

Institutional Constraints to the Development of Aquaculture

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It is very important in this field to determine in each case which authority is capable of issuing rules or provisions designed to regulate activity in each of the categories of waters in the world. I shall therefore attempt a case-by-case analysis.

ON THE HIGH SEAS

One of the few areas where prevailing international law on maritime matters has clear and definitive provisions, accepted by all nations, is the one involving effective authority on the high seas. This authority is the international community, for all countries recognize that the high seas belong to mankind as a whole and that consequently no one country can claim sovereignty or rights over them; this being so, only the community of nations can establish legal rules applicable to that portion of the earth's waters. Legal provisions have been established in the past with respect to other subjects which have the high seas for background, such as piracy, collisions, over-exploitation of fisheries, etc.

Nevertheless, thus far no international convention has been drafted which establishes a legal system with respect to the potential use of the waters of the high seas in activities such as aquaculture whose development is deliberate and rational. There is no doubt that it would be highly desirable for the United Nations or some other world authority to undertake the task of establishing such a legal system.

THE CONTIGUOUS ZONE

The various states recognize that, in addition to the territorial sea, there exists an intermediate zone between the territorial sea and the high seas.

There is considerable uncertainty in the world about the exact delimitation of the territorial sea, and this fact, which we shall be examining shortly, must be kept in mind in order to conclude that, consequently, the contiguous zone is not precisely determined since its location in the various seas depends in large measure on the recognized breadth of the territorial sea.

In any event, although its situation is somewhat uncertain, the so-called contiguous zone is fully recognized in international law, and various national and international rulings have been made with respect to it, notably the Convention on the Territorial Sea and the Contiguous Zone, to which 81 sovereign states adhere. This Convention does not grant coastal states any exclusive fishing rights, but it does grant them the power to establish certain restrictions in the interests of regulating customs, fiscal, immigration, and sanitation matters. The jurisdiction involved is restricted but nonetheless important for this study.

The authority granted coastal states over this zone could be interpreted to mean that those states are capable of regulating certain activities that might in one way or another threaten aquaculture in nearby regions, and this can give rise to regulatory measures of significance to this discussion.

THE TERRITORIAL SEA

The Convention on the Territorial Sea and the Contiguous Zone clearly establishes the authority of the coastal state over the belt of sea adjacent to its territory, so regulatory authority over the territorial sea is established by clear and categorical provisions of current international law. Also in effect is a Convention on the Conti-

guous Shelf, done at Geneva in 1958 and ratified by many nations. The continental shelf in many cases almost or partially coincides with the territorial sea. Nevertheless, the latter's exact breadth has yet to be determined, and this is the point on which, at the present time, not a single clear rule exists. For many decades a 3-mile breadth was accepted for this zone, but in recent years many countries, by now perhaps the majority, have adopted greater breadths. The rationale is that the 3-mile limit is unrealistic, given, on the one hand, the far greater distances over which countries can now exercise surveillance and, on the other, modern technical means that permit intensive exploitation of the sea's resources over much greater areas.

In other words, one could say that in present-day international law there is a uniform criterion for determining the regulatory authority for all kinds of activities in this zone of the sea adjacent to countries' territories—but what is this zone? The differences range from the traditional 3 miles to the 200 miles claimed by many Latin American countries. The lack of a uniform standard has even led to serious conflicts between the authorities of some countries and fishing interests, and at the time this paper is written the same uncertainty prevails.

Another point requiring clarification in certain cases, especially with respect to federally organized countries, is the determination of which authority of the coastal country should direct and regulate related matters inasmuch as uncertainty can arise as to whether that authority should be exercised by the federation as a whole

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or by each of the states into which it is subdivided. This is still a highly controversial question in many countries.

