishing |
| October 2000 February 2001 | Technical Consultation on IUU fishing (Rome, FAO) | A draft text for IPOA-IUU fishing |
| April 2001 | 24 th Session of the FAO Fisheries Committee | IPOA-IUU fishing (adoption) |
| June 2001 | 120 th Session of the FAO Council | IPOA-IUU fishing (endorsement) |
| September 2002 | The World Summit on Sustainable Development (Johannesburg, South Africa) | Plan of Implementation |
| November 2002 | International Conference against IUU fishing (Santiago, Spain) | Conclusion of Conference |

21. The Declaration also makes reference to “Maintain or restore depleted fish stocks to levels that can produce the maximum sustainable yield by 2015” and to “Eliminate subsidies that contribute to illegal, unreported and unregulated fishing and to over-capacity”.

Annex 3: Key Observations and Findings by the OECD IUU Workshop Chairs²²

The Workshop was organised around four sessions addressing: the state of play of IUU fishing; data and information needs; economic and social drivers; and possible future actions. The Workshop Chairs compiled the following list of Observations and Findings that provide a brief overview of the main outcomes of the Workshop.

The State of Play on IUU Fishing

- IUU fishing is a worldwide problem, affecting both domestic waters and the high seas, and all types of fishing vessels, regardless of their size or gear.
- IUU fishing is harmful to fish stocks and undermines the efficiency of measures adopted nationally and internationally to secure fish stocks for the future.
- IUU fishing activities also have adverse effects on the marine ecosystem, notably on the populations of seabirds, marine mammals, sea turtles and bio-diversity as a whole (discards, etc.).
- IUU fishing distorts competition and jeopardizes the economic survival of those who fish in accordance with the law and in compliance with relevant conservation and management measures.
- There are important social costs associated with IUU fishing as it affects the livelihoods of fishing communities, particularly in developing countries, and because many of the crew on IUU fishing vessels are from poor and underdeveloped parts of the world and often working under poor social and safety conditions.
- The impact of IUU fishing for some species (primarily tuna and tuna-like species) is global, whereas that for other species (*e.g.*, Patagonian toothfish and Orange roughy) is specific to those areas where such species occur. This means that global and local solutions are required, as well as solutions tailored to specific species.
- There is concern that excess capacity in fisheries in OECD countries can lead to a spillover of capacity into IUU fishing activities.
- IUU fishing is a dynamic and multi-faceted problem and no single strategy is sufficient to eliminate or reduce IUU fishing — a concerted and multi-pronged approach is required nationally, regionally and internationally, and by type of fishery. The full range of players should be involved in helping bring forward solutions to the IUU problem.
- Many developed and developing states have not been fully responsible in complying with their responsibilities as flag states, port states, coastal states, states of vessel owners and trading nations.
- The FAO International Plan of Action to combat IUU fishing contains tools to tackle the IUU issue. The question is to find ways to better implement such tools.

²² The Workshop Chairs were Mr. Ignacio Escobar, Mr. Jean-François Pulvenis de Seligny, Mr. Nobuyuki Yagi, Ms. Jane Willing and Ms. Lori Ridgeway.

Information and Data Needs

- In spite of recent improvements in information collection, there remains a lack of systematic and comprehensive information on the extent of IUU fishing operations and impacts. This is compounded by the varying level in quality, accessibility, reliability and usefulness of the available data.
- There are a number of international instruments addressing the collection of fisheries information and statistics. However, these need to be integrated and further, there remains a need for improvement in national statistics on trade in fish and fish products, especially in relation to IUU fishing.
- There is a diversity of actors involved in gathering, processing and disseminating information on IUU fishing activities — governments, intergovernmental organisations, RFMOs, regional fisheries bodies (RFBs), NGOs and industry.
- Trade-tracking and the resulting accumulation of information by market countries are an enormous task but it is very important for the creation of effective measures to combat IUU fishing.
- There is a need to broaden the scope of the information gathered so it covers activities and situations “upstream” and “downstream” of the IUU fishing operations themselves. This will help to better define the nature and scope of IUU fishing and to improve knowledge of the economic and social forces which drive IUU fishing in order to help target future actions.

