

# FISHERIES AND THE NEW CONVENTIONS ON THE LAW OF THE SEA

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## INTRODUCTION

In the past five years, the world community has become increasingly aware of the sea and its resources. Issues of the extent of state jurisdiction and of the degree of authority of international regimes have become the subject of intensive debate. The General Assembly of the United Nations has created a special committee for the bed of the sea.<sup>1</sup> Individual states are beginning to form their positions. It is expected that the 1958 Geneva Conventions on the Law of the Sea will soon be opened for new decisions within an international arena.

Thus far, the debate has focused almost entirely upon the bed of the sea and upon mineral resources and military interests. The problems of international marine fisheries have either been ignored or explicitly rejected. But, if the Geneva Conventions are opened for new decisions, the problems of fisheries will have to be addressed.

The necessity for addressing problems of fisheries comes primarily from the extreme difficulty of separating jurisdiction over the bed of the sea from jurisdiction over the superjacent waters. This difficulty derives both from the close interrelationships between different uses of the same area of the sea and from the fears (realistic or not) that rights over the bed of the sea will migrate upwards and interfere with the freedom of the seas on the surface. Furthermore, the necessity for addressing fishery problems at the new conventions will also derive from the growing interests of states in sharing in the distribution of the sea's wealth in general—an interest that emerges from the opportunity to share in the potential wealth of the seabed.

The raising of fishery issues as a kind of afterthought would not be of much concern were it not for the importance of fisheries

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1. G.A. Res. 2467, 23 U.N. GAOR, U.N. Doc. A/7477 (1969).

as a source of both international wealth and conflict. Among the resources shared by the world community, fisheries are the only ones of considerable economic importance—now and for many years to come. Mineral exploitation has not yet gone beyond 200 meters in depth; neither for oil nor for the surficial deposits of marigenous materials such as the phosphorite and manganese nodules. The net worth of recoverable oil in these deep waters is not likely to be great for many years to come. Even though there may be abundant pools of oil, the costs of deep water extraction are quite high and limit the net revenues that can be obtained. The commercial extraction of the nodules is still highly speculative.<sup>2</sup>

But fisheries, beyond limits of present national jurisdiction, have considerable economic value. Chapman has estimated that gross revenues from the annual harvest of living marine resources is on the order of nine billion dollars.<sup>3</sup> He bases this on the assumption of an average price of \$160 per metric ton, which appears to be excessive. In addition, his catch figures include catch within national marine waters as well as within international waters. Even so the fact remains that international marine fisheries contain far greater economic wealth than any other internationally shared resource.

Of equal importance, however, is the fact that fishing is one of the few activities of man in which different states are in direct confrontation with each other over the same resources. It is a confrontation that is increasing rapidly in extent and severity and it is becoming a major source of conflict in and of itself. No such direct confrontation of enterprise can be anticipated for the minerals of the seabed and subsoil—at least not for many years to come.<sup>4</sup> Confrontation over military uses of the sea is restricted to either a few parties or a few locations. The use of the sea for disposal of wastes or as a sink for organocides and other toxic materials is diffused and the damages are little known.<sup>5</sup> Nowhere

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2. [Editor's Note] *But cf. Mero, A Legal Regime for Deep Sea Mining*, 7 SAN DIEGO L. REV. 488 (1970).

3. Chapman, *Some Problems and Prospects for the Harvest of Living Marine Resources to the Year 2000*, at 1, April 1, 1970 (unpublished paper presented to a UNITAR Symposium).

4. [Editor's Note] *See Mero, A Legal Regime for Deep Sea Mining*, 7 SAN DIEGO L. REV. 488 (1970).

5. [Editor's Note] *See Note, Ocean Pollution: An Examination of the Problem and an Appeal For International Cooperation*, 7 SAN DIEGO L. REV. 488 (1970).

in the oceans is there a source of conflict so sustained and prevalent as in the international use of marine fisheries.

