

ARE JAPANESE FISHERIES RESPONSIBLE? FROM RESPONSIBLE FISHERIES TO AUTHENTIC FISHERIES

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ABSTRACT

The main purpose of this study is to answer a question, “Are Japanese Fisheries Responsible?” The author endeavors to find the answer by analysing an historical trend of the Japanese fisheries policies, recent legislation, the “Fisheries Basic Law” and the “Sustainable Aquaculture Production Assurance Law”, and example cases of community-based fisheries management by a fisheries cooperatives in Japan, in accordance with the related Articles of the FAO Code of Conduct for Responsible Fisheries (hereinafter referred as “the Code”). The result of the analysis indicates that the newly established fisheries legislation of Japan covers the main principles of the Code and that traditional Japanese coastal fisheries management is a typical example of responsible fisheries. The author then proposes “Ethics in Fisheries” including the concept of “Authentic Fisheries” as the essence of principles for responsible fisheries management based on analysis of the Code and the Japanese example cases. “Authentic Fisheries” is the ultimate and most idealistic shape of fisheries where fishers themselves are expected to manage their own fisheries based on trust and responsibility, in a transparent manner, with the delegation of authority for management of the fisheries. Notwithstanding, the government authorities are continuously expected to enforce fisheries laws and regulations but mostly on outsiders, such as IUU fishing operators.

Keywords: Responsible Fisheries in Japan; Ethics in Fisheries; Authentic Fisheries

INTRODUCTION

The elaboration of the Code was initiated by the International Conference on Responsible Fishing (Cancun Conference) held in 1992. The Cancun Conference had been convened by Mexico, in collaboration with FAO, with a view to solving the dolphin bycatch issue of tuna purse seine fisheries in the Eastern Tropical Pacific Ocean. The essential principles in the Code, such as *sustainable development* and a *precautionary approach* were then elaborated and endorsed by the United Nations Conference on Environment and Development (UNCED) in 1992. FAO continued the process of further elaboration of the Code and finalized it by harmonizing its high seas related provisions with the UN Fish Stocks Agreement in 1995. The Code was adopted by the Twenty-eighth Session of the FAO Conference in October 1995. While the FAO “Compliance Agreement”, which is recognized as an integral part of the Code, is a legally binding international instrument, the Code itself is not legally binding. However, the Code covers all aspects of fisheries and is still continuously being activated through the elaboration of a series of Technical Guidelines. The Code, in this sense, is the most comprehensive and recent set of international guiding principles in fisheries, such as *stewardship*, *sustainable development* and a *precautionary approach*.

The Code has been implemented nationally, regionally and globally. For example, the USA established the *Implementation Plan of the Code* in 1997 and has been implementing the Code according to the situation of fisheries in the USA. It also drafted “A Code of Conduct for Responsible Aquaculture Development in the U.S. Exclusive Economic Zone” in 2002 [1]. The Southeast Asian Fisheries Development Center (SEAFDEC) has been regionalizing the Code according to the regional situation of fisheries in Southeast Asia, and published the series of “Regional Guidelines for Responsible Fisheries in Southeast Asia” for Fishing Operations, Aquaculture and Fisheries Management [2]. In order to secure global implementation of the Code, FAO has elaborated International Plans of Action (IPOAs) for: (i) “Reducing Incidental Catch of Seabirds in Longline Fisheries”; (ii) “the Conservation and Management of Sharks”; (iii) “the Management of Fishing Capacity”; and (iv) to “Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing [3]. Most recently FAO has elaborated the “Technical Guidelines for the Ecosystem Approach to Fisheries” based

on the outcome of the Reykjavik Conference held in 2001 and of the Expert Consultation on Ecosystem-based Fisheries Management in 2002 [4].

The question now to be addressed is: What has been happening in Japan with regard to the implementation of the Code? Are Japanese fisheries responsible?

The main thrust of this paper is an attempt to answer these questions. The process used for doing so consists of the following steps: (1) review of the general trend of the Japanese fisheries policy and analysis of the recent Japanese fisheries legislation in light of the principles of the Code; (2) review of traditional coastal fisheries management in Japan including a survey of community-based abalone fishery management by a fisheries cooperative in Tokushima; and (3) review of recent policy and efforts made by industries in offshore and distant water fisheries toward responsible fisheries. In conclusion, the author proposes “Ethics in Fisheries” including the concept of “Authentic Fisheries” as the policy thrust in fisheries in the twenty-first century.