Economic and Social Drivers

- Under current conditions, IUU fishing activities can be extremely profitable due, amongst other factors, to lower cost structures than for compliant fishing activities. Strategies to combat IUU fishing need to include measures that reduce the relative benefits and raise the costs of IUU fishing.
- The demonstration effect achieved by government and RFMO efforts in fighting IUU fishing activities is significant. This will provide positive signals to legal fishers and send the message to IUU fishers that their products will be excluded from the international market and that their activities will not be tolerated.
- Inefficient domestic fisheries management may work as a driver for IUU fishing activities; the more economically efficient management is, the higher the fisher income will be, thus lessening the incentive to engage in IUU activities.
- The size of penalties and the risk of being apprehended is not generally a sufficient deterrent to IUU fishing activities. This is complicated by the ease of re-flagging vessels and the difficulties in tracking company structures and identifying beneficial owners of IUU vessels. The lack of harmonisation of penalties across countries is also a concern.
- IUU fishing inflicts damage on a law abiding fishing industry aiming at sustainable exploitation.
- IUU fishing activities also make it harder for countries to strike a balance between food security and protection of the marine environment.

Possible Actions

- There is a wide range of possible measures that can be undertaken to address the problem of IUU fishing. These will need to cover legal, institutional, economic and social dimensions and will require the involvement of multiple players in the national, regional and international fisheries sectors.
- Determining the cost-effectiveness of alternate approaches to addressing IUU fishing problems should be undertaken to help identify priorities amongst the possible options so that the best results can be obtained from the limited resources that are available to national governments and international organisations.

Flag State actions

- Links between flags of convenience and tax havens have been established and a more concerted approach towards both could be undertaken.
- There is a need to improve transparency on the procedures and conditions for re-flagging and de-flagging.
- More countries could usefully investigate the possibilities for applying extra-territorial rules for their nationals.
- The penalties for IUU fishing offences should be significantly increased and harmonised between jurisdictions.

Port State actions

- The development of minimum guidelines for port state controls and actions against IUU fishers, particularly with respect to the use of prior notice and inspection requirements (including health and safety conditions), should be encouraged. The harmonisation of these controls and actions should be a priority.
- There is a need to ensure a broader use of port state control measures including inspections, preventing access to services and goods of IUU vessels.
- There needs to be an agreement to make it illegal to tranship, land and trade in IUU fish.
- There is also a need to improve the monitoring of the provision of at-sea services and transhipment of fish and fish products.

Coastal State actions and international trade responses

- It is necessary to augment monitoring, control and surveillance capacities and improve fisheries management across the board, but in particular in developing countries.
- Improving and extending the use of catch and trade documentation schemes could help provide additional information on IUU fishing activities.
- Fair, transparent and non-discriminatory countermeasures should be adopted, consistent with international law, against countries that do not comply with the conservation and management measures adopted by RFMOs, or fail to effectively

control the vessels flying their flag, in order to ensure they comply with the conservation and management measures adopted by RFMOs.

- Countries should identify the area of catch, name of fishing vessels and their past history (of name and flag) in order to collect information necessary for better fisheries management and elimination of IUU fishing.

RFMO actions

- Strengthening the mandate and role of RFMOs and RFBs, in particular their possibilities for tracking IUU fishing, is an important requirement.
- There is a need to improve information sharing and co-operation among RFMOs, particularly in terms of linking and integrating their data on IUU fishing activities.
- More RFMOs should consider publishing lists of companies and vessels engaged in high seas IUU fishing activities and lists of vessels that are authorized to fish. The use of positive and negative lists of IUU fishing vessels and companies is strongly encouraged in this regard.
- The creation of a global record/register of authorised fishing vessels that are technically capable of engaging in high seas fishing should be considered.

International co-ordination

- Resources matter: more technical and financial resources are needed for capacity building, in particular in the developing states, for monitoring, control and surveillance, and in all activities to combat IUU activities.
- The international community should move to ratify relevant international treaties on labour and working conditions in the maritime sector in order to strengthen international hard and soft laws to protect fishing crews in general.
- Improved monitoring of foreign direct investments (out-going and in-coming) in the fishing sector will assist in tracking potential IUU fishing operations.
- Work should be undertaken nationally and multilaterally to lift the veil of corporate secrecy surrounding the companies undertaking IUU fishing activities and related services. Partnerships between public authorities and businesses offer important scope in the fight against IUU fishing. In this regard, the OECD Guidelines for Multinationals offer some possibilities that could be followed-up by national regulatory authorities.
- A major effort is required, in particular by regional fisheries management organisations and market countries, to collect and disseminate relevant information.
- The efforts already underway to improve information at all levels and mechanisms to share information need to be supported and strengthened.

NGO and private sector actions

- Whenever possible, governments should consider bilateral consultation with businesses engaged in IUU activities to determine if alternative means of getting IUU vessels out of the business can be found.

- There should be continued efforts to communicate the IUU problem, for example through promotional/educational campaigns with the market, including intermediate buyers, processors, distributors and consumers. Such activities will help raise awareness of the problem and improve the knowledge of the social, economic and environmental consequences of IUU activities.
- Industry and NGOs should be encouraged to continue to self-organise their response to IUU fishing and information collection.