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Title:

West African Fisheries and the United States: An Opportunity?

Summary

During the seventies West Africans became aware as never before of the value of the rich fishing grounds off their coast. Such fuller appreciation has grown as the politics of the oceans have grown more prominent in relations between nations. More specifically, the presence of large foreign fishing fleets off their coast, their active participation in protracted and complicated law of the sea negotiations and their laying claim to a large exclusive economic zone have brought the leaders of West African nations face to face for the first time with the significance of the sea to their vital national interests.

The 17 West African nations from Mauritania to Zaire are now eager to develop and expand their own inefficient fishing industry for their protein-deficient populations. They also want to prevent irreversible damage to these grounds by foreign fleets, most notably the Soviet trawler fleet, by improving enforcement within their zones. They have on a number of occasions turned to us to seek help.

Given the overriding importance of the oceans to the security and well being of the United States it is clear that helping the West Africans protect and develop this resource is in our own interest. Creating a climate of cooperation would ultimately yield tangible benefits whether in the scientific, political, military or economic areas. It could also offer new export opportunities as well as investment possibilities. The development of good zone enforcement would significantly raise the cost to the Soviets to exploit these fisheries. Greater involvement in West Africa fisheries would also be consistent with our policy of strengthening the economies of these developing countries, would provide humanitarian aid to some of the poorest nations in the world and would help further the political stability of the region.

Although not always appreciated, the United States is one of the leading nations in marine sciences, including fisheries and management of the exclusive economic zone. The problem lies elsewhere. It is that AID has concentrated its efforts in increasing food production in agriculture (and to a much lesser extent in aquaculture) while largely neglecting marine fisheries. A greater effort in fisheries development would have as its foremost task that of convincing AID to devote resources to undertake a vigorous effort to develop this important resource.

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There are a multitude of approaches to develop fishing resources and no one approach has worked in all situations. In the case of West African fisheries it would seem that both regional and bilateral efforts undertaken simultaneously would appear to have merit.

Background

The marine fisheries of West Africa, formally known as the East Central Atlantic fishery, are among the world's richest. According to FAO data, it ranked sixth in catch size of the world's 17 major fishing areas in 1978. This fishery extends from Morocco to Zaire and includes 18 littoral states which are within the Department's Bureau of African Affairs, Morocco being the only one not in the Bureau.

In 1979 West African fisheries yielded 3.7 million tons and was comparable to the North Western Atlantic in terms of weight landed. In 1977, for example, all United States commercial landings totaled only 2.1 million tons. The estimated value of the West African catch in 1977 was over one billion dollars. These harvests include some highly valued species -- tuna, shrimp, flatfish, sea bream, octopus, squid and

~~cuttlefish.~~

Small-scale fishermen land about three fourths of the fish caught by locally-based vessels. Seventy five percent of the catch is from the northern part of the region, from Morocco to Guinea. Because of this northern zone states are net exporters while southern zone states are importers of fish products.

There are about one million persons in these countries who earn their living through the fish industry. It is estimated that there are about 600,000 artisanal fishermen and 10,000 industrial fishermen in the 18 coastal countries. Further, a large number, estimated between 250,000 and 500,000, of market wives, fish smokers and distributors are engaged in operating the traditional marketing system. Fish is an established and significant source of protein in most West African countries. Per capita fish consumption is about twice that for meat in the region. One important reason for this is that fish normally retains its price advantage over meat.

Problems and Issues

One of the problems facing the region is that fishing methods are largely primitive. Many artisanal fishermen are still fishing from dugouts without motors and the catch size is often small. Lack of refrigeration and the primitive methods of preservation reduce the

edible portion of the catch by twenty to forty percent. The distribution system is hampered by a lack of roads and transport.

Still another problem is the spotty information about stock quantities and varieties in the region. Although some work has been carried out, such as the Guinean trawler survey in the early 60's, a great deal more needs to be done in the field of stock assessment.