TREND IN JAPANESE FISHERIES POLICY

Before analysing implementation of the Code in Japan, it is worth reviewing the general trend of Japanese fisheries policy after World War II. The General Headquarters of the Supreme Commander for the Allied Powers (GHQ) introduced the western methods of fisheries management into Japan in the initial process of reconstruction of the Japanese fisheries after the war. The main thrust of this policy was to introduce democracy into the fisheries sector [5]. The new “Fisheries Law” was established in 1949. This law sought the promotion of coastal and offshore fisheries and fair allocation of fisheries rights and licenses, mainly among fisheries cooperatives, in order to make fisheries “democratic”. In 1952, the Japanese catch reached 4.89 million tonnes which exceeded the level existing before the war. After signature of the Peace Treaty (1951) and abolition of the so-called “MacArthur Line” (1952), fisheries started extending from coast to offshore and then to distant waters. In 1951 the “Fisheries Resources Protection Law” was established with a view to protection of the resources and to their enhancement. In 1960, the Investigation Committee on Basic Problems of Agriculture, Forestry and Fisheries submitted a report “Basic Problems and Measures of Fisheries” to the Government. The Committee proposed: (i) promotion of aquaculture; (ii) rationalization of capture fisheries for coastal fisheries; (iii) reinforcement of processing and distribution systems; and (iv) modernization of a management structure for small- and middle-scale offshore fisheries. Based on the report “Coastal and Small- and Middle-Scale Offshore Fisheries Promotion Law” (hereinafter referred to as “Promotion Law”) was established in 1963.

From 1963 to 2001, until the new basic fisheries law “Fisheries Basic Law” (hereinafter referred to as “Basic Law”) was established, the main fisheries policy thrust of the Government of Japan was based on the Promotion Law. Article 1 of the Promotion Law prescribed its basic policy contents, namely: (i) increase of productivity of coastal and offshore fisheries; (ii) modernization and rationalization; (iii) promotion of welfare of fishers; and (iv) promotion of fisheries with a view to raising the standards of living of fishers to the level of workers in other industries. Article 3 prescribed the following measures to be taken by the Government in order to reach the objectives of the policy principles: (i) maintenance and enhancement of fisheries resources; (ii) increase of productivity by improving fishing ports, fishing grounds and technology; (iii) modernization of management; (iv) rationalization of fisheries distribution systems, improvement of processing, enhancement of demand and stabilization of prices; (v) promotion of exportation of fishery products; (vi) adjustment of importation, (vii) rationalization of distribution and stabilization of prices of materials for fisheries; (viii) measures to deal with natural disasters and accidents; (ix) training and securing a sufficient number of fishers; (x) stabilization of livelihoods and employment by promoting alternative sources of income; (xi) promotion of fishers’ welfare.

By analysing annual reports on fisheries, which are required for submission by the government to the “National Diet” under the Promotion Law, the trend of Japanese fisheries policy over the last forty years can be identified in three phases [6]. In the first phase, from 1963 to the mid 70’s, Japanese fisheries were expanded from coastal to offshore and then to distant waters. The second phase was initiated in 1973 as a

result of the historical first “oil shock” - an incident which occurred due to the shortage of oil supply because of the Middle East conflicts. The introduction of Exclusive Economic Zones (EEZs) by major coastal States worsened the situation for Japanese fisheries forcing them to survive under a limited situation in terms of energy and resources. The third phase can be noted to have commenced in the early 90’s when the United Nations General Assembly adopted two resolutions on the moratorium of large-scale high seas driftnet fishing, one in 1989 and the other in 1991, followed by the convening of the United Nations Conference on Environment and Development (UNCED) in 1992. Moreover, the Code itself was adopted in 1995. During this last phase and up until now, Japanese fisheries policy became environmentally conscious, and a co-existence between fisheries and the environment has been pursued.

The main policy in the first phase in seeking enhancement of fisheries productivity had lost its priority. In the second phase, effectiveness, under the limited energy and resources situation, was sought. Eventually the main priority emerged in the third phase as being how fisheries should be made sustainable and responsible without adversely affecting the environment. A significant shift in the policy can be observed, such as from increase of volume to improvement of efficiency and quality, and from alteration of environment to co-existence with environment. Moreover, a shift in the targeted people for the policy can also be noted, i.e. from fishers to a broader range of the population, such as consumers and visitors to the sea and fishing ports for recreational purposes.

