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UNITED NATIONS DEVELOPMENT PROGRAMME

FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

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REPORT
OF THE
MISSION ON EGYPTIAN FISHERIES ADMINISTRATION
8 October - 7 November 1978

by

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1. SUMMARY

The Egyptian fishery industry has much undeveloped potential, especially in aquaculture, and there is a very strong domestic demand for its products. There is also much scope for reducing costs of production.

The present fisheries administration is fragmented and lacks coordination. It does not possess the organizational structure necessary to carry out many of the tasks it should perform if it is to serve, develop and regulate the fishery industry so as to fulfil its potential. The present administration also lacks senior staff with appropriate professional qualifications and with the knowledge and experience of this unusually complex industry that are necessary if legislators and administrators are to receive sound advice. It is difficult to identify a corporate legal personality capable of handling international assistance funds including development loans.

To remedy this state of affairs, the Mission has suggested the following:

(1) The Under-Secretariat of Aquatic Resources in the Ministry of Agriculture should be strengthened, especially in the fields of resource management and regulation of the fisheries; relations with agricultural divisions of the Ministry; relations with other government departments; international matters; policy formulation. It should also have its own permanent scientific adviser.

(2) Development of the industry should be entrusted to a new Development Authority working in close collaboration with the Under-Secretariat and sharing common services, certain joint committees, etc., etc. The Development Authority would have its own budget and be responsible for major works such as construction of port facilities, fish farms and fish markets; cooperatives; state corporations; technical development, exploratory fishing, demonstration, extension, training, etc., etc. Authorities of this kind already exist in several other areas of the Egyptian economy.

(3) So long as the Minister of Supply is prepared to provide cheap subsidized food to the consumer, the Fish Marketing Company should remain affiliated to the Ministry of Supply. The present powers of the Minister of Supply to control the prices received by certain of the producers of fish should, however, be abolished; machinery should be established to fix fair prices in these cases, and also to make fair allocations of supplies to the various regions of the country.

(4) So long as the development of the fisheries of the High Dam Lake involves the provision of infrastructure such as roads, housing, schools, hospitals, etc., the fisheries should remain the responsibility of the High Dam Lake Development Authority and the proposed new Fisheries Development Authority, and the former should avail themselves wherever possible of the services and advice of the professional staff of the latter. When the new communities are fully established and settled, responsibility for the fisheries of the High Dam Lake should pass to the Minister of Agriculture.

(5) The Mission are not convinced that the Institute of Oceanography and Fisheries, under the Academy of Science and Technology, will be able to provide the fisheries administration with an adequate service in the field of applied research. Immediate action should include initiating more work under contract, and the creation of a stronger representation on the appropriate committees and council of the Academy, of the users of the results of the research. As and when the fisheries administration has acquired its own scientific and technical capabilities and experience, the situation should be reviewed by the Minister of Agriculture.

(6) If these suggestions are accepted in whole or in part, further assistance will be required in drawing up a general programme of work for the new administration and authority, and in deciding upon staff complements and budgets.

(7) Strong support will be required for some years by way of international and bilateral assistance in order to compensate for the inevitable lack of knowledge and experience of newly recruited professional staff at all levels, and of the senior administrators and legislators. This support could take the form of consultancies, missions, resident advisers, seminars, and twinning arrangements as may be most appropriate for the various aspects of fisheries administration and development where support will be required.

2. BACKGROUND INFORMATION

The Mission was undertaken as the result of a request by the Government to FAO, and formed part of the activities of the FAO/UNDP Indian Ocean Programme.

2.1 Composition and Terms of Reference

The international expert members of the Mission were Mr. G.C. Eddie, an engineer and former Technical Director and Deputy Chief Executive of the White Fish Authority in the United Kingdom, and Dr. Franco Ferraresi, Professor of Public Administration in the University of Torino, Italy.

The third member of the Mission was Dr. S. El Zarka, FAO Regional Fisheries Officer, Near East Region. Other unavoidable commitments prevented Dr. El Zarka from serving on the Mission except on 11 October and again from 29 to 30 October 1978.

The terms of reference of the Mission were as follows:

1. To review the existing system and procedures for the administration of fisheries, and to assess their adequacy;

2. to assess the implications for the public sector commercial fishery of the changing law of the sea, and in particular the extension of national jurisdiction over fisheries;

3. to recommend any necessary reforms to improve the quality of fisheries administration and to ensure coordination of governmental policy and action;

4. to recommend any necessary measures to ensure effective administrative handling and implementation of international development loans;

5. to recommend measures for improving the effectiveness of public sector commercial fishing operations;

6. to recommend the general scope of future assistance, if any, required in the field of national and international fisheries law, with particular regard to the negotiation of agreements governing access to fishing grounds under coastal state jurisdiction, and the revision of legislation directly or indirectly affecting fisheries.

The Mission should discuss its findings and recommendations with the Government before leaving Egypt, and should prepare a report on its return to Rome.

2.2. Diary, Itinerary, etc.

The diary and itinerary of the Mission are given in Appendix I.

On most of the visits and discussions in Egypt, the Mission were accompanied by Dr. A. Al Jaff, FAO Country Representative; by Dr. Monir Eshak, Deputy Director of the Institute of Oceanography and Fisheries; and by Eng. Adli Kallini and Mr. Magdi Nassif Awad of the Unter-Secretariat of Aquatic Resources.

After his return from abroad on 29 October, the Under-Secretary for Aquatic Resources (His Excellency Salah Zaalouk) himself attended the Mission during the remainder of their stay in Egypt. During the visit to Aswan, the Mission were accompanied by H.E. M.N. El Menshawy, Under-Secretary for Development and New Communities.

A full list of people met in the course of the Mission's work is given in Appendix II.

3. EGYPTIAN FISHERY POLICY AND OBJECTIVES

The main short-term objective of the Fisheries Administration is to help ensure adequate supplies of food for the Egyptian consumer and this appears to be clearly understood by all concerned. A subsidiary objective is to earn foreign currency by export of certain high-value fisheries products, including sponges and also food fish; some of the latter is in effect bartered for a much greater weight of other, cheaper fishery products that are acceptable in Egypt, thus fulfilling the first objective also.

These activities are carried on within the framework provided by other national policies such as, for example, the encouragement of producers cooperatives, and the employment of comparatively large numbers of people in any given activity (the inappropriateness of the latter policy to the circumstances of deep sea fishing was the subject of comment in earlier FAO reports).

Among longer-term objectives, the most important, and most widely understood, is the intention to make Egypt self-sufficient as regards supplies of all foodstuffs, with the exception of wheat. There is,therefore, in the case of the High Dam Lake, for example, a conscious intention to develop to the maximum its potential for fish production (both by capture fisheries and by fish farming). There is also a general recognition of the potential of aquaculture in many other parts of Egypt, although not yet any development of criteria for assessment of priorities vis-à-vis agriculture.

There is, likewise, no clear picture (at least at working level in the Fisheries Administration) of the Government's view of, or intentions towards, the marine fishery resources, especially as regards the establishment of exclusive economic zones off the Mediterranean and Red Sea coasts, or the conclusion of bilateral or multilateral fishery agreements, or agreements for technical cooperation with other countries. Action in these fields depends not only upon considerations of ensuring adequate supplies of food, but also on the general maritime aspirations and policies of the Government, a subject that the Mission did not investigate.

There is great potential for expansion of production in inland and brackish waters, especially by fish farming. There may be some potential for expansion in the capture fisheries. There is a good deal of scope for reducing costs of production by use of more modern methods and equipment.

4. ACTIVITIES REQUIRED

Given the objectives outlined above, the geographical situation and natural resources of Egypt, the state of development of the economy, the political philosophy and economic policies of the Government, and the underdeveloped potential and productivity of the fisheries sector, the Fisheries Administration might be expected to be concerned with encouraging, or actively engaged in, the production of fish as food, both by capture fisheries and by fish farming; in the procurement of additional supplies from abroad, as seems necessary or desirable; in the marketing and distribution of fishery products; and in development work aimed at expanding local production and reducing costs, including

foreign exchange costs. This indeed can be said to be the case, but when the situation is examined in greater depth and more detail, the conclusions are less reassuring.

Among the specific activities in which the Fisheries Administration might be expected to be engaged, and the subject matter fields in which it might be expected to possess expertise, are the following:

(1) Conservation of the resources: resource management and resource protection, including collection and analysis of statistics and related scientific work; surveillance, licensing and control of fishing operations; anti-pollution measures.

(2) Exploration and survey of new fishing opportunities and identification of suitable areas for fish farming.

(3) Innovation with a view to fuller exploitation of resources and reductions in costs: technical development, including experiment in the field; pilot-scale projects; trial and adaption of methods already in use abroad; subsequently in appropriate cases, demonstration, extension work and practical training.

(4) Applied research in support of (1) (2) and (3) above.

(5) Provision of equipment and services to the fishery industry, for example: port facilities, ice plants, slipways, hatcheries, fish markets, supply of fingerlings and feed, supply of imported equipment.

(6) Basic and advanced craft training.

(7) Policy formulation regarding investment in expansion of production and/or procurement of supplies from abroad, in the light of policies regarding food, land use, maritime affairs and foreign relations (for example, whether to concentrate investment in high seas fishing or in aquaculture or to use the money to import supplies); contribution to the formulation of policies on food, land use, maritime affairs, etc.

(8) Relations with other Government departments whose activities can have an impact upon the development and wellbeing of the fishery industry (for example: Ministry of Transport and Marine); the Military Navy; Ministry of Irrigation; Ministry of Land Reclamation; Suez Canal Authority, also with the regional Governorates.

(9) International affairs representing the fishery industry as regards relations with participating in the work of IMCO, UNLOSC, etc.; participation in bilateral negotiations on fishery matters; relations with international development agencies including IBRD, FAO and with bilateral aid agencies active in the fisheries field.

(10) The operations of production; processing, storage, marketing and distribution, in so far as these are to be done by the public sector.

The administration is not at present engaged in all of these matters; a brief description of its present structure and activities now follows.

5. PRESENT ORGANIZATION

5.1 Main Government Bodies

Note: the figures and other information are as given to the Mission; they may not always be in exact accordance with official information, but this is unlikely to affect the argument and conclusions in the present context.

The principal organizations of central government active in the fisheries sector are four in number; they work where appropriate in cooperation with or in support of the regional governorates.

These are:

(1) The Aquatic Resources Under-Secretariat of the Ministry of Agriculture, with general responsibility for all fisheries other than those of the High Dam Lake.

Three state corporations based in Alexandria: the Northern Fishing Company, the High Seas Fishing Company, and the Fishing Equipment Company, are also sponsored by the Minister.

(2) The High Dam Lake Development Authority, responsible for development of fisheries on Lake Nasser (fisheries being the Authority's most important activity at present). Roughly one-fifth of the total production of fish in Egypt comes from the Lake.

(3) The Ministry of Supply, which is concerned with price controls and supplies of cheap fish to the consumer. This Ministry organizes the importation of fish and, through the Fish Marketing Company, its storage, transport, distribution and final sale at subsidized prices.

There is also a free market in fresh fish produced by the private sector.

(4) The Institute of Oceanography and Fisheries (IOF), an establishment of the National Academy of Science and Technology. This Institute is reponsible for most of the scientific work at present carried out in fisheries and related fields.

5.2 Cooperatives

There are now about 60 cooperatives in Egypt, which are responsible for about 85 to 90 percent of the total fish production. They are organized in eight zones, each zone having a council, while each cooperative elects a board. All licensed fishermen should belong to cooperatives. The degree of internal democracy varies from case to case but situations in which a small oligarchy is able to retain power for long periods of time are not uncommon.

An 11-man council for all cooperative societies ("Union Council") meets monthly at the Undersecretariat for Aquatic Resources of the Ministry of Agriculture, which is in charge of supporting and controlling cooperative activities.

Employees from the Ministry act as liaison with each cooperative, helping on administrative matters and in obtaining government support. The latter takes the form of loans (short, medium, long-term), tax-free gear import (in the past only through the Fishing Equipment Company, now also through privates), and various kinds of subsidies. Originally government tried to induce cooperatives to market their catch through state channels, but the initiative failed because government prices were too low, and there was a dearth of cold rooms for storage of the product.

Cooperatives have no welfare programmes (which should be handled by government), and only some limited training ones, through the Union Council. The kind and amount of equipment owned by cooperatives varies; on Lake Nasser, for examples, the cooperative has a small fleet of carrier boats. In most cases, however, boats belong to the members, and not to the cooperative as a corporate entity. In fact, only boat owners can usually be members of the cooperative.

5.3 Present Activities

5.3.1 Capture fisheries

(1) High Seas Fishing

In this context, high seas fishing means operations by ocean-going fleets in distant waters outside the jurisdiction of the Egyptian Government. Egypt has been actively interested in high seas fisheries since 1967. The operations and management of the High Seas Fishing Company were the subject of a series of FAO reports prepared in the course of a UNDP-assisted project that was active during the second half of 1975 and the early part of 1976. At that time the performance of the Company's fleet in terms of annual production did not come up to expectations; unit costs of production were high both in absolute terms and in terms of foreign exchange. A number of reasons for this state of affairs were identified: operational, technical, managerial, financial, administrative and legal. Among many recommendations were three to the effect that the Company's fishing vessels should undergo refitting and re-equipping, that the officers and crews should undergo retraining, and that continuing support should be provided in the field of fleet management through a further project; it was further recommended that no-one of these three recommended actions should be taken without also undertaking the other two. In the event, the ships have undergone a U.S.$ 5 million refitting and re-equipping in foreign yards, but the other actions were not taken because a source of funding could not be found. Of the many other recommendations, few have been acted upon, especially if they called for administrative or legislative action by the Government.

Meanwhile, the general extension of national fisheries limits and the unfavourable terms on which various coastal states are willing to provide licences, has severely restricted the options open to the Company regarding choice of fishing grounds; it is not clear where, if at all the refurbished fleet will operate. Moreover, the latest estimates of unit costs of production indicate that they will at least for some time to come be much in excess of the price of similar products on the international market; indeed, the foreign exchange component alone is estimated at about equal to the current international market price. Morale is not high, and many key officers and staff have found other employment.