And yet, in spite of the economic and political importance, fishery problems are being dragged in by the back door, to face decisions by diplomats who, for the most part, lack the requisite interest and competence to solve such problems. It is because of this that it seems timely and useful to raise a few points that might be considered by those who are (presumably) preparing themselves for the new conferences on the law of the sea. (1) The problems of fisheries, because of both the centuries of use and the recent, dramatic changes in enterprise, are inordinately complex. However, the issues have not been precisely described and the alternative resolutions have scarcely been formulated. (2) The over-emphasis on the seabed may lead to short term gains for those related interests at the cost of long term damages to the world's interests in fisheries. (3) The character of today's decision-making arena is far different from that of 1958. The fishery diplomats will not be participating in a club of fishing states, but in the context of a global interest in the wealth of the seas, in a split between developed and developing states, and in the fears of a United States-Soviet Union condominium. (4) There is increasing awareness that the patterns of distribution among nations of the sea's wealth in fisheries is becoming more and more non-inclusive in nature, and that the opportunities for sharing are more restricted. (5) These non-inclusive patterns of distribution are supported by customary and conventional law. Non-inclusive access to (though not distribution of) wealth is required for efficiency in production. If there is to be more inclusive sharing of wealth, then there is need for totally new institutions and law.

#### I. COMPLEXITY OF FISHERIES AND THE INADEQUACY OF KNOWLEDGE

The complexity of fishery problems arises from natural, political, and economic factors. One example may help to indicate, in small part, some of these complexities. During the past decade, it was discovered that there were great concentrations of salmon off the east coast of Greenland. It was also found that these salmon originate from streams on both sides of the Atlantic. Commercially, it has been very profitable to take the salmon during their stay off Greenland and as they begin their journey to their spawning streams. But the salmon are also very valuable in

recreational terms when they enter their spawning streams. Thus a stock that swims freely between national and international waters is sought by the fishermen of a number of different states for quite different purposes.

In other instances, complicating factors include ecological interrelationships between stocks, so that exploitation of one affects the yield of another; economic inter-relationships between different fisheries utilized by the same vessels; differences in wage/price structures between fishermen taking the same stock; the use of a stock by vastly different kinds of effort, ranging from primitive dories to large, centrally-directed fleets of highly specialized vessels, and many more contrasts that make the difficulties of determining the "best use" almost intransigent.

In addition, fishing groups have historically formed many and varied kinds of international arrangements. These have great differences in degrees of authority, function, openness to new members and kinds of regulations imposed. In some cases, the same area of the sea may be governed by several different international agreements and arrangements.

The problems and the difficulties of dealing with fisheries are compounded by the international sharing of the resources and the condition of open access. These serve to impede, or to reduce incentives for state investment in scientific, economic, and political science research. There are many competent and dedicated marine biologists throughout the world, but their governments may be reluctant to provide the necessary support because the benefits may not accrue solely to the investing state.<sup>6</sup> Yet there is still a great deal of biological knowledge that must be obtained in order to improve management decisions.

Even though investment in biological research is insufficient, it is still many times greater than the investments in social science research. Fishery economists are few and far between and political scientists familiar with fisheries are virtually non-existent.

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6. The United States Bureau of the Budget has recently made a drastic cut in the research funds of the Bureau of Commercial Fisheries. This terribly short-sighted move was made on the assumption that fishery research does not contribute much to the national economy, and that the benefits of research are dissipated by the condition of open access. While there is some rationale for the assumption, the cut is likely to be severely detrimental to United States' interests. It will not only exacerbate the ill health of domestic fishing industries, but will also severely damage the ability of the United States to prepare for the reopening of the Geneva Conventions.

Economists have been hampered because their research frequently raises questions about the status of open access to fishery grounds. Suggestions for closing fishery access are not popular because of the implications for reduced employment opportunities, for the imposition of taxes or license fees, for changes in the concept of the freedom of the seas and for the distribution of the sea's wealth. And, yet, only through the closing of access can fishing become an economically rational enterprise.<sup>7</sup>

While problems of international fisheries are both extremely complicated and important, the knowledge required for dealing with them effectively is grossly inadequate. At the reopening of the Geneva Conventions, such questions as the following are likely to be raised: How can access be closed in order to permit efficient production? If access is to be closed, who is to be granted access? How can the current trends towards non-inclusive distribution of wealth be changed? What are the criteria for distribution? What is the importance of historic rights, preferential rights of coastal states and the principle of abstention? What are the alternative arrangements and regulations that could be adopted, and how will these affect the production and distribution of wealth? What are the implications of new arrangements for other uses of the sea?

It is most unlikely that satisfactory answers to these questions can be obtained prior to the reopening of the Geneva Conventions. If decisions are forced in the absence of information, the results may be damaging to the long run interests of the world community.

