IWMC World Conservation Trust

CITES
AND THE **MANAGEMENT OF FISHERIES**

A NATURAL **HISTORY**

From the very beginnings of mankind, the world's oceans and waterways have provided essential sustenance that has supported the development of life. The consumption of fisheries by humans and other animals represents an important part of our modern world, as well as our natural history.

Today, our ability to take fish out of the oceans, worldwide demand for fishery products and our capability to manage what we catch are all at new levels. These factors are now competing with each other as we endeavor to find the right balance in the oceans between satisfying demand for a highly nutritious food item and the need to maintain fish stocks for the future.

THE IMPORTANCE OF FISH

Fishermen and aquaculture workers operate all around the globe. Many fishermen are small-scale artisans, catching fish in coastal waters.

Taking account of dependents, the Food and Agriculture Organization (FAO) of the United Nations estimates that 520 million people, or around 8 per cent of the world's population, are dependent on traditional fisheries and aquaculture and the associated processing, marketing and servicing industries.

In 2006, the value of exports of fish and fishery products reached USD85.9 billion and prices began to increase in real terms in 2007 and 2008, making the industry one of the most important in the world.

Fish constitutes an important part of diets around the world. The world's population currently stands at around 7 billion and projections suggest it will increase to around 9 billion by 2050. In 2006, 110 million tonnes of fish was supplied for human consumption and 2.9 billion people relied on fish for 15 per cent of their protein.

THE NEED TO **MANAGE FISH STOCKS**

As the human population has grown, so have concerns about maintaining food supplies, avoiding shortages and eradicating starvation.

In 1798, before the world's population reached 1 billion, Thomas Malthus famously warned that populations were increasing at a faster rate than food production. He concluded that reductions in the size of families were needed. But Malthus was proved wrong, as more advanced agricultural technologies allowed greater quantities of food to be produced even as populations continued to expand.

This rate of production growth on land has proved more difficult to replicate in the oceans where the capacity to supply food has natural limiting factors. More recently, aquaculture has greatly helped to improve efficiency in fisheries, growing at an annual rate of 7 per cent since the 1950s. Today, aquaculture accounts for nearly half of the world's supply of fish and fish products.

Fisheries experts have known for years that over-fishing will lead to smaller catches and that optimum catches must be calculated to maintain stocks at high levels. The proportion of stocks that are overexploited, depleting and recovering has stabilized over the past 10-15 years, standing at 28 per cent in 2007. But with most fish stocks fully exploited, there is little room for growth in catches from the oceans.

One result is that the number of people employed in traditional capture fisheries is declining, while those employed in aquaculture is increasing.

The challenge to maximize the overall supply of fish products remains. Attention has naturally turned to identifying techniques for minimizing wasteful production and to managing catches in ways that keep stocks at optimum levels. Effective stock management has been achieved successfully by individual nations but, as fishing fleets have expanded their areas of operation, fisheries management issues have become much more complex. As a result, there is a consensus that international standards and agreements are required to manage some fish stocks.

Critical developments in fisheries today are focused on reducing bycatch, extracting fewer immature fish, improving scientific data on stocks, establishing quotas, eradicating government subsidies that lead to over-fishing and minimizing illegal, unreported and unregulated fishing (IUU).

INTERNATIONAL FISHERIES **MANAGEMENT MECHANISMS**

The most significant challenge for international fisheries institutions is to manage fish stocks at consistent levels so that low cost food can be obtained by consumers around the world.

While some fringe groups oppose all fishing or advocate no-fishing zones that cover much of the oceans, most policy-makers agree that fisheries provides a vital source of food and income for many people around the world. Conserving fish stocks is primarily a production issue, not a preservation or ethical issue.

It will always be impossible to know for sure how many fish are in the oceans. But stocks can be estimated by analyzing catches and comparing data over time. From this, declining stocks and species can be identified and mechanisms established for reversing negative trends.

In general, over-exploited species will become prohibitively expensive as they become more and more rare. By contrast, well-managed fisheries will be able to supply food at affordable levels.

The Food and Agriculture Organization (FAO) of the United Nations is the principle international body managing fish stocks, which it undertakes through its Committee on Fisheries (COFI). Fishing is also covered by the United Nations Convention on the Law of the Sea (UNCLOS).

Other regional fisheries bodies (RFBs) have been established to manage specific ocean species, such as the Inter American Tropical Tuna Commission (IATTC), the International Convention for the Protection of Atlantic Tuna (ICCAT) and the North Atlantic Fisheries Organization (NAFO).

