1. INTRODUCTION

1.1 Purpose and intended users of the Guide

This guide is designed for indigenous fishing communities and for people in the development field working with indigenous fishing communities. Its objective is to provide guidance on impacts and benefits of the Code of Conduct for Responsible Fisheries (hereinafter the 'Code') from an indigenous peoples' perspective. This guide:

a) provides an overview on the content of the Code relevant to indigenous peoples;

b) shows how the Code can be used to benefit indigenous peoples, in particular those from indigenous fishing communities; and

c) identifies some gaps and includes recommendations for all stakeholders on the progressive interpretation of the Code in the light of human rights instruments on indigenous peoples' rights.

1.2 What is the scope and purpose of the Code?

The Code was unanimously adopted in 1995 by the Members of the Food and Agriculture Organization of the United Nations (FAO) in 1995.[1] The Code is a voluntary instrument that addresses many aspects of fisheries. Its scope includes marine and freshwater fisheries, wild and farmed resources, and harvesting and post-harvest operations.

The purpose of the Code is to encourage the rational and sustainable utilization of fishery resources. The Code takes a holistic view of the world's fisheries. In so doing, it prescribes principles and standards for the conservation and management of all fisheries, and addresses the capture, processing and trade in fish and fishery products, fishing operations, aquaculture, fisheries research and the integration of fisheries into coastal area management.

In relation to indigenous fishing communities, the objective of the Code in Article 2(f) plays a particularly important role. It aims to "promote the contribution of fisheries to food security and food quality, giving priority to the nutritional needs of local communities".

Even though the Code is not a binding instrument, it represents a common commitment by Member States to certain minimum standards and creates a moral obligation for governments and other stakeholders to act in a responsible manner and to address urgent fisheries management issues.

As a voluntary instrument the Code does not require formal acceptance by governments. However, some parts of it are based on the United Nations Convention on the Law of the Sea (LOSC)[2]. The Convention elaborates a comprehensive regime for the law of the sea, incorporating previous conventions and is partly based on customary international law. In addition, the Agreement to Promote Compliance with Conservation and Management Measures by Fishing Vessels on the High Seas (the Compliance Agreement) is an integral part of the Code. In this connection, the provision of the Code reflecting the LOSC and the Compliance Agreement would be of a binding nature for State Parties to these instruments.

[1] Twenty-eighth Session of the Conference in Resolution 4/95, 31 October 1995.

[2] United Nations Convention on the Law of the Sea of 10 December 1982.

1.3 What is its structure?

In total, the Code has twelve articles and two annexes. It consists of five introductory articles:

- Nature and Scope;
- Objectives;
- Relationship with Other International Instruments;
- Implementation, Monitoring and Updating; and
- Special Requirements of Developing Countries.

These introductory articles are followed by an article on General Principles, which precedes six substantive, thematic articles that address these general principles, on Fisheries Management, Fishing Operations, Aquaculture Development, Integration of Fisheries into Coastal Area Management, Post-Harvest Practices and Trade, and Fisheries Research.

1.4 Why is the Code relevant to indigenous peoples?

While many articles and recommendations refer to industrial fisheries and practices, the Code is also relevant to a variety of categories, e.g. small-scale or artisanal fisheries. The Code refers to 'indigenous peoples' in only one article (see Art.7.6.6). However, it does not classify indigenous fishing communities explicitly as one category. It uses the more generic term or category 'small-scale and artisanal fisheries'. Therefore, it is important to understand how the general terms 'small-scale and artisanal fisheries' may relate to indigenous peoples.

Indigenous fishing communities living primarily from fishing are generally comprised of small-scale or artisanal fishers, thus, the articles of the Code regulating small-scale or artisanal fisheries are also of relevance to indigenous fishing communities. In this context also, indigenous fishing communities can be considered as a component of the small-scale and artisanal fisheries category.

The Code is also relevant to indigenous peoples in fisheries through the implementation of the notion of ensuring that all interests are considered in designing policy and institutional frameworks including legislation (Art.10.1) and participation in decision making and taking into account the value of fisheries in its economic social and cultural contexts (Art.10.2).

The provisions of the Code that are of relevance to indigenous peoples will be discussed in greater detail in Section 2.

It is necessary to define the terms "indigenous peoples" and "indigenous fishing communities" in order to contextualize the discussion and guidelines set out herein. Indigenous peoples are specific population groups which are generally characterized by the following features: a) they are peoples who usually maintain a strong attachment to particular geographical locations and ancestral territorial origins, which is often expressed spiritually and through a fervent sense of responsibility towards that territory, b) they typically seek to remain culturally, geographically and institutionally distinct from the dominant society, resisting full assimilation into the greater national body, c) they tend to preserve elements of their own socio-cultural, economic and political ways of living and knowing, often based on distinctive languages and cultures, d) finally, they specifically and overtly self-identify as "indigenous" or "tribal."[3] Indigenous fishing communities are therefore indigenous peoples, whose dependence on "fishery resources and associated and dependent ecosystems is shaped by the need to meet livelihood requirements and food security".[4] It is important to note that for indigenous fishing communities, fishing goes beyond the mere function of meeting food security needs. "[F]ishing "... is a way of life for coastal and inland fishing communities who are the custodians and responsible users of marine and inland fishery resources"[5]. They may utilize fishery resources for food and sometimes also for trading purposes but

may also get involved in related activities such as net making and boat building. Fishing is also used to meet social and cultural needs of indigenous communities.

It is clear from the characterization of small-scale fisheries endorsed by the FAO Working Group on Small-Scale Fisheries,[6] that the activities of indigenous fishing communities are also encompassed by the "small scale fisheries" category. The elements are relevant to indigenous fishing communities as they refer to activities that are "*targeted on supplying fish and fishery products to local … markets, and for subsistence consumption*" ... and *"[o]ther ancillary activities such as net making [and] boat building … can provide ... fishery-related employment and income opportunities in marine and inland fishing communities".*

In the context of indigenous fishing communities, however, the more relevant type of small-scale fisheries primarily for subsistence purposes. Of course, indigenous peoples may also pursue small-scale fisheries for commercial purposes but this is rather rare.[7]

[3] There is no internationally binding definition of 'indigenous peoples'. The provided definition is based on the definition of Martinez Cobo, which is the most widely acknowledged at the international level. UN. 1986. Study of the Problem of Discrimination Against Indigenous Populations, Special Rapporteur of the Sub-Commission, Mr. J. Martinez Cobo. E/CN.4/Sub.2/1986/7/Add.4.

[4] See Zanzibar Statement on Rights-based Approach to Small-scale, Artisanal and Indigenous Fisheries, East and Southern Africa Small-scale Fisheries Workshop (ESA-2008) 24 to 27 June 2008.

[5] See *supra* footnote 4.

[6] See FAO. 2005. *Increasing the contribution of small-scale fisheries to poverty alleviation and food security.* FAO Technical Guidelines for Responsible Fisheries. No. 10. Rome. TECHNICAL GUIDELINES [hereinafter Technical Guidelines No. 10], p. 4, which refer to the working definition developed by the FAO Working Group on Small-Scale Fisheries (Bangkok, Thailand, November 2003).

[7] Small-scale commercial fisheries exploit many of the same stocks as are exploited by the large-scale commercial fisheries but also exploit a large number of smaller stocks. They may be highly modernized and technologically sophisticated.