The ships are at present idle, and the immediate future of high seas fishing in Egypt is in doubt. The situation is being examined by a special committee established for the purpose by the Minister of Agriculture. Among options being considered are fishing in new areas, perhaps with new vessels of appropriate size, power and capacity for the new grounds. A Pan-Arab fishing enterprise is being considered and Egypt is a contributor; this enterprise is not yet active and its prospects are somewhat doubtful.

A disturbing feature of the situation is that until the present Mission, the Chairman of the Committee considering the future of high seas fishing (who is also Acting Chairman of the High Seas Company) was not aware of the contents, or indeed of the existence, of the FAO reports of 1975 and 1976. This is a consequence, perhaps, of the complete replacement of the Board of Directors and also of the transfers since that time of the Company, and the Under-Secretariat for Aquatic Resources, from one Ministry to another, finally ending with the Ministry of Agriculture.

The Company has incurred heavy financial losses (about 10 million Egyptian pounds in ten years). However, its management staff and its officers and crews are still in the process of acquiring the rather uncommon knowledge, skills and experience necessary for the management of a deep sea fishing enterprise; since it is necessary to pay to gain this experience, some of the "losses" can be regarded as an investment, by way of an entry fee into the "high seas fishing club". Whether it is worth continuing to pay this entry fee is a matter for the Government to decide in the light of its foods, maritime and foreign affairs policies.

It is generally the case that only the more efficient elements of fishing fleets operating in mature deep-sea fisheries operate at a profit in the average year. Moreover, the price of the products on the international market may not necessarily reflect the

entire cost of production, for various reasons that need not be gone into here; moreover, their availability may vary in the years to come. The lack of experience, referred to earlier, includes a lack of familiarity with, or realisation of, such facts of life as these, not only on the part of the Company, but also on the part of the Ministry.

Poor performance, from a variety of causes, is one factor contributing to the large financial losses made by the Company, but there are others, and these are the product of administrative decisions or the lack thereof. One is that the Company has never had any working capital, so that it has to borrow at high rates of interest. Another is that it is constrained to sell all its catch to the Fish Marketing Company at an artificially low price fixed by the Ministry of Supply, which bears no relation either to costs of production or to the international market price.

Although the Company is affiliated to the Under-Secretariat of Aquatic Resources of the Ministry of Agriculture, there are no departments within the Under-Secretariat that are concerned with general support to the Company, or with seeking to create an administrative and legal framework appropriate to deep-sea fishing, or with providing working capital, or with establishing criteria of performance with the Company and agreeing norms, or with assisting in negotiating with foreign coastal states, etc., or with undertaking research and investigations in support of the Company's activities. The Company is therefore worse off in this respect than the private enterprise fishing companies of (for example) N.W. Europe, North America and Japan, which enjoy a strong measure of support from the state in some or all of these fields; moreover, in the developed, centrally-planned economics (for example Poland) the operating companies likewise enjoy such services, provided by the central government.

(2) Mediterranean Fisheries

Before the wars with Israel, there were about 600 boats fishing between Port Said and Alexandria; after hostilities began, all the fleet concentrated in Alexandria, causing a sharp fall in catch rates (from 40 kg to 13 kg per hour, according to one source). This has reduced the number of boats, whose total now does not exceed 400. Most of them belong to three cooperatives (Alexandria, Abou Kir and Idku) and some to a parastatal company, the North Seas Fishing Company, of the Ministry of Agriculture and Rural Development.

(a) Public (parastatal) fisheries

The Northern Fishing Company has resulted from the amalgamation of four previously existing ones, so that its activities are still rather diversified. In the Mediterranean, the Company has a fleet of 12 fishing boats powered by 150-200 hp motors, engaged in trawling and lampara fishing. The operation has not been very profitable, due in part to the poor efficiency of the boats, and to the difficulty in obtaining spares (because of Governmental regulations), and in part to the redundancy of manning scales, coupled with the difficulty in firing personnel. For these reasons, the Company has been thinking of discontinuing coastal fishing, and concentrating on its other activities. The recent acquisition of two new well-equipped boats, capable of bringing in a catch of 20 tons per month, is inducing the Company to reconsider the continuation of coastal fishing. The matter will be decided within the end of the year.

The other Mediterranean activity of the Company is sponge fishing, carried on off the west coast, in what are purported to be the best sponge grounds in the world. The average catch is six to seven tons per season, and all of it is exported, mainly to Japan, at a price of LE 15 000 per ton. The fishers used to employ scafanders, but now they use skin-diving equipment. Keeping enough experienced divers is becoming a problem: the Company has a training centre, but divers tend to leave once they are fully trained, and find employment with better-paying foreign companies (mainly Greek). There are now around 45 of them with the Company, as opposed to 90 a few years ago; they are paid on a percentage of the sales, which has been recently increased to 40 percent.

(b) Private fisheries

Private fishing as elsewhere is done largely by cooperatives, the most important of which is located in Alexandria. Figures regarding the latter are rather tentative; cooperative members appear to own about 100 motor boats, and ten times as many sailboats. Only boat-owners can become members, although the Alexandria Cooperative has a reputation for being run rather democratically. Labour is paid by a share of the catch (80 percent after costs).

The technological level of boats and equipment has remained unchanged since some decades, when the Italians began fishing in the zone. The use of radios is forbidden for security reasons. Port facilities are defective; for example, the depth of the harbour is insufficient to allow mooring alongside jetties.

Nevertheless the productivitiy of the cooperative's boats is alleged to be superior to that of the North Seas Company, because of higher crew salaries and fewer stoppages. Awareness of the importance of maintenance work is inducing the cooperative to consider the establishment of its own repair shop.

Total catch is being effected by overfishing and by the dispersion of fish caused by the building of the High Dam (especially sardines and shrimps). For this reason cooperative officials consider it important that trawling operations be stopped during the spawning season, but the local authorities appear unwilling to issue the necessary decrees, fearing that such stoppage might cause unemployment[1/].

(c) The Northern Lake fisheries

The Northern lakes show the same joint presence of public and private fisheries as the Mediterranean.

The main public agency is still the North Fishing Company, which operates a rather successful operation on Port Fuad Lake, catching (both directly and through local fishermen) grey mullet and orata (sea bream). The orata is exported to Italy in the barter exchange mentioned above (one ton against ten tons of blue fish). The grey mullet is sold on the local market. The price is fixed by the Port Said local government at 36 PT per kg, against an average market price of LE 2 per kg. (The company still makes an overall profit, however, although a small one).

Another lake operation of the Company is concerned with the catching of live eels in Lake Manzalla and Lake Burullus. The catch averages 200-250 tons per season. It is a joint venture conducted with a Dutch-Italian firm, which provide equipment and transport facilities, and some expertise, and purchase all the production (the eels are brought to Europe alive). There seems to be much scope for the development of this fishery; the counterpart company is willing to absorb as many as 5/600 tons, and the lakes could probably yield up to 700 tons per year.

(d) Lake Nasser fisheries

Fishing in the High Dam Lake is done entirely by the private sector, with some public support from the High Dam Lake Development Authority and the Fish Marketing Company.

1/ Cooperative representatives reply that during the closed season fishermen could be employed in other kinds of fishing, or in auxiliary activities. The Institute of Oceanography has taken no stand on the matter; the Under-Secretariat for Aquatic Resources does not feel bound to act, because no formal written request has yet been filed by the cooperative.

There are at present about 7 000 fishermen on the lake, and 1 500 boats. The conditions of the (non-boat owning) fishermen are destitute. They come from provinces some hundred kilometres north of the lake (Quena and Sohag) and remain on the lake two/three months at a time, while their families stay at home in the north. They are under the power of the tribal chiefs and local influential personages who advance subsistence money, handle the catch, and control transport facilities. The fishermen's cooperative (from which non-boat owners are excluded) is firmly in the hands of such influential locals. The fact that many of the fishermen (as many as 50 percent, according to one UNDP source) are fugitives from justice strengthens the chiefs' control over them.

Tribal and clan patterns also obtain in the division of fishing zones; it appears that rivalry among the two main ethnic groups is rather strong and has led, at least in the past, to considerable violence.

Fishing techniques are rather primitive. The boats, locally produced at exhorbitant prices (LE 700) are around five metres long, and carry one or two people. Fishing is only coastal, with gill-nets and some hook-and-line. The catch has increased rather slowly over the years, reaching 18 500 tons in 1977.

The main problem for this fishery has been disposal of fish after catch. The shores of the lake are completely without population, so that local marketing is out of the question; the fish then must be brought to the main centre (Aswan) and be shipped north from there. The operation is performed by the Fish Marketing Company, to be discussed later together with matters concerning costing and pricing relations between the Company and the fishermen. Distances are very great (some catching places are as far away from Aswan as 350 km) so that transport using the fishing boats themselves is out of the question. It is easy to see, then, what a crucial role is played by the carrier boats. They are at present 78, of which 60 belong to the Lake Nasser Development Authority and 18 to the fishermen's cooperative. Fishermen time their catching operations on the expected arrival of the transports; poor maintenance of the boats, and the lack of efficiently planned carrier routes have severely curtailed actual fishing times. It appears that many of the fishermen do not fish more than once a week.

Ice is provided by the Authority, and its price is included in the 3 PT/kg charge made by the Authority. The latter's leadership recognize that ice production (50 tons a day) is insufficient. A new 20 tons factory is being set up.

In the course of transport operations the fish is handled at least five times (from the fishermen's boats to the carrier, from the carrier to the dock, from the dock to the Fish Marketing Company depôt, during sorting and repacking in the depôt and from the depôt to trains), so that its quality tends to be spoiled. Harbour facilities are rather primitive.

The Development Authority is considering several projects for improving production on the lake. In the course of next year some outboard motors will be brought to Aswan for trial. A 'villagization' project has been approved, whereby some ten villages should be built on the coast, in order to house fishermen and their families, and initiate agricultural activities. The money has been apparently allocated, but the project has not become operative yet because of the high construction costs. Some better means of fish collection are being considered, including the use of containers carried by barges.

If these projects were totally or partially realized, they would bring about a sizable increase in catches, which in turn would raise the problem of resource management. However, the management of the Authority gave the impression of having entered into such projects rather haphazardly, without a serious assessment of the consequences they might have on existing fish stocks and future development.

On the other hand, a study is to be carried out by Norway on the potential of "deep" lake fishing (below ten metres). The study should begin next year, and it is being looked upon as providing the main inputs on which most future decisions will depend.

This seems to be an on-going pattern with the Authority's decision-making processes: the Authority does not have a real fishery staff, so that it has relied on external advice for most of its decisions. This means that projects and their consequences have not been permanently monitored by a local, resident staff, nor have any long-term policy lines been developed. Other aspects of the Authority's operations will be commented upon in discussing the administration of fisheries.

(e) Red Sea Fisheries

The main base for the Red Sea Fisheries is Suez, where at present there are about 200 motor boats, powered with 100 to 350 hp engines, engaged mainly in bottom trawling and purse seining. To these at least as many sailing and sailing-and-rowing boats should be added, some of them using hook-and-line.

The area of the fleet's operation is very wide, going as far south as the border with Sudan: the absence of carrier boats causes serious transport problems, since the boats are not equipped to freeze the catch, but merely preserve fish with crushed ice. This means that actual fishing operations must be relatively short, compared to the time spent in reaching the grounds and returning from them to the home base.

Other problems facing the industry stem from the inadequacy of services. The harbour lacks a slipway or an ice factory. There are, likewise, no maintenance shops, or marine engineers, so that, for heavy repairs, motors must be sent to Alexandria. The construction of a new harbour is being planned but it will accommodate vessels of limited draught.

The total production in 1977 was about 17 000 tons. The industry feels rather strongly the need for research of stocks. The last information was produced by a 1966 Russian survey, whose estimated (50 000 tons) are now considered too optimistic.

About 25 to 30 percent of the catch is marketed locally; the rest is shipped to Cairo and other Governorates by a small group of dealers (not more than five or six) who daily fix the price outside of any auction. The dealers' power appears to be considerable, for the usual reasons: during the closed season (six months) they advance money to fishermen, who repay the debts during the season, only to borrow again when the season is over - remaining thus constantly in debt. The dealers appear also to have a strong influence on the fishermen's cooperative, either directly or through boat-owning associates.

There are two cooperative units, one for the big, the other for the small boats. They appear to be controlled by the big boat-owners, some of whom are alleged to be millionaires. Crews and non-proprietor fishermen are not members. It appears, however, that the incomes of labourers are relatively good; the crews of trawlers earn about £E 50 per month, those of purse seiners about £E 10 more. This compares favourably with fishermen incomes from other areas (especially those on Lake Nasser), and general labour wages in Suez Governorate.

5.3.2 Aquaculture

Most aquaculture operations in Egypt are managed privately (about 70 percent according to an IOF source). There is very little information about them, except on some aspects: a) interest in this type of activity is very lively; b) fish-farmers are very differentiated among themselves - ranging from small, individual operators to large, international companies; c) they all expect and need governmental help and support in such matters as: selecting the sites, learning basic construction and management techniques, acquiring additional food and fry. The public role in aquaculture is thus crucial. The main public initiatives appear to be the following:

(a) Government-owned farm

Located near Manzalla, it is managed by the Undersecretariat for Aquatic Resources. It comprises about 250 feddans and during the last season (of 13 months) it produced 150 tons

or 450 kg per feddan. (The fish is sold through the Fish Marketing Company). There is a permanent staff of about 15 people, while as many as 70 work there during harvest time. The level of sophistication is quite low; the operation consists mainly of putting in the fry and harvesting the fish.

(b) North Sea Fishing Company's Farms

These are two: one on Lake Manzalla, the other at Idku; the former produces tilapias, mullets, catfish; the latter mainly eels. Although they are called fish farms, in fact they seem to be simply ponds where fish are let in with water through inlets, are allowed to remain and grow, and later on are harvested without any supplementary work. According to the Undersecretariat of Aquatic Resources, the productivity of these farms is only a small fraction of what it could be.

