

Bibliographic Coverage of the Growing Fisheries Literature in ASFA

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This cooperative network of organizations has steadily increased the total number of papers covered, as shown in Table 1.

These figures conceal serious ups and downs that reflect the realities of trying to achieve comprehensive coverage of the fisheries literature. Among the points to note are:

- * the subject scope and the number of abstracts were increased substantially beginning in 1978;
- * the level of coverage varies from year to year at any given input center owing to shifting resources, even to the extent of a center discontinuing input for a significant period;
- * a change of publisher (company and country) in 1981 caused the buildup and subsequent reduction of a backlog;
- * a change of technical system specifications necessitated retraining with some slowing of input;
- * some of the "growth" in the ASFA publications since 1982 reflects abstracts that appear in both ASFA-1 and ASFA-2;
- * financial crisis within the UN system is causing a backlog of completed but unpublished abstracts to accumulate.

In terms of coverage of the growing fisheries literature, the last-cited point is probably the most serious in impact. Collectively the network of ASFA input centers produced 32,750 abstracts in 1986, but only 23,000 were actually published in ASFA, including approximately 18,000 in ASFA-1, which contains all of the fisheries literature abstracts.

This shortfall was brought about by the coincidence of rising production costs with sharply reduced resources within the FAO, which subsidizes the difference between production costs and income from sale of subscriptions and online computer retrieval services. Attempts to resolve this problem are still being worked out.

Meanwhile the aquatic sciences and fisheries literature continues to grow. Over 30,000 papers have been monitored annually in the last several years, but the lack of coverage of some languages, papers not abstracted by input centers for lack of resources, and (most serious) the lack of capability for capturing the publications of many developing countries lead us to be confident that the total is likely to be at least 40,000.

Some attempts have been initiated to improve coverage of developing country publications. The ASFA center at the National University of Mexico seeks to locate and abstract literature from Latin America, the center in Portugal monitors publications from African countries where the Portuguese language is used, and the center in China now provides coverage of Chinese publications.

As Naga readers will already know, donor agencies, especially IDRC, have begun to sponsor the creation of fisheries information centers in other regions. First priority must necessarily go toward building capabilities that meet national and regional needs. Eventually the benefits of inclusion of literature from these countries in the global ASFA database should become evident and coverage from these areas will grow.

If the system for producing the major fisheries abstracting service appears to resemble a rickety house in constant need of propping up, one might well ask "why not do it another way?" The basic reason is that fisheries science and related aquatic sciences are not well-endowed and have no strong and wealthy industry behind them that is willing to provide resources for a more straightforward, centralized service. Even in countries with market economies, funding of fisheries science tends to be the province of governments and, therefore, subject to political competition for resources. The resource constraint combined with the international character of fisheries science makes the cooperative international network the continuing choice for organizing an information service, despite the pitfalls described above.

Meanwhile the efforts made by Naga to improve understanding by the fisheries community of the size, distribution and nature of its literature and the problems of access to it are a solid contribution to the growth of the field.

Quantifying the size and growth of the fisheries literature is difficult because there is no comprehensive bibliographic service to use as a resource. Readers will understand that it grieves me to admit as much because attaining such coverage has been a longstanding goal of Aquatic Sciences and Fisheries Abstracts (ASFA) and of earlier FAO efforts. In the absence of a comprehensive service we are reduced to the information scientist's equivalent of trawl surveys and other stock assessment methods in trying to discover how much there is and where it is located.

An abstracting service primarily serves a field of science, but it operates like a production industry -- and so it is to a degree subject to the economics of both. In pursuing the goal of comprehensive coverage it must contend with sharply rising marginal costs of monitoring and acquiring documents once the readily available journals and books have been covered.

Since fisheries science is highly diversified and decentralized around the world, a useful approach to the resource problem is to seek voluntary cooperation in identifying and abstracting the literature from countries where the literature is produced. Since fisheries science is closely linked to other aspects of marine and freshwater science and to a broadening range of economic, legal and social studies, another useful approach is to seek cooperation from organizations that are primarily interested in those fields. These two factors led FAO in the 1970s to create the Aquatic Sciences and Fisheries Information System (ASFIS) in conjunction with the United Nations, Unesco and agencies in eleven countries. A private company, Cambridge Scientific Abstracts, publishes ASFA in printed and electronic forms under an agreement and contract.

Table 1. Average annual numbers of abstracts in ASFA for 3-Year periods.

Period	ASFA-1	ASFA-2	ASFA Database Unique records*
1972-74	12,976		
1975-77	14,923		
1978-80	16,996	9,537	24,253
1981-1983	17,915	10,369	24,885
1984-86	22,866	10,200	29,052

*According to subject relevance some abstracts are included in both ASFA-1 (living resources) and ASFA-2 (nonliving resources) publications but only once in the computer database.