Box 1. Definition of small-scale and artisanal fishing

Words such as artisanal, traditional, small-scale are sometimes used interchangeably and in an overlapping manner in several of the definitions used by international organizations such as FAO, UNEP, World Bank and Asian Development Bank and by the legislation of countries. It has been recognized and emphasized that because of the varying socio-economic conditions in different countries, it is not possible to achieve a universal definition for 'artisanal and/or small-scale fisheries'. Indeed, there is no agreed international definition of these terms. The FAO Working Group on Small-Scale Fisheries agreed that it would be inappropriate to formulate a universally applicable definition for a sector as dynamic and diverse as small-scale fisheries.[8]

While there is no common definition, it has been considered useful to have a common understanding on some general characteristics applying to such category. Thus, based on elements that have been advanced by these international organizations such as common characteristics for developing an understanding of small-scale, artisanal fisheries may be based on a recognition of the following: [9]

- Artisanal fisheries are traditional fisheries involving fishing households or small groups of fishworkers.
- The fishing vessel could vary from gleaning or a one-man canoe to up to 20 m, including trawlers, seiners or long-liners.
- They use relatively small fishing vessels, which may be non-motorized or use small out board engines (say, up to 10 bhp).
- The fishing is confined close to the shoreline.
- Use of fishing gear such as beach siene and gill nets, hook and line, and traps.
- Use of labour-intensive technologies

Artisanal fisheries can be both, subsistence or commercial, providing for local consumption or export. (*Emphasis added in order to point out what characteristics may directly be relevant to indigenous peoples*)

[8] Technical Guidelines No. 10, page 4. The TGL No. 2 provide a definition of the traditional or artisanal fisheries sector "as low-technology fisheries carried out by large numbers of small vessels, often where there is no central management agency."

[9] The elements of a definition for small scale, artisanal, traditional fisheries, have been discussed at the WTO in September 2005. A note by the WTO's Secretariat puts together a number of such definitions, as well as those that can be inferred from the laws & regulations of some WTO Members. See TN/RL/W/197, note by the WTO Secretariat.

1.5 Role and relevance of the Code's Technical Guidelines to indigenous fishing communities

To facilitate the implementation of the Code, FAO has prepared Technical Guidelines on different thematic areas addressed by the Code.[10] They are designed to provide practical direction for government officials and other stakeholders, especially in developing countries, on *how to implement different aspects of the Code*. They are intended to assist in reviewing options and developing national enabling social and economic policies and guidelines to support the implementation of the Code. These Technical Guidelines, which have no formal legal status, are intended to be flexible and capable of evolving as circumstances change, or as new information becomes available. In some respects, the Technical Guidelines might be viewed as a bridge between the Code itself and national policy and implementation measures.

One of the objectives of the Code is to optimize the benefits from the fishery resource through effective fisheries management and through ensuring an equitable distribution of its benefits. The Technical Guidelines No. 10 on *"Increasing the contribution of small-scale fisheries to poverty alleviation and food security"*, which focus principally on the distributional aspects,[11] are the most relevant to indigenous fishing communities. They provide a focus on small-scale fisheries and their current and potential role in contributing to poverty alleviation and food security by expanding on the guidance on small-scale fisheries offered by the Code.[12]

Furthermore, the Technical Guidelines No. 4, Suppl. 2 on *"The ecosystem approach to fisheries"* are of special relevance to indigenous fishing communities as they describe how current management processes would change under an Ecosystem Approach to Fisheries (EAF) which "recognizes that man is an essential component of the ecosystem in which fishing takes place"[13] and that "encourages the participation of all relevant stakeholders"[14], which includes indigenous fishing communities.

Other Technical Guidelines are also of relevance to indigenous fishing communities as they refer to small-scale fisheries and related terms and concepts, such as 'customary' and 'traditional' fisheries and traditional knowledge.[15] Most Technical Guidelines include implicit references to indigenous fishing communities, whereas only a few Technical Guidelines directly refer to 'indigenous peoples'.[16]

[10] All Technical Guidelines are available at http://www.fao.org/fishery/ccrf/en.

[11] See Technical Guidelines No.10, page XV.

[12] See Technical Guidelines No. 10, page V.

[13] FAO. 2003. *Fisheries Management. The ecosystem approach to fisheries.* FAO Technical Guidelines for Responsible Fisheries No. 4 (Suppl. 2). Rome, 2003, 124 pp. [hereinafter Technical Guidelines No. 4 (Suppl. 2)], , page 6.

[14] Technical Guidelines No 4 (Suppl. 2), page 7.

[15] See for an overview of relevant terms that refer/relate to or include indigenous fishing communities, Table 1.

[16] Technical Guidelines No. 2, No. 4, No. 6, No. 8 and No. 12.

1.6 Normative instruments on the rights of indigenous peoples relevant to the interpretation of the Code

The Code is closely related to several other fishery instruments and it serves, in different ways, to re-enforce and support their goals and purpose. Article 3 of the Code requires that it be interpreted and applied in conformity with and in the light of, amongst others:[17]

- the 1992 Declaration of Cancùn;
- the 1992 Rio Declaration on Environment and Development;
- chapter 17 of Agenda 21; and
- other relevant declarations and international instruments.

All of these normative instruments include provisions on indigenous peoples that are relevant to the interpretation and application of the Code.[18] Article 3 is intended to relate the Code to other international fisheries management and environmental instruments and declarations. Importantly, it also stresses that the Code should be interpreted and applied "in accordance with other applicable rules of international law, including the respective obligations of States pursuant to international agreements to which they are party" (Art.3.2, para. b) and "in light of… other relevant declarations and international instruments" (Art.3.2, para. c).

Article 3 implies that the Code should be interpreted and applied as such international declarations and instruments evolve, and that the Code should therefore be seen in relation to recent commitments on poverty alleviation, food security and human rights instruments such as International Labour Organization (ILO) Convention No. 169 concerning Indigenous and Tribal Peoples [19] and the UN Declaration on the Rights of Indigenous Peoples (UNDRIP)[20].

[17] Another explicitly listed instrument is United Nations Conventions on the Law of the Sea, 1982.

[18] The box in Annex II provides an overview of the most relevant provisions of the soft law instruments listed in the Code relevant to indigenous fishing communities and indigenous fishers. For a definition of so-called soft law instruments, please see Annex III.

[19] International Convention Concerning Indigenous and Tribal Peoples in Independent Countries (ILO Convention No. 169), June 27, 1989, 72 ILO Official Bull. 59, entered into force Sept. 5. 1991, available at http://www.ilo.org/ilolex/cgi-lex/convde.pl?C169

[20] The text of the Declaration is available at http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf

Box 2. Provisions on indigenous peoples' rights relevant for the interpretation of the Code[21]

ILO Convention No. 169 concerning Indigenous and Tribal Peoples

The Convention addresses issues of vital importance to indigenous and tribal peoples including the rights of ownership and possession over the lands they traditionally occupy, or have had access to (Art.14); the rights to natural resources including the right to participate in the use, management and conservation of such resources (Art.15) and the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development (Art.7).

UN Declaration on the Rights of Indigenous Peoples

The Declaration was adopted by the General Assembly in September 2007. It embodies the most affirmative intergovernmental response to date to the claims of indigenous peoples. The Declaration reaffirms basic and individual rights to equality and non-discrimination as well as collective rights in relation to lands, territories and natural resources. It also affirms indigenous peoples' right to participate fully, if they so choose, in the political, economic, social and cultural life of the state; and to be consulted in relation to decisions affecting them with the objective of obtaining their prior, free and informed consent.

