

**FFA****FORUM FISHERIES COMMITTEE
ONE HUNDRED AND EIGHTEENTH MEETING***Virtual***11 - 14 May 2021**

Agenda Item:	
Paper Number:	<i>FFC118-INFO.15</i>
Title:	Economic Analysis and capacity building

Summary

This paper provides an update of the economic analysis and capacity building work conducted by the Economics Intelligence Unit (EIU).

Recommendations

Members are invited to note the paper.

Economic Analysis and capacity building

Introduction

1. The Economics Intelligence Unit (EIU) sits within FFA's Fisheries Development Division and is tasked with: the collection and dissemination of economic data; conducting economic analysis and providing related advice at the national, sub regional and regional levels, and; building national and regional capacity in economic analysis. This work is often carried out in conjunction with members, other units within FDD, other FFA Divisions and other regional organisations (particularly SPC).
2. This paper provides a brief overview of the work conducted by the EIU in the past 2 years including current and ongoing activities.

Collection and dissemination of economic data

3. The EIU collects on an ongoing basis, data relating to a range of economic indicators and statistics for the WCPO tuna fisheries and the contribution that these fisheries and associated industries make to the economies of FFA member countries. These data are disseminated through a number of avenues, including:
 - The Economic and Development Indicators and Statistics Report: Tuna Fisheries of the WCPO (EDIS Report). This report provides comprehensive information on the level of control exerted by FFA members over the WCPO tuna fisheries, trends in economic conditions in the major fisheries and the contribution of tuna fisheries and related industries to the national economies of FFA member countries. The report aims to assist decision-makers to assess and monitor progress in implementing the strategies and achieving the goals outlined in *The Roadmap* and the *Economic Indicators Report*. Information from this report is also provided in summary form in the *Tuna Economic and Development Indicators* brochures and *Tuna Fishery Report Card* series. The 2020 edition of the EDIS report is expected to be published in April/May 2021.
 - Spreadsheets provide the data contained in the EDIS report and detailed statistics on catch and catch values by national waters and fleets which are also available from the FFA website.
 - The SC paper "*Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions*".
 - Dashboards of custom and regular analyses of market information that have been produced at member request, e.g. on the economic value of the Thai market, and a price forecast and prediction dashboard (in progress).
 - Development of the unit's fisheries economics database is now well underway and this has enabled us to respond more rapidly to data requests from members.
 - Market information graphs, showing trends in tuna prices on main markets, which are provided every two months in the Trade and Industry Newsletter (online and sent by email to interested contacts).
4. As part of the data collection program FFA contracts 10 in-country data collectors on two year contracts to collect a range of national level data which is subject to a data verification process. While there has been an improvement over time in the quality of the data collected through this programme, issues remain with both the quality of the data collected and the ability of contracted

data collectors to obtain information from government and industry beyond that which is publicly available. The planned internal review of the current practice of engaging in-country data collectors and other related data collection processes noted previously has been delayed with the limited available resources being directed toward the completion of the fisheries economics database. It is anticipated that this review will be conducted within the next 12 months and extend to include other issues related to data and data collection processes, such as survey-based sampling. Finally, automated collection of market data from the major markets has commenced via web-scraping although manual collection is still undertaken.

5. The development of the fisheries economics database is well progressed with: EDIS data migrated to the database; Annual Catch Estimate data mirrored to enable the migration of the Value and Catch Statistics data to the database; and annual Bangkok import price data migrated to the database. This has centralised these data and allowed for a lower turn-around time in responding to data and, in some cases, analytical requests.

Economic analysis and advice

6. The EIU provides advice, analysis and commentary on a range of economic issues related to the management and development of the tuna fisheries harvest and related sectors at the national, subregional and regional levels. In the past two years this work has, and continues to cover, a wide range of issues including:
 - Financial and economic analysis of fleet performance.
 - Analysis of options for incorporating climate change analyses into the work of the EIU.
 - Bioeconomic analyses examining outcomes under different management limits and/or controls at the national, subregional and regional levels.
 - An analysis of the demand for fishing on FADs and possible policy measures.
 - Economic implications of different target reference points (TRPs).
 - Economic conditions in the major WCPO tuna fisheries.
 - Analysis of access and licence fees to members including data provision. This includes a report on the EU SFPAs to the Cook Islands that is currently being finalised.
 - On-going work on price predictions using statistical/econometric and machine learning methods.
 - Support for EDF with game theoretic analysis of the southern Albacore fishery and analysis of agreements and negotiation between members and distant water nations over the high seas.
 - Support and advice to SPC concerning the analysis of effort creep on productivity and efficiency analysis.
 - Advice and consultation with consultants on data availability to the social-economic indicators project.
 - Provision of catch and catch value data to the Solomon Islands, Kiribati and Vanuatu.
 - Impact evaluations and analysis of CoVID-19 impacts for Solomon Islands, Palau and Tonga (currently underway).

- An analysis of the impact of climate change on license fee revenues of member countries (currently underway).
7. In addition, the formalisation of the process with regard to work requests through on-line forms in standard format to allow for a better understanding of member needs has been introduced.

Building national and regional capacity in economic analysis

8. A number of EIU activities relating to capacity building in economic analysis have recently been undertaken or are planned for in the near future, including:
- National Fisheries Economics Workshops were run in PNG, Solomon Islands, Kiribati and Tonga in 2019 and in Samoa and the Cook Islands in 2020.
 - In early 2021 an Advanced Regional Fisheries Economics Workshop was held in virtual mode with participants from the Solomon Islands, Kiribati, Tuvalu, Cook Islands, Samoa and Tonga. This workshop introduced participants into more detailed bio-economic modelling, data analysis and database use. An on-line refresher workshop is planned for June this year and a workshop on the economics of fisheries licensing for later in 2021. Most likely this will also be held on-line. On request, we foresee being able to offer introductory national fisheries economics courses in virtual mode in the second half of this year.
 - The Secretariat has also periodically conducted internal training on using our database within the Fisheries Development Division.

Key Issues

9. Key issues during 2020 included:
- The COVID19 pandemic and its impact on services delivered through:
 - EIU team members being forced into remote working
 - Impacts on data collection and verification process, and
 - Delays in delivery of training programmes as virtual delivery mechanisms were developed.
 - Staff shortages primarily driven by the difficulty in recruiting a Chief Economist.
 - Challenges in relation to on-going modernization of data management processes and database development.
 - Expansion of the scope of the work undertaken to include machine learning for predictive analyses and policy and other impact evaluation methods.
 - The initial development and investigation of approaches to assess economic consequences of predicted changes in size and distribution of tuna stocks in WCPO as a result of climate change.