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FFA Update on the Application of the Ecosystem-Based Approach to managing Tuna Fisheries amongst FFA Member Countries and Territory in the WCPO: specific to lessons from stakeholder consultations in countries

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ABSTRACT

In 2005 the FFA commenced work on the Ecosystem-Based Approach to Tuna Fisheries Management amongst its Members and Territory. Series of stakeholder workshops and consultations were conducted, which aimed towards developing national EAFM[1] reports. Such reports will form the basis for providing a platform towards developing and reviewing tuna management plans, operational framework, strategic policy and legal framework. This paper presents an overview of current progress and summary of lessons learnt from stakeholder workshops in implementing the FFA EAFM Framework amongst its Members and Territories in the WCPO[2].

INTRODUCTION

The tuna fishery is paramount and important to both fishing parties and small island countries and territories. In the WCPO, tuna stocks are managed collectively by all parties to the WCPFC Convention, including those with special interest in participating directly or indirectly in fishing and fisheries related activities in the WCPO. Amongst its priorities, the Convention promotes the use of an ecological system approach to managing tuna fisheries. Other international instruments including UNCLOS[3], FSA[4], UNCED[5] and WCPFC[6] further provide similar directions in reference to relevant articles and provisions on ecosystem approach.

The FFA initiative provides the necessary tools to help put into practice what has been outlined in Article 5 of the WCPO Convention. The FFA EAFM Guide, which provides detail description of the steps required to implement the EAFM Framework, entails a range of broad areas and issues related to target species, non target species, other dependent species within the ecosystem, minimizing waste and pollution, endangered

[1] Ecosystem-based approach to fisheries management
[2] Western and Central Pacific Ocean
[3] United Nations Convention on Law of the Sea (1982)
[4] Fish Stock Agreement (1995)
[5] United Nations Convention on Environment and Development (1992)
[6] Western and Central Pacific Fisheries Commission Convention (2004)

species, biodiversity, optimum utilization, the welfare of the various states involved including the interests of artisanal and subsistence fishers. Consequently, the implementation of the EAFM approach by the WCPF Commission should not be seen as a major change in direction that will require adding many extra elements. Rather, this guide outlines a framework that should help coordinate current and future tuna fisheries activities. It should provide the basis for accommodating many of the strategies and monitoring programs already being undertaken by countries and territories in the WCPO.

An oceanic tuna fishery is one of the major components of a complex marine ecosystem that exists in the WCPO. Pacific island countries and territories which are influenced by their obligations and commitments to various international and regional management regimes, have been involved in the development of viable management arrangements that will be effective in addressing issues such as resource sustainability, fishing capacity and effort control, maximizing benefits from resource utilization and mitigating impacts on the environment and non-target species. These specific areas are specifically enshrined in the objective of the Convention on the conservation and management of highly migratory fish stock in the WCPO which is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stock in the WCPO in accordance with the United Nations Convention on the Law of the Sea (1982), and also many of the articles within this convention.

Similar concepts have been widely published also in Ecosystem Based Management (EBM; e.g. Ward et al., 2002), Ecosystem Based Fishery Management (EBFM; e.g. Brodziak & Link, 2002), Ecosystem Approaches to Fisheries Management (EAFM; e.g. Garcia et al., 2003) and Integrated Oceans Management (IOM; e.g. NOO, 2004). Others have been around for over 10 years, such as Sustainable Development (SD; WSED, 1987) and Ecologically Sustainable Development (ESD; CoA, 1992).

The paper presents an update and progress of the FFA EAFM efforts in the WCPO. The paper also outlines the key lessons from stakeholder consultations which assists in improving the delivery of services in future consultations.

THE FFA EAFM FRAMEWORK

A schematic diagram of the FFA EAFM processes detailing the four main stages of scoping, issues identification, issues prioritization and risk assessment and management system (development of operational objectives and performance values, determine/ implement actions, assess progress against performance measures, review systems) is outlined below. An example of one of the generic component trees, that are used to document all the relevant issues (biological, social and economical) for any one fishery, is also presented.