[21] See Annex IV for an extract of relevant articles

2. WHAT PROVISIONS OF THE CODE AND TECHNICAL GUIDELINES ARE RELEVANT TO INDIGENOUS FISHING COMMUNITIES?

The following overview analyzes the most relevant provisions of the Code and of the subsequent Technical Guidelines which are relevant to indigenous fishing communities. The thematic sections will also include some observations directed at national and local governments as well as indigenous peoples communities and organizations.[22]

This analysis presupposes that generally, the Code's objective to achieve conservation and sustainable use of fishery resources resonates with the values of indigenous peoples. In indigenous communities, the concept of sustainability is entrenched in customary values. It is important to stress the role indigenous peoples play in designing development pathways that are more sustainable and in harmony with the delicate balance of nature. Indigenous peoples have extensive knowledge in managing fishery resources and are important partners for local and national governments as well as international organizations in this respect. Indeed, the very origins of environmental conservation lie in ancient cultures found throughout the world.[23] Therefore, the role of indigenous peoples in protecting biodiversity and in the sustainable management of aquatic resources respecting their customary access and use rights needs to be recognized.

2.1 Framework for governance

Governance issues and power relations in fisheries are critical to the success of the strategies suggested in support of indigenous fishing communities. Therefore, understanding the effects of governance issues in fisheries is crucial in designing and implementing effective solutions for indigenous fishing communities.

Policy and governance issues of small-scale fisheries (in particular those concerning indigenous fishing communities) are often very complex and demanding, and good approaches and best practices are still in the process of being explored and defined in the very wide range of social, environmental and economic conditions which are encountered.[24] An appropriate governance framework to guide fisheries management requires a policy that addresses effectively many, often competing, objectives. Such a framework would need to consider the conservation and sustainable use of resources, and to economic and social (equity) needs, institutional arrangements to implement it, as well as research to improve policies and performance of the small-scale fisheries sub-sector.

In any case, it is important to bring decision-making closer to indigenous peoples through increased participation and decentralization in order to increase the likelihood of success of supportive strategies, policies and programs.

When dealing with small-scale fisheries, the governing framework for fisheries including institutions, policies and legislation need to pay attention to the specific situation, interests and rights of fishers/local communities, including indigenous fishing communities and fishers. This is stipulated by several articles in the Code (Arts. 6.18; 7.6.6; 10.1.1; 10.1.3)[25] as well as the Technical Guidelines. The central provision in the Code relevant

[22] The table in Annex I provides an overview of all articles of the Code that contain terms that may be directly related/ referred to or also encompass indigenous fishing communities. The text of all relevant articles and sub-articles included in the table can be found in Annex II.

[23] See also www.unep.org/indigenous/About/index.asp (last visited April 2009).

[24] FAO. © 2005-2009. Fisheries Topics: Governance. What is governance?. Text by Garcia, S.M. In: FAO Fisheries and Aquaculture Department [online]. Rome. Updated 27 May 2005.

[25] The relevant articles are included in Annex I.

to indigenous peoples in this context is Article 6.18 which calls upon governments to protect the rights of small-scale fishing communities to a just and secure livelihood and preferential access to traditional fishing grounds and resources. The article is directed towards the welfare and legal, social and economic security of fishing communities, thus also of indigenous fishing communities. It calls upon governments to protect the interests of indigenous fishing communities against the erosion of their fisheries and livelihoods by the growth and expansion of semi- and industrial fishing fleets that target the same fishery resources as indigenous fishing communities.

2.2 Fisheries management

The first paragraph of the Code's preface sets the context for fisheries management when it states that: "…aquatic resources, although renewable, are not infinite and need to be properly managed, if their contribution to the nutritional, economic and social well-being of the growing world's population is to be sustained". Indeed, fisheries management is primarily about mediating the interaction between people and resources. It entails a complex and varied set of tasks aimed, ultimately, at ensuring that optimal benefits accrue from the use of fishery resources. It is potentially of great importance to the goal of enhancing the role of local communities (e.g. indigenous fishing communities) in food security which is also indicated in the objectives of the Code (see Art.2 (f)). Improved management practices can contribute to this goal through increasing the share of the benefits that accrue to small-scale fishers, including indigenous fishing communities.

According to Article 7 of the Code, which deals specifically with fisheries management, the core objective of fisheries management is the conservation of fishery resources and their sustainable use (Arts. 7.1.1 and 7.2.1). These provisions do not emphasize social objectives such as employment creation, poverty alleviation and food security but address them indirectly through Article 7.6.6 which recognizes explicitly the interests of 'local fishing communities' and 'indigenous peoples' by stipulating that "when deciding on the use, conservation and management of fisheries resources, due recognition should be given … to the traditional practices, needs and interests of indigenous peoples and local fishing communities which are highly dependent on fishery resources for their livelihood". Furthermore, Article 7.2.2 (c) states that "the interests of fishers, including those engaged in subsistence, small-scale and artisanal fisheries [should be] taken into account." These articles, one specifically and the other implicitly, however, refer to indigenous fishers whose subsistence fishing activities are often in conflict with other interests for example, industrial shrimp-trawling, distant-water tuna-fishing, tourism development, industrial aquaculture and the creation of non-participatory and exclusive Marine Protected Areas (MPAs).

Practically, these articles call upon governments to weigh up opposing sets of issues (e.g. competing interests and use of spaces and resources) and assess the degree of risk involved in the decisions they make. When attempting to take into account development and poverty alleviation priorities as well as concerns and needs of indigenous peoples, and not simply consider issues related to resource management or conservation, one of the major challenges fisheries managers face, is the difficult trade-off between short-term priorities

and long-term objectives. For example, there are times when the "best scientific evidence available" points to the need for a reduction in the catch in circumstances where strong social and economic pressures are exerted to maintain or even increase the catch. Yet putting the resource at risk for "short-term considerations" could well worsen the position of the poor and indigenous peoples in the medium and longer term. Thus, in making decisions that involve the sustainability of the fisheries, managers should explore all other possible ways of ameliorating social and economic pressures before making decisions to risk the aquatic resources on which the poor depend. This is particularly relevant in the context of indigenous fishing communities because they depend on fishing for their livelihoods and are more vulnerable to outside intrusion because of their special cultural, social and religious dependence on their traditional (ancestral) land and resource base. Another typical example in this context is the use of conservation measures (see section 2.4).

The Technical Guidelines No. 4[26] provide further direction on fisheries management. There is only one explicit reference to indigenous peoples. However, the Guidelines regulate issues of relevance to indigenous fishing communities when referring, for example, to traditional systems, rights, communities and traditional measures.[27] Indeed the use of the term 'traditional' by the Code or the Guidelines is a reference to practices of indigenous fishing communities. The Guidelines recommend the protection of traditional approaches to fisheries management which is already emphasized in the introductory note to the Guidelines. It identifies the current search for new approaches to fisheries management as one of six key problems in the sector, stipulating that this search is to be actively encouraged but should not abandon the traditional measures where they have proved effective.[28] Furthermore the Guidelines No. 4 stress, amongst others:

- the use of traditional structures as part of the fisheries management system (where appropriate institutions are in existence);[29]
- the recognition of traditional or customary systems of fisheries management at local level when establishing arrangements for management in partnership;[30]
- the guidance to national legislators, by potentially useful principles rooted in traditional practices, where management policy includes some form of formal partnership[31].