More recently, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has become involved in limiting trade in some fish species in an attempt to reduce perceived over-exploitation and prompt species recovery.

CITES

CITES entered into force in 1975 to ensure that international trade does not threaten the survival of wildlife species. CITES is most effective when there is agreement among range States and trade States that a species is threatened. In such cases, a listing on CITES Appendices is likely to lead to coordinated measures that will help it to recover.

CITES has steadily grown in membership, as has the number of wildlife species covered by its Appendices. CITES now has 175 member States, or Parties, and has listed around 40,000 animals and plants.

New listing criteria were established in 1994 to define the circumstances under which CITES restrictions should be applied. Since it is often difficult to know exactly what condition a species is in, these criteria involve subjective assessments, often based on what is “known, or can be inferred or projected”.

Where a decline in a species can be observed, the cause or principle causes may or may not be related to trade. If they are not trade related, CITES will have little or no impact on the status of the species even though a listing may give some observers the impression that something useful has been achieved. Species decline may be related to poor resource management by range States, pollution, habitat degradation, crime or other factors.

CITES LIMITATIONS

As its global reach has extended, CITES’ listings have become more controversial as non-range States have tried to limit trade in species that they are not directly responsible for managing. This has led to conflicts about whether species under consideration are truly endangered, whether a listing would have any practical benefit and what costs a listing would impose on affected communities.

Since the livelihoods of people can be negatively impacted by CITES, the organization has a duty to take special care to only list species that are actually threatened by trade and would genuinely benefit from a listing. Poor rural communities can be particularly hard hit by restrictions on the use of their limited natural resources.

However, CITES’ procedures do not always lead to balanced decision making. CITES listings require a two-thirds majority of voting Parties, which means that groups of nations voting together can impose decisions on others. CITES allows countries to vote as a bloc on listing proposals, either formally – which is now the practice of the European Union (EU) – or informally.

For those individuals and groups who wish to end the utilization of wildlife in general, CITES presents an attractive means to establish restrictions without the need for rigorous scientific justification. While only Parties may make listing proposals and vote on them, politicians and bureaucrats around the world are constantly lobbied by animal rights groups to support new listings, often under the presumption that doing so will, in all cases, “save” a species from extinction.

The combination of a politically driven agenda and subjective listing criteria have weakened the ability of CITES to consistently advance sound conservation solutions. For example, in 2004 Australia succeeded with a proposal to list the great white shark in Appendix II even though the species is abundant in many parts of the world.

CITES has no role in actually assisting countries to manage their wildlife resources. It establishes rules but it has no mandate to intervene to try to solve actual conservation problems. As a result, conflicts can develop between CITES and Parties even when they have a common desire to conserve a species.

CITES AND FISHERIES

Fisheries production is particularly susceptible to bad science because fish stocks can only be estimated. It is therefore easy to depict a problem with particular fish stocks but difficult to demonstrate healthy numbers and trends.

While not specifically excluded from its treaty, CITES was not envisaged to be an institution that would become involved in fisheries. Its philosophy of protecting species was essentially geared to land-based fauna and flora and was developed as a final recourse mechanism that could be applied to promote conservation after all other options had been explored.

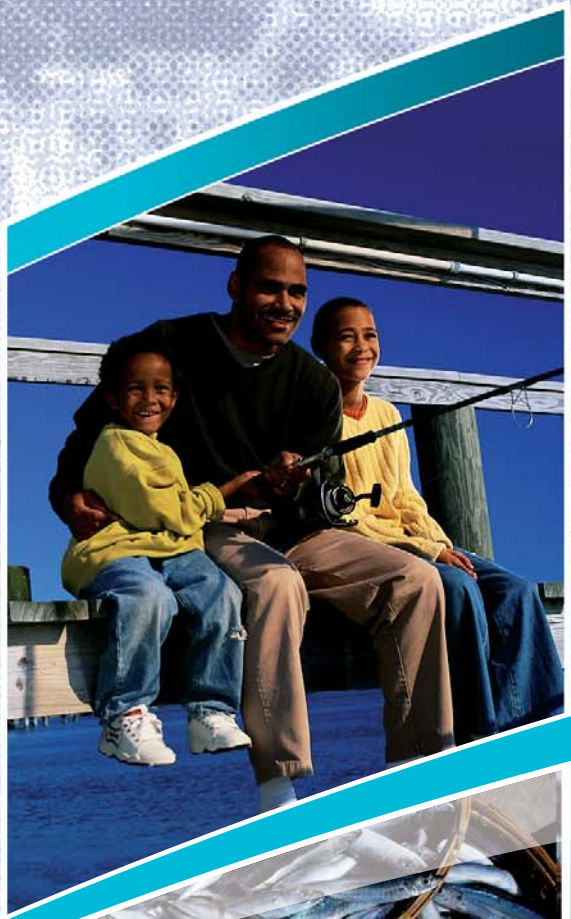
While CITES has worked with the FAO to amend its listing criteria for fisheries, this resolves only one part of the overall problem.