FUNDAMENTAL POLICY IN THE BASIC LAW

The Basic Law was established in 2001 based on a two-year consultation in the Fisheries Basic Policy Committee (1997 -1999). By establishing the Basic Law, the main legislation forming the Japanese fisheries policy was changed from the Promotion Law to the Basic Law. The law consists of thirty-nine articles and prescribes the new fundamental policy for Japanese fisheries. There are two main thrusts of the Basic Law: (i) stable supply of fish and fishery products to the nation by sustainable utilization of fisheries resources in harmony with the environment and (ii) sound development of fisheries and related industries. It should be considered that one of the main objectives of the old Promotion Law was to increase productivity of coastal and offshore fisheries. However, due to the growing number of vessels and development of technology, fishing capacity increased to a level more than that presumably appropriate in considering sustainability of the marine living resources targeted in recent years. It therefore became essential to consider how productivity and capacity should be controlled, and, at the same time, maintain sustainable fisheries co-existing with the environment. The main thrust therefore of the Basic Law became the sustainable utilization of fisheries resources.

Another objective of the Promotion Law was to raise the standard of living of fishers based on the fact that fishers were poorer than any other industrial workers in the early 60’s. The main beneficiaries were therefore considered as fishers. In recent years, however, many other users of the sea and coastal areas evolved, for example, for recreational purposes. At the same time, consumers had become more conscious about fisheries and the environment. In other words, fisheries were not any more issues only for fishers but also for many other categories of people concerned, including other marine users, consumers and environmental-conscious individuals. Therefore, the Basic Law targets the Japanese nation as a whole and seeks stable supply of fish and fishery products to the nation. It should be noted, moreover, that the Basic Law also targets all aspects of fisheries and related industries, such as distribution and processing, while the Promotion Law targeted only coastal and small- and middle-scale offshore fisheries.

A comparative analysis between the Basic Law and the Code has been done in order to identify to what extent the principles of responsible fisheries are reflected in the Basic Law. To start with, there is no term “Responsible Fisheries” found in the Basic Law. However, most of the basic principles of the Code, as prescribed in its Article 6, “General Principles”, are well taken in the articles of the Basic Law. For example, the first clause (Article 6.1) of the General Principles of the Code is *the right of fishing and obligation of resources conservation* namely, *stewardship*. Right of fishing and obligation of resources conservation are two sides of the same coin. Article 6.1 of the Basic Law prescribes that fishers and fishers’ associations shall make

efforts subjectively towards realization of the basic policy issues. The basic policy issues are stable supply of fish and fishery products prescribed in Article 2, and sound development of fisheries prescribed in Article 3 of the Basic Law. “Stable supply of fish and fishery products” includes appropriate conservation and management of fisheries resources and stock enhancement in harmony with environment (Article 2.2). Thus, fishers and fishers’ associations, who have the right to fish, shall endeavor subjectively towards, *inter alia*, appropriate conservation, management and enhancement of fisheries resources in harmony with the environment. The first and most fundamental principle of the Code - *stewardship* - is therefore well addressed in the Basic Law.

The principle of *sustainable development* referred in the second clause of the General Principles is another essential principle of the Code. Article 2.2 of the Basic Law also prescribes that sustainable utilization of fisheries resources shall be secured in considering that fisheries resources are part of the ecosystem and not unlimited. It is interesting to note that the Basic Law also recognizes fisheries resources as part of the ecosystem. This notion is similar in the Code, which calls for the conservation of not only target species, but also of species belonging to the same ecosystem or associated with or dependent upon the target species.

On the other hand, there is no article in the Basic Law which directly refers to a *precautionary approach* referred in the fifth clause of the General Principles. The sixth clause, *selective and environmentally safe fishing gear and practices*, is neither referred directly in the Basic Law, but environmentally safe technology may be taken account in the context of *research and technology development* referred to in Articles 15 and 27 of the Law.

The attached table as Annex shows that it can be seen that most general principles of the Code other than “Precautionary approach” and “Gear selectivity” are covered by the Basic Law. While there is no specific reference to “responsible fisheries” in the Basic Law, the Law was created for pursuing responsible fisheries as the basic thrust of the new Japanese fisheries policy.

