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**Addressing Disproportionate Burden: A framework for implementation
Summary Report of a Workshop Convened in Honolulu,
Hawaii, September 18-20, 2014**

**Western Pacific Regional Fishery Management Council
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1. Introduction

This document reports on a workshop held 18-20 September 2014 to address Disproportionate Burden (DB) in the implementation of the obligations stemming from the WCP-Convention¹ and of conservation and management measures established by the Western and Central Pacific Fisheries Commission (WCPFC). The workshop discussed principles underlying the definition for disproportionate burden and a process to evaluate the distribution of the conservation burden and how to offset it. This document assumes that the primary purpose of any measure under consideration is to satisfy an agreed upon conservation objective.

2. Definition

Article 30(2)c of the WCP-Convention states that in establishing conservation and management measures (CMM), members of the Commission shall ensure that measures do not result in transferring a disproportionate burden of conservation action onto developing States, territories and possessions. This obligation has been interpreted by States Parties in CMM2013-06 as a positive obligation on the Commission to ensure that any CMM does not result in a disproportionate burden.

The concept of disproportionality is not well defined in international law, but some guidance may be found from looking at the concept of proportionality, which is well established as a metric for equity and fairness. Disproportionality can be defined as the deviation from proportionality.

Proportionality can be broadly defined as each country paying a fair share of the costs of meeting the conservation goal. More formally, the costs incurred by member i (individual State or group of States) would be viewed as imposing a proportional burden if:

$$C_i = S_i^* (\sum_i C_i),$$

where S_i^* is the percentage share deemed to be fair for member i (see discussion in #8 below). C_i is the cost incurred by member i , and $\sum_i C_i$, is the summation of costs (i.e. the total cost) incurred across all members of the Commission. A member for whom the cost of the proposed management action exceeds its proportional share, i.e. for whom

¹ Convention on the Conservation of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

$$C_i > S_i^*(\sum_i C_i),$$

would potentially qualify as experiencing a disproportionate burden. Whether the magnitude of the deviation is sufficiently large to be viewed as an actual disproportionate burden is a decision for the Commission.

3. Whose Benefits and Costs are to be Considered?

The benefits and costs of all members of the Commission need to be measured and valued when considering where the burdens of a conservation measure are distributed. However, the need to avoid transferring a disproportionate burden of conservation action applies only in the case of Small Island Developing States (SIDS), territories and possessions.

4. What is the Process?

There is a need to develop a formal process to assess whether there is a burden, whether it is disproportionate, and to provide different options to address/compensate it. Such a process may be timely and costly but necessary; for these reasons, it should focus on the most important management measures, and be conducted as a collective exercise, with clear steps and procedures.

Elements to consider in the development of the process should include:

- Who has the responsibility of demonstrating DB
- Evidentiary standards
- Dispute settlement
- Best available science to include independent expert panel and expert peer review
- Transparency and stakeholder engagement

5. What is the Baseline?

Evaluating DB requires analyzing the difference between net benefits with and without management action, based on the recommendation from the stock assessment model. The “without” scenario is the baseline from which the action’s benefits are compared. The baseline, or counterfactual, refers to the outcomes that would have occurred in the absence of additional conservation and management measures. A population dynamic bio-economic model, informed by fishery and socio-economic data, is the preferred way to assess the economic tradeoff of the fishery, with the starting baseline date to be determined by the Commission. Models used to determine the baseline should be fit to observed data, and all projections should indicate measures of statistical uncertainty.

6. How and What Do We Measure?

Measurement of benefits and costs for governments, fishing fleets, consumers (accounting for domestic consumption and food security), and value chain activities is

required for evaluation of the DB. Benefits and costs can be analyzed from two different informational perspectives. A financial analysis measures costs and benefits in existing market prices, and is undertaken and evaluated from the perspective of firms and consumers. An economic analysis evaluates the costs and benefits from the perspective of the national economy, considers benefits and costs that are not valued by market prices, and accounts for any market distortions in the economy.² Internationally accepted best practices for measuring costs and benefits should be employed.

The net value of benefits and costs from a conservation and management measure may occur over a period of years. This creates a timing issue in the calculation of DB that can affect its magnitude at various points in time. For this reason, measurement should be undertaken either period-by-period or as a net present value over the relevant time period. During the initial years after a management measure, costs often exceed benefits, so that net benefits are negative before they turn positive at a later date. A member can thus incur a DB for some period before the member eventually enjoys the positive net benefits that occur in later periods.

