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SOUTH PACIFIC COMMISSION

NINETEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

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Data Base Duplication

(Paper Prepared by the Secretariat)

Background

1. The possibility that the Forum Fisheries Agency may attempt to duplicate some of the data base functions currently carried out at the South Pacific Commission has stimulated lengthy discussions at several different meetings, including the 1986 South Pacific Commission Regional Technical Meeting on Fisheries, the 1987 Forum Fisheries Committee, and the May 1987 South Pacific Commission Committee of Representatives of Governments and Administrations. The outcome of this latest discussion was a request that the Secretariat prepare an information paper on the consequences of data base duplication.
2. The South Pacific Commission has been developing a data base on oceanic fisheries since 1981 when the Tuna and Billfish Assessment Programme was created out of the Skipjack Survey and Assessment Programme. The core of this data base is information derived from daily fishing logs. Each year the Tuna Programme processes about 50,000 daily reports and the data base currently contains information from about 450,000 daily reports.
3. In 1986, the Forum Fisheries Committee approved a project to improve the data handling capabilities of the Forum Fisheries Agency. The capacity to process daily fishing logs was included in this project. Thus it was proposed that the FFA would develop the capacity to potentially duplicate an important activity of the SPC.
4. The creation of a useful and credible regional pelagic fisheries data base is a complex and expensive undertaking. There are numerous potential components to such a data base and each component must be put through a rigorous series of processes. The information contained on the daily logsheets is one important component in a fisheries data base, but there are many others. Regardless of the components, however, it is the processes that distinguish a data base from a simple accumulation of numbers. The potential components of, and processes required for, a complete data base are outlined in a separate paper (SPC/Fisheries 19/WP.2).

Consequences

5. It is an established principle that regional organizations should take great care to avoid duplication of work programmes in order to make the best use of limited human and financial resources. Duplication of data bases, however, has potential consequences which extend beyond the misuse of resources. An attempt to create a duplicate data base would be technically foolish and would ultimately reduce the credibility of both the SPC and the FFA. There are numerous problems of judgement and interpretation required to create a data base. It would be impossible to ensure that the contents of the two data bases are identical.

6. Discrepancies of this nature have already occurred in respect to missing weight information, a perennial problem in logsheet processing. The general South Pacific Commission policy is not to introduce external estimates of average weight into reports unless specifically requested to do so. Such average weight estimates have nevertheless been introduced into Tuna Programme reports without correct attribution. As a consequence, there are three separate — South Pacific Commission, non-SPC (but attributed to the SPC), and Japanese — estimates of catch per trip for certain subsets of the data. The individuals who introduced the external average weight estimates have left the region and it is difficult to verify the authenticity of the estimates. The consequence of data base duplication is the loss of the most important reason to have a data base in the first place — credibility. It is essential to be able to state with confidence that the data base accurately reflects the events in the fishery as reported.

7. Users of the data will of course generate analyses and reports for specific purposes. That is what a data base is for. But there can be only one definitive, authoritative data base.

8. Participants in the data base often have legitimate reasons to insist on local implementation of certain processes or to maintain certain data components. These reasons usually hinge on questions of speed of access. Such requirements pose problems to which there are technical solutions that do not require duplication of the data base or even duplication of effort. In fact the current arrangement in which some data components are maintained at the SPC (ie. logsheets) and others at the FFA (ie. vessel register, surveillance data) is a logical division of labour based on technical requirements of the work programmes of the two organizations.

9. The consequences of data base duplication are therefore:

- waste of skilled staff resources;
- waste of funds;
- loss of credibility.

10. These consequences can be avoided if the agencies involved take a coordinated approach to the development of a badly needed regional facility.