THE CODE AND THE SUSTAINABLE AQUACULTURE PRODUCTION ASSURANCE LAW

Article 6.19 of the Code recognizes the importance of aquaculture, including culture-based fisheries, as a means to promote diversification of income and diet. It also calls for responsible utilization of resources and minimization of adverse impacts on the environment and on local communities. This basic principle is further elaborated in Article 9 of the Code, “Aquaculture Development”. The Article comprises four sections, namely: 9.1 Responsible development of aquaculture, including culture-based fisheries, in areas under national jurisdiction; 9.2 Responsible development of aquaculture including culture-based fisheries within transboundary aquatic ecosystems; 9.3 Use of aquatic genetic resources for the purposes of aquaculture, including culture-based fisheries; and 9.4 Responsible aquaculture at the production level.

The Sustainable Aquaculture Production Assurance Law (hereinafter referred to as “Sustainable Aquaculture Law”) was established in 1999 to ensure sustainable aquaculture production in Japan. The objective of the law is to improve the environment of aquaculture grounds and prevent the spread of disease of living resources for aquaculture. The definition of *Sustainable Aquaculture Production Assurance* is, according to the law, to maintain aquaculture grounds in sound conditions or improve them, to prevent the spread of designated fish diseases and eventually to sustain or increase aquaculture production in a stable manner on a long-term basis. Article 3 of the Sustainable Aquaculture Law requires the Minister of Agriculture, Forestry and Fisheries to establish a “Basic Plan of Action” for securing sustainable aquaculture production. The plan shall include goals, appropriate measures and necessary arrangements and facilities with a view to improving aquaculture grounds and preventing the spread of disease.

For improvement of aquaculture grounds, Article 4 allows fisheries cooperatives, which carry the area-designated fishing right for aquaculture, to prepare an “Aquaculture Grounds Improvement Plan”, based on the Basic Plan of Action, and to seek the approval on it by the Governor of each Prefecture. The Governors may recommend fisheries cooperatives to take appropriate actions, including preparation of an Aquaculture Grounds Improvement Plan, when conditions of the aquaculture grounds have deteriorated against the Basic

Plan of Action (Article 7). For prevention of fish diseases, the Governors may order necessary measures such as limitation and prohibition of transportation of infected animals and plants, their incineration and burial, and the sterilization of facilities infected, such as cages and nets (Article 8). The Governors, however, need to compensate for any loss and damages caused by such orders. The Governors may also conduct inspection (Article 10), request reporting (Article 11) and station “Fisheries Diseases Prevention Officers” (Article 13). The Governors are required to report any disease epidemic to the Minister of Agriculture, Forestry and Fisheries (Article 12). The Minister promotes research for preventing diseases (Article 14). The Governors give technical guidance to fisheries cooperatives (Article 15).

The Sustainable Aquaculture Law seeks responsible aquaculture under the national jurisdiction of Japan with focus on improvement of the aquaculture grounds’ environment and prevention of the spread of fish diseases. This approach coheres with Articles 9.1 and 9.4 of the Code. The establishment of the Law itself is an embodiment of *an appropriate legal and administrative framework* prescribed in Article 9.1.1 of the Code. The Basic Plan of Action corresponds to *aquaculture development strategies and plans* referred to in Article 9.1.3 of the Code. The Aquaculture Grounds Improvement Plan prepared by fishery cooperatives allows for the participation of fish farmers, as prescribed in Article 9.4.2 of the Code. The prevention of the spread of fish diseases sought by the Law coheres with Article 9.4.4 of the Code. Promotion of research by the National Government and guidance by the Prefectural Governments are also encouraged by Article 9.4.1 of the Code. Kataoka (2001) highlighted two significant merits of the Sustainable Aquaculture Law as follows: (1) the Law clearly defined the responsibilities and roles of Prefectural Governments, fishery cooperatives and fish farmers, respectively, and established a framework to promote sustainable aquaculture production; and (2) the Law introduced the legal force of Governors to recommend fisheries cooperatives to establish an Aquaculture Ground Improvement Plan when the environment of aquaculture grounds is deteriorated [7]. Further enhancement of public awareness of the Law, with the consequent increase in the number of fisheries cooperatives to introduce the Improvement Plan should be encouraged, so that this Law becomes fully implemented thus ensuring sustainable aquaculture practices all over Japan.

On the other hand, what are lacking in the Sustainable Aquaculture Law are the aspects of transboundary aquatic ecosystem and aquatic genetic resources. Sea farming by releasing juveniles of marine living resources is very popular in Japan, but not targeted by the Law. In order to compliment policy on sea farming, the Government of Japan established in 2000 the *Fourth Basic Policy on Production and Releasing of Juveniles of Fishery Animals and Rearing of Fishery Animals* (the Fourth Basic Policy on Sea Farming) [8]. The policy seeks *responsible sea farming* in considering the transboundary nature and the genetic aspect of fisheries resources.