Heavy fishing by modern fishing fleets from Europe and Asia poses a serious problem for this fishing ground. Although European fleets began fishing in the area in the 1920's, large-scale trawler operations began only with the appearance of the Soviet and other fishing fleets in the area. Large catches are also reported by the Spanish, Korean, Polish, Japanese, Portuguese, Romanian and other fleets, but Soviet catches have been by far the largest, catching some 40 percent of all fish caught in 1976 and more than all West African countries combined. In 1977 some two thirds of the total catch was by foreign fleets. Since many littoral countries in West Africa have little or no enforcement capability, foreign vessels are pretty much free to fish or overfish as they please and some employ "vacuum cleaner" techniques. Certain species of herring (bonga) have all but disappeared and the less sought after trigger fish has proliferated, presumably because of the thinning out of other species.

Another problem which affects all aspects of fishery questions in the region is the lack of trained administrators. Even if a country wished to carry out a stock assessment, the enforcement of its 200-mile exclusive economic zone (EEZ) and the development of its artisanal and industrial fisheries, it lacks the administrators, researchers and scientists to do so.

Lack of regional cooperation also hampers efforts to bring about a more rational exploitation of these fisheries. Because there is little cooperation poaching, jurisdictional disputes and a freer hand for foreign fishing fleets results.

These problems are a source of growing concern among West Africans aware of such problems. Awareness was greatly heightened by the protracted Law of the Sea negotiations, by declarations of the 200-mile economic zones and by the presence of large foreign fishing fleets off their coasts. The most emotional issue by far is the widely held conviction that non-African fleets are damaging these rich fishing grounds, perhaps irrevocably for some species. These fleets are not only doing permanent damage, they believe, but in the process they are paying little or no fees for such exploitation and are turning an inadequate or inferior share of the catch to the host country. Since this over

fishing is being done by fishermen from socialist, West European and Far Eastern nations many West Africans turn to us for help.

Progress In Fisheries Development

Littoral states along the West Coast have undertaken a variety of measures to develop and control these fisheries. Some have, like Togo, motorized most their artisanal fleet. Ghana and Senegal, with established marine fishing traditions, operate industrial fleets to exploit inshore fish stocks using trawlers and purse seiners. Both countries also operate several tuna boats and Ghana now operates a fleet of distant water trawlers. Nigeria and Ivory Coast also possess sizeable industrial fleets. A number of these countries do some surveillance work of foreign fleets with one or more patrol boats.

Bilateral aid from Western European countries, Canada, Japan and the Soviet Bloc has helped to develop West African fisheries. Canada has spent \$20 million in Senegal alone to assist in the motorization of the artisanal fleet. Its total fisheries assistance to West Africa between 1969 and 1979 amounted to more than \$100 million. France has provided considerable aid to its former colonies, as have the Spanish and Portuguese, partly as a means to secure fishing rights and to sell equipment. Soviet training and equipment has usually been provided as a quid pro quo for fishing rights in the exclusive economic zones or territorial waters. Information on the activities of other donor countries is sketchy.

At the regional level two organizations relevant to fisheries should be mentioned. One is the 16-member Economic Commission of West African States (ECOWAS) which includes many of the states discussed in this report. The purpose of ECOWAS is to promote economic cooperation and development among its members, including the elimination of custom duties. ECOWAS has the potential for dealing with a number of regional fisheries issues but because of its recent creation it has yet to produce any concrete results.

The Fishery Committee for the East Central Atlantic (CECAF) was established by the Director General of the FAO in 1967 and consists of 19 coastal states plus 11 non-African members, including the United States. The mission of CECAF is to promote and coordinate national and regional programs of research and development, leading to the rational utilization of the marine fishery resources of the area, and to assist in their implementation through sources of international aid. It enables member states to analyze and monitor the state of their shared stocks, to exchange their experiences and points of view on fishery development

problems and to study programs for co-management of the resources.