## II. UNDER-EMPHASIS ON FISHERIES

For a number of reasons, the current debate on the sea has focused almost exclusively on the bed of the sea and on military and mineral interests. In part, this is due to the technological developments that have recently made deep water mining appear to be a more commercially attractive proposition than before. A good deal of publicity has been given to possible ventures for mining deep sea manganese nodules. Oil companies have invested sizeable funds in leases for areas well beyond 200 meters in depth.

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7. See E. CHRISTY AND A. SCOTT, *THE COMMON WEALTH IN OCEAN FISHERIES* (1965); *The Management of Fishery Resources*, THE STATE OF FOOD AND AGRICULTURE 1967, FAO, Rome (1967); and Christy, *The Distribution of the Sea's Wealth in Fisheries*, *THE LAW OF THE SEA: OFFSHORE BOUNDARIES AND ZONES* (L. Alexander ed. 1967).

These potential exploitations have dramatized the inadequacy of the 1958 Geneva Conventions.

In addition, the possible use of the bed of the sea for the placement of military weapons was a strong motivation behind the introduction of the issues into the United Nations by Malta's Ambassador Pardo.<sup>8</sup> Because of these potential military and mineral developments, it is understandable that the mandate given by the General Assembly to the special committee was restricted to issues of the bed of the sea.

Another reason for this focus is that the issues concerning the bed of the sea are far easier to draw than those for international fisheries. The military and mineral interests are primarily concerned with the limitations of coastal state jurisdiction. The history of use is limited and has not, thus far, led to developments and vested interests that would have to be changed (although this is only apparently so with respect to military uses). In short, the potential gains and losses to these interests can be expressed with relative clarity.

In fisheries, the situation is quite different. The issues and the alternatives are not clear. In addition, it is not clear how interests of different states would be affected by new seabed regimes that might be adopted. Nor is it easily seen how the different interest groups within the same state might be affected. Several states, for example, have ambivalent positions with regard to the appropriate limits of jurisdiction. Fishermen in distant water vessels, fishing off the coasts of foreign states, would like to have as narrow limits as possible. But their fellow nationals who fish in their own near shore waters would like to have extensive limits to reduce the competition from abroad.

As a consequence, the world is likely to re-open the Geneva Conventions with heavy emphasis on military and mineral interests and little weight directed to the interests of fishermen.

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8. On August 17, 1967, Ambassador Arvid Pardo, Permanent Mission of Malta to the U.N., introduced a Note Verbale into the General Assembly calling for an "[e]xamination of the question of the reservation exclusively for peaceful purposes of the sea-bed and the ocean floor, and the sub-soil thereof, underlying the high seas beyond the limits of present national jurisdiction, and the use of their resources in the interests of mankind." 22 U.N. GAOR, U.N. Doc. A/6695 (1967). This was followed by a major statement by Ambassador Pardo in the U.N. First Committee on November 1, 1967. 22 U.N. GAOR provisional Docs. A/c.1/PV. 1515, 1516.

This is not to derogate the importance of peaceful and efficient uses of the bed of the sea, but to suggest that the long term and general interests in fisheries should be given much greater weight in the discussions, and to urge that they not be sacrificed to achieve the more specialized and perhaps more ephemeral goals of the military and mineral interests in the sea.

It should be noted that, at least within the United States, the goals of the petroleum and military interests are not compatible. Each, if realized, would have a different effect on fisheries. The petroleum interests desire wide limits of jurisdiction over the seabed, extending out beyond the continental shelf, down the slope, and to the landward portion of the continental rise.<sup>9</sup> The military interests of the United States call for as narrow limits as possible, with respect to both the floor of the sea and the superjacent waters. They feel that wide limits would threaten freedom of mobility of submarines, surface vessels, aircraft, and perhaps the placement of detection devices on the seabed.<sup>10</sup> Debate within the United States governmental agencies is focused primarily upon these two positions, with little attention being paid to the possible effects on fishing.<sup>11\*</sup>

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9. *Petroleum Resources Under the Ocean Floor*, National Petroleum Council (Washington D.C. 1969).