TRADITIONAL COASTAL FISHERIES MANAGEMENT IN JAPAN

The following are two examples of successful and autonomous approaches towards responsible coastal fisheries in Japan.

A Fishing Village Constitution

Yagi (1984) reported a famous example of Japanese responsible fisheries in Ehime Prefecture [9]. The Yusu Fisheries Cooperative established a “Fishing Village Constitution” in 1982. This Constitution was not a legally binding law, but rather a set of guiding principles on fisheries management for the cooperative. The Constitution firstly prescribes that the sea managed by the cooperative is the common property of members (Article 3). Members have an obligation to conserve the sea as common property (Article 4). This concept is exactly coherent with the *stewardship* principle prescribed in Article 6.1 of the Code. Under the Japanese legal system no property right is considered to be incident to fisheries resources before being caught. However, most coastal fishers in Japan, who are delegated the common fisheries right, assume that the coastal waters in front of their communities and the living marine resources in these waters are almost their own property or, at least, something they are obliged to protect for themselves and for their future generations. Such a sense of

“possession” may generate traditional and autonomous management of the Japanese coastal fisheries resources, thus leading to sustainable coastal fisheries.

The Constitution further prescribes that any pollution caused must be resolved based on polluters’ responsibility, and members have an obligation to impart a clean and abundant sea to future generations (Article 4). The first part of this notion coheres with *habitat protection* as set out in Article 6.8 and recalls *a precautionary approach* as set out in Article 6.5 of the Code. The later part exactly refers to *sustainable development*, which is the core principle of the Code. It is indeed noteworthy that this Constitution was established ten years before UNCED and twelve years before the establishment of the Code.

Autonomy is essential for implementing the Code in its voluntary nature. It is also important to stress that autonomous discipline in the community is one of the most effective and efficient ways for enforcing the rules for responsible fisheries.

The Constitution prescribes limited entry, limited efforts and penalties decided by the cooperative. The importance of education through cooperative activities in the community is also stressed. Such autonomous sets of rules, penalties, public awareness and enforcement are essential for Japanese responsible fisheries management. It is not always purely scientific, but also based on tradition and custom consisting of knowledge, experience gained and lessons accumulated and imparted to generations over a long period of time. Such an approach can be found in many coastal fisheries communities in Japan.

Abalone fishery management being implemented by the “Abu Fisheries Cooperative” in Tokushima

The Abu Fisheries Cooperative is one of six fisheries cooperatives in Yuki, west of Tokushima Prefecture on Shikoku Island [10]. This cooperative has 98 full members and 31 associate members, who mainly catch abalone through diving fishing in summer, and spiny lobsters by gillnets in winter. In particular, abalone is the main targeted species of the cooperative and more than 13 tonnes of abalone are caught annually [11]. The cooperative has been managing their abalone fishery since the early 60s. It first agreed, in 1961, on three-year management measures including catch prohibition of juveniles, autonomous inspection at landing sites, and suspension of fishing as a penalty if juveniles were caught against the agreement. Due to these measures abalone catches jumped from 4.8 tonnes in 1961 to 10.1 tonnes in 1965 and 19.3 tonnes in 1966. The catches reached the peak of 53 tonnes, in 1974, but since then, according to the former President of the cooperative, have been gradually declining, mainly because the cooperative discontinued inspection at landing sites. The current main activities of the abalone fishery management are a combination of autonomous surveillance on poaching, and releasing of juveniles. In particular, the surveillance is effectively conducted not only on outsiders but also on the cooperative members themselves. While the main driving force of the surveillance is a group of young and middle-aged members, all people (other than females, children and elders more than 65 years old) engaged in the fishery even only on one day are obliged to participate in the surveillance activity. Surveillance is conducted every day except on stormy days by a group of three people, one in a cooperative office by using radar, another from a car on a hill and the third on a fishing vessel. At the time of the survey, fifty-four members (eighteen groups) were in charge of the surveillance. Checks on an ad hoc basis on belongings, including catches, are conducted at landing sites without prior notice.