Ecosystem approach to fisheries management

The implementation of the Ecosystem Approach to Fisheries (EAF) may have substantial impact on the governance framework for fisheries, in particular in terms of institutional structure and process and would, therefore, also affect indigenous fishing communities. It builds on current fisheries management practices and more explicitly recognizes the interdependence between human

[26] *FAO. 1997. Fisheries management. FAO Technical Guidelines for Responsible Fisheries. No. 4. Rome, [hereinafter TECHNICAL GUIDELINES No. 4].*

[27] See Technical Guidelines No. 4, pages 5, 9, 15, 20, 24, 39, 53, 56, 57, 64.

[28] TECHNICAL GUIDELINES No. 4, page 5.

[29] TECHNICAL GUIDELINES No. 4, page 39.

[30] TECHNICAL GUIDELINES No. 4, page 56.

[31] TECHNICAL GUIDELINES No. 4, page 64.

well-being and ecosystem well-being. Its social and economic dimension can be extremely supportive for indigenous fishing communities. An EAF is fundamental to the implementation of the FAO Code of Conduct, providing a way to achieve sustainable development in the fisheries context.[32] The purpose of an EAF is to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardizing the options for future generations to benefit from the full range of goods and services provided by the aquatic ecosystems.[33] The ecosystem principles, concerns and policy directions contained in the provisions of the Code provide the framework for EAF.[34] It contains a number of provisions which, when considered together, give a good indication of the ecosystem principles, concerns and policy guidance already available in the Code for the development of an ecosystem approach to fisheries. It is useful to note that the Code, in highlighting the relationship between fisheries and food security, and the need for transparency in decision-making processes and for effective participation of interested parties, provides helpful guidance on the social aspects of applying the EAF.[35]

The EAF takes its focus in fisheries management but broadens the perspective. It assesses also interactions between the core of the fishery (fish and fishers) as well as other elements of the ecosystem and the human system relevant to management. The often marginal status of indigenous fishing communities has important consequences for implementing EAF in the context of small-scale fisheries. Addressing marginalization, vulnerability, gender issues and achieving equitable results require that marginalized groups, such as indigenous fishing communities, are included in the EAF process. This can be achieved through their effective involvement as stakeholders, which implies stakeholder analysis and capacity building. A stakeholder analysis involving indigenous peoples should include an assessment of their specific needs and concerns and take into account indigenous peoples' special (collective) rights. The involvement of indigenous fishing communities as stakeholders throughout the EAF process engenders process ownership and increases the likelihood of successful and sustained results.

Considerations to be made in the context of indigenous fishing communities applying the EAF include an assessment of how their religious and traditional practices or cultures are affected or may have a bearing on EAF implementation

[32] For example: the Code refers to the need for prior impact assessment and monitoring of gear impact (12.11), the prohibition of destructive practices (8.4.2) and the development of environmentally safe gear. The Code also considers, albeit very briefly, the problem of sound or optimal use of energy (8.6 and 11.8c). Environmental impacts of other users and pollution: the Code also addresses other (non-fishery) users (1.2; 10.1.5) and acknowledges the impact of other human activities on fisheries. It recommends avoiding or settling conflicts (10.1.4 and 10.1.5). It also recognizes that other users impacts should be assessed (7.2.3) and promotes the development of environmental research (8.4.8 and 12.10). It requires that the negative effects of natural environmental factors should not be exacerbated by fisheries (7.5.5) and calls for restoration of resources affected by other uses (7.6.10). It calls specifically for consultation with fisheries authorities before making decisions regarding the abandonment, in the aquatic ecosystem, of artificial structures (e.g. oil platforms). The Code contains also one article entirely dedicated to the integration of fisheries into coastal areas management (1.1, 1.3, 6.9, 8.11.3 and 10.2.4). The Code calls for a reduction of pollution (7.2.2) through the development of waste disposal systems (e.g. for oil, garbage, decommissioned gear) in harbours and landing places (8.7.4 and 8.9c). Dumping at sea from fishing vessels should follow the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL) (8.7.4) for onboard incineration (8.7.2). Please see for the complete list of relevant provisions of the Code to the EAF, the FAO Technical Guidelines for Responsible Fisheries - No. 4, Suppl.2, available at http://www.fao.org/docrep/005/Y4470E/y4470e0c.htm.

[33] FAO. 2009. *Fisheries management. 2. Ecosystem approach to fisheries. 2.2 The human dimension of the ecosystem approach to fisheries.* FAO Technical Guidelines for Responsible Fisheries. No. 4 Suppl. 2 Add 2. Rome, 89p [hereinafter TECHNICAL GUIDELINES No 4, Suppl. 2, Add 2]. See page xiii.

[34] TECHNICAL GUIDELINES No. 4, Suppl. 2, Add. 2, page xii.

[35] FAO. 2008, page 35.

because cultural or religious values of fishing activities may contribute to or hinder the adoption of an ecosystem approach.[36] In addition to the role that traditional, cultural or religious practices may play in the application of an EAF, the knowledge held in local communities and by indigenous peoples and its relevance to the EAF is an important element.[37] Indeed traditional knowledge can often provide suitable management options in applying the ecosystem approach and reducing fish pressure where needed on the one hand and generate economic benefits and social esteem of indigenous fishing communities on the other (see also section 2.5).

Precautionary approach and indigenous fishing communities

The precautionary approach or principle is an inter-related guiding feature of EAF.[38] The precautionary approach is advised when ecosystem resilience and human impact (including reversibility) are difficult to forecast and hard to distinguish from natural changes.[39] However, the precautionary approach is also a distinguishable concept operating in tandem with other conservation and management measures.[40]

The precautionary approach was adapted to fisheries by FAO and incorporated into the Code of Conduct (see Arts. 6.5 and 7.5). The precautionary approach is also prominent in the Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement. The Code urges states and sub-regional and regional fisheries management organizations to apply a precautionary approach to the conservation, management and exploitation of living aquatic resources (Art.6.5) and then, in language quite similar to the UN Fish Stocks Agreement, specifies what this will involve (Art.7.5). The application of the precautionary approach to fisheries is expended in the Technical Guidelines to the Code of Conduct No. 2 on the *"precautionary approach to capture fisheries and species introduction"*.[41] The Guidelines advocate the application of the precautionary approach to fisheries management, fisheries research, fisheries technology and species introduction. The Technical Guidelines No. 2 emphasize that the precautionary approach should not be taken to imply that "no fishing can take place until all potential impacts have been assessed and found to be negligible." What is required is that all fishing activities should be subject to prior review and authorization; that there should be a management plan for each fishery that clearly specifies management objectives and that the means of monitoring, assessing and controlling fishing impacts should be clearly stated.

In many small-scale fishing communities and in particular in indigenous fishing communities, the concept of sustainability is entrenched in customary values, with individuals and groups from these communities which do not view the fisheries resource as their property but rather as a source for their livelihood. Indeed, generally indigenous communities that pursue a traditional way of life accept

[36] FAO. 2007, page 42.

[37] FAO. 2007, page 43.

[38] Technical Guidelines No. 4 (Suppl. 2), pages 83, 85.

[39] Kuemlangan, B. in FAO. Forthcoming. A Fishery Manager's Guidebook, FAO, Rome, Part II, section 5.5.2.

[40] Kuemlangan, B. in FAO. Forthcoming, Part II, section 5.5.2.

[41] FAO. 1996. *Precautionary approach to capture fisheries and species introductions*. FAO Technical Guidelines for Responsible Fisheries. No. 2. Rome, 54p [hereinafter TECHNICAL GUIDELINES No. 2].

the need for conservation measures and act in a precautionary manner when there is a degree of uncertainty about impacts of fishing on resources.