10. There are several implicit assumptions to the military position that have never been fully examined. What, for example, is the United States national interest in freedom of mobility? Does the Navy feel that it has to be able to send its forces anywhere at any time to police the world? Or is it more concerned with specific areas in which maritime commerce might be interrupted? To what extent would freedom of mobility be reduced by the extension of jurisdiction for specialized purposes? If rights are extended simply for the exploitation of seabed resources, would these necessarily lead to interferences with freedom of navigation? Is freedom of mobility necessary through all waters? Or is it only certain straits that are critical? If the latter, would it be possible to achieve the desired freedom through other means than a generalized opposition to the extension of jurisdiction for any and all purposes? Some of these same questions and other different ones have been raised in a letter from Congressman Alton Lennon to President Nixon, April 7, 1970.

11. One exception to this is the advocacy of the military position by a spokesman for United States distant water fishing interests. W.M. Chapman has stated that "over the long run, ocean trade routes must be kept open to preserve the peace, even if it takes war to do it." *Hearings on U.N. Suboceanic Lands Policy Before the Senate Comm. on Commerce*, 91st Cong., 1st Sess. (1969).

\* After this article was written, President Nixon announced the United States position on oceans policy (May 23, 1970). This calls for full jurisdiction over seabed resources out to 200 meters and for an "international trusteeship zone" beyond that to the edge of the continental margin. It also calls for an extension of the territorial seas to 12 miles.

### III. A NEW CONTEXT FOR DECISIONS

The interests of the dominant fishing states have been given little challenge in the past. They have been able to work out agreements and patterns of cooperation among themselves with little exposure to the possible demands of non-fishing states and non-fishing interests. In 1958, at the Geneva Conferences on the Law of the Sea, most participants were willing to let the fishery diplomats work out the agreements on fisheries as long as other interests were not affected. Since 1958, many bilateral and multilateral agreements have been made, but they have not been exposed to world opinion.

In fact, fishery diplomacy is a unique area of international relations. The fishery diplomats of the various states are well known to each other because of their many common meeting grounds in the negotiation of agreements, the continued work of the commissions, and in their interaction in the international agencies concerned with the sea. The scientists-turned-diplomats who negotiate the agreements, unlike their foreign service colleagues, have a highly specialized knowledge of the problems and issues with which they deal. Generally, although not entirely, they are able to operate without significant constraint in having to meet other national interests.

The close relationship among the fishery diplomats, together with their expertise and freedom, has facilitated the reaching of agreements among the various states. But it has also tended to drop curtains around the negotiations and to impede the interventions of those who are not members of the club. It is questionable whether or not this technocratic approach can be maintained in the light of today's world interests.

While the issues before the United Nations have focused on the bed of the sea, they have raised questions about the distribution of the sea's wealth in general. For if the developing states expect to share in the revenues of mineral exploitation, why should they not expect to share in the wealth of fisheries? This question is likely to be raised with increasing force as the patterns of not including in the distribution of the sea's wealth those nations who have failed to exercise their right to fish (noted below) become more apparent. It is also likely to become more important as the inefficiencies and economic wastes of open access become greater.



In addition to the awareness of wealth and the desire to share in it, there are many other factors that serve to create a significantly different context for negotiations than those that operated in 1958. These include the greater number of states, the greater sensitivity to the gap between developed and developing states, the desires of the developing states to participate in the decisions on management as well as in the wealth, and the apprehensions about a United States-Soviet Union condominium.

In short, the fishery diplomats can expect a totally different ball game than the ones in which they have participated in the past. And for this, they will need a great deal of preparation as well as an openness to new demands and new institutions.

#### IV. PATTERNS OF DISTRIBUTIONS OF THE SEA'S WEALTH IN FISHERIES

It was stated above that the patterns of distribution of the sea's wealth in fisheries tend to be non-inclusive in nature. The acquisition of wealth can only be achieved through exercise of the freedom to fish. Those who do not fish, acquire no shares in the wealth, even though they may maintain their option to do so at some time in the future.