(c) Experimental Stations of the Institute of Oceanography and Fisheries

They are also two: one, near Manzalla, comprises about 50 feddans, and is intended basically for the breeding of fingerlings; some experiment in production is also carried on. The second, at El Mex, near Alexandria, is intended for small-scale experiments, and the collection of mullet fry.

(d) Sharkaya Governorate Farm

The Governorate of Sharkaya owns a farm near Zagazig, of which the supervision is entrusted to the IOF.

The importance of aquaculture and its potentialities for Egypt have led international agencies and foreign donors to take a keen interest. At least three major projects are at present at various stages of development: the FAO pilot project in Kafr El Sheikh, the World Bank Project (linked to the former), and the USAID project to establish a centre on aquaculture technology.

One of the difficulties that all these projects are encountering is the identification of an appropriate counterpart within the Egyptian Government[1]. This, in turn, refers to the weakness of the institutional structure for the support of aquaculture in Egypt.

The main agency in charge is the Undersecretariat for Aquatic Resources, whose Aquaculture Division has a staff of about 25 people. They are charged with the general task of developing the activity in the country which means, among other things, to select sites, to advise private farmers, participate in international programmes, etc. Many of the staff never go in the field; the number of real specialists is not above 10; there are no civil engineers; most of the combined experience was acquired in the U.S.S.R. (that is, in northern temperate climate conditions) some years ago.

5.3.3 Imports

A monopoly on fish imports is held by the Fish Marketing Company of the Ministry of Supply, established in 1965.

The Company imports only frozen fish, the main source having been in the past, the U.S.S.R. At present, some quantities also come from Sweden, Korea, Yemen. Past imports have averaged around 40/45 000 tons per year, with an expected total for the current year of 55 000 tons. Until now imports have been paid for with hard currency. For the next year it is hoped to acquire a certain quantity (40 000 tons) through "clearings" (commodity exchanges) and to import via normal channels another 60 000 tons, so as to reach a total of 100 000 tons.

1/ For example, the terms of reference of the USAID project include the appointment of an Egyptian project director, before disbursements are to begin. A few days before the expiration of the deadline for such appointment, it was obvious that the administrative machine was nowhere near accomplishing the task.

With a partial, recent exception that will be briefly mentioned below, the real importing agency is the General Authority for Commodity Supply, belonging to the same Ministry. The Authority pays to the U.S.S.R. exporters U.S.$ 200 per ton (= LE 140, at the rate of .70) that is, a price probably well below that of the international market. The Authority also is responsible for harbour handling costs (and some transport?). The prices paid by the consumer are fixed at a level below that implied by these costs; the difference is absorbed by the Authority, and there is a book profit to the company.

Since 1978 the Company has been allowed to import directly, out of its own funds and without going through the Authority, some quantities of fish; this activitiy is expected to acquire more importance in future.

The Company retails the fish it has acquired through 50 outlets it owns in Cairo, and through the stores of other public companies (El Nasr etc.)

The Company does not confine itself to importation of frozen fish. In the first place, while the High Seas Company was in operation, its catch had to be sold to the Fish Marketing Company (at a price far below market prices and production costs, as will be seen below).

Moreover, the Company purchases fresh fish, most of it from the Lake Nasser fishermen cooperative, viz about 13 000 tons a year, out of a total fresh fish purchase of 14 000 tons. Fishermen from other areas are unwilling to sell to the Company because of the low prices it pays. Those from Lake Nasser have no alternative, since they cannot reach the city markets except through the Company's transport system as was shown above. The Company packs the fish in Aswan, and ships it north by train on a fleet of wagons (some electrically refrigerated, some only insulated) it rents for the purpose. Here again the price is fixed by Government (i.e., the Ministry of Supply); consumer price for Tilapia is PT 18/kg; the Cooperative is paid PT 14/kg; transport costs amount to PT 10; the Company obtains a subsidy of PT 6/kg.

5.3.4 Marketing

Marketing presents different features according to location.

On the Mediterranean and along the Nile there appear to be no major problems, since the selling places are close to capture areas, and consumer demand is far in excess of supply.

Where fish is caught in places distant from the market, however, serious problems may arise, due to the scarcity of means of transport. It has been seen above, for example that, on the Red Sea, dealers are able to yield a significant measure of power on the industry because they control transport facilities and market the product; their earnings are supposed to be larger than those of the producers, as is often the case in these circumstances.

Two other special marketing situations involve the public sector, and within it the Fish Marketing Company. They have already been touched upon: one concerns the High Seas Fishing Company, the other the fisheries of Lake Nasser. In both cases the Fish Marketing Company is the compulsory buyer, and prices are fixed by the Ministry of Supply at an artificially low level, bearing no relation to costs of production or free market value. In either occurrence it appears that the Government's policy has been to favour consumers and impose on producers a very low selling price, the "executive arm" of this policy being the FMC.

5.3.5 Research, development, innovation

Practically all of the research at present undertaken in the field of fisheries is carried out by the Institute of Oceanography and Fisheries (IOF), an establishment belonging to the National Academy of Science and Technology. The institute is organized partly by specialist disciplines and partly on a geographical basis. Physical oceanography and marine geology are separate departments, but people working on fairly fundamental aspects of aquatic

biology are within the same departments as those concerned more directly with commercial fisheries biology and resource management. The Academy is still in the process of revising its programmes of work following a policy decision to concentrate upon problems of national economic importance, but the academic links and tradition of publication remain; no staff were replaced as a direct result of the policy, and there is still a tendency to measure the potential usefulness of a member of staff by whether or not he possesses a higher degree. In the case of fisheries, the user industry is not represented on the appropriate Academy Committee of the Research Council, and the Council itself deals with terrestrial animals as well as with aquatic science. Nevertheless, there is a willingness and desire in the division mainly concerned with the fishery industry, at Deputy-Director level, to do work that will be of direct and immediate use to the fishery industry.

The Institute staff includes economists. There is some work on pollution. Experimental work and original research includes a small effort in the field of aquaculture. Staff of the Institute attend the General Council of Fisheries for the Mediterranean on Egypt's behalf, and other international scientific bodies.

The Institute is prepared to carry out research under contract, and does so. The Academy can also place contracts with research establishments not under its own control, including those administered by government departments.

In the fields of handling, processing, preservation and transport of fish as food (food science and technology as applied to fish or, as it is often termed, fish technology) there is no effective research or development activity in Egypt.

As regards the development of fishing vessels and their equipment, and methods of operation: the only activity is a rather small, spasmodic, ad hoc effort on the part of the Fishing Equipment Company, noted later below. There is no professional engineering capability in this field within the Undersecretariat for Aquatic Resources or the High Dam Lake Authority (or in the IOF).

In the analogous field of aquaculture, the official approach seems to be that its development is largely a matter of placing contracts with civil engineering contractors to build ponds and provide the appropriate means for producing and controlling a flow of water, although the supply of fingerlings is also recognized as a potential problem. However, various practical experiments in the field supported by international and bilateral aid are in the course of getting under way and will no doubt identify various problems, some of which may be amenable to solution by research or technical development.

It is recognized that development of aquaculture will need a trained and experienced extension service which does not yet exist and the recruitment and training of which is not yet put in hand. The existing extension services in the field of capture fisheries are mainly concerned with disseminating information about new and amended regulations, etc., etc., - a not surprising state of affairs since there is little innovative activity and little by way of transfer and adaption of foreign methods and equipment.

Apart from the international and bilateral projects mentioned earlier, there is no specific fund for pilot-scale trials in the field, practical demonstration of new methods and equipment, or support for innovative enterprises. Even in the case of aquaculture projects some difficulty has arisen because of this, insofar as IBRD have as yet failed to identify a corporate legal person competent to handle a large development loan, and the same situation would arise in other fields of fisheries technology and management. There is a general shortage of professionally qualified staff, especially of experienced staff capable of organizing and leading development programmes.

5.3.6 Resource Management: Regulation of the Fishery

Statistics of catch and effort are collected by staff of the Under-Secretariat for Aquatic Resources and, as noted earlier, these are analyzed by the IOF to ascertain the

effects of fishing upon the well-being of the resource; the IOF carry out other investigations in support. However, there are few, if any, instances of the fisheries authorities taking action based on the Institute's findings, and indeed there is no branch of the Under-Secretariat that could handle the feedback of information and draw up proposals for action based upon it, or handle representations from fishermen's organizations or others alleging overfishing or detrimental effects from the use of certain methods of capture. There are some mesh size regulations, there is licensing of vessels and a control of total effort in certain cases, but these have been the result of ad hoc consultations; there is no continual process of adjustment of present fishing effort and of future development plans in the light of up-to-date information on the state of the stocks and the trends therein[1/].

Surveillance of the fisheries to enforce the law in such respects was formerly undertaken by the armed forces, but they are no longer prepared to undertake this task. The Under-Secretariat for Aquatic Resources is planning to establish a new branch to carry out the duties of surveillance and enforcement.

5.3.7 Equipment and services

The Fishing Equipment Company imports proprietary equipment and materials of foreign manufacture, such as engines, deck machinery and fittings, nets, hooks, twine, and other fishing gear components, and makes them available to recognized producers' cooperatives; the goods are supplied free of customs duties and bear a comparatively modest profit. Certain items of capital equipment such as engines can be the subject of loans at reasonable terms. Although the most obvious advantages to the fishermen are financial, there are others. Besides avoiding the excessive profits made by agents of foreign manufacturers at the expense of local fishermen (and consumers of fish) in some parts of the world, the company provides the after-sales service that is sometimes lacking, as regards provision of adequate stocks of spare parts, provision of technical support and, if necessary, skilled workmanship. It also has facilities for building, maintenance and repair of boats. Moreover, it carries out a certain amount of design and prototype construction and development as regards the application of the equipment it sells, in cases where this is perceived to be of potential benefit; for example, the design of a standard bedplate and foundation for the main engine and winch power take-off for local trawlers, employing one popular make of engine, in order to avoid trouble caused by poor design on the part of local boatyards or marine engineering firms, or by amateur installations.

These services are mainly used by the private enterprise section of the industry (cooperatives) either on the Mediterranean, the Nile, the Northern Lakes and Lake Nasser. The two state fishing companies tend to make their own arrangements for procurement of equipment and services and have professional staff of their own.

Among the reasons given for this state of affairs are the long delays in procuring supplies, because of the bureaucratic processes the Company is constrained to use; and the fact that the fishing companies can procure supplies at lower prices elsewhere, due to the Company's large overheads and the fact that it has to borrow its working capital. These complaints are echoed by the fishermen's cooperatives. The Company in turn points to a lack of coordination of users' requirements and lack of standardization of specifications among the different users. It is reluctant to import many types of improved or advanced equipment in the absence of any programmes of training in its proper use and maintenance.

The Company's turnover was LE 4 million in the last full year, of which a quarter was in spares. The turnover is expected to decline as it becomes easier for the private

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1/ The episode, mentioned-above, of the cooperative from Alexandria not being able to obtain a three month stoppage on trawling operations is an eloquent example of this situation.

sector to import equipment and material through other channels.

The management of the Company has recently been the subject of an official enquiry.

Subsidies for fuel for fishing boats were abolished some years ago.

Services concerned with port facilities such as ice plants, water supplies, provision of fish boxes, slipways and specialist workshops are not well developed and such facilities are said to be inadequate or lacking in several areas. This is certainly true of Lake Nasser. Cold stores operating at the low temperatures considered to be most suitable for frozen fish are not yet available and the Marketing Company makes use of general cold storage facilities for the storage of the frozen fish it imports.

Telecommunications and other electronic aids are not in general use in the Mediterranean or on Lake Nasser.

Services to fish farming, including supply of fingerlings and feedstuffs, are described separately under aquaculture.

Inland fish markets are capable of much improvement.

5.4 Fisheries Administration

As should be evident from the preceding paragraphs, the administration of fisheries in Egypt is rather intricate and it involves many different agencies. Moreover, the governmental bodies involved have tended to vary considerably through times. Between 1968 and 1978 responsibility over all or part of the fishing industry has shifted between the following: Armed Forces; Ministry of Supply; Ministry of Agriculture; Ministry of Marine Transport; Ministry of Supply again; then again of Agriculture; of Sudan Affairs; of Agriculture; of Housing and Reconstruction; of Scientific Research.

As a consequence, operating sectors, agencies and organizations have been moving from one affiliation to another, without much advantage or consistency and adequacy in the division of responsibility1/.

At present, the highest-level governmental bodies (Ministries) involved in fisheries are: the Ministry of Agriculture and Rural Development; the Ministry of Supply; the Ministry of Scientific Research (through the Academy of Science and Technology); the Ministry of Development and New Communities. To these one should add the local government authorities (Governorates), which are generally responsible for the provision of food to the population, and in several areas are actively interested in fisheries (Port Said, Suez, etc.).

The agency whose responsibilities theoretically should embrace the widest areas is the Under-Secretariat for Aquatic Resources, of the Ministry of Agriculture. Here also there have been many variations; some office concerned with Aquatic Resources has existed at ministerial level (Under-Secretariat) since 1961, being repeatedly shifted between Agriculture and Food Supply. In 1975 it was abolished, and all of its experts were disbanded. It was re-established in 1977 within the Ministry of Agriculture but all the experienced staff were not recalled.

1/ An extreme case is perhaps that of the High Seas Fishing Company, which in ten years has changed seven affiliations, at one time being simultaneously under the (theoretical) supervision of two Ministries.

At present the Under-Secretariat has a personnel of about 190 persons, organized in three main operational departments (Aquaculture and Projects, Extension and Field Offices, Cooperatives and Land rentals), plus two "general divisions" Finance and Administration and Office of the Under-Secretary (which takes care of statistics, coast-guard, and licensing).