Regarding monitoring of fishing and avoidance of undesirable and unacceptable outcomes of development, the Technical Guidelines No. 2 contain the following recommendations relevant to indigenous peoples:

- Precautionary monitoring of fishing should seek to detect and observe a variety of ancillary impacts (e.g. environmental changes, fish habitat degradation, and effects on birds, mammals and other biota) using information from indigenous peoples. Appropriate procedures to process and analyze this information should also be in place.[42]
- Fisheries management agencies should take precautionary measures for traditional or artisanal fisheries in order to avoid undesirable or unacceptable outcomes in the development of fisheries.[43]

Furthermore, the Technical Guidelines No. 2 promote the following precautionary steps for the traditional or artisanal fisheries sector, which also encompasses indigenous fishing communities:

- delegate some of the decision-making, especially area closures and entry limitations, to local communities or cooperatives;
- ensure that fishing pressure from other (e.g. industrial) segments of the fishery does not deplete the resources to the point where severe corrective action is needed.[44]

[42] See TECHNICAL GUIDELINES No. 2, page 12, para. 41.

[43] See TECHNICAL GUIDELINES No. 2, page 13, para. 45.

[44] See TECHNICAL GUIDELINES No. 2, page 13, para. 50.

The application of the precautionary approach to fishery management depends on the amount, type and reliability of information about the fishery and how this information is used to achieve management objectives. This makes it inevitable to refer in this context to traditional/indigenous knowledge (the topic will be discussed in more detail in section 2.5). Thus as a basis for information to be used to apply the precautionary approach, the Technical Guidelines No. 2 suggest that "(t)he use of complementary sources of fishery information should be facilitated by active compilation and scientific analysis of the relevant traditional knowledge". Moreover, the use of traditional knowledge "should be accompanied by the development of methods by which this information can be used to develop management advice."[45]

[45] See TECHNICAL GUIDELINES No. 2, page 18, para. 64.

2.3 Participation in fisheries management

Although a very wide variety of tools and approaches are currently used in fisheries management, not all of them are specifically supportive of small-scale fisheries and indigenous fishing communities. However, there has been a positive trend to change the management regime of fisheries from state control to participatory approaches. The more recent participatory methods are associated with the move to decentralization of government functions and are essential for the protection of the interests of small-scale fishers.

Stakeholder participation in fisheries management encompasses a wide range of arrangements. It includes setting up advisory bodies for stakeholder consultation as well as the establishment of mechanisms for cooperative management (co-management). In the case of the latter, fisheries management and enforcement responsibilities would generally be shared between central government authorities and local communities or institutions, like local fisheries associations[46] or indigenous fishing communities. Such arrangements could also recognize customary fishing rights and vest fishing rights in these local communities.

Participatory fisheries management, as promoted by the Code, has broader implications than just for the sound management of small-scale fisheries. The promotion of a management approach that provides the opportunity for the marginalized and poor, such as indigenous fishing communities, to participate in (decentralized) resource management has not only a positive impact on fisheries but also helps to achieve sustained progress in poverty alleviation and the realization of indigenous peoples' rights. Indeed participatory fisheries management can contribute to poverty alleviation in small-scale fishing and indigenous fishing communities provided that supportive measures from both within and outside the fisheries sector are simultaneously put in place.

Indigenous peoples' participation in fisheries management is fundamental to ensure on the one hand that there are policies and mechanisms in place to facilitate indigenous peoples' interests and involvement in fishing and on the other hand to ensure the realization of their rights. The Code indeed recognizes that while policy decisions concerning the changes aimed at achieving sustainability rest firmly with governments, the effective implementation of the Code requires wide stakeholder participation and cooperation (i.e. from fishermen, processors, NGOs and fishing communities). States are called upon to facilitate consultation and effective participation in decision-making (see Art.6 of the Code). The Code urges states to "facilitate consultation and the effective participation of industry, fishworkers, environmental and other interested organizations in decision–making with respect to the development of laws and policies related to fisheries management, development, international lending and aid" (Art.6.13) and to "promote the creation of public awareness of the need for the protection and management of coastal resources and the participation in the management process by those affected". (Art.10.2.1). This has, for example, led notably to the emergence of co-management arrangements involving joint development of management measures by fishers, government and possibly local communities.

[46] See Skonhoft, A. and Gobena, A. 2009, page 30, 31.

Furthermore, the Code promotes "the active participation of fish-farmers and their communities in the development of responsible aquaculture management practices" (Art.9.4.2).

The Code does not only encourage mobilization of fishing communities to participate actively in fisheries management, but also to adopt measures that are based on traditional resource knowledge and customary resource-use practices (Arts. 6.4 and 12.12). The use of this knowledge and these practices facilitates decision making and consensus building among stakeholders, serves to minimize adverse effects on the environment, leads to new alliances and modes of cooperation in fishing communities, in particular in indigenous fishing communities, and ultimately has a positive bearing on the manner in which fisheries are utilized (see section 2.5).

Box 3. Provisions of the Code on fisheries management relevant to indigenous fishing communities

In the context of fisheries management, the central provision of the Code for indigenous peoples is Article 7.6.6 which stipulates that "due recognition should be given, as appropriate, in accordance with national laws and regulations, to the traditional practices, needs and interests of indigenous peoples and local fishing communities which are highly dependent on fishery resources for their livelihood".

Article 6 on General Principles is of critical importance to artisanal and small-scale fishermen and thus also to indigenous fishing communities. In terms of the legal framework for good governance within fisheries management, the FAO Code of Conduct, although non-binding, refers to the need for increased transparency within the decision-making processes and to ensure that timely solutions to urgent matters are achieved. In addition, states are called upon to facilitate consultation and effective participation in decision-making.

Article 6.2 of the Code is crucial for indigenous fishing communities. It links fisheries management with inter-generational considerations, food security, poverty alleviation, and the maintenance of the ecosystem. It highlights the importance of fisheries in poverty alleviation and food security. It has been noted that there could appear to be a contradiction in Article 6.2 between the promotion of sustainable development on the one hand, and food security and poverty alleviation on the other, while recognizing that effective resource management is a prerequisite for sustainable development.[47]

[47] Doulman, D. in Neiland, A.E. and Béné, C. (eds.). 2004. Poverty and small-scale fisheries in West Africa, page 220.

Article 6.4 of the Code stipulates that conservation and management decisions for fisheries should be based on best scientific evidence available but that traditional knowledge of the resources and their habitat, as well as relevant environmental, economic and social factors should be taken into account. The article refers to the need to take into account traditional knowledge, which is also referred to as indigenous or local knowledge.[48]

Article 6.18 is the most significant article of the Code for indigenous fishing communities as it recognizes the right (of fishworkers) to a just and secure livelihood. As stipulated by Article 3 of the Code, the provisions of the Code have to be interpreted in the light of Agenda 21, chapter 17.79, Agenda 21 refers explicitly to the rights of indigenous peoples. For example, it stipulates that coastal states should recognize the rights of small-scale fishworkers and the special situation of indigenous and local communities, including their rights to utilization and protection of their habitats on a sustainable basis.

[48] Traditional knowledge encompasses the beliefs, knowledge, practices, innovations, arts, spirituality and other forms of cultural experience of indigenous communities. See also the definition of indigenous knowledge at http://www.unesco.org/most/bpindi.htm (last visited 5 January 2009). The ad hoc CBD Working Group on Article 8 (j) proposed to define 'Traditional Knowledge Protection' as follows: Full recognition and protection of rights of indigenous peoples and local communities to own and control their bio-cultural heritage, including to conserve it for livelihood security, and to restitution of heritage and traditional resources taken from them (see UNEP/CBD/WG8J/4/INF/18, page 5).

