Gaps in Tuna Fishery Data for the Western and Central Pacific Ocean Held by the Oceanic Fisheries Programme

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BACKGROUND

The Secretariat of the Pacific Community (SPC) has compiled tuna fisheries data for the Western and Central Pacific Ocean since 1977:

• Skipjack Survey and Assessment Programme (SSAP): 1977–1981

• Tuna and Billfish Assessment Programme (TBAP) commenced in 1982 and was later renamed the Oceanic Fisheries Programme (OFP)

• Regional Tuna Tagging Programme (RTTP): 1989–1992

• South Pacific Regional Tuna Resource Assessment and Monitoring Project (SPRTRAMP): 1994–2001
TYPES OF DATA COMPILED BY SPC

• Annual catch estimates, by species, flag and gear type
• Catch and effort data aggregated by time-area strata, covering the distant-water fleets of Chinese Taipei, Japan and Korea
• Operational catch and effort data, provided by SPC member countries and territories
• Unloadings data
• Port sampling data (size, species and other biological data)
• Observer data (size, species, other biological data, gear attributes, etc.)
• Tagging data, oceanographic data, etc.
WESTERN AND CENTRAL PACIFIC CONVENTION AREA
ANNUAL CATCH ESTIMATES

- Annual catch estimates provided by the fishing nation, but not stratified by gear type and/or species
  
  Example: Indonesian industrial and artisanal fleets and Philippines commercial and municipal fleets

- Untimely provision of annual catch estimates by the fishing nation
  
  Example: Japanese longline and pole-and-line fleets

- Annual catch estimates not provided by the fishing nation and determined by SPC on the basis of incomplete data
  
  Example: Tonga longline, 1996–2000
ANNUAL CATCH ESTIMATES

- Annual catch estimates neither provided by the fishing nation nor determined by SPC

Examples: Vietnamese longline fleet, from mid-1990s. All fleets prior to 1950.
CATCH AND EFFORT DATA

- Status of data collection and compilation unknown
  - Japanese coastal, offshore and distant-water longliners and pole-and-liners, prior to 1952
  - Operational data covering the industrial and artisanal fleets of Indonesia and the commercial and municipal fleets of the Philippines
CATCH AND EFFORT DATA

- Operational or trip data compiled by fishing nations, but not provided to SPC
  - American Samoa troll and handline, Guam troll and handline, and Northern Marianas troll, from 1982 onwards
  - Canadian (South Pacific albacore) troll
  - Chinese Taipei offshore and distant-water longline and purse-seine
  - Japanese offshore and distant-water longline, pole-and-line and purse-seine
  - Korean distant-water longline and purse-seine
  - United States (POFI) longline surveys in the 1950s
CATCH AND EFFORT DATA

- Untimely compilation of operational data by fishing nations, then aggregated data provided to SPC
  - Japanese distant-water longline and pole-and-line fleets
  - Korean distant-water longline fleet
  - Chinese Taipei distant-water longline fleet
CATCH AND EFFORT DATA

- Aggregated data provided to SPC by fishing nation, but inaccurately raised
  - Chinese Taipei distant-water longliners, 1967–1993
CATCH AND EFFORT DATA

- Operational data compiled by coastal states and provided to SPC, but with low coverage due to non-reporting and/or mis-reporting

  - Fiji longline, 1993–2001
  - Tonga longline, 1990–2000
  - Chinese Taipei purse seine, 1983–1993
  - Korean purse seine, 1980–1993
SIZE COMPOSITION DATA

• No port sampling data collected by port state
  - Purse-seine fleets unloading in Thailand
  - Coastal fleets of Japan
  - Indonesian industrial and artisanal fleets
  - Vietnamese longline fleet

• Low Coverage by Port Sampling Data
  - Philippines commercial and municipal fleets
SIZE COMPOSITION DATA

- Port sampling data compiled by port state, but not provided to SPC
  - Chinese Taipei offshore longliners sampled in Chinese Taipei
  - Korean purse seiners sampled in Korea
POTENTIALLY RESCUEABLE DATA

- Japanese longline and pole-and-line catch and effort data, prior to 1950.
- Operational catch and effort data for Indonesia and the Philippines
- Operational catch and effort data for Chinese Taipei and Korean purse seiners, prior to 1993
DATA GAPS: NEXT STEPS

- The proposed PrepCon monitoring programme for Indonesia and the Philippines may commence in 2004, resulting in the compilation of operational catch and effort data, and the establishment of sampling programmes.

- The discovery and rescue of data for Japanese longline and pole-and-line fleets prior to 1950 will be attempted by retrieving data published in reports listed in the bibliography on world tuna fisheries, 1930–1953, of Van Campen & Hoven (1956), in collaboration with the National Research Institute for Far Seas Fisheries.
DATA GAPS: NEXT STEPS

• A working paper on “data gaps” may be presented to the 17th meeting of the Standing Committee on Tuna and Billfish (SCTB) in August 2004.

• SCTB recommendations will be considered by the Scientific Coordinating Group, the Preparatory Conference, and possibly the Western and Central Pacific Fisheries Commission in late 2004.