CECAF is assisted in its task by specialized working parties on fishery statistics and resource evaluation and by two subcommittees. The first deals with resource management within the limits of national jurisdiction. The second deals with fishery development. It ensures liaison between CECAF and an operation called "Project for the Development of Fisheries in the Eastern Central Atlantic", which was set up in 1974. It is financed by the UN Development Program and donor countries and is executed by the FAO. Since its establishment it has contributed towards strengthening the capacities of the member countries in field such as statistics, resource appraisal, management and staff training. CECAF decisions are not binding on its members. The permanent staff moreover consists of only a half persons, including secretarial staff.

VI - U.S. Aid To Fisheries in Africa

United States aid programs in West Africa have included few marine fishing projects over the past decades. The most noteworthy effort was the OAU-sponsored Guinean trawling survey carried out between 1962 and 1966 at a cost of \$727,000 to the United States. As the most basic study undertaken to date the survey is still referred to in assessing stock levels. Two others projects were undertaken in Nigeria during the 1960's. A \$560,000 project was started in 1962 to improve the taking and distribution of shrimp. In 1961 a project was launched to build a four-million dollar terminal for fish processing. These projects ran into serious problems due to the outbreak of the civil war in 1967. AID is allocating \$500,000 (FY79 only) to aid 200 artisanal fishermen in Guinea-Bissau. One of the few other projects in Africa is one presently being carried out in Djibouti in East Africa. At present only one percent of AID's African Bureau budget is spent for fisheries and almost ninety percent of that is for inland fisheries and aquaculture. In AID's Office of Agriculture only \$two million of an \$75 million budget is allocated for fisheries, most of which is used for aquaculture projects.

VII - Should the US Play a More Active Role?

Are there compelling reasons for the United States to do more to develop West African marine fisheries? Can we effectively further U.S. interests in the region through our efforts in marine fisheries?

The issue of marine fisheries and the EEZ are subjects of growing concern in these West African states. Identifying with an issue of such importance to West Africans and with an economic resource of high value would clearly be in our interest. Moreover, frequent African requests for US help in dealing with these fisheries and economic zones

indicate that we are perceived as a desirable partner rather than a potential exploiter of their seas.

The new awareness by West Africans in the 1970's of the importance and value of these fisheries is echoed periodically by officers at our West African missions who generally find receptive listeners in the Bureau. Ambassador Richardson, during the time he headed our Law of the Sea delegation, took considerable interest in whether progress in the talks could be furthered by addressing the great need of African countries for technical assistance in marine matters. He felt that it would be helpful to him if he could demonstrate to influential African participants in the conference that the United States has provided and is still providing substantial training to African national in ocean matters such as fisheries technology and marine research.

In the field of security most marine technical assistance projects have at least indirect military implications in the sense of expanding the recipient country's scientific knowledge in the marine area. For example, US marine technical assistance would strengthen these countries'

capabilities for surveillance and for broadening their knowledge of the local marine environment.

Effective surveillance programs in the CECAF region would also significantly increase the economic costs for other nations, including the Soviets, to fish there. At present licences are sometimes issued because the host states are unable to prevent outsiders from fishing in their zone and they prefer a nominal fee to nothing at all. Further, the outsiders often fish illegally in these waters. Effective control of the EEZ would sharply increase the fees per ton of fish landed and reduce the size of the foreign catch by preventing excessive fishing. Zone enforcement would also provide the option of denying outsiders any access at all.

Fisheries assistance may also offer benefits to the US private industry. Recent policy decisions in AID emphasize the role of self help and US private investment in assistance to developing countries. A recent AID seminar to stimulate private sector in West African fisheries revealed some interest in joint ventures and fish imports from West Africa. It is however unrealistic to think of mobilizing US industry for marine technical assistance. The increasing involvement of US companies operating overseas in this type of activity is possible however. It can be promoted by a willingness of the US Government to provide training for these countries in fisheries and zone management. This could even be relatively inexpensive technical assistance with some obvious potential benefits for U.S. firms. Should AID successfully involve the private sector in the development of West African fisheries this area could become a market for US vessels, equipment, technology and management. It would also open new sources for US fish processors. Such ventures could also provide both foreign exchange earnings and new sources of protein for the host country.