In sum, it is, pursuant to the right and principle of free prior and informed consent and other indigenous peoples' rights[49], imperative to recognize and prioritize, in all fisheries management initiatives and decision-making processes, including in the establishment and management of protected areas, and within the framework of sustainable resource use, the interests and participation of indigenous fishing communities when they are affected (as stipulated in Art.7.6.6). Furthermore, in order to improve management from the perspective of indigenous fishing communities: governments need to develop and strengthen existing partnerships with a range of organizations which should include a host of Non-Governmental Organizations with an interest in fisheries and indigenous peoples' issues as well as representatives of indigenous fishing communities themselves; and states should make efforts to raise awareness and provide technical training to government officials in applying the Code in accordance with the rights of indigenous peoples and other small-scale and artisanal fishing communities. Legal provisions providing for increased stakeholder participation and co-management could significantly contribute to the empowerment of fishing dependent communities.

[49] E.g. Arts. 31 and 32 UNDRIP.

2.4 Access and use rights of fishers and indigenous fishing communities

Indigenous fishing communities usually have their own internal regulatory mechanisms for management of their fishing activities. Such regulatory mechanisms are integral to the nature of their fishing-rights. Recognizing and providing for indigenous communities access and use rights means empowering the communities concerned to use those mechanisms, and to provide for their integration within the wider fisheries management framework.[50]

Open access

Granting open access to indigenous fishing communities can serve as an example of prioritized treatment. Open access regimes may, however, not be sustainable, and are also not promoted by the Code. In any case they should be subject to restrictions on fishing gears, as well as other control measures. Open or preferential access is, however, often insufficient to sustain the livelihood of indigenous peoples if there are not additional facilitating measures put in place by the state (e.g. take effective measures to combat discrimination). This could include access to credits and technology, which would facilitate their better integration into the economy. The Code does not address these issues specifically in the context of small-scale fishers. The Technical Guidelines No. 10, however, address this gap and promote amongst others microfinance measures, and the strengthening of existing informal savings and credit schemes at the micro-level.[51]

[50] *See also Hooper, M. and Lynch, T., Recognition of and Provision for Indigenous and Coastal Community Fishing Rights Using Property Rights Instruments*, in FAO. 2000a.

[51] TECHNICAL GUIDELINES No 10, page 90, section 2.9.3

Limited access

Limited access to fishery resources is considered essential for responsible fisheries and is an important means for tackling the severe consequences suffered through open access regimes, like the depletion of stocks, excess harvesting capacity, shortened fishing seasons and related negative social and economic effects. Limited access can, however, be used to limit the possibilities of vulnerable fishing communities to secure their livelihoods through fishing (see also section 2.2).

The Code proposes to give fishing communities (thus also indigenous fishing communities) "preferential access to traditional fishing grounds and resources" (Art.6.18). Indeed, when access for these communities to resources is prioritized or not encroached upon when scarce resources are being allocated, this article is consistent with the rights of indigenous peoples[52]. However, if continued fishing by vulnerable communities is not compatible with sustainable fisheries management, and measures that reduce access to these resources are necessary to ensure their long-term sustainability, then these groups should be supported in finding alternative livelihoods.

An example in the context of limited access is the use of conservation measures. Restricting fishing activities to certain times, seasons or areas as a means of rehabilitating stocks, plays an important role in sustainable fisheries management.[53] Closures can be in relation to the taking of certain stocks, or a geographical area. A typical case for such restriction is the establishment of Marine Protected Areas (MPAs), which is a tool for more holistic biodiversity conservation. Indeed, while MPAs have been shown under some conditions to improve the sustainability of the resource, the creation of these protected areas may be done at the expense of some marginalized or vulnerable groups, in particular indigenous fishing communities who may be denied access to the fishing grounds on which they had relied to maintain their livelihoods. Therefore, the establishment of MPAs should ideally not encroach on the right of access to fishing areas for indigenous fishing communities. The Code recommends in this regard that access rights of coastal fishing communities and their customary practices shall be taken into account in institutional and legal frameworks (see Arts. 10.1.3, 10.1.4 and 10.2.2). The Code promotes also the consultation and involvement of local communities in initiating, developing and managing MPAs (in a broader context see Arts. 10.1.2 and 10.2.1). This can be seen as a tool by the communities to secure their resource use rights vis-à-vis detrimental impacts by large-scale fisheries and aquaculture. On the other hand, if MPAs are established through a top-down process without community consultation and participation, they may be less beneficial for the local fishing communities and rather serve the interests of tourism, for example.[54]

The Technical Guidelines No. 4 recommend that access rights of indigenous peoples need to be part of the considerations of the authority that limits access. They propose that in particular, existing access rights of indigenous peoples need to be taken into consideration when moving from a system of open access to one of limited access. The Technical Guidelines No. 4 provide examples of considerations to be made when limiting access,

[52] See Art.15.1 ILO Convention No. 169; Art.26 UNDRIP; and Art.9 Cancún Declaration.

[53] See also Skonhoft, A. and Gobena, A. 2009. *Implementing the right to food in national fisheries legislation*, Right to food online study, FAO, Rome, page 23.

[54] FAO. 2009b. *Securing sustainable small-scale fisheries: bringing together responsible fisheries and social development.* COFI/2009/7. Committee on Fisheries, Twenty-eight Session, Rome, Italy, 2-6 March 2009.

the different types of exemptions from access limitations and criteria for granting access:[55]

"Finally, access can be granted on the basis of a selection of specific criteria, including, for example, a proven history of participation in the fishery, performance, e.g. catch above certain minimum criteria, a history of responsible fishing, of social responsibility, etc. In all cases, equity in allocating rights requires that all current fishers be involved in the process. Particular attention should be given to those with long-standing traditions of fishing, especially, where appropriate, to indigenous peoples and to those local communities highly dependent on fisheries for their livelihoods (*7.6.6*)." [emphasis added]

Collective access and use rights

It has been contended that the introduction of individual property rights would be likely to increase conflicts and inequality decrease access for the poor[56] and that increased property rights in fisheries often work against the interest of disadvantaged segments.[57] This statement applies particularly to indigenous peoples, whose self-understanding and culture are built on a collective understanding of rights. The most appropriate type of access for indigenous fishing communities is to vest access and use rights in the local community which would be crucial in ensuring that indigenous fishing communities have equitable access to fishery resources.[58] The community then takes responsibility for further allocation and monitoring of the use of the resources.

The Code sets out social responsibilities of the state in Article 6 (in particular in Arts. 6.1, 6.2 and 6.18). These 'social obligations' have been interpreted as requiring attention to the rights of indigenous fishing communities, and to the discrimination caused by the distributional effects of privatization, which may be offset by zoning and specific quota allocation to small or community groups.[59] Furthermore, the Code protects community rights by calling upon states to take into account rights of coastal fishing communities and their customary practices (Art.10.1.3), and to ensure that the access of local communities to fishing grounds is not negatively affected by aquaculture development (Art.9.14). However, the protection of the interests of the small-scale fisheries sector and of community rights through the Code needs to be strengthened.

For the security of indigenous peoples' traditional livelihoods, the recognition and security of collective access and use rights to fisheries resources – the so-called 'common property regime" is fundamental. In this regime, for example, a local community rather than an individual holds the exclusive right to harvest in a particular geographical area.[60] Such exclusive rights can imply the right to harvest a particular stock, to fish in a particular area, or to use a certain kind of gear or vessel. The management of the resource is carried out by the community, which assumes some measure of

[55] See TECHNICAL GUIDELINES No. 4, p. 54, section 3.2 Limiting Access (see in particular under 3.2.2 considerations in limiting access).