7. Decision Rule and Offsetting Payments

A primary objective shall be to avoid DB. DB can be avoided in the first place through the choice of management measures, or alternatively offsetting payments can be made for least-cost or other measures that impose a DB. Avoidance of DB can lead to selecting conservation and management measures that are not least-cost. Economic efficiency may then be foregone in an effort to avoid the DB or to prioritize equity (an equity-efficiency trade-off). The use of avoidance and offsetting payments to address DB can not only change the allocation of impacts but also affect incentives, and in turn the overall costs of meeting the conservation goals. Measures that avoid DBs are more likely to gain acceptance by all parties than measures that impose DB on one or more parties.

8. What is a “Fair” Distribution of Costs?

There are various ways to define fair distributions of costs, based on different principles regarding who should pay the costs of a given measure. For example, the “beneficiary pays principle” states that those who benefit most should pay the most. Alternatively, the “polluter pays principle” states that those who are responsible for the damages imposed on others should bear the costs. A “means-based principle” states that those who can “afford” to pay should pay. Who pays not only affects the potential magnitude of DB, but also the incentives of members and hence the economic efficiency of conservation measures.

The Commission will have to determine what combination of factors or principle(s) to use in defining a fair distribution of costs, which may vary by context. The principle(s)

² Market distortions include quotas, taxes, subsidies, unemployment, excess capacity in the economy, labor paid in kind, external costs and benefits, and the like. There are well-established international best practices for measuring the economic value (shadow prices) that accounts for these distortions and indirect effects such as additional employment and incomes.

chosen will determine the cost shares to be used in defining disproportionate burden (see #2 above). For example, if a “beneficiary pays principle” is adopted, the cost shares would be based on each member’s share of benefits. Formally, let B_i denote the gross benefit received by member i (individual State or group of States). Then the fair cost share under this principle for member i would be defined as $S_i^* = \frac{B_i}{\sum_i B_i}$, where $\sum_i B_i$ is the sum of gross benefits across all members.³ If a SIDS’ actual cost share exceeds this definition of its fair cost share (see #2 above), application of this principle would imply that this SIDS member would need to receive an offsetting payment to ensure that it does not bear a disproportionate burden.

In cases where the benefits are difficult to identify on an individual basis, a different cost sharing principle or combination of principles may be more appropriate for use in defining a member’s fair cost share.

For example, under an “ability to pay” cost-sharing principle, the share deemed fair for member i might be defined as $S_i^* = \frac{W_i}{\sum_i W_i}$, where W_i is a measure of the national income or wealth of member i and $\sum_i W_i$ is total income or wealth over all Commission members. Alternatively, under a “polluter pays” cost sharing principle, the share deemed fair for member i might be defined as $S_i^* = \frac{H_i}{\sum_i H_i}$, where H_i is a measure of the harm imposed by member i on all other members, and $\sum_i H_i$ is a measure of the total harm across all Commission members. The measurement of harm would differ across contexts. For example, in the context of bigeye tuna bycatch, H_i might be a measure of the bigeye bycatch attributable to member i . If a SIDS’ actual cost share exceeds this definition of its fair cost share (see #2 above), application of this principle would imply that this SIDS member would need to receive an offsetting payment to ensure that it does not bear a disproportionate burden.

9. How Do We Pay?

There are multiple ways to make offsetting payments, including payments in cash, in kind, or through a regulatory exemption approach. There are costs to offsetting payments, including administrative, information, and transaction costs, as well as disincentive effects upon the paying parties and losses in economic efficiency incurred when raising the funds. Examples of regulatory approaches include the distribution and implementation of transferable property rights or credit systems (for bigeye catch and/or bigeye bycatch). Proceeding in this fashion may be facilitated by a loan fund to mitigate short-term costs that SIDS incur during the initial phases of a measure when costs often

³ The fair cost share S_i^* is defined here in terms of gross rather than net benefits, so that the fair cost share is always positive ($S_i^* > 0$), where as $NB_i = B_i - C_i$ is the net benefits to member i , which can be positive, negative or zero.

exceed the benefits, such as periods of reduced purse seine harvests of bigeye during which bigeye stocks are allowed to rebuild. The way that offsetting payments or related adjustments are paid for and financed can affect incentives in ways that contribute to, or distract from, the achievement of a particular conservation goal.

**Participants in the WPRFMC Disproportionate Burden Workshop
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