The absence of qualified technical staff has a damaging effect on the activities of the Under-Secretariat, confining them mainly to administrative tasks. Thus, for example, the officials responsible for assistance and support to cooperatives are concerned mainly with helping the cooperatives through administrative intricacies for the obtainment of loans (no small feat, to be sure), or with controlling budgets and records. There is, however, no technical fishery advice, nor any attempt to influence the cooperatives' politics and policies. The same applies to land use: when would-be fish farmers ask for a land concession, the evaluating committee of the Under-Secretariat is more concerned with the land's value for financial purposes than with technical aspects. The understaffing of the Aquaculture Department has been pointed out above; the Extension Department does not seem to have more than fifteen personnel who are concerned mainly with giving publicity to new governmental regulations.

The general weakness of the Under-Secretariat reflects itself in the limited scope of its range of action. The Under-Secretariat has no responsibilities concerning international fishery matters and the administration of the Law of the Seas. It does not have a permanent office charged with direction and coordination of the companies coming under the jurisdiction of the Ministry (High Seas, North Seas and Equipment). It does no research itself, nor does it have a permanent unit charged with relations with the IOF, nor is it represented in the Academy's committee charged with the IOF's activities. It should be added that the unstable affiliation of the Under-Secretariat, its minority role in a large Ministry prevalently devoted to other matters, where few people have interest or understanding for fisheries, its very location at Heliopolis while the rest of the Ministry is in Dokki - all these factors give to the Under-Secretariat a "poor relations" status, which certainly does not increase its prestige in dealings with other administrative units (like for example the companies which it should in fact coordinate, let alone other ministries).

As a consequence, the Under-Secretariat does not perform a general role of coordination and guidance over fishery matters for the whole country, but is confined to the performance of limited tasks, having prevalently administrative or bureaucratic content.

The main area whose administration is outside the scope of the Under-Secretariat is the area surrounding Lake Nasser, where the principal governmental body concerned with fisheries is the Lake Nasser Development Authority, besides the Governorate (the Aswan Regional Planning Authority seems to have little if any powers).

Here again there have been some shifts in the Authority's affiliation, which has moved several times between the Ministries of Agriculture, of Sudan Affairs, and finally of Development and New Communities.

The Authority should be in charge of general development projects concerning the Lake area; in fact, it has been concerned only with fisheries and within fisheries it has confined itself to providing transport for the catch from fishing areas to Aswan. The Authority seems to have been unable to articulate a policy line of its own; most of the plans and projects it has entered into have been the result of external interventions (surveys, consultancies, aid missions, etc.) of differing length, depth and reliability. This might be due to the fact that the Authority, with a staff of 500 (of which 450, including boat crews, are concerned with fisheries)(simply does not have enough professional talents at management level in order to elaborate long term policies and options.

Thus, the Authority's management has accepted rather supinely the prevailing, non-expressed view that fishermen's needs must be compressed in order to provide cheap food for city dwellers; it has made no attempt to break or reduce the very tight hold that village strong men enjoy over boat-less fishermen; it has not produced any systematic analysis of the possible consequences of various courses of actions in which it seems to be entering

(motorization of boats, villagization, improvement of transport facilities, etc.).

In this case, as in that of the Under-Secretariat's, although for different reasons, the result is a serious lack of politico-administrative guidance and leadership on fishing operations.

5.5 Summing-up

The present Egyptian fisheries administration consists of a number of groups carrying out various special functions and which were established at various times to meet perceived needs, and in accordance with the then-existing policies and priorities; these groups belong to various official bodies, and the criteria according to which powers and responsibilities have been apportioned among them are quite different (area, function, industry, etc.). The formal coordination between these groups and bodies leaves much to be desired. More important, the fisheries administration is lacking to a serious degree the professional capabilities, experience, structure and powers that are necessary if it is to organize, regulate and develop the fishery industry of Egypt to enable it to meet the known national objectives.

A special problem in the case of fisheries administrations and fishery industries often arises when the industry is comparatively small and does not play a dominant part in the economy; the feeling that, whichever department of government is the official sponsor, fisheries will be the neglected, poor relation; this feeling is all the stronger because few legislators and administrators have a wide and deep understanding of this peculiar and very complex industry. This feeling certainly exists in the Egyptian fishery industry and administration.

6. SUGGESTIONS FOR CONSIDERATION

6.1 Prefatory Remarks

Although both members of the Mission have worked in Egypt for short periods on previous occasions, they cannot claim any great familiarity with Egyptian law, custom, history, political philosophy and way of life. Nor is it possible in such a short time as two or three weeks to become thoroughly familiar with the Egyptian fishery industry and its supporting administration. Those who read what follows hereunder will have to interpret the suggestions put forward by the Mission in the light of their knowledge of the Egyptian context.

6.2 The Need

Previous discussion shows that one of the main weaknesses of the fishery industry in Egypt is lack of effective political and administrative leadership, support, guidance and coordination. A strong body should be established for this purpose. The questions then arise as to the nature of such a body, its administrative affiliations, its tasks and areas of operation.

6.3 The Sponsoring Ministry

In a very few countries the fishery industry is so large or so important economically that there is a separate Ministry of Fisheries. In some others, the fishery industry is of special importance in otherwise disfavoured regions and may be under the care of a special regional development agency. In many countries, however, such considerations do not apply and the fisheries administration can be found within departments concerned with agriculture, or with forestry, or wild life, or maritime transport, or foreign trade, or the military navy; sometimes it is divided between two or more departments and statutory bodies. There is no universally valid solution to the problem of which department of government should sponsor the fishery industry.

Nevertheless it is the opinion of the Mission that the Ministry of Agriculture, where the Under-Secretariat for Aquatic Resources has, at the moment, come to rest, is the most

appropriate department of government, given present circumstances in Egypt. First, the main objective is to produce food, not commercial profits (although these may also be important) and food production is the concern of the Minister of Agriculture. Second, and more important, aquaculture seems likely to produce a growing amount of fish and a growing proportion of Egypt's total fish supplies, and aquaculture has close affinities with agriculture - much closer than have capture fisheries using ships; moreover, the existence of aquaculture and agriculture alongside each other raises questions of land use and perhaps also of allocation of supplementary feeding stuffs - questions better settled within the same ministry rather than between two separate ministries. Again, the law relating to aquaculture, and policies of subsidization, should be assimilated closely to those governing agricultural activities, on grounds of equity, and this is more easily accomplished if one ministry is involved rather than two. Fisheries Administration, then should be placed within the framework of the Ministry of Agriculture, with two major exceptions.

The fisheries of the High Dam Lake are in an isolated, separate region and special circumstances prevail: including, for example, the lack of a settled population and the need to take steps to develop the Lake in this sense. The Mission, therefore, recommends that the High Dam Lake Development Authority should continue to be responsible for fisheries development and administration within its area of jurisdiction and that it should continue to be sponsored by the Ministry of Development and New Communities, at least until such time as there are settled fishing communities on the Lake and the situation has stabilized. When this has come about, by which time the fisheries administration will have grown in experience and competence, the transfer of responsibility for the fisheries of the High Dam Lake to the Ministry of Agriculture should be reconsidered. Meanwhile, there should be stronger and more formal links between the High Dam Lake Authority and the fisheries administration for the rest of Egypt as suggested later below.

There is a feeling that the Fish Marketing Company should be brought within the orbit of the Minister responsible for fisheries. The arguments are threefold: first, that the same overall organization should be responsible for the quality of the product from catching to consumer; second that most of the profits in the fishery industry tend to be made in the marketing part of the system, so that there should be some degree of formal vertical integration to allow the producer to share in these profits; and third, general administrative tidiness.

No doubt the system of pricing enforced by the FMC regarding the EHSFC and the Lake Nasser Fisheries needs serious reconsideration, and will be discussed later below. However, if one omits those two instances, the Ministry of Supply does not appear really to perform a role in the fishing industry, being mostly concerned with the mere importation of frozen fish, alongside with many other alimentary commodities. The need for coordinating such an activity with the rest of the fishing industry would be urgent if importation of cheap frozen fish were a serious menace to local production, which is not the case, given the different quality of the fish, and the generally high level of the demand in presence of insufficient supply. Moreover, it is also practicable for the ownership of the product to change hands, as it does at present, and this is satisfactory if the transaction is subject to such contractual conditions, including product specifications, as are deemed necessary to safeguard quality. In the opinion of the Mission, therefore, and so long as the Minister of Supply continues to subsidize the prize of foodstuffs to the consumer (a subject to which further reference is made later below), the Fish Marketing Company should remain with the Minister of Supply. If food subsidies disappear the situation should be reviewed.

6.4 Special Considerations

The capture fisheries are a hunting industry in which the production operations are carried out by independent fishermen or independent fishing units, without immediate and direct supervision, and in often hostile environmental conditions. Fish, once captured, is subject to rapid spoilage. The organization and technology of the fishery industry are complex and peculiar. For all these and other reasons, the fishery industry is often not well understood by the legislator or civil servant called upon to administer it, and some years of experience are required before any individual gains sufficient knowledge and

understanding to ensure appropriate policies, legislation and administration. The legislator and administrator in the fisheries field are therefore dependent to an unusual degree upon experienced professional advice if their policies and actions are going to be successful.

Another special consideration - that the fishery industry and administration often believe they are treated as the poor relation of agriculture - has already been mentioned.

The fishery industry, whichever ministry happens to be the official sponsor, is also subject to legislation, regulations and administrative action by various other ministries, such as those concerned with, for example, maritime transport, health and hygiene, labour laws, education, and so on, and which cannot be expected to be familiar with the peculiar characteristics and circumstances of the fishery industry. This puts a special burden on the sponsoring ministry: that of defending the industry against inadvertent and unintentional action, by these other ministries, that would be detrimental to the wellbeing and future prospects of the fisheries. Here again, the sponsoring Minister and his senior administrative civil servants are very dependent upon the vigilance and detailed technical knowledge of professional advisers who are thoroughly familiar with all aspects of fishing operations and of fish marketing and distribution.

These considerations lead to two conclusions: first, that special care must be taken to make available to the Minister and Under-Secretary concerned, advice from senior, permanent, professional experts with long experience and thorough knowledge of the fishery industry; second, that the status of the fishery administration must be high enough to remove any feeling of neglect or being misunderstood.

Theoretically, this result can be achieved in two ways: either by strengthening the present structure (the Under-Secretariat for Aquatic Resources) and charging it with new tasks, or by creating a new body, typically with the status of a Development Authority.

There are some arguments against the establishment of a new organism. In the first place, in many developing countries (and in several developed ones) there is a tendency to fall under the delusion that the mere establishment of a new administrative unit will be enough to solve all the problems which were apparent when it was created, without there being a need for further serious governmental action. Moreover, in administrative contexts where central governments are not usually very strong, it is often the case that new, semi-independent bodies add to the general problem of coordinating the administration, and end up by running themselves outside any effective governmental control.

These dangers are real. Nevertheless, after mature consideration, the Mission decided to recommend the establishment of a new Development Authority, for several reasons:

(a) If fishery administration were entrusted to an Under-Secretary within a ministerial structure (viz, that of Agriculture), the Under-Secretary, however strong, would still be in a minority position within a huge organism, charged with larger, "more important" and different tasks. This would have especially negative effects in areas like resource allocation, setting of priorities, preferential recruitment of qualified personnel, etc..

(b) Remaining structurally within a Ministry charged with other tasks, the administration of fisheries would be exposed to the vagaries of political appointments, which bring to the head of the Ministry or of the Under-Secretariat persons not really competent or interested in fisheries. Especially if political turnover were rapid, this would also cause discontinuities and interruptions in policy-making.

(c) Most of the tasks connected with fishery development proper require technical-professional skills and patterns of behaviour that are largely outwith the scope, philosophy and cumulative habits of Ministerial offices, to which administrative, regulatory, licensing and bureaucratic tasks are better confided. The acquisition of personnel possessing the necessary professional skills and work-habits can also be better achieved within a specialized body like a Development Authority, for example, control of harbour works; construction of fish farms.

(d) Some of the functions that need to be performed, like the administration of development loans, require corporate personality on the part of the receiving organs, and this, again, is better achieved by an Authority than a Ministry.

(e) The management of fisheries required flexibility both in actual administrative interventions and in the use of the necessary funds. Both can be better obtained by an Authority; in fact, one should keep in mind that the application of general bureaucratic rules and regulations to fishery administration (for example, the enforcement of standard governmental procedures for the acquisition of equipment) has severely hampered the activity of public companies engaged in fisheries.

(f) The coordination problem is certainly a major one, for which no easy recipe can be offered. A necessary condition for its solution would be to grant the Authority enough powers and means in order effectively to coordinate the activities coming under its jurisdictions. This would make of it a strong interlocutor within Agriculture, and, in turn strengthen Agriculture in external relations.

(g) The Development Authority as proposed is not an innnovation as far as Egypt is concerned: one need go no further for an existing example than the High Dam Lake Authority (also cf. the Canal Authority).

6.5 Development Functions

The main functions which should be entrusted to a Development Authority are the following:

(1) Acting as national counterpart agency for internationally and bilaterally funded development projects and as the trustee for development loans.

(2) Innovation with a view to increasing production and reducing costs, including technical development, adaptation of methods and equipment already in use elsewhere, pilot-scale projects; practical demonstration, extension work; support of innovative ventures, including financial support; training in connection with the foregoing.

(3) Exploratory fishing and search for new fish farming sites.

(4) Placing research contracts aimed at facilitating the work of (2) and (3) above, supervising them and analysing the results.

(5) Basic and advanced on-the-job training; liaison with education authorities on curricula for basic and advanced formal training and education.

(6) Services to capture fisheries and aquaculture, including dredging of harbours, provision of landing facilities, ice plants, slipways, specialist workshops, etc.; supply of fingerlings and feedstuffs; supply of equipment and materials; fish markets.

(7) Organization, supervision and support of cooperatives including servicing of and consultation with the existing Council.

(8) Establishment, supervision, coordination and support of state corporations, including their abolition if deemed necessary or desirable.

(9) Participation in decisions about land use in relation to aquaculture and fixing of rents for public land used for fish farming (see later below).

(10) Participation in decisions about prices to be paid to producers in the public sector, and on the proportions or amounts of catch to be exported and retained in individual governorates (see later below).