This system of open access and the rule of capture could continue without too much difficulty if there were plenty of fish in the sea and plenty of opportunities for new states to exercise their option to fish in the future. But these conditions do not exist today. First, the supplies of desirable species are limited. Second, there is little evidence that there has been a significant increase in the number of nations that are increasing their shares of the world catch. Third, with open access the advantages lie with those states that are able to establish fleets that are mobile and highly organized. Fourth, international agreements tend to impede the entry of new states. Fifth, open access *should* be closed if there is to be efficient production of wealth. These items are elaborated in much greater detail in another paper and will be treated only briefly here.<sup>12</sup>

The limitations on total catch of fish occur primarily from the fact that man's demands are restricted to a few dozen of the

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12. F. Christy, Jr., Fisheries: Common Property, Open Access, and the Common Heritage, (Papers for Preparatory Conference on Legal Framework and Continental Shelf, Center for the Study of Democratic Institutions, in press).

thousands of species that live in the sea. Because of taste preferences, demand patterns, difficulties of catching or preserving certain species, most of the vast quantities of protein materials are not used directly by man. These conditions can and do change from time to time, but the changes are slow to occur.

It is true that total world catch of fish has increased at a high rate over the past few decades—about 6 percent per year. But this is a misleading figure, because the greater proportion of the increase has been due to a phenomenal growth in demand and supply of fish caught for fish meal. This has grown at a rate greater than 12 percent per year, while fish caught for food purposes has grown at less than 4 percent per year. Since it is most unlikely that the former growth rate can be maintained (and indeed, it already shows signs of slackening), it is unsafe to extrapolate past trends into the future.

More directly, economic analyses of supply and demand recently prepared for the FAO Indicative World Plan, signify not only a diminution of rate of increase but also a tendency for demand to outstrip supply so that there may actually be shortages of supplies at current price levels.<sup>13</sup> These estimates are strongly counter to the optimistic projections of Chapman and others about the opportunities for expansion.<sup>14</sup>

It has been maintained by some that the distribution of catch has become much more inclusive in nature and that the trends have been particularly favorable to the developing countries.<sup>15</sup> But this is not strongly supported by statistical evidence. Table 1, below, shows patterns of catch in 1958 and 1968. It shows a marked decline in the proportion of catch taken by the developed market economies and a commensurate increase in the proportion taken by the single state of Peru. For the rest of the developing market economies, the share of total catch has increased only from 22 percent to 23 percent—hardly a significant gain.

To be sure, there are several developing states that are doing quite well. Twenty of these, whose catch was more than one tenth of one percent of total 1968 catch, have increased at rates greater

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13. Indicative World Plan Unit, Department of Fisheries, *The Prospects for World Fishery Development in 1975 and 1985*, FAO, Rome (1969).

14. See Chapman, *supra* note 3, at 1.

15. *Id.* at 25-6.

TABLE 1  
*Total Fisheries Catch as Percent of World Total*

	1958	1968
Developed Market Economies	52%	39%
Developing Market Economies, excluding Peru	22%	23%
Peru	3%	16%
Centrally Planned Economies (Communist Countries)	<u>23%</u>	<u>22%</u>
Total	100%	100%

Source: FAO, *Yearbook of Fishery Statistics 1968*, Vol. 26  
 (Rome: FAO, 1968), Table A1-0.

than for the world as a whole. But the total effect is still not very significant. Even here, it can be questioned whether or not the benefits have accrued to the states or to the foreign processing firms that, in many instances, have invested in the increased efforts.<sup>16</sup>

Perhaps a more significant indication of future patterns of distribution of those stocks that are purely international in character, lies in the number of vessels of more than 100 tons in size. The number of these vessels, their aggregate tonnage, and the proportion of tonnage are shown in Table 2. Almost half of these fly the Soviet flag and another 30 percent come from a few developed states. The rest of the states, both developed and developing, share less than 20 percent of total tonnage.

It is generally the larger vessels that benefit most from the conditions of open access. Their size generally gives them a greater degree of mobility. When a stock, close to a coastal state, becomes overfished, the mobile fleets can easily move off to other stocks, whereas the local coastal fishermen in the smaller vessels do not have the same opportunities.

In addition to the non-inclusive trends in patterns of catch, there are also non-inclusive patterns in the international

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16. See Scott, *Fisheries Development and National Economic Development*, Proceedings of the Gulf and Caribbean Fisheries Institute, 18th Annual Session, Nov. 1965, at 335-45.