[56] Viswanathan, K.K. 2000. Community perspectives - Exclusivity of rights. In: Shotton, R. (ed.) Use of property rights in fisheries management. Proceedings of the FishRights99 Conference. Fremantle, Western Australia, 11–19 November 1999. Mini-course lectures and core conference presentations. FAO Fisheries Technical Paper. No. 404/1. Rome, FAO. pp. 307–315.

[57] FAO. 2004. Legislating for property rights in fisheries, Legislative Study 83, Legal Office, FAO, Rome, page 18.

[58] See Skonhoft., A. and Gobena, A. 2009, page 26.

[59] Symes, D. 2000. Rights-based management: A European Union perspective in use of property rights in fisheries management, FAO Fisheries Technical Paper 404/1, Rome, pp.276-283.

[60] FAO. 2004, page 16.

control, including monitoring and surveillance functions, and devises the individual rights to withdrawal and access. Thus the community as a whole has collective rights.

A system of community rights-based management, which protects the rights of access by fishing communities including indigenous peoples, is likely to be the best pro-poor arrangement in many indigenous fishing communities. This can imply the restriction of the access to the resources to a well-identified group, which helps community property rights to reduce the risks of overfishing, thus preventing the fishers from falling into the downward spiral of poverty and resource overexploitation associated with open access regimes. At the same time the fact that these property rights are granted to groups rather than to individuals may ensure a certain level of equity within the community by allowing all members (including the poorest) to access the fishing grounds and therefore to rely on fishing to sustain their livelihoods. The concept of community property rights is therefore central to indigenous peoples and implies the recognition and enforcement of preferential access rights of (indigenous) fishing communities. Furthermore, as already outlined above, it is a fundamental element in building a successful fisheries management system.

However, the degree of vulnerability or strength of such rights will be measured by the extent to which such rights are recognized and protected by law, the ability of the judiciary to protect them and the capacity of rights holders to take legal action to redress any wrong. This also means that governments accept local communities or fisher groups as legal entities capable of holding rights over fisheries, thus not preventing them from taking legal action to defend their interests.

2.5 Traditional knowledge and research

Facilitating optimal conditions for small-scale fishers depends on access to good information on which appropriate policies and strategies can be based. This requires improved data collection, as well as further research on small-scale fisheries that is participatory in nature and seeks to learn from indigenous knowledge. However, of their nature and main characteristics (multiple landing sites, remote areas, partially subsistence-based activity, etc.), small-scale fisheries raise a certain number of challenges in terms of information collection and use.

Guidance on meeting information needs relating to social issues in small-scale fisheries are not explicitly addressed or recognized in section 7.4 of the Code on "Data gathering and management advice". This section envisages that fisheries data should be generated and managed by 'States' (Arts. 7.4.4 and 7.4.6) and the "subregional or regional fisheries management organizations" (Art.7.4.7). No reference is made to local communities, and their potential role in data collection and management. However, these issues are mentioned elsewhere in the Code. The General Principles are in line with the current position adopted by the majority of the international community as it is stipulated that states "should facilitate consultation and the effective participation of industry, fishworkers, environmental and other interested organizations in the decision-making" (Art.6.13) and "should ensure that fishers and fish-farmers are involved in the policy formulation and implementation process" (Art.6.16).

Similarly only the "best scientific evidence" (Art.7.4.1), "reliable statistics … in accordance to international standards" (Art.7.4.4) and "scientific

data" (Art.7.4.6) are envisaged as providing valuable information for management advice, while no reference is made to "traditional" or "indigenous knowledge", although its importance is recognized in Article 12 in the context of research priorities.

One of the objectives of the Code (Art.2 (i) is to "promote research on fisheries as well as on associated ecosystems and relevant environmental factors". While the growing research emphasis on ecosystems and environment is thus foreseen and supported by the Code, there is a less explicit mandate to promote research into the economic, social, cultural and political factors that influence the development of the fishery sector, levels of poverty and food security, and the conservation of fish stocks. These issues are clearly articulated in the General Principles but they are not adequately reflected in the relevant technical sections elaborating on those principles. Guidance on traditional and indigenous knowledge of fisheries resources is additionally provided by a number of Technical Guidelines, namely Guidelines No. 2, 10 and 12, which reflects the importance of traditional and indigenous knowledge for the different areas of fisheries. Technical Guidelines No. 10 include some form of definition of indigenous knowledge.[61] The Guidelines promote the participatory approach to research and refer more specifically to the "integration of indigenous knowledge and participatory research in the co-management of small-scale fisheries, ..."[62] Technical Guidelines No. 12 on *"information and knowledge sharing"* deal comprehensively with the issue of traditional knowledge and specify that "(i)ndigenous knowledge pertains to experiential, locality-specific knowledge developed by indigenous peoples over the years. Thus, indigenous and traditional knowledge is local knowledge that is unique to a given culture or society"[63]. The Guidelines highlight the importance of the integration of traditional knowledge with research-based knowledge[64] and point out that "(y)et fisheries management can only be effective if the measures are considered legitimate by all stakeholders and a communication bridge between different knowledge discourses is needed"[65].

Article 12 of the Code specifically addresses fisheries research. It states that "responsible fisheries requires the availability of a sound scientific basis to assist fisheries managers and other interested parties in making decisions." An interdisciplinary interpretation of "science" that includes the social sciences is incorporated. The Code emphasizes state responsibilities for the funding, implementation and dissemination of appropriate research, often with specific reference to developing-country needs. Article 12.12 provides a specific reference to traditional fisheries knowledge and technologies in the context of the small-scale sector: "States

[61] "This knowledge has developed as a result of the astute observations of fishers over decades and passed down from generation to generation, with the inquisitive testing, verifying or amending it." In this context, the TECHNICAL GUIDELINES highlight the importance of longitudinal studies such as those for small-scale farming communities that use "panel data" – repeat visits over a period of years to record demographic, economic, social and cultural change. See section 2.10.3 on research requirements of TECHNICAL GUIDELINES No. 10, page 67.

[62] For example, through the use of consultation workshops. See TECHNICAL GUIDELINES No 10, section 2.10.2, page 66

[63] TECHNICAL GUIDELINES No 12, section 5.2, page 32.

[64] TECHNICAL GUIDELINES No. 12 provide the example of the European Union funded Knowfish Project which investigates the use of local knowledge of fishers in the processes of managing fisheries resources. Furthermore, TECHNICAL GUIDELINES No. 12 identify as the major challenges to the management and preservation of indigenous knowledge focused collection development policies; accessibility; storage and preservation media and intellectual property rights.

[65] TECHNICAL GUIDELINES No. 12, section 5.2, page 32. The Guidelines refer in this context to Arts. 6.4 and 12.12.

should investigate and document traditional fisheries knowledge and technologies, in particular those applied to small-scale fisheries, in order to assess their application to sustainable fisheries conservation, management and development".

The Code also stresses more operational research issues such as provision of data to monitor the state of the stocks, monitoring human food supplies, and ensuring that food quality and safety standards are assessed. However, the various articles related to research in the Code – most of which are concerned with states' general responsibilities for research and issues of research process – identify the specific subject-related research priorities relevant to indigenous fishing communities such as fish product quality and environmental health issues around fish consumption (Art.12.8); and the potential application of traditional fisheries knowledge for management, particularly in small-scale fisheries (Art.12.12).