The cooperative agrees annually on a set of rules for the abalone diving fishery, called “Matters for Notification on Diving Fishery”. The rules cover in detail the opening date of the fishery, inspection at landing sites, catch prohibition of juveniles and size limitation for each targeted species, safety operation, surveillance of poaching, operation by non-members, etc. The rules have been updated annually with appropriate modification according to the actual situation of the fishery, and scientific advice provided by a former researcher of the Prefectural research station. Operation of the fishery is exclusive to members only, with some exception for household consumption. Obligation to participate in surveillance is very strict and directly linked to the right to be engaged in the fishery. For example, the role of surveillance is not transferable even to a spouse. A cooperative member is prohibited from participating in fishing operations while performing surveillance duties. Fishers have to accept the personal sacrifice involved so as to ensure autonomous

enforcement of the rules. A strong leadership comprising a keen sense of responsibility is required to maintain the system. While the driving force of the system is the group of young and middle-aged diving fishers, elder members of the cooperative mentally and ethically back up the activities. Responsibility and obligation have been passed down from one generation to the next, together with the targeted resources and the fishing rights.

The contribution of the retired scientist from the Prefectural research station is another factor which led to this successful management operation. This scientist had been conducting research on the abalone fishery during his professional assignment at the research station of Tokushima Prefecture. Even though presently retired he continues to advise the cooperative on appropriate measures, such as the size limitation. For example, he proposed to raise the minimum size limit of one of the targeted abalones from 9 cm to 11 cm, while neighbouring cooperatives still use 9 cm as the limit. The fishers accepted the more restricted measures because of their full reliance on the scientific advice of the researcher. He is now proposing to introduce a closed area (Satoumi) to further enhance the stock. It is accepted worldwide that the best scientific evidence available is essential for implementation of the Code. However, the best scientific evidence applicable for each local fishery and resource situation is not always available. The case of the Abu Fisheries Cooperative is therefore indicative of how local communities should seek and possess the best scientific advice.

The abalone fishery management being carried out by the Abu Fisheries Cooperative is one of the most successful, autonomous and highly appreciated community-based fisheries management cases in the Japanese coastal fisheries with a view towards enhancing responsible and sustainable fisheries. It is also indicative how each community can establish and maintain an autonomous system of fisheries management and enforcement and how each community can secure the best scientific evidence available for daily practice of management in a local area.

RESPONSIBLE APPROACHES IN OFFSHORE AND DISTANT WATER FISHERIES IN JAPAN

In 1997 Japan introduced the Total Allowable Catch (TAC) System. The TAC System was introduced upon entry into force in 1994 of the United Nations Convention on Law of the Sea (UNCLOS). It is not clear whether or not the Code was taken into account in the process of establishing the TAC System, but it is clear that the concept of sustainable development by harmonizing promotion of fisheries and conservation of the environment was the underlying factor leading to its establishment [12]. In particular, the TAC Agreement System, by which fishers themselves decide how they should implement the TAC System, is quite unique and fits well into the traditional and autonomous fisheries management system in Japan. For example, fishers may agree on: (i) supplemental regulations such as size limitation of targeted fish and fishing efforts control in terms of the number of vessels and/or period of operations; (ii) reallocation of TAC by area and season; (iii) penalties for violating the Agreement; and (iv) individual allocation of quota to each fisher, as appropriate [13].

In addition to the national TAC System, a TAC system at Prefectural level was introduced into Japanese (Sailfin) sandfish management off the coast of the Akita Prefecture and resulted in being one of the most successful examples of Japanese autonomous fisheries management at the regional level [14]. Japanese (Sailfin) sandfish, *Arctoscopus japonicus*, is one of important fisheries resources caught in the Sea of Japan off the coast of the Honshu Island of Japan and the Korean Peninsula. In Akita Prefecture, all fishers, in collaboration with the Akita Prefectural Fisheries Promotion Center, voluntarily closed sandfish fisheries for three years from 1992 to 1995 due to the rapid decrease of their catch, after which they re-opened the fishery under a very rigid management scheme, resulting recently in a steadily increased catch. It should be noted in this regard that the introduction of the closure was the initiative taken by the fishers themselves. In order to build consensus among fishers, much efforts are made among the deferent types of fisheries and at the different levels of decision-making processes. The Sandfish Management Plan consisted of input control such as size limitation, closed seasons and area, gear regulations and reduction of fishing capacities, and output control by the local TAC System. Stock enhancement by development of spawning grounds and releasing juveniles was also conducted simultaneously.