(11) Professional and technical advice to the Minister within the fields of competence of the Authority, including participation in liaison activities with other government departments concerning the law related to fisheries, fishing vessels, fishermen and fish as food; and with international and regional bodies including FAO, IMCO, UNLOSC.

6.6 Administrative, Legal and Regulatory Functions

Certain functions, however, are best reserved to the Under-Secretariat proper. These include those regulatory functions that involve legal sanctions and, in the extreme case, the use of armed force; also the drafting of legislation; relations with other government departments; and international relations.

In more detail, the Under-Secretariat should be strengthened so as to carry out the following functions:

(1) Resource Management and Regulation:

In addition to the current collection of statistics on catches and effort, and the proposed new surveillance branch, this department should include an Office of the Adviser on Resource Management. The Adviser should be a fisheries biologist or economist with experience of, and a record of achievement in, the field of resource management. His terms of reference should be:

"To advise the Minister on matters in the field of resource management, with due regard to the advice of the research and development policy advisory committee (see later) of which he will act as joint official secretary.

To assist in the preparation of legislation on resource management, and in the monitoring of the effectiveness of such legislation.

To consult with the IOF on technical aspects of the collection and analysis of the relevant statistics and related scientific work.

To act as the Minster's representative on relations with the IOF concerning resource management, including supervision of any research contracts placed with IOF in this field.

To act as the Minister's representative in international scientific bodies, fisheries commissions and conventions in the field of resource management.

To advise on and participate in bilateral agreements on fishing and on exchange of information on resources, and to monitor the effectiveness of such agreements.

To supervise the collection of fisheries resource statistics and allied information.

To liaise with the surveillance and enforcement branch".

(2) Inter-Departmental and External Relations

A branch of the Under-Secretariat (headed by a civil servant of a grade immediately below Under-Secretary) should be involved in liaison with other departments of government, especially those responsible for legislation on safety at sea; construction, equipment and operation of ships; conditions of employment and manning scales at sea; hygiene regulations relating to foodstuffs; international matters, etc. He should handle correspondence and assist the Minister as seems necessary and desirable in his relations with UNCLOS, IMCO, FAO, regional fisheries bodies and so on, in each case in consultation with the Adviser on Resource Management and the senior professional staff of the Development Authority, and working in collaboration with and through the Ministry of Foreign Affairs as and when this may be appropriate.

(3) Legislation

The Under-Secretariat's capability to prepare draft legislation, in conjunction with the scientific and professional advisers to the Minister, should be strengthened as necessary to meet the inevitable demand for more and more detailed legislation arising out of the greater activity of the strengthened administration.

(4) Policy

The Under-Secretary's Office should include a small staff concerned with preparation of policy papers, formulation and drafting of policy, and interpretation of policy, in conjunction with the scientific and professional advisers.

6.7 The Fisheries Development Authority: Terms of Reference and Organization

The modern fishery industry is characterized by change, both internally and in its external circumstances. One of the functions of the Development Authority will be to enable the Egyptian industry to respond successfully to, and take advantage of, changes in its circumstances. It must, therefore, be capable of a flexible approach. For this reason, and because it is not yet possible to identify the problems and opportunities that will present themselves, the Authority's terms of reference should be wide and should be interpreted broadly. They could be, for example, as follows:

"to organize and develop the fishery industry everywhere in Egypt other than that under the jurisdiction of the High Dam Lake Authority, in accordance with the policies and objectives laid down from time to time by Government;

to collaborate actively at the technical level with the High Dam Lake Authority."

The Authority should have its own budget.

The Authority should have a Chairman and Board of Management. The Chairman, the General Manager, and the senior staff should, ideally, possess a thorough knowledge of, and experience in, the fishery industry, in at least some of its aspects. More important, however, is that they should have a proven record of achievement in the field of development, whether in fisheries, agriculture, land reclamation, irrigation, marine engineering, canal construction, or any other technological areas involving work "in the field" in an aquatic technology, and a practical approach. In view of the lack of senior professionally qualified people with experience in fisheries, it is more important to recruit leaders with the right approach to development work, rather than to put too much emphasis on experience and detailed knowledge of fisheries, at this stage. Even if this will inevitably mean that some mistakes will be made, progress will be faster in the end. Knowledge, experience and advice can be aquired meanwhile through international and bilateral aid.

Similar considerations apply to recruitment of additional professional staff. It will be difficult or impossible to recruit technicians with qualifications in "aquaculture" and the use of professionally-qualified biologists and engineers (ideally, but not essentially, with post-graduate experience in aquaculture or in related subjects) will be more effective. Similarly, basic qualifications in engineering, naval architecture, electronics, navigation and the like, are more effective in the development context than a basic qualification in "fisheries", which is usually oriented to resource management or administration.

In order to perform its functions, the Development Authority should be organized into two main divisions:

(1) Development

(2) Industry

with, in addition, common services such as secretariat, finance and accounting, transport, and such specialist services as may be seen by the Authority to be necessary: such as for example computer services; operations research; instrumentation workshop.

The Development Division should be responsible for all aspects of innovation and training, including technical development, transfer of technology, pilot scale projects, research in support of these activities; demonstration in the field; extension work and ad hoc training in connection with innovation; basic and advanced on-the-job training; advice on content of formal courses of education and training organized by the education authorities; technical advice on law relating to fishing, vessels, fishermen employment, fish as food, etc.

The basic disciplines of the professional staff of the development division will be those appropriate to its programme of work (see later below) but the predominant disciplines are likely to be civil and mechanical engineering, marine engineering and naval architecture, fishing technology, aquatic zoology, animal health and animal breeding. (In contrast to the IOF, the staff will have a much higher proportion of engineers and technologists). For professional and carreer reasons, the organizational structure of the division should probably be by academic disciplines, but the work programme should consist of discrete projects, the execution of each of which will be carried out by an ad hoc team with a team leader appointed only for the duration of the project. Until these staff gain experience, the Authority should avail itself of guidance from international and bilateral sources of technical aid, including twinning arrangements.

The head of the division should possess a record of personal achievement in full-scale technical development work or management of large projects in the field. Since people of this calibre are very scarce in fisheries, he may have to be sought in some other related industry where environmental factors play a large part: irrigation, canal construction, land reclamation, agrioulture, marine engineering and shipbuilding; construction of dams.

The Industry Division should be divided into branches dealing with, respectively, the cooperatives, the state corporations, the aquaculture industry, and relations with the High Dam Lake Authority and governorates. There should also be two specialist services: first, an engineering service dealing with port facilities, fish farm construction and similar contractual work; second, a service concerned with techno-economic studies in support of those whose responsibility is for the economic performance of the industry fixing of prices and rents, etc.

The branch dealing with cooperatives would operate much as at present, but it should work in close association with those responsible for technical extension services, training, and provision of port and other facilities. The Union Council would continue.

The branch dealing with State Corporations would aim to coordinate the activities of the companies; agree performance norms and monitor performance, and justify and administer any subsidies granted to the companies; support the companies in their relations with other bodies such as the Marketing Company, propose the creation of new companies or the abolition of existing ones, as may seem necessary or desirable. They would also participate in negotiations on prices and allocation of catches (see below).

Among the responsibilities of the Aquaculture Branch (apart from general support of the industry) would be (in cooperation with the development division and the two specialist services of the industry division) to prepare studies on which decisions can be made about land use and about level of rent for public land to be used for fish farming (see later below).

6.8 Boards and Committees

6.8.1 The Board of the Authority

The Board of Management of the Development Authority should comprise representatives of industry and official bodies and also independent members. Among the representatives of industry should be the Chairmen of the (four) state corporations engaged in the fisheries sector, and two members of the Cooperative Council: one an active fisherman and the other an active fish farmer. The Chairman of the research and development policy advisory committee (see below) should be a member of the Board. Among the representatives of official bodies should be one or two from the High Dam Lake Authority, with provision for alternate representation.

6.8.2 Research and Development

A joint research and development policy advisory committee should be appointed by the Minister with responsibilities for advising the Board of the Fisheries Development Authority on its programme of development, for advising the Under-Secretariat on its research programme related to resource management, for considering any other matters related to research and development in the fisheries field and the application of the results, and advising the Minister on research and development policy. The Chairman of the committee should be independent; its joint official secretaries should be the Adviser on Resource management and the Chairman of the Development Authority. It should be composed of representatives from each of the following: one from the IOF; one from each of the state corporations; two from the Cooperatives Council (one active fisherman and one active fish farmer); one senior professional member of staff from the High Dam Lake Authority; together with independent members of eminence in the fields of marine engineering, food processing, animal husbandry, civil engineering, and any other appropriate fields.

6.8.3 Land Use

The Minister of Agriculture should establish a small standing committee or working party composed of appropriate members of staff of the Fisheries Development Authority and of other branches of the Ministry concerned with crop husbandry and land use, to establish rational criteria upon which recommendations can be made as to whether a particular area of land should be devoted to aquaculture or to agriculture, and to make such recommendations.

6.8.4 Supplementary Feed

A similar standing committee or working party should be set up to establish rational criteria upon which allocations of animal feeding stuffs can be made as between fish farms and terrestial stock raising enterprises, and to make such recommendations; this committee should also keep a watching brief on the development of integrated stock raising and fish farming systems, and make appropriate recommendations.

6.9 Inter-Departmental Relations

6.9.1 The Academy of Science and Technology

The Committee and Research Council responsible for the IOF are characterized by a preponderancy of members from the academic and scientific world; the users of the results of the work are not sufficiently represented. In the opinion of the Mission, at the very least the adviser on Resource Management, the Chairman of the Development Authority and a senior professional member of the High Dam Lake Authority should be ex-officio members; ideally, there should also be representation of those actually engaged in production. Both scientists and producers would greatly benefit from more contact of this kind.

When the fisheries administration has acquired the necessary competence and experience, the Minister should assess whether he is being adequately served by the existing arrangements for research, and take appropriate steps if necessary.

6.9.2 Income of producers

The present system whereby the prices received for their catches by certain producers are fixed by the Ministry of Supply is unnecessary and counter-productive. If the Minister of Supply wishes to continue to provide fish to the consumer at subsidized prices, he should employ the same mechanism as he does for imported fish, that is to say, the General Authority for Supplies should meet any difference between costs of production and selling price. The prices paid to the producers should be decided by a committee composed of the General Authority for Supplies, the Fish Marketing Company, the Industry Division of the Fisheries Development Authority, the High Dam Lake Authority and its producers' cooperative, the High Seas Fishing Company and the Northern Fish Company. The committee should be enjoined to establish fair prices having due regard to costs of production, standards of living of fishermen, and the international market price (suitably adjusted for costs of transport, storage, etc.). It should review the prices annually.

The powers of Governors to control prices paid to producers should be used with discretion, and only after the governor has discussed the matter with the standing committee.

In cases where the fair price so established is still below the costs of production (for example, in the case of the High Seas Fishing Company) then the Minister of Agriculture (in that case) should make a policy decision as to whether, nevertheless, the production operation should be subsidized, in consultation as may be appropriate with his colleagues in Transport and Foreign Affairs (Maritime Policy), Supply (ensuring future supplies) and Finance (saving of foreign exchange.)

6.9.3 Allocation of supplies

The decision as to what amounts or proportions of imported fish, and that part of the local catch handled by a public sector, should be put on sale in the various regions of the country, should not be at the sole discretion of the Ministry of Supply. The allocation should be negotiated with the regional governors, having due regard to local availability of fish on the free market, local dietary habits and nutritional needs, and local ability to pay free market prices.

6.9.4 The High Dam Lake Authority

The Fisheries Development Authority should have two members (with alternates) on the Board of the High Dam Lake Development Authority. Wherever possible, the latter should make use of the services of the professional staff of the fisheries administration.

6.10 Other Matters

Nothing in the foregoing would preclude the establishment of a state corporation or corporations to be responsible for much of the production in the growing aquaculture sector, but the organizational structure suggested is equally appropriate to the sponsorship and support of a mainly privately owned fish farming industry. In the view of the Mission, the nature of the aquaculture operations likely to be established, and the rather unimpressive performance of some of the existing state corporations (sometimes for reasons not within their control) suggests that effort should be placed, at least until experience and technological considerations indicate the contrary, behind the individual private fish farmer, albeit organized in cooperatives and with strong technical and operational support from the Development Authority.

6.11 Caveat

The Mission is aware that the establishment of a new agency can present severe problems concerning the continuity of operations, since inevitably some of the new agency's personnel will be taken from existing departments. In order to reduce the negative consequences of the latter problem, it is suggested that the Fisheries Development Authority's permanent staff should if possible share the same building, and as far as possible common services (such as telephone switchboard) with the rest of the Under-Secretariat for Aquatic Resources. Moreover, the Development Authority should be within easy access of the Minister and Under-Secretary because its staff are going to be one of their main sources of experienced professional advice.

7. FURTHER ACTION

It is not within the terms of reference of the present Mission to suggest specific legislation, programmesof work, projects, budgets or staff complements. On the two last-named topics, they have had in mind that the proposed Fisheries Development Authority's development department, and the Adviser on Resource Management, should have rather small staffs and work as far as possible by placing contracts with existing organizations, unless and until this procedure is seen to be inadequate, or to be impracticable for solving some types of problem.

It is suggested that the Government should take an early opportunity to seek advice and assistance from appropriate international aid agencies in drawing up programmes of work, proposals for budgets and staff complements and other preparatory work consequent upon any decision to implement the suggestions put forward above.