Research priorities identified in the Code (Arts. 12.4, 12.5, 12.8, 12.10, 12.11 and 12.12) are a mix of operational and strategic areas. Economic, social, marketing and institutional issues in fisheries tend to be less well specified as research topics (see Art.12.9) and organizational and institutional issues, in particular, are treated as research process issues rather than as a research subject as such.

Box 4. Overview of relevant provisions of the Code on traditional knowledge and research

In the context of traditional knowledge, the Code of Conduct recommends:

- "States should investigate and document traditional fisheries knowledge and technologies, in particular those applied to small-scale fisheries, in order to assess their application to sustainable fisheries conservation, management and development".[66]
- "When deciding on the use, conservation and management of fisheries resources, due recognition should be given, as appropriate, in accordance with national laws and regulations, to the traditional practices, needs and interests of indigenous peoples and local fishing communities which are highly dependent on fishery resources for their livelihood".[67]
- "Conservation and management decisions for fisheries should be based on the best scientific evidence available, also taking into account traditional knowledge of the resources and their habitat, as well as relevant environmental, economic and social factors. States should assign

[66] CCRF Art.12 Fisheries Research, para.12.12.

[67] CCRF Art.12 Fisheries Research, para.12.12.

priority to undertake research and data collection in order to improve scientific and technical knowledge of fisheries including their interaction with the ecosystem. In recognizing the transboundary nature of many aquatic ecosystems, States should encourage bilateral and multilateral cooperation in research, as appropriate".[68]

The potential value of using traditional and indigenous knowledge in achieving sustainable fisheries management and thereby improving the livelihoods of fishing communities, is acknowledged by the Code. However, a more systematic approach to including traditional knowledge in research and management systems is necessary. This could be enhanced through the development of collaborative research projects between scientists and indigenous fishing communities.

The collective right of indigenous peoples to their collectively held traditional knowledge, in particular indigenous peoples' rights to control, own and manage their traditional knowledge and creativity, should be recognized and implemented in the context of the Code and practice. Therefore, the Code's relevant provisions should be interpreted in the light of international instruments[69] which call upon states:

- to create an environment that encourages individuals and social groups, to create, produce, disseminate, distribute and have access to their own cultural expressions, paying due attention to the specific circumstances and needs of indigenous peoples;
- to ensure the widest possible participation of communities to maintain and transmit their intangible heritage, if so wished by the peoples involved, and involve them in a meaningful way in its management.

Applied to research, this would mean that fishers and indigenous fishing communities participate in both the choice of research to be carried out and in the collection of the information. This would also result in more cost-effective research, increased credibility and potentially greater impact.[70]

[68] CCRF Art.6 General Principles, para. 6.4.

[69] United Nations Declaration on the Rights of indigenous peoples, Art.31; Convention on the Protection and Promotion of the Diversity of Cultural Expressions, Art.7; Convention for the Safeguarding of Intangible Cultural Heritage, Art.15; Convention on Biological Diversity, Arts. 8(j), 10(c), 15; International Covenant on Civil and Political Rights, Art.27.

[70] Also COFI highlighted the need for a participatory approach to research, referring generally to the participation of fishers. See FAO Fisheries Report No.639, FIPL/R639, para. 23, available at http://www.fao.org/docrep/003/y0422e/y0422e00.htm#TopOfPage

3. CONCLUSION

The Code is not tailored to indigenous fishing communities specifically, but it does regulate issues of relevance to them. The Code is sparse in its direct reference to indigenous fishing communities but it is relevant to indigenous fishing communities throughout, implicitly viewing them as part of the category of small-scale and artisanal fisheries. Although this mere implied reference to indigenous fishing communities may be a source of criticism for the Code from an indigenous peoples' perspective, it has to be borne in mind that the Code refers in Article 3 to international instruments that include specific articles on indigenous peoples or indigenous fishing communities which have to be considered in the interpretation and application of the Code. Indeed, indigenous fishing communities should insist on the implementation of the Code in a holistic manner which requires its interpretation and implementation in accordance with ILO Convention No. 169, and in the light of the UN Declaration on the Rights of Indigenous Peoples and other relevant international instruments.

In sum, if the Code is implemented fully and effectively in a coherent and holistic manner as is intended, it:

- can contribute to the improved management of small-scale and artisanal fisheries (including indigenous fishing communities);
- can help eliminate poverty among small-scale and artisanal fishers; and
- assist achieving long-term sustainability.

However, it needs to be noted that the Code focuses primarily on industrial and large-scale fisheries and that the protection of the interests of small-scale, subsistence and indigenous fishing communities needs to be strengthened. The need for this gap to be addressed has been emphasized in the recently concluded twenty-eighth session of COFI in March 2009 where many Member States expressed the need for an international instrument on small-scale fisheries. They suggested a new article in the Code, an International Plan Of Action (IPOA) and/or the development of Guidelines to secure sustainable small-scale fisheries and create a framework for monitoring and reporting.[71] The consideration of the concerns and interests of indigenous communities in this context would be desirable from the perspective of indigenous peoples.

The Code's emphasis of a participatory approach is of fundamental interest to indigenous fishing communities. It reverses the approach from a top-down process to a participatory and interactive one. Securing participation of indigenous fishing communities in fisheries management is in line with the principle and right to free, prior and informed consent. Therefore, in small-scale fisheries, representatives of indigenous fishing communities (through participatory management) and NGOs representing indigenous peoples or focusing on indigenous issues (given their grass roots affiliations), should be closely involved in facilitating and supporting the implementation of the Code.

The Code requires governments to take the lead in its implementation because they are responsible for the development of national fisheries policy and legislation. The state's responsibilities and obligation with respect to the small-scale fishing sector and fishers and thus also for indigenous fishing communities are summarized in Box 5.

[71] Committee on Fisheries Draft Report, Twenty-eighth Session, Rome, Italy, 2 – 6 March 2009, see para. 82.

5. Overview on recommendations of the Code addressing Governments that are important to indigenous fishing communities

According to the Code of Conduct in the context of indigenous peoples, the State should:

- protect the rights of fishers to a secure livelihood (Art.6.18);
- minimize adverse impacts on local communities through aquaculture (Art.6.19);
- ensure that management measures take into account interests of subsistence, small-scale and artisanal fisheries (Art.7.2.2);
- recognize decisions on the use, conservation and management of fishery resources, traditional practices and needs of indigenous peoples (Art.7.6.6);
- ensure that Coastal area management plans take into account interests of artisanal and subsistence fishers (Art.8.11.3);
- ensure that aquaculture development does not threaten the livelihoods of local communities and access to fishing grounds (Art.9.1.4);
- ensure that policy, legal and institutional frameworks take the needs of coastal communities into account (Art.10.1.1);
- ensure consultation of coastal fishing communities in decision-making processes and coastal area management planning and development (Art.10.1.2);
- ensure that institutional and legal frameworks governing the use and access to coastal resources take into account the rights of coastal fishing communities and their customary practices (Art.10.1.3);
- investigate and document traditional fisheries (Art.12.12).

States as primary implementers of the Code and FAO in their efforts to facilitate and support the implementation of the Code, should ensure not only that different actors involved in the fisheries sector are aware of the rights, interests and needs of indigenous fishing communities but also that the same communities are involved as partners in the implementation of the Code. In addition, indigenous fishing communities should use the Code to lobby their national governments to implement and apply its stipulations in a manner that respects their rights and interests. NGOs, academics and other interested groups should play supporting roles.