In distant water fisheries, many efforts have also been made, particularly in tuna fisheries. The “International Plan of Action for the Management of Fishing Capacity” (IPOA-Capacity), adopted by the Twenty-third session of the Committee on Fisheries (COFI) in 1999, called for action on reducing fishing capacity, such as the establishment of a national plan of action and international cooperation through regional fishery bodies. The required reduction was to vary from fishery to fishery, but 20 to 30 percent was required for large-scale tuna longline fleets [15]. In response to this requirement, Japan reduced 132 tuna longline vessels in 1999, which corresponded to about 20 percent of the total number of such Japanese tuna vessels. This action by Japan was considered to be a responsible practice in accordance with Article 6.3 of the Code, namely *reduction of excess fishing capacity*.

Japan has also been combating IUU fishing. In 1999, the Law for Special Measures on Reinforcement of Conservation and Management of Tuna Resources was established to reinforce domestic regulations, such as obligatory reporting of names of fishing vessels upon importation of tuna, in order to exclude importation of tuna caught by IUU fishing. Japan accepted the FAO Compliance Agreement in June 2000. In October of the same year, upon the initiative taken by the Japanese tuna fisheries industry in collaboration with industries in Chinese Taipei, the Republic of Korea, the Philippines, and Indonesia, the Organization for Promotion of Responsible Tuna Fisheries (OPRT) was established as an International NGO. OPRT seeks responsible tuna fisheries through voluntary measures taken by the industries, not only at the production level, but also at distribution and marketing levels. Such measures include establishment of a list of responsible tuna fishing vessels, eco-labeling for tuna caught by the responsible tuna fishing vessels, scrapping of Flag of Convenience (FOC) fishing vessels, investigation of imported tuna and international cooperation and exchange of information for responsible management of tuna resources. After the adoption by FAO of an International Plan of Action to Prevent, Deter and Eliminate IUU Fishing (IPOA-IUU), the Japanese efforts to combat IUU fishing have been further accelerated, and Japan, as the world’s largest importer and one of the major fishing nations of tuna has been playing a leading role in regional fishery bodies, such as the International Commission for the Conservation of Atlantic Tunas (ICCAT).

ETHICS IN FISHERIES: FROM RESPONSIBLE FISHERIES TO AUTHENTIC FISHERIES

The Code is the most recent and comprehensive set of principles for responsible fisheries of a voluntary nature. The words “responsible fisheries” mean the fisheries where sustainable development is sought in considering the environment and humanity for future generations. Article 6, the General Principles, of the Code contains widely accepted principles which are incorporated into the concept of responsible fisheries, such as stewardship (which means a genuine link between the right to fish and an obligation of resources conservation), control of excess fishing capacity, a precautionary approach based on the best available scientific evidence, gear selectivity, habitat protection, flag state responsibility, multilateral approaches, transparency, and an appropriate relationship between international trade and management of fisheries.

According to the analysis made in this study, the recent fisheries legislation of Japan, such as the Basic Law and the Sustainable Aquaculture Law, seeks responsible fisheries, including aquaculture, as its basic thrust in fisheries policy. These laws are not perfectly equivalent to the Code, but they seek to apply the principles of the Code to the specific circumstances and characteristics in Japan and the Japanese fisheries.

It can also be observed that traditional Japanese coastal fisheries management is a typical example of responsible fisheries management based on customary rules, experience gained and lessons accumulated and passed down through generations. It is also worth highlighting that such management is efficiently implemented by the fishers themselves in each community. Taking into consideration the voluntary nature of the Code, autonomy is essential for its implementation. While monitoring, control and surveillance (MCS) is one of the essential principles of the Code, it is very difficult to implement the Code without autonomous will and initiative by fishers themselves. Once fishers themselves possess self pride, responsibility and consciousness and take the primary and leading role in fisheries management, real responsible fisheries will be effectively and successfully practiced.

Fishers are often considered as individuals that should be subjected to control by authorities. Responsible fisheries, however, can never be achieved through force on fishers. Successful cases in the Japanese fisheries sector indicate that autonomous management by fishers themselves, with partial delegation of fisheries management authority to fishery communities, could be the most efficient and economic method to implement fisheries management measures. At this juncture, the author would like to refer to such an idealistic shape of fisheries as “*Authentic Fisheries*”, which is a step forward from Responsible Fisheries leading towards the desirable vision of fisheries in the twenty-first century. “Authentic” implies “reliability and trustworthiness, stressing that the thing considered is in agreement with fact or actuality” [16]. In *Authentic Fisheries*, based on the view that human nature is fundamentally good and trustworthy, the authorities trust fishers, delegate partially their mandate and authority of fisheries management to them, and establish a fisheries management system where fishers play the primary and leading role in taking appropriate fisheries management measures. These measures are also expected to be established by fishers themselves in accordance with each local fisheries situation and with the state of fishery stocks, based on the best scientific information available, as well as knowledge, experience gained, achievements and lessons learned within the communities, in collaboration with the authorities and scientific institutions. Consequently, enforcement by the authorities should concentrate primarily, and even perhaps only, on outsiders such as IUU fishing operators.