INLAND WATERS

In the field of international law there is no doubt that authority to regulate any activity in waters within a country's territory belongs to that country. Discussion may arise regarding which internal authority can make what regulation and which has jurisdiction to issue orders or controls on the subject. In most federally constituted countries of Latin America it would seem to be the criterion that these matters are the responsibility of the Federal Government. In the United States the point has not been so clearly defined, although the prevailing thesis appears to be that the individual states have jurisdiction, at least until the Federal Government enacts clear and definitive legislation to assume it.

Keeping in mind the foregoing analysis of the uncertainty about which authority should issue regulations regarding aquaculture, we can proceed to discuss what clear and definitive provisions may exist in the world, and especially in the western hemisphere, to cover this type of activity. We have already said that no clear regulations covering aquaculture exist with respect to the high seas, where the jurisdiction of the community of nations appears unchallenged. Authority over the other aquatic zones obviously devolves on the countries which exercise jurisdiction over them, although uncertainty remains as to the identification of those zones. At the same time we are faced with an almost total absence of concrete rulings that might offer guidelines for the development of aquaculture.

Some Latin American countries have passed fairly comprehensive laws concerning fishing activities, particularly Mexico, Guatemala, and Peru. However, these laws contain little that refers directly to aquaculture; they are almost totally limited

to provisions regulating traditional fishing, while the application of artificial means to promote the growth of aquatic organisms, the rational and artificial development of those organisms into colonies, and the problems caused by this type of activity are virtually ignored.

In the other countries, which lack even comprehensive legislation on fisheries, still fewer provisions exist. Consequently, they are without the means to resolve many of the problems that aquaculture would bring. Almost all of them have general legislation covering coastal property rights and the use that men can make of public bodies of water; it generally establishes priorities for such use, and fisheries, under which aquaculture would come, are in most cases relegated to one of the lowest priorities, after industry and sometimes after navigation. Everyone realizes that this would make the development of aquaculture difficult at a time when it would require legal protection to defend itself against the danger posed by industry, with its tendency to pollute, and by navigation.

There is the separate matter of the policy to be followed for the rational use and proper conservation of the natural resources which are the objective of aquaculture. This is currently an issue of much interest that relates directly to the purely legal aspects of the matter and may determine to a great extent the legislation that will have to be adopted regarding it.

On the one hand is the sound and lofty aim of helping man develop and use all the resources with which nature has blessed him. On the other is the very commendable point of view of those who have begun to observe with alarm how natural resources, including those of the sea, are shrinking in proportion to the man's needs, especially in view of the threat of excessive population. This latter concern causes countries to try to protect all the more zealously the natural resources with which they are blessed, as they come to fear their disappearance before they can be used.

Without conscious chauvinism but simply in a spirit of eagerness to protect the very subsistence of their inhabitants, there is a widespread and growing tendency among countries to preserve such natural resources for themselves.

This tendency is especially understandable when countries are confronted with activities that could somehow damage or destroy the resources contained in their waters without benefiting their own citizens or those of other countries.

Such attitudes, as long as they are not carried to absurd extremes, are perfectly proper, understandable, and admissible. Private international enterprise must get used to the idea that restrictions stemming from such proper national aspirations are to be expected as reasonable actions, and that countries, as they realize the need to enact laws to regulate aquaculture, will probably, in the majority of cases, include provisions reflecting the aforesaid concerns. Public opinion, however, must keep in mind the need for intelligent regulation of aquaculture which avoids wasting a country's natural potential and accepts, on an equitable basis, the technical and economic assistance that is often unavailable within its own borders.

Fortunately, the fact that there is virtually no legislation pertaining to aquaculture on the books makes it possible to plan for the adoption of laws which would take into account the foregoing points of view and coordinate them in a just and equitable manner.

We must keep in mind the welfare of the people of countries that are starting to draft legislation on aquaculture that will control activities rationally and fairly. We consider it advisable for some international organization, whether of an official or private professional nature, to undertake study on what a model law in this field should include. It might be undertaken by an international organization such as the United Nations or the Organization of American States, or by private professional groups such as the Inter-American Bar Association.