

SOUTH PACIFIC COMMISSION

**NINETEENTH REGIONAL TECHNICAL MEETING ON FISHERIES
(Noumea, New Caledonia, 3 - 7 August 1987)**

**REPORT OF THE
TUNA AND BILLFISH ASSESSMENT PROGRAMME
TECHNICAL REVIEW WORKING GROUP
(29-30 July 1987)**

1. Opening remarks, Dr John Sibert, Tuna Programme Co-ordinator.
2. Dr John McKoy (New Zealand) was nominated, and accepted Chairmanship of the Working Group.
3. The question of dividing the Working Group into subcommittees was discussed but was not accepted because the topics for discussions were of interest to all delegates. Working Paper 5 to the 19th RTMF "Summary of TBAP Activities" was presented by TBAP staff as a basis for discussion.
4. There were extensive discussions on many of the results of Programme activities outlined in WP5. These discussions generally involved five important areas. The summary which follows should be interpreted with reference to WP5.

Specifications for log sheet accounting system

5. Duplication of log sheets is a significant problem which could be partly minimised by in-country log sheet accounting systems. In setting up such systems, the following points should be considered:
 - (i) unique log sheet numbers;
 - (ii) links with licensing systems; and
 - (iii) that they do not need to be computerised.

6. In addition, appropriate checks on the SPC data base should be improved, and distant water fishing nations (DWFNs) should be encouraged to be careful to avoid sending in duplicates.

7. Particular interest was shown in the quarterly summaries as published in the Fisheries Newsletter. The regular publication of data summaries was endorsed by the Working Group. The usefulness of SPC data summaries as currently sent out to countries was recognised. The value of the maps displaying catch distribution by month was recognized.

Tuna and FADs

8. Discussion revealed a high degree of interest in the relationship between tunas and FADs.

9. It emerged that there is a strong need for greater dissemination of information about FADs and for co-ordination of in-country research including

- small-scale tagging
- fish tracking
- acoustic surveys
- detailed data collection on FAD fishing

10. Most of the research would need to be conducted by in-country research staff but SPC should assist in developing an integrated research programme and in supervision of projects. This research was viewed as regional in scope and as involving many countries. Research results should be made available throughout the region. The Working Group agreed to convene a special meeting in the next week to develop a specific programme for information and research on FADs.

11. It was noted that the development of favourable cost-benefit analysis would assist in securing funding for wide-spread FAD deployment in the Region.

In-country stock assessments

12. Several approaches to assessing tuna stocks were discussed.

13. Assessments which combine data across the whole region may obscure important sub-regional variation — for example, areas of local overexploitation.

14. The use of fishery yield per unit area of fishing ground in other regions as a guide to local fishing potential was discussed. This approach may be useful as a preliminary guide in the absence of other data but caution is required in applying such estimates to small areas.

15. Stock production models based on catch and effort data may not be appropriate for setting total allowable catch (TAC) in developing fisheries. An alternative is to set reasonable targets for increased harvest coupled with careful monitoring of catch and effort as fisheries develop.

Yellowfin assessment and interaction studies

16. More information on yellowfin movement and population dynamics in the western Pacific is essential to evaluate current levels and patterns of exploitation. In addition, analyses of interaction have gone as far as possible with current data which is from pre-purse-seine fisheries.
17. The SPC has been seeking funding for a large scale yellowfin tagging project since 1984. Funding from the EEC under the Lome III treaty is likely but other sources of funding should be pursued.
18. Re-endorsement for the yellowfin tagging proposal should be sought from the RTMF.
19. In any event, some of the information required on yellowfin could be obtained from the proposed FAD studies if properly planned.

Uses of ocean "climate" information

20. Sources of oceanographic data useful for fisheries studies were reviewed. These included various world oceanographic data bases and, in particular, the data from merchant vessels currently being used in the TBAP studies. A large amount of oceanographic data is publicly available from a variety of sources.
21. The use of observers to collect appropriate oceanographic data was mentioned, and the value of sea surface temperature (SST) information on the log sheets was discussed.
22. Various aspects of "ocean climate" as indicators of fishing conditions were discussed. It was suggested that SST was not always the most useful indicator of oceanic variability and that in the absence of sub-surface data, salinity was sometimes more sensitive.