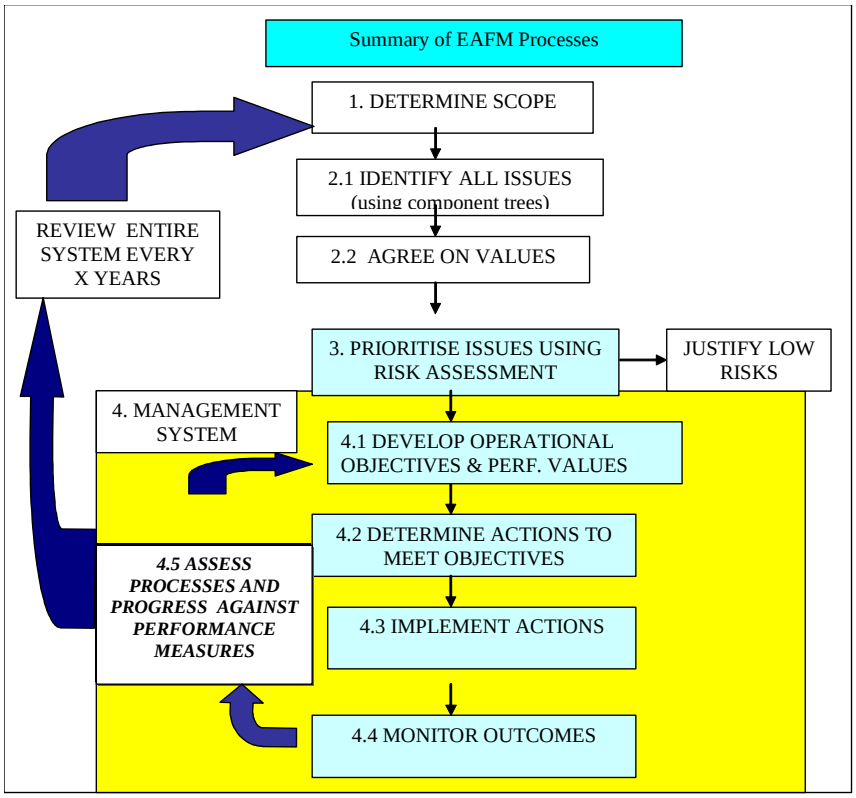

Figure 1. The FFA EAFM framework (source: Fletcher, 2007)

The above Framework outlines the four steps required to fully apply the EAFM (Fletcher, 2007):

Step 1: Determine the scope of the assessment by developing a clear description of what is to be managed/assessed. The scope of some issues may be difficult to define given that tuna fisheries deal with trans-boundary and highly migratory species and can operate at island, country and regional levels. A common distinction that is made is for those assessments that relate to the regional level (e.g. WCPO Commission), individual country level, and within country (artisanal and targeting tuna). There is a need to understand how the linkages must operate among these levels. Thus, for the target species, any management must be linked to regional level assessments.

Step 2: Having determined the scope, is the identification of all the relevant issues and what is wanted to be achieved for each issue. The outcomes wanted for an issue can vary given the requirements of any convention, country needs, local requirements and global attitudes and can be based on ecological concerns, economic realities or social attitudes. It is necessary to work out which of the issues are being used because they have different implications for what actions should be taken. For example, there is likely to be different concepts of acceptability for some elements, particular interactions with species of customary

importance both among countries and regions. The use of component trees is used to categorize the issues according to broad areas of fishery (ies) under investigation.

Step 3 - The decision as to what level of management response is required is based on prioritization of issues using risk analysis and assessment, as well as the precautionary approach. The risk analysis process determines and ensures that the current management system is working at the right level. For instance, for issues not currently addressed directly whether they continue to do nothing or, need to be doing something. Similarly, for issues that are currently being managed or investigated, the appropriate questions would include whether they are doing an appropriate amount, not doing enough or doing too much.

Step 4 – For issues that need direct management, there must be clear operational objectives and ways to assess if performance against these objectives is acceptable or not. Depending upon the issue, the management actions required may be implemented at the whole Commission level, at a country level, or just within some areas of a country. The management system must also include the monitoring and review of performance outcomes and what will happen if performance is not acceptable.