APPENDIX I

Diary and Itinerary

8 October 1978	Ferraresi arrives Rome
9 October 1978	Ferraresi briefing in Rome
	Eddie arrives Rome p.m
10 October 1978	Ferraresi arrives Cairo
	Eddie briefing in Rome
11 October 1978	Ferraresi: Meeting with Under-Secretary for Aquatic Resources
12 October 1978	Ferraresi: Meeting with Chairman, Fish Marketing Company; Meeting with Director, Institute of Oceanography and Fisheries
	Eddie arrives Cairo p.m.
13 October 1978	Mission visits Lake Karoun
14 October 1978	Meeting with Fish Marketing Company
15 October 1978	Alexandria: Fishing Equipment Company
16 October 1978	Alexandria: High Seas Fishing Company
17 October 1978	Alexandria: Northern Fishing Company, Institute of Oceanography and Fisheries
18 October 1978	Alexandria: Fishermen's Cooperative
19 October 1978	Port Said: Northern Fishing Company and regional fisheries administration
20 October 1978	Day of rest
21 October 1978	Meeting with Dr. Padlan, Team Leader, FAO Aquaculture Project, and counterpart
22 October 1978	Aswan: Meeting with Under-Secretary for Development and New Communities; Meeting with Cooperative; Meeting with High Dam Lake Development Authority; visit to fish harbour, transport depôt
23 October 1978	Aswan: Day on lake, visiting fishing sites and experimental fish farming sites
24 October 1978	Aswan: Meeting with High Dam Lake Authority
25 October 1978	Cairo: Academy of Science and Technology; USAID; Meeting with FAO Regional Mariculture Mission
26 October 1978	Under-Secretariat of Aquatic Resources
27 October 1978	Drafting
28 October 1978	Drafting
29 October 1978	Drafting
30 October 1978	Suez: Meeting with Governor, Regional Fisheries Adviser; Visit to Red Sea Project site and fishing port
31 October 1978	Cairo: Interviews with Minister of Agriculture and Minister of Development and New Communities
1 November 1978	Amending report; administration
2 November 1978	Departure Cairo; arrive Rome; begin debriefing
3 November 1978	Drafting and debriefing
4 November 1978	Day of rest
5 November 1978	Day of rest
6 November 1978	Drafting; Ferraresi departs Rome
7 November 1978	Drafting
8 November 1978	Eddie departs Rome

APPENDIX II

List of persons met in course of Mission

(see also main text of report, Section 2)

His Excellency Dr. Mohamed Mahmoud Daoud	-	Minister of Agriculture
His Excellency Salah Zaalouk	-	Under-Secretary of Aquatic Resources
Taher Mohamed Yousef	-	Manager, Aquaculture Division
Monir Abd el Malik	-	Coast Guard and Planning Division
Tahreim Mostafa	-	Sub-Minister, Assistance
Mostafa Adam	-	Director, Cooperatives Branch
Ezzat Sharaf	-	General Manager, Cooperatives Branch
Ibrahim Ettawa	-	Cooperatives Branch
Tayez Hanna	-	Cooperatives Branch
Ibrahim M. Ettawa	-	Department of Supply (Cooperatives)
Nabil Riad Rassid	-	Manager, Projects Division
Mohsen Saboy Hanna	-	Planning and Projects Division
His Excellency Hassaballa el Kafrawi	-	Minister of Development and New Communities
H.E. M.N. el Menshawy	-	Under-Secretary, Development and New Communities
Abdel Latif Rashwan	-	Chairman, High Dam Lake Development Authority
M.H. Moimen	-	Director General, HDLA
Eng. A.R. el Naggar	-	HDLA
A.H. Wail	-	HDLA
H. el Dib	-	Director of Administration, HDLA
Eng. A.T. Hussein	-	HDLA
A. Moustafa	-	Chairman, High Dam Lake Fishing Cooperative
His Excellency the Governor of Suez		
Abdel Salam A. Chalabi	-	Regional Director of Fisheries
M.M. Metwally	-	Assistant Secretary General, Suez Governorate
M. Chalabi	-	Suez Governorate
N. Ishak	-	Suez Governorate
Ahmed el Fiki	-	Chief, Aquatic Resources, Alexandria
Saad Risika	-	Chairman, Fishermen's Cooperative, Alexandria
El Saad Mohamed Mostafa	-	Secretary, Fishermen's Cooperatives, Alexandria
Officials of the local fisheries administration in Port Said and of the Northern Fishing Company in Port Said		
Mohamed Fathy el-Mostehy	-	Chairman, Fishing Equipment Company
Sabhe Kallini	-	General Director, FEC
Professor M.E. Okeil	-	Acting Chairman, High Seas Fishing Company
Abdel Rahim Ahmed el Tonoubi	-	Director of Planning, HSFC
Salah el Din Dia el Din	-	Chief Accountant, HSFC
Admiral M.A. el Makky	-	Chairman, Northern Fishing Company
The Chairman	-	Fish Marketing Company
Mahmoud Sharaf el Din	-	Commercial Director, FMC
Officials and managers of the Fish Marketing Company in Aswan		
Dr. Bayoumi	-	Director, Institute of Oceanography and Fisheries
Dr. Aboul-Fotouh Abdel-Latif	-	Secretary General, Adademy of Science and Technology
M.G. Rellis	-	Deputy Director, CARE
George H. Armstrong	-	USAID Agriculture
Ashraf Shams el Din	-	Programme Officer UNDP, Cairo
P.G. Padlan	-	Team Leader, FAO Aquaculture Project and counterpart
John B. Glude	-	Mission Leader, FAO Regional Mariculture Mission, and colleagues

وبصدد الموضوعين الأخيرين المذكورين ، كانوا يظنون أن قسم التنمية قد يكون لديهم عدد قليل من الموظفين ، وعليهم أن يعملوا كلما كان ذلك ممكنا بعقود وضعية مع التنظيمات الموجودة ، ما لم ، والى أن يعرف ان هذا الاجراء غير كافى أو مستحيل لحل بعض أنواع المشاكل ٠

ومن المقترح أن تأخذ الحكومة فرصة البحث عن المشورة والمساعدة من الوكالات الدولية المناسبة فى ترتيب برامج عمل ، اقتراحات للميزانيات ، والموظفين المكملين وأعمال تمهيدية أخرى تترتب على أى قرار لانجاز المقترحات التى سبق تقديمها عالية ٠

ومن وجهة نظر البحثة ، فان طبيعة عمليات الاستزراع السمكى المحتمل اقامتها وبالاصح العمل الغير قادر على التأثير لبعض النقابات الحالية القائمة (أحيانا لأسباب غير داخلة فى اشرافهم) تقترح أن المجهودات يجب أن تبذل ، على الاقل الى أن تحدد الخبرة والاعتبارات التكنولوجية العكس ، وراء المزارع السمكية الفردية الخاصة ، ولو أنها تم تنظيمها فى الجمعيات التعاونية وباعانة فنية وعملية متينة من هيئة التنمية ٠

تحذير

ان البحثة تسلم أن اقامة وكالة جديدة يمكن أن توجد مشكلات صعبة فى مجالات التنسيق بين الهيئات القائمة واستمرار العمل ، لانه من المحتم أن بعض افراد الوكالة الجديدة سيؤخذوا من الأقسام القائمة ٠

وفى سبيل تقليل النتائج السلبية للمشكلة الأخيرة ، فانه من المقترح أن الطاقم الدائم لهيئة تنمية المصايد لا بد وأن يقتسم نفس المبنى اذا كان ممكنا ، والخدمات المشتركة (مثل خطوط التليفون) مع الباقى من وكالة الوزارة للثروة المائية ٠

فضلا عن ذلك ، فان هيئة التنمية يجب أن تكون على اتصال سهل بالوزير ووكيل الوزارة لأن موظفيها ستصبح أحد مصادرها الأساسية لتقديم الخبرة والتخصص ٠

ان مشكلة التنسيق بالطبع مشكلة كبيرة ولا يمكن أن يقدم لها أى علاج سهل ٠ ولا بد لحلها من شرط ضرورى لتضمن هيئة التنمية سلطات وأساليب كافية لتنسيق فعال للأنشطة الداخلة فى اختصاصها ٠ وهذا يجعل منها حكما تمهيديا قويا فى الزراعة فى الداخل ، وبالتالى ، زراعة معززة فى العلاقات الخارجية ٠

ولا بد أيضا من الاشارة الى أن البديل الوحيد المعقول لاقامة وكالة جديدة (فى محاولة تخفيض مشكلات التنسيق) كان يمكن أن يكون تعزيز وكالة الوزارة الموجودة وللموازنة فاذا كان المظهر السائد انه ، بالرغم من تعزيزها ، فان بنيان وزارى ممكن أن يكون غيرلائق لنوعية مهام التنمية التى تكلف بها الهيئة ، خاصة تلك التى تستلزم نقابة خاصة (مثل ، معالجة قروض التنمية) تداخل التخصصات الفنية ، والاستخدام المرن لرأس المال ٠

عمل اضافى

ليس ضمن اختصاصات البحثة الحالية اقتراح تشريعات خاصة ، برامج عمل ، مشروعات ميزانيات أو موظفين مكملين ٠

ولاقتراح سعر معتدل فانه على وزراء الزراعة ، التموين ، التنمية والمجتمعات الجديدة ، انشاء لجنة دائمة أو فريق عمل مكون من ممثلين عن الهيئة العامة للتموين ٠ شركة تسويق الأسماك ، قسم التصنيع لهيئة تنمية المصايد ، هيئة بحيرة السد العالي وجمعياتها الانتاجية ، شركة مصايد أعالي البحار وشركة المصايد الشمالية ، واللجنة عليها أن توصى بوضع أسعار معتدلة مع الوضع فى الاعتبار تكاليف الانتاج ، مستويات معيشة الصيادين وسعر السوق العالمى (معا بما يتناسب وتكاليف النقل ، التخزين ٠٠٠ الخ) ويجب مراجعة الأسعار سنويا ٠

سلطات المحافظين فى التحكم فى الأسعار المدفوعة للمنتجين يجب أن تستخدم بمطلق الحرية ، وذلك بعد أن يكون المحافظ قد ناقش الأمر مع اللجنة الدائمة ٠

وفى الحالات التى يظل فيها السعر الصافى المقدر أقل من تكاليف الانتاج (على سبيل المثال ، حالة شركة مصايد اعالى البحار) هنا فان وزير الزراعة (فى هذه الحالة) عليه أن يقرر اذن ، سياسته خاصة بتقديم اعانة لعملية الانتاج بالتساوى مع وزراء النقل ، والخارجية (سياسة بحرية) التموين (لتأكيد تموين المستقبل) والمالية (لتغطية التبادل الخارجي) ٠

(٣) توزيع الامدادات

القرار الخاص بأن حصيلة أو نسب الأسماك المستوردة ، وذلك الجزء من محصول الصيد المحلى الذى يديره القطاع العام لا بد أن تطرح للبيع فى المناطق المختلفة من الدولة لا يجب أن يكون تحت التصرف الوحيد لوزارة التموين ٠

التوزيع يجب أن يناقش مع المحافظين الاقليميين ، مع الوضع فى الاعتبار امكانية الحصول محليا على الأسماك فى السوق الحرة ، عادات النظام الغذائى المحلى ، الاحتياجات الغذائية ، وكذلك القدرة المحلية على دفع أسعار السوق الحرة ٠

(٤) هيئة بحيرة السد العالى

لا بد أن يكون لهيئة تنمية المصايد اثنان من الأعضاء (بالتبادل) على لجنة هيئة تنمية بحيرة السد العالى ٠ وكلما أمكن ، فان هذه الأخيرة يجب أن تستفيد من خدمات الطاقم المتخصص لادارة المصايد ٠

أعمال أخرى

لا شىء فيما تقدم يعوق اقامة نقابة أو نقابات حالية لتكون مسؤولة عن معظم الانتاج فى قطاع الاستزراع السمكى المتقدم ، لكن البنيان التنظيمى المقترح يتناسب تماما مع تملك السفن واعانة صناعة المزارع السمكية ذات الملكية الخاصة أساسا ٠

الغذاء الاضافى

كذلك لجنة صغيرة دائمة مماثلة ، أو فريق عمل يجب أن يقام لانشاء علاقة متوازنة يقوم عليهـــا توزيع الاعلاف ما بين المزارع السمكية واستثمارات تربية المواشى والدواجن ، وان ــ تتخذ مثل هـــذه التوصيات ٠

هذه اللجنة عليها أيضا أن تسهر على التنمية المتكاملة لنظامى تربية المواشى ، والمزارع السمكيـة وان تتخذ توصيات مناسبة ٠

علاقات الادارات الداخلية

(١) أكاديمية البحث العلمى والتكنولوجيا

اللجنة ومجلس البحث العلمى المسؤول عن معهد علوم البحار والمصايد ( ) ، تتميـــز بأن أغلبية أعضاءها من الوسط الاكاديمى والعلمى ٠ والمنتفعين بنتائج العمل ليسوا ممثلين تمثيـــلا كافيا ٠

ومن وجهة نظر البحثة ، على الاقل ، فان المستشار على ادارة المصادر ، رئيس مجلس هيئـــة التنمية ، وعضو متخصص من هيئة بحيرة الســـــد ، لا بد وأن يكونوا أعضاء سابقين فى الـــوزارة، كذلك يجب أن يكون تمثيلا للمشتركين حقا فى الانتاج كلا من العلماء والمنتجين سيستفيدوا كثـــيرا من الاتصال بهذه النوعية ٠

تكون ادارة المصايد قد اكتسبت المعرفة والخبرة ، فان الوزير عليه أن يقدر ما اذا كـــان سينتفع نفعا مناسبا من التنظيمات الموجودة للأبحاث العلمية ، وأن يقدم اقداما مناسبا اذا كـــان ذلك ضروريا ٠

(٢) دخـــل المنتجين

ان النظام الحالى ، الذى تؤخذ به الأسعار التى تحددها وزارة التموين لحصيلة الصيد عـــن طريق بعض المنتجين يعتبر غير ضروريا وغير منتجا ٠

واذا كان وزير يرغب فى استمرار توفير الأسماك للمستهلك بأسعار مخفضة ، فعليه اذن ، أن يطبق نفس النظام الذى يسرى على الأسماك المستوردة ، وهذا يعنى ، أن الهيئة العامة للتموينـــن عليها أن تدفع سعرا صافيا للمنتج ، وتقضى أى فارق بين هذا السعر الذى تتداول به شركـــة التسويق انتاجها بالتجزئة ٠

ويجب أن يكون رئيس مجلس ادارة الهيئة مستقلا ، كما أن السكرتارية الحكومية التابعة لـــــه يجب أن تكون بمثابة مستشار على ادارة المصادر ورئيس مجلس ادارة هيئة التنمية ٠