CITES requirements can be extremely wieldy because they attach a number of physical checks at various points in the harvesting and trade chain. Where a plant or animal is unique to one country, has a relatively low trade volume and is clearly distinct from other species, these can be readily applied. But in the case of fisheries the same measures may be unworkable because they entail placing reporting and verification obligations on many different jurisdictions, including those in the country of origin of the catch, the vessels' countries and importing and re-exporting countries, depending on how the fish is processed. This is further complicated by difficulties in dealing with 'look-alike' species.

In many cases, fish management can best be improved by enhancing the capability of nations to develop and enforce laws that promote efficient resource use. CITES can become more of a distraction and a hindrance than a help by forcing nations to divert resources to administering its requirements. Moreover, CITES obliges range States to supply information and data to its Secretariat. Inevitably, it is developing countries that are often unable to develop and manage the bureaucratic systems necessary to administer CITES requirements.

Once a species has been listed on CITES Appendices, it is very difficult to achieve a downlisting or de-listing. Not only is a two-thirds majority required, but CITES adopts more restrictive criteria for downlistings by applying the Precautionary Approach to these decisions. This means that whereas sound science is not needed to obtain a listing, it is required to remove a listing. Even then, it may not be possible to secure the support of two-thirds of Parties for commercially-exploited species because of outside pressure from animal rights groups and others.

Moreover, a nation that is able to apply effective conservation systems may be disadvantaged by difficulties in neighboring range States. In the case of sturgeon, the Islamic Republic of Iran and other countries around the Caspian Sea developed modern hatcheries and restocking processes but were still prevented from trading wild caviar by the CITES Secretariat for some time.



CAN **CITES** BENEFIT **FISHERIES**?

A CITES listing can help some species to recover from over-harvesting caused by trade but it does not guarantee that any species will become abundant whatever the circumstances. If a particular type of fish is listed on CITES appendices there is no certainty that it will recover as a result, or even that any abundance benefits will follow.

According to the International Union for Conservation of Nature (IUCN) over 17,000 species across the globe are currently endangered. While this assessment may or may not be accurate, it is clear that many species, including many that are listed on CITES appendices, remain endangered or threatened.

In response to the characteristics of the fisheries industry, a network of regional regulators and bodies has evolved. These regional fisheries bodies (RFBs) and national regulators provide a focused and coordinated response to fish stock management issues.

Due to the complexity of some of the issues these RFBs are addressing, it should not be a surprise that they have met with mixed success. While some stocks are now being managed much better, many are still being caught at unsustainable levels. However, while arguments can be made to strengthen these systems, it is not clear how adding an additional layer of international regulations and greater bureaucracy with CITES will improve the situation.

Moreover, most of the nations, if not all, that are participating in the RFBs also belong to CITES. The question therefore arises why these nations would be expected to come to better solutions at CITES. If they are unable to come to agreements within a body that is dedicated to resolving a particular fisheries issue, why would the same nations, and the same officials, suddenly find it easy to do so through CITES?

International agreements on wildlife carry some appeal at the political level but the real problems ultimately have to be solved by national agencies. Oftentimes, it is the lack of coordination between international and national bodies, or between competing national governing bodies, that leads to conservation failures. This makes it vitally important that States speak with a single voice in the various relevant international wildlife institutions to which they belong.

HOW **CITES COULD HARM** FISHERIES

Since the CITES template of requirements was designed with terrestrial species in mind, it may cause a series of difficulties for fishermen and customs and other officials if it is applied to larger numbers of marine species.

In a typical CITES situation, a country would issue a permit if it exports specimens of a species under its jurisdiction that is listed on Appendix II. This is presented to the importing country before the trade takes place. If the importing country subsequently re-exports some or all of these specimens, perhaps after they have been processed in some way, a re-export certificate is required for each shipment. This must be presented to the new country of import before the import occurs.