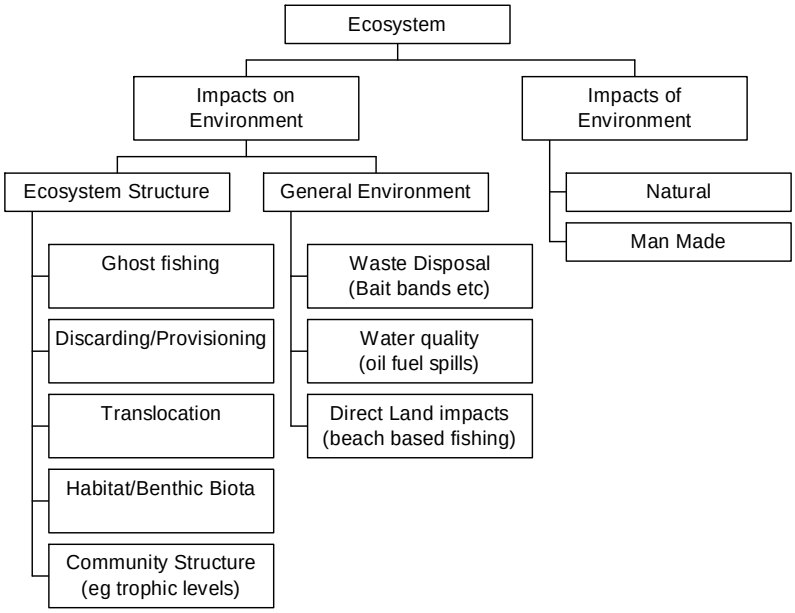

Figure 2. One of the five generic component trees (Source: Fletcher, 2007).

The EAFM Guide, the main document used in the implementation of the FFA EAFM Framework, also stresses the need to match the level of risk with the relative rate of exploitation and the types and quantities of data used to monitor performance. Where the risks (exploitation rate) are low, only crude indicators of performance are likely to be

needed. Where the risks are higher and the management approach is more aggressive, leading to a relatively high exploitation rate, more robust and precise measures of abundance will be needed. A key point is that the EAFM guide by itself, does not provide the 'answers' – it merely assists you in the process of trying to find these.

The EAFM guide has been based on a system developed for use in Australia (Fletcher *et al*. 2005). This has been modified and tested through a series of FFA regional funded workshops. The outcomes of this workshop were a strong endorsement of the process and a number of refinements to the methodologies that should be used. The specific outputs produced at the training workshops includes a concise description of the scope of the tuna fishery within their country; a set of tailored component trees covering the issues associated with the retained species, non-retained species, ecosystem issues, generation of economic benefits, community wellbeing issues and administration issues. Four types of objectives were identified in the guide and could be used by countries/commission to assess the risk associated with any specific issues. The objectives are: (1) sustainability (i.e. keeping biomass levels above Bmsy); (2) viability (avoiding recruitment failure/ extinction for a species, thus limit is < Bmsy); (3) economic (maximise economic benefits, limit may be > Bmsy); (4) social (maximize social acceptability, limit may be >> Bmsy). The guide further highlights the long term need to have clear linkages between the objectives at the regional level and the actual management that occurs within each of the countries.

This EAFM process was adapted and implemented during in country EAFM work, recognizing the difficulties and challenges faced during the consultations with stakeholders which potentially vary from on FFA member country to the next. For example, private sector involvement in the fishing industry is a lot more in Vanuatu, Federated States of Micronesia (FSM) and Palau compared to small countries like Nauru, Kiribati and Tuvalu. This simply translates into stronger opinions on certain issues affecting the fishing industry from several stakeholders in the private sector relative to parallel views from those in fisheries authorities. The process encourages wide consultation and representation of key stakeholders to map out relevant and priority issues affecting the fishing industry. However, at the same time ensuring the consultations remain focused on the objectives of the EAFM exercise in order to generate positive and quality outcome of deliberations. The FFA has, to date, completed EAFM scoping and stakeholder consultations in Vanuatu, Palau, Tonga, FSM and Nauru.

LESSONS FROM STAKEHOLDER WORKSHOPS & CONSULTATIONS

The process of EAFM workshops and consultations is done twice for each country, initially with the EAFM scoping and followed by stakeholder consultations. A third country visit may be also planned in order for Secretariat staffs and officials from Fisheries Authorities re-visit outcome of stakeholder consultations and finalize documentation of the EAFM.

Below is a summary of the lessons and observations from series of stakeholder workshops and consultations done to date (Sauni *et al*. 2007).

There was a wide range of experiences and lessons gained from the FFA EAFM work conducted in its five FFA Member countries that have had case studies completed. Among the key areas are the lack of awareness on update information on the stocks and efforts currently in place, inter-agency relationship partly due to relevant information not necessary filtering down to other stakeholders, sensitivity on issues particularly in areas of socio-economics, administration and governance and, confusion over priority issues driven either by the lack of data to support the issues or clarity of national policies and priorities on fisheries. There are, in some countries a conflict between agencies responsibilities over tuna fisheries, particularly where more than one department deals with tuna related matters. The identification of such governance issues is one of the key benefits of this EAFM approach.