ويجب أن يتكون من ممثلين من كل مما يأتى :

واحد من معهد علوم البحار والمصايد ( ) ، وواحد من كل من النقابات الحالية ٠ اثنين من مجلس الجمعيات التعاونية (احدهم صياد نشيط ، والآخر من عمال المزارع السمكيـــــة النشطين) ، واحد من الأعضاء المتخصصين بالوظائف العليا من هيئة بحيرة السد العالـــــى ، كلهم معا ، مع أعضاء مستقلين من المتخصصين فى مجالات الهندسة البحرية ، تنسيق الغذاء ، الاقتصاد الحيوانى ، الهندسة المدنية وأى مجالات مختصة أخرى ٠

استخدام الأرض

ان وزير الزراعة عليه أن ينشىء لجنة صغيرة دائمة أو فريق عمل مكون من أعضاء مختصين من طاقم هيئة تنمية المصايد ومن فروع أخرى للوزارة مختصة بالمحاصيل الزراعية واستخدام الأرض ٠ كذلك أن ينشىء علاقة متوازية ، تقوم عليها توصيات لامكان استخدام الأرض سواء فى الاســـتزراع السمكى أو فى الزراعة وأن تتخذ مثل هذه التوصيات ٠

ثانيهما : خدمة تختص بالدراسات الاقتصادية / الفنية مستندة الى تلك التى تنتمى مسوءوليتها الى الاعمال الاقتصادية للصناعة ، تحديد الأسعار والايجارات ٠٠٠٠ الخ ٠

الفرع الذى يتعامل مع الجمعيات التعاونية يجب أن يعمل أكثر مما يعمل الآن ، ولكن عليه أن يعمل فى اتحاد تام مع هوءلاء المسوءولين عن الخدمات الفنية الواسعة ، التدريب ، تموين الميناء وتسهيلات أخرى ٠ وعلى المجلس أن يكمل ٠

أما الفرع الذى يتعامل مع النقابات الحالية ، عليه أن يهدف الى ربط أنشطة الشركات ، يتفق مع قواعد عمل ، أعمال ارشادية ، ويصحح ويدير أى اعانات مالية مقدمة الى الشركات ، يساعد الشركات فى علاقاتهم مع هيئات أخرى مثل شركة التسويق ، يقترح انشاء شركات جديدة أو الغاءها منها ، كلما تراءى ذلك ضروريا أو لازما ٠ كما أنه سيشارك أيضا فى التفاوض على الأسعار وتوزيع المحصول من الصيد ٠ (أنظر ما بعد) ٠

وضمن مسوءوليات فرع الاستزراع السمكى ، (فيما عدا الاعانة العامة للصناعة) ستكون (بالتعاون مع قسم التنمية والخدمتين المتخصصيتين لقسم التصنيع) اعداد الدراسات على تلك القرارات الخاصة باستخدام الأرض ، وعلى مستوى ايجار الأرض العامة لاستخدامها فى المزارع السمكية (أنظر ما بعد) ٠

لجان ومجالس

مجلس ادارة هيئة التنمية يجب أن يشمل ممثلين عن الصناعة والهيئات الحكومية ، وكذلك أعضاء مستقلين، وضمن ممثلي الصناعة يجب أن يكون رئيس مجلس الادارة للاربع نقابات الحالية المتشابكة مع قطاع المزارع ، واثنين من أعضاء المجلس التعاونى احدهما من الصيادين النشيطين ، والآخر من العمال النشطين فى المزارع السمكية ٠

ان رئيس مجلس ادارة البحث العلمى والهيئة الاستشارية لسياسة التنمية (أنظر ما يلى) لا بد وأن يكون عضوا فى اللجنة ٠ وضمن ممثلى الهيئات الحكومية لا بد وأن يكون هناك واحد أو اثنين من هيئة تنمية بحيرة السد العالى ، مع شرط تمثيل بديل ٠

كما أن الوزير عليه أن يعين هيئة استشارية مشتركة للبحث العلمى وسياسة التنمية مع مسوءوليات لارشاد اللجنة على هيئة تنمية المصايد على برامج التنمية لها ، كذلك لارشاد وكالة الوزارة على برنامج بحثها العلمى المتعلق بادارة المصادر ، ولبحث أى أعمال أخرى متعلقة بالبحث العلمى والتنمية فى مجال المصايد ، ومتابعة النتائج ، وأيضا لارشاد الوزير على البحث العلمى وسياسة التنمية ٠

(١) التنميـــــة

(٢) التصنيـــــع

بالاضافة الى خدمات مشتركة ، مثل السكرتارية المالية والمحاسبة ، النقل ، وخدمات أخـرى تخصصية تراها الهيئة ضرورية كخدمات الكمبيوتر مثلا ، الأبحاث العلمية ، وورش المعدات ٠

قسم التنمية لا بد وأن يكون مسؤولا عن كل خصائص التجديد والتدريب ، بما فيها التنميـــــة الفنية ، نقل التكنولوجيا ، المشروعات الرائدة ، البحث فى تمويل هذه الأنشطة ، التطبيـــــق الميدانى ، العمل التوسعى ، التدريبات الخاصة المتعلقة بالتجديد ، التدريب أثناء العمـــــل الأساسى والمتقدم ، الارشاد على كفاءة الدورات الأساسية للتعليم والتدريب المنظمة من قبـــــل الهيئات التعليمية ، الارشاد على القانون الخاص بالمصايد ، سفن الصيد ، العمالة فى الصيادين ، السمك كغذاء ، الخ ٠

النظم الأساسية للطاقم المتخصص لقسم التنمية ستكون تلك التى تتناسب وبرامج عمله (أنظر ما بعد) ، ولكن النظم السائدة فهى الهندسة المدنية والميكانيكية ، الهندسة البحرية وهندسـة بناء السفن ، تكنولوجيا المصايد ، الأحياء المائية ، صحة وتهذيب الحيوان ٠ و على العكس مـــن معهد علوم البحار والمصايد ، سيكون لدى الطاقم نسبة أعلى من المهندسين والتكنولوجييـــــن ٠ لأسباب تخصصية ومهنية ، فان البنيان التنظيمى للقسم لابد وأن يكون بنظم أكاديمية ، ولكـــــن برنامج العمل يجب أن يشتمل على المشروعات المستقلة ٠

كل من تلك التى تنفذ من قبل فريق خاص مع فريق رئيسى معين فقط لفترة المشروع ٠ والى أن يكتسب هذا الطاقم خبرة ، فان الهيئة عليها أن تساعد نفسها بالارشاد من مصـــــادر دولية وثنائية من المساعدات الفنية بما فيها التنظيمات المزدوجة ٠

رئيس القسم يجب أن يكون ذو خبرة فى أعمال التنمية الفنية على نطاق واسع ، أو فـــى ادارة المشاريع الكبيرة فى هذا المجال ، وبما أنه يندر جدا الافراد من هذا النوع فى المصايد ، فانـه من الممكن أن يلتجأ الى صناعة أخرى متعلقة بها وحيث العوامل البيئية تلعب دورا كبيرا : الرى، بناء القنوات ، استصلاح الأراضى ، الزراعة ، الهندسة البحرية وبناء السفن ، اقامة السدود ٠

كذلك يجب أن ينقسم قسم التصنيع الى فروع تتعامل على التوالى مع الجمعيات التعاونيـــــة، النقابات الحالية ، صناعة الاستزراع السمكى ، والعلاقات مع هيئة بحيرة السد العالمى والمحافظين ٠

يجب أيضا أن تكون هناك اثنتان من الخدمات المتخصصة :

أولهمـــــا : خدمة هندسية تتعامل مع تسهيلات الميناء ، اقامة مزارع الأسماك ، والأعمـــــال المماثلـــــة ٠

ولهذا السبب ، ولانه لم تتاح الفرصة بعد لتحديد المشاكل والفرص التى ستقدم لهـــا ، فان مهام الهيئة لا بد وأن تتسع وتفسر بوضوح ٠

ويمكن أن يكونوا مثلا كالآتى :

"ـ تنظيم وتنمية صناعة الصيد فى كل مكان من مصر ، وحتى تلك التى تقع تحت ادارة هيئـــة بحيرة السد العالى ، وفقا لسياسات وأهداف تطرح من وقت لآخر من قبل الحكومة " ٠

"ـ المشاركة بنشاط على المستوى الفنى مع هيئة بحيرة السد العالى " ٠

ـ لا بـــد وأن يكون للهيئة ميزانيتها الخاصة ٠

ـ لا بد وأن يكون للهيئة رئيس مجلس ادارة ، ومجلس ادارة ٠

رئيس مجلس الادارة ، المدير العام ، والوظائف العليا يجب أن يتمتعوا بمعلومات وخـــبرة تامة بصناعة الصيد فى أحد خصائصها على الأقل ٠ والأكثر أهمية ، انهم يجب أن يكون لديهـم شهادة مسجلة فى الانجاز فى هذا المجال للتنمية ، سواء كان فى المصايد السمكية ، الزراعيـــة ، استصلاح الأراضى ، الرى ، الهندسة البحرية ، بناء المصارف ، أو أى مناطق تكنولوجية أخـــرى تشمل العمل " فى المجال " والبلوغ للهدف العملى ٠

ونجاه العجز فى الأفراد المتخصصين ذوى الخبرة فى المصايد ، فان تجنيد قيادات لبلـوغ الهدف الصحيح فى عمل التنمية ، أهم من وضع تأكيدات عديدة على الخبرة والمعلومات التفصيليـة للصيد فى هذه المرحلة ، واذا كان هذا سيعنى حتما وقوع بعض الأخطاء الا أن التقدم ســوف يكون أسرع فى النهاية ، وهنا ، فان المعرفة ، الخبرة ، والمشورة يمكن أن تكتسب خلال المساعدة الدولية والثنائية ٠

اعتبارات عائلة تستلزم تجنيد للخبرات الاضافية المتخصصة ٠ وسوف يكون من الصعب والمستحيل تجنيد فنيين بمؤهلات متخصصة فى الاستزراع السمكى ٠ كما أن استخدام بيولوجيين ومهندسين بكفاءات تخصصية عامة وليس خاصة ، مع خبرات متقدمة فى الاستزراع السمكى أو المواد التابعة لهـــا ، سوف تكون أكثر فاعلية ٠

وبالمثل ، الكفاءات الأساسية فى الهندسة ، هندسة بناء السفن ، الالكترونيات الملاحيـــــة وما يماثلها ، تعتبر أكثر فاعلية فى علاقات التنمية عن تلك الكفاءات الأساسية فى المصايد ، الـــتى تتجه عادة الى ادارة المصادر ٠

وفى سبيل انجاز مهامها ، فان هيئة التنمية لا بد وأن تنظم فى قسمين أساسيين :

- تقديم النصح والمساهمة في الاتفاقيات الثنائية على الصيد وعلى تبادل البيانات للمصادر ولتوجيه فاعلية مثل هذه الاتفاقيات ٠
- الاشراف على احصائيات مصادر جماعات المصايد والتوفيق بين هذه البيانات ٠
- الربط بين الاشراف ، وفرع التنفيذ ٠

(٢) الادارة الداخلية والعلاقات الخارجية

ان فرع من وكالة الوزارة (يرأسه موظف مدني على درجة مباشرة أدنى من وكيل الوزارة) يجب أن يشترك مع بعض أقسام أخرى للحكومة خاصة تلك المسؤولة عن قوانين الأمن في البحار بناء واعداد وتشغيل السفن ، شروط العمالة وموازين تجهيز المراكب بالافراد في البحار ، القوانين الصحية الخاصة بالمواد الغذائية والأمور الدولية ،٠٠٠ الخ ٠ لا بد وأن يعالج أمور المراسلات وأن يساعد الوزير عند الضرورة والحاجة في علاقاته مع ادارة المصادر والوظائف العليا المختصة لهيئة التنمية ، والعمل بالتعاون مع ومن خلال وزارة الخارجية كلما كان ذلك ملائما ٠

(٣) التشريع

ان كفاءة وكالة الوزارة لاعداد صياغة التشريعات بالاتفاق مع المستشارين العلميين والمختصين لتقديمها للوزير ، لا بد وأن تعزز كلما كان ذلك ضروريا لتعامل الطلب المحتم لكثير من التشريعات التفصيلية الناتجة عن النشاط الكبير للادارة المعززة ٠

(٤) السياسة

ان مكتب وكيل الوزارة يجب أن يحتوي على طاقم صغير يختص باعداد الابحاث السياسية تكوين وصياغة السياسة ، وتفسيرها ، بالتضامن مع المستشارين المختصين والعلميين ٠

هيئة تنمية المصايد

تنظيمها ومهامها

تتميز الصناعة الحديثة للصيد بالتغير ، في كل من ظروفها الداخلية والخارجية٠ وأحد مهام هيئة التنمية سيكمن في تمكين الصناعة المصرية من الاستجابة بنجاح ، والاستفادة من التغييرات في ظروفها ٠ كما أنها يجب أن تكون قادرة على بلوغ الهدف بمرونة ٠

فى أنشطة الاتصال مع أقسام حكومية أخرى تتعلق بالقانون الخاص بالمصايد ، قوارب الصيد ، الصيادين ، والأسماك كغذاء ، ومع هيئات دولية واقليمية منها : F.A.O. (منظمة الأغذية والزراعة التابعة لهيئة الأمم المتحدة) ، UNLOSC, IMCO .

العلاقات الادارية والقانونية والتنظيمية

ان بعض الوظائف ، تعتبر خاصة بوكالة الوزارة فقط . وهى تتضمن تلك الوظائف التنظيمية التى تشمل العقوبات القانونية ، وفى الحالة القصوى ، استخدام قوات مسلحة كذلك،صياغة القوانين ، والعلاقات مع أقسام حكومية أخرى ، وأيضا العلاقات الدولية .