Applying CITES to fisheries will not be so simple. The complexity gives rise to three fundamental concerns. First, CITES requirements may not be followed, rendering the overall policy unworkable. Second, the administrative costs of enforcing the requirements will place significant manpower and budgetary pressures on developing countries. Third, the costs of trying to implement complex requirements will force some fishermen to leave the industry, damaging communities that rely on fisheries for part of their societal welfare.

This is illustrated in the following hypothetical scenarios, where a series of increasingly complex issues are identified when specimens of a fish listed in Appendix II are traded between different countries, *A*, *B*, *C* and *D*. Each scenario is considered plausible.

SCENARIO 1

***A* exports to *B*, *C* and *D* specimens taken in waters under its jurisdiction by a vessel from another country to which it has granted fishing rights.**

Procedure

A must issue an export permit for each country of import. Re-export would require a certificate from *B*, *C* and/ or *D*.

Difficulties

A must know who is the importer in each country of import. It must also know the quantity of specimens being exported to each country. The same is true for each country re-exporting the specimens.

Outcome

Incorrect permits and certification lead to a failure to comply with CITES requirements.




SCENARIO 2

A vessel from *C* takes specimens from waters under the jurisdiction of *A* and *B*, for which it has been granted fishing rights, and transports them to *C*, *D* and *E*.

Procedure

A and *B* must each issue export permits for each country of import before trade takes place.

Difficulties

A and *B* must know who is the importer in each country of import. They must know the quantities taken in their own waters and exported to each country of import. However, specimens taken simultaneously in both countries would be mixed, particularly if the harvested stock is shared between both countries. Re-exporting countries may not know the origin of each re-exported specimen.

Outcome

Incorrect permits and certification lead to a failure to comply with CITES requirements. Difficulty in applying CITES requirements on fisheries leads to more lax policing of trade in other listed products.

SCENARIO 3

Vessels from one or more countries take specimens of two or more species, at least one of which is listed in Appendix II, in waters under the jurisdiction of two or more countries. The specimens are processed into fillets and fishmeal on a factory vessel from *A*. The fillets are sent to two or more countries, including *A*, and the fishmeal to at least one other country.

Procedure

Each country with jurisdiction of the waters from which the specimens are taken should issue an export permit for each country of export.

Difficulties

Export countries would not know how the specimens were processed or where they would be sent. Therefore they wouldn't know who should receive an export permit or which specimens should be included.

If, for sake of argument, CITES nominates the flag State of the factory vessel, *A*, as the export country and the vessel's owner as the importer, then export permits could be issued. However, *A* would have to issue re-export certificates for each shipment to other countries unless all specimens are landed on its territory. For this to happen, *A* must know the ownership of the factory vessel and, for each re-exporting shipment, the origin, type, quantity and date of issue of export permits. *A* must also be satisfied that all the specimens were transferred to the factory vessel in accordance with CITES.

Outcome

Incorrect permits and certification lead to a failure to comply with CITES requirements. Difficulty in applying CITES requirements on fisheries leads to more lax policing of trade in other listed products.

SCENARIO 4

A fishing vessel takes specimens from waters not under the jurisdiction of any State and lands them in *A*.

Procedure

A certificate of introduction from the sea must be issued by the State of introduction.

Difficulties

The State of introduction is not known. If the flag State is nominated as the State of introduction, it must issue an export permit before landing in the port State. If the port State then ships some or all of the specimens, processed or unprocessed, to another country, it must issue a re-export certificate. If, instead, the port State is nominated as the State of introduction, it must issue export permits for shipments to other countries.

Outcome

Incorrect permits and certification lead to a failure to comply with CITES requirements. Difficulty in applying CITES requirements on fisheries leads to more lax policing of trade in other listed products.

SCENARIO 5

Vessels from one or more countries take specimens of two or more species, at least one of which is listed on Appendix II, in waters under the jurisdiction of two or more countries, as well as in waters not under the jurisdiction of any State. They transfer the specimens to a factory vessel from *A*, which processes them into fillets and fishmeal. Fillets are sent to two or more countries, including *A*, and the fishmeal to one or more other countries.

Procedure

A certificate of introduction from the sea must be issued by the State of introduction for specimens taken in international waters, as under Scenario 2. Export permits and re-export certificates would be similar to the scenarios 3 and 4 above.

Difficulties

How would shipments of mixed specimens from various origins and processed in various ways be dealt with in terms of CITES certification, including establishment of non-detriment findings?

