

Report of the Evaluation Team on Bycatch Systems

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Thematic Concerns (Most of which are inter-related)

Consumer Acceptance.—Great strides have been made in the direction of gaining consumer support but regional differences still exist. Additional creative approaches need to be explored in order to achieve universal acceptance of some products (i.e., some bycatch species are potentially high priced luxury items).

Fisherman Acceptance.—This has not been universally achieved. The U.S. shrimp fleet in the Gulf of Mexico is a notable example. However, various factors ranging from exclusive economic zones to fuel costs are exerting new economic factors into the fishery and this may influence the viewpoint of fishermen. Not every government or geographic region can use the solution adopted by Guyana.

Economic Problems.—These still exist for most of the regions in one form or another and it seems that these are being solved region by region and product by product.

Distributional Problems.—This seems to be a factor in each geographic or political region and is usually related to the nature of the product and consumer acceptance and/or rejection. The more stable products which do not require special handling seem to offer the easiest solution to this problem (i.e., dried fish cakes).

However, the team felt that not enough attention has been given to selective distribution of certain products and that an example of this is related to the first concern of consumer acceptance. Mention was made of the probable lucrative market in the Lesser Antilles for frozen whole fish of sizes and species which may not be appreciated elsewhere. West Indians are heavy consumers of fish, most of which is presently imported. Much of the bycatch is composed of species and sizes which are widely known and appreciated in the region. Distribution of a frozen product to the smaller islands presents a problem which would have to be solved but which would probably be economically feasible and contribute to the foreign exchange of producing countries.

Ecological and Social Concerns.—Mention was made of the possible trophic level effects which are being created by the overboard return of unutilized bycatch. This may be affecting not only sharks and their fishery but the shrimp populations as well.

Competition for market shares was voiced as a concern, and this has possible effects on the social structure of artisanal fisheries as well as the economics of such fisheries. However, the problems were deemed by some to be

less important than providing new protein sources to burgeoning populations. Moreover the demand for fish seems to outweigh the total of all supplies so that economic competition does not assume major proportions.

Comments and Recommendations.—The team was disappointed that samples of the products were not made available at the various social functions.

GCFI might well consider two workshops at future meetings.

a. A workshop for fishermen who produce bycatch. This could address the economic and technological aspects of landing and utilizing the bycatch as well as the possible and/or probable results of not landing the bycatch. The question might be posed in today's or tomorrow's world regarding the survival of a shrimp fleet which does not land the bycatch.

Attention might be given to the possibility of obtaining products other than human or animal food from the bycatch. Possibilities are various chemicals, minerals, antibiotics, anticarcinogens, etc.

The team noticed practices in other parts of the world where bycatch and/or fish processing wastes have been utilized in very effective ways by government planning or private enterprise ingenuity.

An example is the relationship in Scandinavia between mink and fox farms and fish products. The fish receives minimal processing as food for the fur bearers because the fur farms are located in close physical proximity to the fish processor. This eliminates long-term storage and transportation costs as well as certain processing costs. Could the same thing apply to pigs and chickens in the Caribbean region? Could it apply to aquaculture farms or to crocodile farms?

b. A workshop on the ecological effects of shrimp fishing and its utilization or non-utilization of the bycatch. The ecological effects of either route must also have economic effects on the same or different fisheries.