Another reason for greater involvement with this vast resource is that humanitarian considerations still constitute a primary incentive for US overseas assistance. Since World War II we have had a longstanding commitment to fight the widespread hunger and poverty in the world. Twenty of the world's 30 poorest nations are located in Africa, including a number in West Africa. The West African fisheries are already an important source of protein for these nations. These fish resources deserve recognition as a principal and often overlooked means of meeting the objective of expanding food production in West Africa. There is little

we could do with assistance programs that has the potential of these fisheries for great increases in food supply. This certainly is one of the more significant contributions we possibly make to these 18 AF countries with a combined population of over 180 million.

Along with humanitarian considerations the development of these fisheries would also advance our goals of strengthening the economies of these developing countries and of improving thereby the political stability of the region.

Are there however solid reasons for avoiding greater involvement in West African fisheries? It is sometimes said that we lag behind other countries in this sector, notably the Japanese and even small countries as Norway, and that we have little or no experience on the subject of tropical water fisheries.

While fishing and ship building do not play the major role in the U.S. economy that they do in Japan or Norway we are none the less in the forefront in most areas of marine activities. We have been conducting stock assessments for over 100 years. We have done more to manage our 200-mile economic zone than any other nation. One quarter of the world's marine scientists are in the United States. The world's major oceanographic institutions are in this country, at least 36 of them. There are 79 oceanographic research vessels operated by the United States. Only the USSR can boast a comparable number. Our fleets for premium quality fish, tuna, salmon, lobster, flatfish and shellfish, are the most modern in the world and our fish exports primarily to Japan, Europe and Canada, are over one billion dollars annually. U.S. fishermen in the Gulf of Mexico have been fishing actively in tropical waters since the 19th century.

Another argument against greater involvement in fisheries is that AID efforts in the past have been dismal failures. This is not so. One of its most successful efforts was one of its first attempts, that of developing the fisheries of South Korea beginning in the mid-1950's. A major effort in India some 20 years ago was only partially successful but due in part to that effort India is now one of the major fishing countries of the world. AID has also dozens of small projects, often under \$500,000, which have been successful. AID's record in marine fisheries is probably as good as its score card in agricultural projects. As such its record thus provides no rationale to avoid this area for development projects.

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It thus seems to be clearly in our interest to assist in the development of these fisheries. The need is there and West Africans appear to want our technology and experience. Such aid is likely to have a big payoff in results with only modest outlays of expenditures. The benefit to the United States in terms of cooperation, for the development and long-term stability of the region and for possible commercial gains appear considerable when measured against the small sums needed.

VIII - Guidelines For Projects

Over the past 30 years AID has undertaken a variety of marine projects around the world. It has organized seminars for West African officials to discuss the needs of their governments in fisheries matters. U.S. specialists in zone surveillance and technical training have visited a number of these countries. Other initiatives have been support of ICLARM, the International Center for Living Aquatic Resources Management in Manila, in cooperation with the parent body, the Rockefeller Foundation. ICLARM was founded in 1973 to support a research, training and action program in living aquatic resources for the benefit of developing countries in the Western Pacific. AID has also worked closely with the University of Rhode Island and Auburn University to carry out research and projects in fisheries.

If more resources are spent to develop fisheries where should they go? One approach would be to use AID funds as a catalyst to increase private sector involvement in this area. In mid-1981 AID established the Bureau for Private Enterprise. This Bureau is attempting to identify investment area opportunities in LDC's and then provide funds in a variety of ways to support a joint venture or to an American or host-country firm.

Other areas of possible involvement are the improvement of artisanal fisheries, enforcement problems, stock assessment, regional cooperation and the training of administrators. In the latter area fisheries experts Drs. Rothchild and Norton have proposed to AID a collaboration with CECAF to build the regions fishery-management capabilities. The program, located in a West African city, would conduct over a two-year period a series of three, one-month workshops. The Tiros satellite system gives promise of an efficient surveillance system that would require fewer search vessels and aircraft to patrol a zone effectively.