Outcome

Incorrect permits and certification lead to a failure to comply with CITES requirements. Difficulty in applying CITES requirements on fisheries leads to more lax policing of trade in other listed products.

Many more complex scenarios can also be envisaged, all of which would have the effect of tying fishermen and management authorities into a web of procedures, permits and certifications. Some nations might enter reservations to CITES listings, further complicating the process. National regulations would also add to the mix of requirements.

The end result is that it may not be possible for fisheries to follow CITES requirements. A failure in this area would undermine the broader work of CITES.

LOOK-ALIKE ISSUES

Adding fish species to CITES Appendices creates unique problems with Look-Alike species. For example, the northern bluefin tuna, found in the West Atlantic and East Atlantic is difficult to distinguish from the southern bluefin tuna, which is found in the Indian Ocean. This problem is magnified when comparing their parts and derivatives.

While the northern species is more valuable and therefore less likely to be traded under the other's name, species mixing may occur. As a result, other tuna species are likely to be caught up in any listing precisely because samples are difficult to distinguish.

Further confusion would be created if, as expected, some nations entered reservations on a CITES listing.

CONCLUSIONS

- 520 million people, or around 8 per cent of the world's population, are dependent on traditional fisheries and aquaculture and the associated processing, marketing and servicing industries. Many of the world's fishermen are small-scale artisans, catching fish in coastal waters.

- Fish constitutes an important part of diets around the world. In 2006, 110 million tonnes of fish was supplied for human consumption and 2.9 billion people relied on fish for 15 per cent of their protein.

- Most fish stocks are fully exploited, leaving little room for growth in catches from the oceans. Critical developments in fisheries today are focused on reducing bycatch, extracting fewer immature fish, improving scientific data on stocks, establishing quotas, eradicating government subsidies that lead to over-fishing and minimizing illegal, unreported and unregulated fishing (IUU).

- The most significant challenge for international fisheries institutions is to manage fish stocks at consistent levels so that low cost food can be obtained by consumers around the world. Conserving fish stocks is primarily a production issue, not a preservation or ethical issue.

- Where a decline in a species can be observed, the cause or principle causes may or may not be related to trade. If they are not trade related, CITES will have little or no impact on the status of the species. CITES is most effective when there is agreement among range States and trade States that a species is threatened. In such cases, a listing on CITES Appendices is likely to lead to coordinated measures that will help it to recover.

- CITES has no role in actually assisting countries to manage their wildlife resources. It establishes rules but it has no mandate to intervene to try to solve actual conservation problems. As a result, conflicts can develop between CITES and Parties even when they have a common desire to conserve a species.

- The combination of a politically-driven agenda and subjective listing criteria have weakened the ability of CITES to consistently advance sound conservation solutions.

- CITES was not originally envisaged to be an institution that would become involved in fisheries. CITES has worked with the FAO to amend its listing criteria for fisheries but its measures may still be unworkable because they entail placing reporting and verification obligations on many different jurisdictions, including those in the country of origin of the catch, the vessels' countries and importing and re-exporting countries, depending on how the fish is processed. This is further complicated by difficulties in dealing with 'look-alike' species.

- In many cases, fish management can best be improved by enhancing the capability of nations to develop and enforce laws that promote efficient resource use. A major concern of fishery experts is that CITES will systematically list fish species on its Appendices and thereby undermine the work of the FAO to promote the availability of affordable food, particularly in poorer nations.

- Applying CITES to fisheries is highly complex. CITES requirements may not be followed, rendering the overall policy unworkable. Administrative costs will place significant manpower and budgetary pressures on developing countries. Implementation costs will force some fishermen to leave the industry, damaging communities that rely on fisheries for part of their societal welfare.

- Failure in fisheries could undermine the broader work of CITES.

IWMC World Conservation Trust

IWMC is a global non-profit organization that promotes the conservation of wildlife resources.

Headquartered in Switzerland and with offices in the USA, Canada, Argentina, China and Japan, IWMC works to strengthen international cooperation, protect sovereign rights and advance public education through the sustainable utilization of wildlife resources.

IWMC advocates the use of science-based management techniques and seeks to develop broader understanding, greater respect and increased tolerance towards all peoples whose customs, traditions and livelihoods are based upon the sustainable use of wildlife resources.

IWMC is a global coalition of wildlife conservation experts and managers.

For more information, visit www.iwmc.org.

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