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EDITORIAL NOTES:

This is the second issue of KENYA AQUATIC. The original idea was to publish the bulletin annually. The present issue has come after five months, because of our anxiety to release the accumulated material. The Kenya Aquatic aim is to treat Aquatic Science from a wider perspective and present compiled and well-documented information.

Efforts will be made to report activities related to Aquatic resources through KENYA AQUATIC. This will include scientific communications, critical reviews, seminar proceeding and other publications. This comprehensive coverage will be possible only through co-operative of various institutions, Departments, universities, societies and individuals who are concerned with aquatic resources.

KENYA AQUATICA is a technical and extension series for rapid dissemination of information on aquatic resources and allied information from Research Officers, Fisheries Officers and any individual for transfer of Technology to the fishermen and industry and any other relevant information needed for National Development.

The Editor wishes to invite comments and suggestions from readers with a view to improving the bulletin in the choice and arrangement of the articles, notes, summary, news briefs etc. It is our aim to see that this publication receives wide acceptance from the reading public and those interested in aquatic both within the country and abroad. It is hoped that this issue will stimulate further contributions from the readers.

We appeal to all concerned to send us regularly such Publications, at the following address:-

The Director,
Kenya Marine & Fisheries Research Institute,
P.O. Box 81651,
MOMBASA, Kenya, E. Africa.

Editorial Group
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RESEARCH AND DEVELOPMENT: INFORMATIONS REQUIRED AND THEIR UTILIZATION

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Fish is one of the world most valuable resources, and discussion on its status more often solicit a lot of interest. It is obvious though that commercial fisheries operate between two poles. It is never viable without both suitable stock of fish and a fully functioning market for the products produced. In between, there are many parameters of equal importance ranging from research, development and growth. The correct informations are needed at all levels of operation.

This paper will try to outline the nature of fishery development, the benefits consequential on such development, and some of the more important techniques and methods which promotes its development or growth. The provision of informations related to or affecting growth constitute research and development enhanced by marketing of resultant products included. This consideration apart is not possible therefore within the scope of this paper to discuss in detail research and development and attendant problems which are to be overcome in the promotion and expansion of the fishing industry.

Fishery development in this context, must nonetheless relate to the expansion of the total production in a given fishery, irrespective of other factors, leading to increased growth which in turn should provide essential benefits as the case may be. Such benefits may include provision of food. In a country such as Kenya the provision of cheap protein food is still considered very important and fish can be considered as a cheap source of protein food.

It is also true that fisheries resources, if well managed, are most valuable to the economy of a country. The apparent perpetual benefit of a managed fishery is further enhanced if the products can also be exported, in addition to providing direct and indirect employment, if for example the development of a particular fishery can also lead to development of other infrastructures. There are of course other benefits accruing from a developed fishery such as providing rescue and defence services, the latter can if is a sensitive, contribution, but it is obvious that fishermen can play a major role in formal and *ad hoc* rescue services. It is now a common knowledge that during the second world war, experienced fishermen and the crafts they operated played extensive and important role in the defence service of various nations. In a developing country such as Kenya this aspect of the role of fishermen is not always obvious, and the apparent subtle and significant difference in attitude between developing countries such as Kenya, has in a way kept greater input into the fishing industry by developing countries.

In such countries, as already indicated fishery development is regarded essentially as part of an effort to provide the much needed nutrition. Perhaps because of the changing pattern of defence requirements the attitude prevailing in the developing countries is the right one. Research into problems affecting the fishing industry starts with the basic characteristics of fishery resources in relation to development. More often fisheries research include the study of the existing fishery, and as such it concerns itself with the state of existing status of the industry. Informations required therefore, must be relevant to operations either in existence in that which is planned in so far as the known stock is concerned. In planning fishery development in this instance, it is important to have a fair knowledge on the fully exploited, the unexploited and partially exploited stock. In all such cases opportunity for development may still exist, if informations are also available on such other parameters as the operational methods, which perhaps when modified can give rise to an increased productivity directly or by reduction in losses.

It is realised that for the essential informations referred to be made available, knowledge about certain characteristics of the stock must be made available. Such informations may include:-

- i) Location, distribution, behaviour and abundancy of resources and includes prediction of these characteristics.
- ii) Weather conditions.
- iii) Markets and
- iv) Technological matters.

Technological matters referred is most important in the case of hitherto unexploited fishery due to limitation on gears and crafts available. In this regard there is need for development of new fishing technique, sometimes using newly developed fishing gears and vessels. Such are the types of informations required on known stock. However, in a completely new field, brought about sometimes as a result of the newly acquired exclusive economic zone of two hundred nautical miles, other types of research activities may be called for. In instances such as these there is need for both exploratory and experimental fishing, conventional parameters being considered as well as a matter of routine. It suffices though to reiterate on important point, and that no commercial fishery can thrive and survive in this economic returns. Informations therefore must be made available which will facilitate the disposal of the catches. Characteristic of marketing may therefore be envasess briefly. Some of the obstructions that can prevent development or improvement of existing new fishery must therefore, be looked into such, such essential include:-

- i) Consumers preference; some consumers because of cultural traditions, habit, low incomes or other reasons may be reluctant to consume particular kind of fish.
- ii) Market restrictions ineffective distribution channels.
- iii) There may be ineffective processing methods.
- iv) There may be lack of port harbour facilities.
- v) There may be restricted access to capital markets which prevents individual from being provided with enough finance or
- vi) There may be just lack of interest in fishery development by a government agency with the responsibility of encouraging such economic deveopment.

Research and development can be seen therefore as a wholesome state of fishery development, which in final analysis is affected too by the attitude of management as elucidated when discussing some characteristics of marketing system as a tool for growth. In most developing countries information referred to above are either already available or being acquired through national and bilateral efforts.

The problem appears to be somewhere, unwillingness and readiness by those charged with the responsibility of management to appreciate and utilize the available informations, particularly if such informations are obtained as a result of research work carried out by indigenous research officers. Sometimes, this apathy towards utilization of research findings is extended to also results obtained as a result of technical aided projects. The result of this approach by management can, and has lead to greater waste of meagre resources that could perhaps would have been used elsewhere. Besides, this attitude can contribute to numerous duplication of effort and loss of interest and faith by indigenous scientists as well as useless and repeatative research surveys and projects giving out informations already available.

As earlier indicated it is not possible for a paper of this nature to cover in detail what is probably a very broad subject. However, what discussed above may warn us to be rather realistic. It is not possible that we are having gaps simply because we have not been relating our research and development and to the national policy? We should therefore examine in detail the types of informations now remaining to be acquired in relation to the type of information now at our disposal. It is possible, we have been repeatedly acquiring during the past twenty years similar informations with the result that the Kenya Marine fishery sometimes providing no guidelines which can enhance development, with the result that Kenya Marine Fishery sector has still to take off.