وبشىء من التفصيل ، فان وكالة الوزارة لا بد وأن تعزز بحيث تنجز المهام التالية :

(١) ادارة المصادر والتنظيم :

بالاضافة الى المجموعة الحالية للاحصائيات على الصيد ، والمجهودات ، وفرع الاشراف الجديد المقترح ، فان هذا القسم عليه أن يحوى مكتبا للمستشار على ادارة المصادر .

هذا المستشار لا بد وأن يكون بيولوجى فى المصايد أو " عالم أحياء مائية " أو اقتصادى ذو خبرة وقدرة على الانجاز فى مجال ادارة المصادر .

ومهامه يجب أن تكون :

- اخطار الوزير بما يحدث فى مجال ادارة المصادر مع نظرة اعتبارية لمشورة الأبحاث واللجنة الاستشارية لسياسة التنمية (أنظر ما بعد) والتى سيعمل لها سكرتير رسمى عام .
- المساعدة فى اعداد التشريعات على ادارة المصادر ، والتنبيه للتحقق من فاعلية مثل هذه التشريعات .
- التشاور مع معهد علوم البحار والمصايد ( ) على الخصائص الفنية الجماعية والتحليلية للاحصاءات المناسبة والعمل العلمى المتعلق بها .
- العمل كممثل للوزير فى العلاقات مع ( ) معهد علوم البحار والمصايد الخاصة بادارة المصادر ، بما فيها الاشراف على أى من اتفاقيات الأبحاث القائمة مع ( ) معهد علوم البحار والمصايد فى هذا المجال .
- العمل كممثل للوزير فى الهيئات العلمية الدولية ، لجان ومؤتمرات المصايد فى مجال ادارة المصايد .

وليس فقط وكالة الوزارة تحتاج الى تعزيز لتمكينها من انجاز مهامها الأساسية التى حتى حاليا لا تقوم بها على الوجه الأكمل ، وانما أيضا مدها للدفعة القوية المطلوبة لبداية جديدة فعالة وقوية فى تنمية المصايد • وهذه المهام المتعلقة بتنمية المصايد لا بد وأن تتم من خلال قسم متسع وقوى من الوكالة، ضمن هيئة قوية للتنمية •

هيئة التنمية : وظائفها

ان الوظائف الأساسية التى يجب أن تكلف بها مثل هذه الهيئة هى الآتية :

(١) العمل كوكالة قومية مناظرة لمشاريع التنمية الدولية والثنائية ، وأيضا كدليل لضمان قروض التنمية •

(٢) التجديد مع العمل على زيادة الانتاج وتخفيض التكاليف ، بما فيه التنمية الفنية ، مواءمة الأساليب والمعدات المستخدمة بالفعل فى أماكن أخرى ، كذلك المشاريع الرائدة ، التطبيق العملى ، العمل التوسعى ، اعانة المشروعات الجديدة ، بما فيها الاعانات المادية والتدريب بخصوص ما تقدم •

(٣) البحث والتنقيب عن مواقع المزارع السمكية الجديدة •

(٤) عقد الابحاث التى تتطلع الى تسهيل العمل فى (٢) عالية ، الاشراف عليها ، وتحليل النتائج •

(٥) التدريب الأساسى والمقدم أثناء العمل بالاتفاق مع السلطات التعليمية على منهج دراسى للتدريب والتعليم الأساسى والمقدم رسميا •

(٦) الخدمات لاستغلال المصايد والاستزراع السمكى ، بما فيها تسهيلات الموانى ، مساعدات تسهيلات الارساء ، مصانع الثلج ، طرق مزالق السفن ، الورش المتخصصة•• الخ ، التموين بالاصبعيات والمواد الغذائية ،كذلك التموين بالمعدات واللوازم والأوراق السمكية •

(٧) تنظيم الاشراف وتدعيم الجمعيات التعاونية بما فيها التصرف والتشاور مع المجلس القائم •

(٨) الانشاء والاشراف والتنسيق واعانة النقابات التعاونية بما فيها الغاءها اذا استلزم الأمر وكان ذلك ضروريا ومرغوبا فيه •

(٩) المشاركة فى القرارات بشأن استعمال الأرض وعلاقتها بالاستزراع السمكى ، وتحديد الايجارات للاستخدام العام للأرض للمزارع السمكية (أنظر ما بعد) •

(١٠) المشاركة فى القرارات بشأن الأسعار لدفعها للمنتجين فى القطاع العام ، وبشأن النسب أو محاصيل الصيد لتصديرها أو للابقاء عليها فى المحافظات •

(١١) تقديم المشورة التخصصية والفنية للوزير داخل ميادين اختصاص الهيئة ، بما فيها المشاركة

اعتبارات خاصة

تعتبر مصايد الأسماك صناعات صيد تتم فيها العمليات الانتاجية من خلال صيادين مستقلين ووحدات مستقلة ، بدون اشراف سريع ومباشر ، وفى ظروف بيئية مضادة فى معظم الأحيان . الأسماك ، بمجرد صيدها ، تتعرض لتلف سريع — كما أن التنظيم وتكنولوجيا صناعة الصيد تعتبر مركبة وذات طابع مميز . لكل هذه الأسباب ، ولأسباب أخرى ، فان صناعة الصيد غالبا ما يفهمها المشرعين وموظفى الحكومة المكلفين بادارتها ، فهما خاطئا . لذلك يكون من المطلوب بعض سنوات من الخبرة قبل أى قدرات فردية ومعلومات كافية ، وادراك لتأمين السياسات للتشريع والادارة المناسبين .

المشرع والادارى فى مجال المصايد لا بد وأن يعتمد على درجة غير عادية من الخبرة فى الارشاد والتخصص فى حالة ما اذا كانت فعوليتهما وتأثيرهما يؤتى نجاحا .

وهناك اعتبار خاص آخر ، كان قد تم تسجيله ، وهو أن صناعة وادارة الصيد غالبا ما تعامل على أنها العلاقة الضعيفة للزراعة .

ان صناعة الصيد ، أيا كانت حكوميا تابعة لدى الوزارات، فهي أيضا خاضعة للتشريع التنظيمات والأعمال الادارية من قبل وزارات متنوعة ، مثل تلك التى تختص مثلا بالنقل البحرى ، الصحة وقوانينها ، قوانين العمل ، التعليم ، وما الى ذلك ، والتى لا يمكن أن يتوقع أن تتآلف مع الخصائص المميزة والظروف الخاصة بصناعة الصيد . وهذا يضع عبئا خاصا على الوزارة المسؤولة عن حماية الصناعة ضد العمل العرضى والمهمل من تلك الوزارات الأخرى التى يمكن أن تضر برفاهية مستقبل المصايد .

وهنا أيضا فان الوزير المسؤول وموظفيه من الادارات العليا يعتمدون جدا على تيقظ المستشارين المختصين والملمين تماما بجميع خصائص عمليات الصيد وتسويق وتوزيع الأسماك .

وهذه الاعتبارات تؤدى الى نتيجتين :

أولا : أنه لا بد من توجيه عناية خاصة لاتاحة المشورة للوزير ووكيله المختص ، من قبل الخبراء الدائمين والمختصين وذوى الخبرة الطويلة والمعرفة الكاملة بصناعة الصيد .

ثانيا : ان حالة ادارة المصايد لا بد وأن تكون على درجة عالية بما يسمح لازالة أى احساس بالاهمال أو سوء الفهم .

تعزيز وتوسع

المهام التى لا بد أن تنجزها ادارة المصايد هى ، تقريبا ، تلك المدونة فى (٢) عالية . ومن الواضح اذن ، أنه لتحقيق ذلك ، فان ادارة المصايد المصرية الموجودة لا بد وأن تتسع وتعزز بوضوح .

الغذائية لذلك فان استقرارها داخل نفس الوزارة أفضل من كونها بين وزارتين منفصلتين • كما أن القانون الخاص بالاستزراع السمكى ، وسياسات الاعانات المالية ، لا بد وأن يماثل تماما تلك الأنشطة الزراعية السائدة على أسس من العدالة ، وهذا يتم بطريقة أسهل لو كانت وزارة واحدة هى المسوؤلة بدلا من اثنين • وعندئذ ، لا بد وأن تحدد ادارة المصايد ، ضمن اطار العمل لوزارة الزراعة ، باستثنائين رئيسيين •

ان مصايد بحيرة السد العالى تقع فى منطقة معزولة ومنفصلة ، وتسودها ظروف خاصة : منها على سبيل المثال ، الافتقار للتعمير الضرورى ، والحاجة للاقدام على تنمية البحيرة لهذا الغرض • وبناء على ذلك ، فقد أوصت البعثة بأن هيئة تنمية بحيرة السد العالى لا بد وأن تستمر فى أن تكون مسوؤلة عن تنمية وادارة المصايد داخل دوائر اختصاصها • كما أنها لا بد وأن تستمر فى أن تكون مسوؤلة أو مكفولة من قبل وزارة التنمية والمجتمعات الجديدة ، على الاقل حتى ذلك الوقت الذى تتواجد فيه مجتمعات صيد على البحيرة والى أن يكون الوضع قد استقر •

وحين يحدث ذلك ، فى الوقت الذى تكون ادارة المصايد تمت بالخبرة والتخصص ، فان نقل مسوؤلية مصايد بحيرة السد العالى الى وزارة الزراعة سوف يعاد النظر فيها • وفى خلال ذلك لا بد من وجود روابط رسمية ومتينة بين هيئة بحيرة السد العالى وادارة المصايد لبقية مصر كما هو مقترح فيما بعد •

وهناك شعور سائد بأن شركة تسويق الأسماك لا بد وأن تدخل فى فلك الوزير المسوؤل عن المصايد وهناك حجج ثلاث لذلك :

أولا ، ان نفس التنظيم الأساسى لا بد وأن يكون مسوؤلا عن نوع المنتج من الصيد المستهلك •

ثانيا ، ان أغلبية الأرباح فى صناعة الصيد تميل لأن تكون قد تمت فى قسم التسويق من الجهاز حتى أنه لا بد أن يكون هناك درجة ما من التكامل الرأسى لتسمح للمنتج بالمشاركة فى هذه الأرباح •

وثالثا ، ترتيبات ادارية عامة •

وعلى أى حال ، فانه من الممكن أيضا لمن يملك الانتاج أن يغير الأوضاع ، كما يحدث حاليا وهذا يكون كافيا اذا كان التعامل خاضعا لمثل هذه الشروط التعاقدية متضمنة مواصفات النتائج التى تعتبر ضرورية للحفاظ على النوعية •

ومن جهة نظر البعثة ، اذن ، وطالما يستمر وزير التموين فى اعانة أسعار المواد الغذائية للمستهلك (هذا ما تناوله اشارة اضافية نأتى فيما بعد) ، فان شركة تسويق الأسماك لا بد وأن تبقى تابعة لوزير التموين • واذا اخفقت الامدادات للغذاء ، فلا بد من أن يعاد النظر فى الأمر •

وسياسة الأسعار مطروحة للمناقشة فيما بعد •

اقتراحات لدراستهـــا

ملاحظات تمهيديـــة

بالرغم من أن أعضاء البعثة عملوا فى مصر فى مدة قصيرة فى مناسبات سابقة ، الا أنهم لا يمكـــن أن يدعوا معرفتهم الكبيرة بالقانون المصرى ، أو العادات ، أو التاريخ ، أو الفلسفة السياسية وطريقة المعيشـــة ولا من الممكن فى هذا الوقت القصير ، (أسبوعين أو ثلاثة) أن يتألفوا بعمق مع صناعة الصيد فى مصر ومقوماتها وتنظيماتها • والذين سيطلعون على ما يلى ، عليهم أن يترجموا الاقتراحات المقدمة من البعثة على ضـــوء معلوماتهم للعلاقات المصرية •

الاحتياجـــات

المناقشات التى تمت ، تبين أن الضعف الأساسى لصناعة الصيد فى مصر ، يرجع الى الافتقار فـــى السياسات الفعالة والقيادات الادارية ، الاعانات ، الارشاد ، والتنسيق • ولا بد من انشاء هيئة قوية لهذا الغرض •

وهنا تظهر التساؤلات بخصوص طبيعة مثل هذه الهيئة ، انتسابها الى أى الادارات ، مهامها ومناطق عملها •

الوزارة المسؤولة

فى عدد محدود جدا من البلدان تتسع صناعة الصيد أو تعتبر هامة اقتصاديا ، بحيث أن يكـــون هناك وزارة منفصلة للمصايد • وفى البعض الآخر ، تعتبر صناعة الصيد ذات أهمية خاصة فى بعض الأقاليـــم وهنا تكون تحت رعاية وكالة تنمية اقليمية ونجد ادارات المصايد تتداخل ضمن أقسام تختص بالزراعة أو زراعـــة الغابات أو الحياة البرية أو النقل البحرى ، أو التجارة الخارجية ، أو البحرية الحربية وأحيانا تكون مقسمـــة بين اثنين أو أكثر من الادارات والهيئات الدستورية • وعموما ، لا يوجد حل سليم للمشكلة • الى أى الفـــروع بين الحكومة يجب أن تتبع صناعة الصيد •

ولكن ، فان رأى البعثة بأن وزارة الزراعة ، حيث وكالة الوزارة للثروة المائيـــة ، التى تعتبر حاليـــا أكثر فروع الحكومة تلاؤما ، كانت قد أعطت الأوضاع الحالية فى مصر • أولا ، الهدف الأساسى هو انتـــاج الغذاء ، وليس النفع التجارى (بالرغم من أن ذلك قد يكون هاما أيضا) وانتاج الغذاء هو من اختصـــاص وزارة الزراعة •

ثانيـــا ، وهذا أكثر أهمية ، ان الاستزراع السمكى يبدو أنه من المحتمل أن ينتج مقدارا كبيرا من الأسماك ونسبة كبيرة من مجموع التموين السمكى فى مصر ، كذلك ، فان الاستزراع السمكى له علاقـــات وثيقة بالزراعة أكثر تقاربا منها الى صيد الأسماك باستخدام السفن • وعلاوة على ذلك فان وجود الاستزراع السمكى والزراعة جنبا الى جنب ينهض بمشاكل استغلال الأرض ، وربما أيضا فى توزيع الاضافى من المـــواد

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