Furthermore, the elements on departure of skilled staffs, re-shuffling and merging in fisheries authorities, which are often influence by change of national policies and governments, further complicate matters in effective management of tuna fisheries. In the consultations, the stakeholders often raise concerns that numerous Tuna Management Plans in the past were not fully implemented. There were little consultations and key stakeholders did not participate fully in the development process of the plans, and that the plans were not circulated widely and people lacks awareness of it. Also, there is a sense of participants protecting their interests by way of their contributions to the discussion. Some countries point to the lack of political will and government interventions, corruptions as well as the lack of financial and technical support to implement the plans.

The above experiences mounted to the difficulty in coordinating in-country EAFM consultations. However, the process encourages participants in EAFM national workshops to raise those issues, which will then be assessed succinctly through the prioritization and risk assessment steps in order to arrive at possible management responses. In most cases, new ideas and proposals flagged during the consultations present new opportunities for government officials in decision making positions to follow such actions through to full implementation. Similarly, the discussion also benefits stakeholders in the private sector to take on the new challenges and understanding in addressing ongoing issues with fisheries authorities as well as implementing management responses within their own fishing businesses.

Almost in all the stakeholder consultations, there appears to be interesting but relevant informal debate and conflict of ideas and opinions, between the formal and informal sectors in the tuna industry. On the one hand, the industry stakeholders often argue on the lack of financial and logistical support or provisions from the government to foster sustainable and profitable onshore developments. The issues of government subsidy and relevant technical information and materials filtering down to industry stakeholders are often limited. For example, the industry stakeholders often request the governments for duty free or imposition of tax exemptions on fuel, oil, spare parts and other accessories commonly used by domestic tuna fleets. Also, the lack of proper and adequate onshore facilities like fuel depot, wharf facility and berthing area, and skilled skippers and crews (which often led to foreign crews moving in).

On the other hand, the national governments often argue that there are current national and regional initiatives and projects in place that look into alternative and better means of developing tuna fisheries in the private sector. But first there need to be feasibility studies and related accounts of the major challenges and constraints, explore and identify development opportunities, develop or review strategic management and development plans and policy documentations and then implement the plans. In knowing the state of the tuna resources and its environment, and development opportunities against the challenges and constraints, strategic responses to key issues experienced in the industry would be addressed. This includes the construction or improvement of onshore-based facilities and services, allocation of licenses and related control limits, application of technical specifications on boats, use of monitoring, control and surveillance mechanisms, analyses on the use of subsidies and exemptions, as well as other incentives to encourage effective, sustainable and profitable management of domestic tuna fisheries. In fact, all these elements are the basis for developing national EAFM reports that incorporates all the components of ecological, ecosystem, social and economic aspects of the tuna industry.

In addition, national EAFM workshops and consultations further provide opportunities for improvements in the conduct and preparation of EAFM reports, Operational framework, Legal framework and Policy platform and related documentation. This includes the following elements: keeping the EAFM report concise and short; improving the delivery of risk assessments for clarity among the participants; and encourage the use of non-technical languages during the consultations – possibly by engaging national fisheries officials. There is also the need for clear demarcation of jurisdictions between inshore and offshore fisheries, flexibility in approach, and link debate on issues to WCFC decisions, provision of workshop materials in advance, ensure local stakeholders drive the whole EAFM process in order to encourage sense of local ownership of the EAFM reports.

CONCLUSION

The paper briefly report on the progress of the FFA EAFM Framework and also provides a summary of lessons learnt from its national stakeholder consultations. In ensuring their obligations to the Convention and other international instruments are met, and in light of their national interests in maximizing sustainable fishing and optimum utilization, the FFA Member Countries and Territory will manage their national tuna fisheries in accordance to their EAFM reports, operational and legal frameworks and policy documentations. The Members have full ownership of the EAFM initiative and will progress to fully implementing their strategic management and development plans in line with EAFM reports.

Within the countries of the Pacific Community, there are currently Tuna Management Plans in place for Fiji, Palau, Papua New Guinea, Solomon Islands, Tonga, and Vanuatu. Most Plans generally include some over-arching goal regarding management of associated and dependent species. Taking into account ecosystem considerations in the management of fisheries requires substantial amounts of data on target species,

interactions between target species and other species, food webs, and the direct effects of fishing on non-target species and their habitat. To meet the objectives of the WCPFO Convention will require substantial input into modeling and monitoring of not just target fisheries, but the environment in which they exist.

Looking ahead, the Pacific Island countries will endeavor to fully comply with their obligations under international instruments, and ready to develop and manage their tuna fisheries to maximize the opportunities for its people. The FFA will continue to provide technical services to the countries to ensure their goals and visions are fully achieved.

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