There appear to be as many approaches as there are experts in this field. Project concepts have varied greatly over time and no one concept has been found to be preferable in all circumstances. From the range of approaches one must be selected to suit the exigencies of the particular situation. The only general trend has been increased recipient participation in developing projects and in their administration.

It is not the purpose of this paper to suggest specific projects or approaches as, for example, recommending that we concentrate on improving artisanal fisheries rather than put our resources into scientific research. After reviewing the material on West African fisheries however it is my own view that the most urgent need is for improved surveillance measure and for effective regional cooperation in order to obtain a greater share of the total catch for the African market, to prevent the destruction of several species and even to head off irreversible damage to these fishing grounds. This also happens to be the area of greatest concern to Africans and is a field where we have considerable experience. When discussing fishery matter with U.S. officials they seek our help more often on matters of surveillance more than any other subject.

Although surveillance and regional cooperation may be the most urgent needs they may not lend themselves as readily to sound projects as other areas, such as bilateral efforts. Until the US develops a comprehensive marine fisheries policy guidelines such as those given below are suggested to select an overall program and individual projects.

-- Continuity. Successful projects often require many years of effort. To ensure their success in such cases a long-term commitment is necessary.

-- Need For Quick Pay-Off. The second loudest complaint by Africans, after complaining they are this huge resource is fast being depleted by the socialist, Asian and West European countries, is that the fisheries question has been studied to death but little has been accomplished. Should we agree to make a significant contribution to the development of West African fisheries some of the projects should yield quick results to demonstrate our ability and desire to do more than simply analyse the problems once again.

-- Choose the Country Carefully for Bilateral Projects. In the early phases at least one should select a country with an established fishing tradition. Successful projects in the past have also been cases where the local host government fully supported the project.

-- A Comprehensive Approach Has Been The Most Successful One. Projects for example, which have neglected marketing, storage and distribution problems in favor of increasing catch sizes have usually met with failure.

-- Recognition of Cultural and Economic Factors. Some projects have been unsuccessful because resistance to modernization by the local society was not considered.

-- Our Efforts Should be Large Enough to Get Win a Political Pay Off. There should be a sufficient number of well-publicized projects so that we are clearly seen as playing the role of an active partner in the development and preservation of these fisheries.

-- Involvement of U.S. and Host Country Private Enterprise. Our ability to attract U.S. companies in joint ventures will help to give our participation a real boost. AID will continue to emphasize greater private sector involvement in developing countries at least for the life of the present administration.

XI - The Agency for International Development

An effort to make a serious contribution to West African marine fisheries development would pose problems for AID. It has only three positions for fishery experts and one of the three has not been filled for some time. Much more serious is the fact that AID has been almost entirely oriented toward the development of agriculture as the sole solution to the world's food problems. All its know-how, traditions and bias are built around agriculture.

Given this heavy emphasis by AID on agriculture, previous attempts to do more with fisheries have been mostly small in scale. An attempt to develop a medium to large-scale program or a series of projects would no doubt be resisted within AID. Some would argue, perhaps correctly, that funds for such projects might be taken from agricultural programs. They would also point out that at a period of smaller budgets is no time to launch a new program in a "high-risk" area. Last, they would argue, inaccurately as pointed out earlier, that the United States lacks the necessary expertise.

Should the United States decide to aid West African fisheries development some reorganization of AID is clearly in order. Resistance to this new departure could best be overcome by elevating a fishery expert to a policy level within the agency. To carry out a new and probably unpopular program he would probably need access to the top echelons of the agency and his own independent division within AID.

A word needs to be said about aquaculture. AID personnel will probably also counter with the argument that aquaculture provides a better solution to food supply shortages than capture fisheries. More akin to livestock raising than marine fishing, aquaculture has been emphasized in AID programs in comparison to marine fishing projects. For example, eight of the ten projects presently funded in Africa are in aquaculture. (However, aquaculture projects represent only a small percentage of total AID projects.)