TABLE 2  
*Number of Fishing Craft Over 100 Gross Tons by States*

<i>State</i>	<i>Number</i>	<i>Tonnage</i>	<i>Tonnage as % of Total</i>
U.S.S.R.	2,908	3,410,000	49
Japan	2,125	890,000	13
Spain	1,289	400,000	6
U.K.	578	240,000	3
France	663	193,000	3
Norway	623	178,000	3
Poland	168	176,000	3
W. Germany	215	162,000	2
Other	3,400	1,300,000*	19*
Total	11,949 [sic]	7,000,000* [sic]	100 [sic]

\*Estimated total tonnage given only as "less than seven million tons", so these figures are approximate.

Source: "USSR has 382 Fishing Vessels Larger than 2,000 Tons," 8 FISHING NEWS INT'L, Dec. 1969, at 15. Estimates taken from Lloyd's Register of Shipping Statistical Tables for 1969.

arrangements for the management of stocks. These are perfectly understandable—from the point of view of the fishing states. Where management of a stock becomes necessary and some control on the annual take has been instituted, the entry of new comers can only mean that the signatories will be getting smaller shares. The signatories will naturally attempt to resist new entry. Such non-inclusive attempts can be found in claims to historic rights in the establishment of national quota schemes, to preferential rights, to the extension of limits of coastal state jurisdiction, and in the advocacy of the doctrine of abstention. While these cannot legitimately exclude non-signatories and those who do not recognize extensive claims, they do, in fact, impede the entry of new states.

Finally, and on a different order entirely, the condition of open access inevitably leads to considerable economic waste in the utilization of fisheries. This has been documented in a number of studies. In the Northeastern Pacific, for example, it has been

estimated conservatively that the same annual catch (and gross revenue) from salmon could be taken with \$50 million worth of less capital and labor than are currently employed.<sup>17</sup> The prevention of such waste can occur only through the establishment of some controls over access. It does not mean, however, that states cannot share in the wealth, because systems can be devised whereby those who gain access pay for the privilege and the payments can be shared by those who are excluded.

But this last point is an item for the future, whereas the former points demonstrate what is happening in the present. This is a demonstration of strong trends towards non-inclusive patterns of distribution of the sea's wealth in fisheries. Those who enter the re-opening of the Geneva Conventions should be prepared either to prove that these estimates of trends are incorrect or to suggest alternatives that would be more inclusive in nature.

#### V. THE NEED FOR NEW PRINCIPLES OF LAW

Generally, the international law of the sea has evolved gradually from customary and conventional law. Currently, this leans heavily upon the principle of the freedom of the seas which guarantees free and open access to all states. It is modified slightly by the principles of historic rights, which gives some measure of return to states which have participated in the past, and by preferential rights, which recognize the special interests of the adjacent coastal states. All of these principles, however, tend to support the non-inclusive patterns of distribution described above.

The only way in which the patterns can be changed to allow for more inclusive patterns of distribution is to change the principle that wealth can be acquired only through the exercise of the right to fish. A totally new principle is necessary, and one for which there is no precedent.

This principle will require the establishment of some form of tax, license fee, lease system or auction whereby those who obtain the rights to fish pay for the privilege and those who are excluded share in the rents that are produced.

Theoretically, this principle is no different than one employed in many states—where the users of public property such as grazing lands and the oil resources of the continental shelf, pay

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17. J. CRUTCHFIELD AND G. PONTECORVO, *THE PACIFIC SALMON FISHERIES* 174 (1969).

the public for their rights of exploitation. Theoretically, it is also an eminently logical scheme for international fisheries, for the economic rent that could be produced is currently being dissipated by open access and accrues to no one—neither the fishermen nor society.

In practice, however, there are considerable difficulties. Some of these have been referred to already in the discussion of the complexity of fishery problems. The others lie in changing the course of international law and abandoning the concept that new institutions can evolve gradually from those of the past. But there is to be more inclusive sharing in the sea's wealth in fisheries, if the concept of common heritage is to be given operational meaning, then these difficulties will have to be overcome.

#### SUMMARY

The above five points have been raised because it is not at all apparent that either the states of the world or their diplomats are ready to deal with the fishery issues that are likely to be raised at the reopening of the Geneva Conventions. It is to be hoped (though not expected) that the reopening can be delayed for at least a few years. If this can be done, then it must also be hoped that the delay could be accompanied by a tremendous increase in study of the issues and alternative solutions.

Failing that, the states should at least be made aware of the 'mare's nest' that is being opened by the sudden interest in the bed of the sea and they should prepare themselves as best they can for the complexity of the issues and the need for new international institutions and arrangements.