

The Increasing Importance of Social Science Research

The Study of International Fisheries Research Needs for Developing Countries (SIFR) was the result of an initiative of the First Fisheries Development Donor Consultation held in 1986. The objectives of the study were to identify the specific constraints to fisheries management and development (including aquaculture) and to determine high priority research needs. Seven mission and working paper reports were prepared from the study.

One of the reports, *Small-scale Fisheries: Research Needs*, concluded that the focus of research should be on "people-related problems."

"The research needs identified are, thus, primarily tasks for the social sciences (economics, sociology, anthropology and policy analysis), although they may need to be combined with other disciplines in certain cases. Social science analysis of fisheries problems in developing countries has received insufficient attention thus far. Although there is a growing amount of social science research, there is still a considerable need for improvement.

"A critically important condition governing most fisheries, both small and large-scale, is the absence of satisfactory use

rights. Where this condition exists, it inevitably results in depletion and economic waste. Catches per unit effort decrease beyond the optimum level and incomes and returns to capital decline. Frequently, the lack of satisfactory use rights also leads to conflict between different user groups. Attempts to solve these problems by investing in new technology and more capital equipment exacerbate the consequences.

"Thus the direction for research is clear. It must deal with the issues related to the establishment, re-inforcement or protection of satisfactory use rights. The research areas identified by the Working Group in this report deal to a large extent, though not entirely, with these issues. The research areas, in general, fall into three major subject matter areas: 1) the social organization of fisher groups; 2) the institutions within which the groups operate; and 3) the forces and conditions affecting the way in which the group operates."

With the publication of this report, social science research is receiving the attention it deserves from fisheries researchers, fisheries administrators and donor agencies. *R.S. Pomeroy*

Clearing Up Some Misconceptions: Open Access vs. Common Property

ROBERT S. POMEROY

Common property management issues have recently received much greater attention since they are felt to be critical to development projects, primarily in agriculture, forestry and fisheries (Bromley and Cernea 1989). The term "common property" has come to connote inevitable resource degradation. It is generally believed that fisheries resources which are held in common are subject to over-exploitation and degradation. A situation in which entry into the fishery is uncontrolled, there are no effective boundaries around the resource and there are no restrictions on how the resource is to be exploited, is often concluded

to be a situation of "common property". The economic incentive of the fisher is to harvest as much fish as possible before other fishers do since "everybody's property is nobody's property". Decisions made by the fishers are to maximize benefits even at the expense of resource sustainability and long-term societal good; to give up any immediate income-earning possibilities is to sacrifice income to other fishers. This situation has become known as the "tragedy of the commons".

Yet, the situation which is really being described is that of an open-access fishery. This popular notion of the nature of common property resources is misleading

and has led to inappropriate policy recommendations and project implementation in the fisheries sector. Part of the problem has been conceptual; the "tragedy of the commons" may not simply result from the fishers' inability to restrain themselves from overexploitation but from governments' failure to conceive or recognize the existence of local community management institutions which can effectively manage resources.

H. Scott Gordon (1954) wrote, in what has become a seminal article in the fisheries economics literature, "fishery resources are unusual in the fact of their common

property nature". In the article, Gordon stated that under freedom of access, unregulated fishing effort will increase until economic rents (profits) are dissipated. The bioeconomic equilibrium solution of fish stocks and fishing effort is at a point where resources are overexploited and economic rents are gone.

The problems that Gordon was describing, however, were those of an open-access fishery, that is, a fishery where access or entry into the fishery is uncontrolled. This confusion about property institutions and the terms "open access" and "common property" presented in the article has been maintained in the fisheries literature and has shaped the thinking of social scientists and biologists about the nature of the fishery and the role that property rights regimes play in fisheries management.

Since the Gordon article, a large literature has been developed based on the seeming incompatibility between common property and sustainable resource management. One of the most cited and pervasive references is the 1968 article by Garrett Hardin entitled "The Tragedy of the Commons". Using communal grazing as his model, Hardin argued that resources held in common are vulnerable to overexploitation. Each herdsman found it more profitable to graze more animals than the pasture could support because each took all the profit from an extra animal but bore only a fraction of the cost of overgrazing. The result was a loss of the resource for the entire group of herders, and Hardin's conclusion that

"freedom in the commons brings ruin to all".

Despite a well-developed argument presented by Ciriacy-Wantrup and Bishop in 1975, in which they distinguish between common use situations characterized by an absence of defined property rights governing access and use, typically referred to as open access, and common property, defined as "a distribution of property rights in resources in which a number of owners are co-equal to use the resource", the two terms continue to be used interchangeably. This makes it more critical to understand the essential connection between property regimes and resource management, and to conceptually locate common property resources in a continuum between the free-for-all of open access and complete individualization that is the essence of private property.

Common property regimes are forms of management grounded in a set of individually accepted rights and rules for the sustainable and interdependent use of collective goods (Gibbs and Bromley 1989). A collective good is defined as a resource that is managed and controlled by a group. A common property regime is composed of a recognized group of users, a well-defined resource boundary that the group uses and manages, and a set of institutional arrangements for use of the resource. In some situations the group may formalize the institutional arrangements with an organizational structure for management. Common property represents private property for the group of co-owners.

A number of recent articles and reports

by social scientists from several disciplines have challenged the fallacy of the stereotype of the "tragedy of the commons". This work by both researchers and development practitioners has begun to clarify the distinctions between resource regimes and document essential characteristics of common property management and associated institutional arrangements. A more careful analysis of the foundation of common property, combined with closer investigation of management of collective goods in the developing world, suggests that common property resources not only can be viable, but in some circumstances are essential. In addition, the naive belief that nationalization or privatization are the only solutions to resource degradation has been replaced with a new consensus that no "one best way" exists to solve resource problems (Bromley and Cernea 1989).

References

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Institutional Profiles

Bureau of Fisheries and Aquatic Resources

The Bureau of Fisheries and Aquatic Resources (BFAR) is a staff technical bureau of the Philippine Department of Agriculture (DA) mandated to implement activities and program thrusts on fisheries and aquaculture under the government's sectoral plan. Its main functions is to formulate and establish policies for the proper management, accelerated development and proper utilization of the country's fisheries and aquatic

resources. It also extends technical assistance and advisory services to effect increased fisheries productivity and to provide a bigger income for the fisherfolk.

In 1990, BFAR spearheaded the implementation of the Fisheries Sector Program (FSP), a five-year program of the DA with financial assistance from the Asian Development Bank (ADB), primarily designed to address the problems and issues confronting

the fisheries sector. Since then, the core activities of the agency were redirected towards regeneration, conservation and sustained management of the coastal fisheries resources; intensification of aquaculture production within limits of maintaining ecological balance; and encouraging commercial fishers to exploit deep-sea resources to draw them from the overfished coastal waters.