There are serious problems in investing heavily in aquaculture. About 96 percent of the current total world fish production comes from capture fisheries, an imbalance not reflected in AID funding patterns. More serious however is that the potential of aquaculture for increasing significantly the production of fish protein has yet to be shown. Although aquaculture is a protein source of considerable promise its potential is long run. The immediate needs of countries such as the ones in question would be better served in the short run by focusing AID attention on existing capture fisheries.

What Actions Should AF Take?

If there is agreement that it is in the U.S. interest to make a meaningful contribution to the development of West African fisheries, AF should consider the following actions:

-- Make a strong recommendation to AID to embark on a West African fisheries program of some magnitude.

-- Make specific recommendations to AID on the kind of programs that will have the best political as well as economic impact. Solicit the views of Embassy officers in the countries involved for project ideas, etc.

-- Develop with AID an overall policy paper on the development our role in the development of the fisheries. In developing a strategy an effort should be made to emphasize the regional approach while at the same time not neglecting sound bilateral projects which might produce results more quickly.

-- Support AID efforts to encourage private industry to consider ventures to develop these fisheries for the benefit of both the U.S. and the host country.

-- Request AID to look into marine fishery programs by countries such as Canada, West Germany and France to learn more about the size, nature and success rate of these programs.

-- Support AID efforts to gain support for the program with Congress, the White House and other groups that can influence the success of the effort.

XII - More Aid to Fisheries: An African or a Worldwide Problem?

AID's reluctance to become more involved in marine fisheries is not limited to the West Coast of Africa. There are other areas as well where AID, for political as well as economic reasons, probably should be making a greater effort. In the Caribbean Basin for example the U.S. could and probably should be playing a leadership role in bringing about more orderly policies and practices among the states competing for this resource.

The question thus arises whether a strategy to generally upgrade AID's marine fishery programs on a worldwide basis would be a more successful tack. An across the board strategy would receive more attention and perhaps also more support in State and AID. An effort to obtain backing for a program involving West African fisheries only could more easily become sidetracked despite general State and AID backing.

This thought leads into an even broader consideration concerning the future of the oceans. Like it or not the seas are becoming a major international issue during the last part of this century. Heavy exploitation of the seas by countries such as the USSR and Japan and an increasing naval challenge from the USSR have focused attention on them. Longstanding Law of the Sea negotiations have brought the importance of the seas to the attention of the most backward nations. With the declaration of the 200-mile exclusive economic zone by most

coastal nations following the United States' unilateral action, some 50 million square miles, or forty percent of the surface area of the world's oceans, have come under national jurisdiction. In a world of expanding populations, shrinking supplies of conventional resources and rising expectations there can be little doubt that the resources of the oceans will be more and more extensively exploited.

The United States' interest in the use and exploitation of the oceans are diverse and strong. Despite this the United States has no declared policy concerning the oceans and their resources. It is clear that we have an important leadership role to play in managing this vast area. For example, the management and exploitation of the EEZ's require varying degrees of technical competence largely unavailable in developing countries. The magnitude and importance of these problems far transcends the basic mission of AID, which has been admittedly slow in moving into marine fisheries as the oceans were receiving increased attention. What is needed is a high-level examination of the problems with a view to developing a national strategy and policy and a restructuring of the several agencies involved to reflect the new political and economic importance for the oceans.

AF. or Worldwide?

Despite the above considerations the best strategy for the USG, I believe, would be to press for a substantial program for West African fisheries only. Such a limited approach would stir up less opposition by those opposed to a new departure. Should a strong case be made for a worldwide approach one could argue that it is best to try a new approach to food resource problems in one area only to see how successful it is before trying in other places. One should also mention that given the poor protein resources in Africa, the richness of the West African fishing grounds, the number of countries and populations involved, West Africa is an excellent place to launch such a program.

Sources

One important source for this report was data published by CEECAF, including statistical as well as studies and summaries of CEECAF meetings. Another important source has been conversations with State, AID and NOAA officers familiar with fisheries questions. Department and AID messages to the field were also consulted. A particularly useful document for background was the AID-funded "Fisheries of West Africa," published in 1980 by Sutinen and Pollnac of the University of Rhode Island and Josserand of the University of Michigan.

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