Based on the analysis of the Code and the Japanese experience, the author proposes the following set of ten “*Ethics in Fisheries*” principles, which are considered essential for responsible and authentic fisheries:

1. Fisheries should be sustainable.
2. Fisheries should be coexistent with environment.
3. Fisheries should be scientific.
4. Fisheries should be precautionary.
5. Fisheries should be fair.
6. Fisheries should be economically efficient.
7. Fisheries should be self-controlled.
8. Fisheries should be transparent.
9. Fisheries should be safe.
10. Fisheries should be authentic.

“Ethics” mean the moral principles governing or influencing conduct. “Morals” mean standards of behavior or principles of right and wrong [17]. Ethics in Fisheries are expected to provide a simple and concise set of principles which is applicable fully or partially, as appropriate, in any possible cases of fisheries policy-making and fishing practices. They must not be too long or complicated. They should be easily comprehensible, memory friendly and readily available for referral and evaluation whenever and by whomever necessary, if fisheries policies or fishing practices are to be kept in line with appropriate direction toward the desirable shape of fisheries, namely responsible and authentic fisheries. For example, it might be opportune to place a notice outlining the ten principles on the wall of a fisheries cooperative or in a cabin of a fishing vessel for easy reference for fishers and fisheries managers. Such ethics indicate the idealistic image of fisheries in the twenty-first century and without such clear vision of what fisheries should be in the future no fisheries policy, even on a day-to-day basis, can be elaborated.

CONCLUSION

Are Japanese fisheries responsible? As far as the author’s analysis on the Japanese fisheries policy, legislation and management practices is concerned, the answer is “Yes”. Most principles of the Code are well incorporated, if not perfectly or fully, into the recent elaboration of Japanese legislation and policy for fisheries. The Japanese coastal fisheries management examples cited above also indicate that traditional Japanese coastal fisheries could be considered as good examples of responsible fisheries, particularly due to the autonomous nature of their management. The experience gained and lessons accumulated in Japan could be disseminated and applied to other regions, while at the same time such application should be carefully performed on a step-by-step basis according to the specific characteristics of each region.

A simple set of the most basic and essential principles for fisheries policy-making and fishing practices is proposed as *Ethics in Fisheries* which include the concept of *Authentic Fisheries*. It is the author's intention to initiate discussion for further elaboration of the common understanding of utilization, conservation and management of the oceans and marine living resources among all stakeholders which would lead to the most idealistic shaping of fisheries in the twenty-first century. Without such initiatives and efforts, no fundamental fisheries policy can be elaborated and shared among all concerned.

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ENDNOTE

* This paper is written in the author’s capacity based on his Ph.D. study, “Analytical Study on Fundamental Principles of Fisheries Policy: in the Perspective of ‘Responsible Fisheries’ ” (in Japanese) and does not represent any position on the part of FAO.

ANNEX

The Code and the Basic Law

The Code	General Principles	The Basic Law
Article 6.1	Right & obligation to fish (Stewardship)	Article 2, 6, 7, 13
Article 6.2	Sustainable development	Article 2
Article 6.3	No overfishing & excess fishing capacity	Article 13
Article 6.4	Best scientific evidence, research & data	Article 15, 27
Article 6.5	Precautionary approach	?
Article 6.6	Gear selectivity	Article 15, 27?
Article 6.7	Handling, processing & distribution	Article 25
Article 6.8	Habitat protection	Article 17, 26
Article 6.9	Integrated coastal area management	Article 11, 30, 31, 32
Article 6.10	Monitoring, control & enforcement	Article 14
Article 6.11	Flag state responsibility	Article 14
Article 6.12	Multilateral approaches	Article 14
Article 6.13	Transparency & participation of fishers	Article 4, 11, 35, 37, 38
Article 6.14	International trade of fish	Article 19
Article 6.15	Dispute settlement	Article 14
Article 6.16	Awareness, education, training & participation	Article 4, 23, 28, 29
Article 6.17	Safe, healthy & fair	Article 23
Article 6.18	Artisanal and small-scale fisheries	Article 30, 21
Article 6.19	Aquaculture	Article 16
Article 5	Special requirements of developing countries	Article 20