GLOSSARY OF TERMS

Access control mechanisms: According to the FAO Code of Conduct, nations are encouraged to create institutional and legal frameworks that govern access to the use of coastal and ocean resources. Use rights to fisheries may include rules of access to the fishery; legal constraints on open access; requirements for licensing, permitting, or other rules that limit open access.

Adequate: (See "Scoring Levels")

Basic: (See "Scoring Levels")

Better: (See "Scoring Levels")

(Fishing) Capacity: The ability of the fleet to catch fish. This is key metric considered in the development of management measures as an input control. Actual fishing capacity is a complex and hard to measure parameter that is usually represented by a proxy, for example as the number of vessels in the fleet, their size; engine horsepower; number of days they can operate per year, etc. Where measures restrict the fleet and/or vessel size, the ability of those vessels to catch fish can still increase with technological advances. Overcapacity contributes substantially to overfishing and IUU, degradation of marine resources, decline of food production potential, and economic waste. In 1999, the FAO adopted the International Plan of Action for the Management of Fishing Capacity.

Community outcomes: The "fair and equitable" aspect of fishery management regimes, which considers the distributional effects, or outcomes, that follow from on the water affects the participants - such as fleet consolidation, vessel participation, heterogeneity of the fleet, wealth redistribution - to impacts on shoreside support services, crew and support service employment, among others.

Competence and jurisdiction: A nation's constitution determines jurisdictional authority of courts and judges, including freedom to decide cases impartially, in accordance with their interpretation of the law and the facts. Courts should be able to act without any restriction or improper influence. Competence is the legal ability of a court to exert jurisdiction over a matter; the power to hear and determine a case.

Components: The Components are the first step in the hierarchal structure of the FGT. Three Components encompass the evaluation, each clearly defined to communicate what is being evaluated. The scope of the Components differ to collectively encompass all relevant aspects of fisheries performance, from governance and policy to outcomes achieved 'on the water'.

Data/Information (as used in the FGT): Evidence in the framework relies on the existence of information in support of achieving the criteria at any given scoring level. Data can be quantitative or qualitative, but there should be confidence in the information provided. In evaluating enabling factors and outcomes, data used will be based largely on documentation but also pull from qualitative and anecdotal sources. The framework employs a scale of confidence to add an index of data quality to the results.

Data (fisheries): The collection of data on fishing activity, fish stock abundance and the environment are essential for designing policy goals and implementing management measures. Fishery dependent data are collected directly from the fishery and may include fishing effort, total amount of fish removed from the ocean (landings and discards), species (target and incidental), and biological information. Fishery independent data are collected from scientific at-sea surveys to gather information on fish stock abundance, biology and their ecosystem for inclusion in stock assessments.

Data-limited fisheries: Fisheries where comprehensive stock assessments are not feasible (also referred to as data deficient fisheries). Smaller or artisanal fisheries may lack the resources needed to carry out detailed stock assessments. Although such fisheries may lack the data necessary to demonstrate sustainable operation, it is possible that they may still be operating sustainably. Risk assessment methods and data limited tools have been developed in recent years to provide alternative ways to assess the impacts of fishing on fish stocks and ecosystems.

Enabling factors: Enabling factors are captured in Components 1 and 2 of the FGT. They are forces that facilitate or impede individual, collective, or environmental change based on their level of availability; or elements of process that are conjectured to support outcomes and are therefore often used as proxies for those outcomes (Anderson et al, 2015).

Environmental outcomes: The environmental results realized. These are measured through indicators that include status and trends for target stocks, non-target stocks, protected species, habitats, indicators of ocean and coastal health (ecosystem structure, process, function).

Evaluation: A structured process of assessing success of a system. Evaluation questions whether the system is meeting its goals (how good the outcomes are) and what lessons can be learned (whether those outcomes are good enough).

Fishery: A unit determined by an authority or other entity that is engaged in raising or harvesting fish. Typically, the unit is defined in terms of some or all of the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats, and purpose of the activities.

(Fishery) Stock: A group of individuals in a species occupying a well-defined spatial range independent of other stocks of the same species. Also, the part of a fish population which is under consideration from the point of view of actual or potential utilization.

Fishery management plan: A formal or informal arrangement between a fishery management authority and interested parties which identifies the partners in the fishery and their respective roles, details the agreed objectives for the fishery and specifies the management rules and regulations which apply to it and provides other details about the fishery which are relevant to the task of the management authority. (FAO, 1997)

Good: (See “Scoring Levels”)

Harvest control rules: The operational component of a harvest strategy, essentially pre-agreed guidelines that determine how much fishing can take place, based on indicators of the targeted stock’s

status. HCRs formalize and summarize the management strategy. Constant catch and constant fishing mortality are two types of harvest control rules that might appear in a harvest strategy.

Harvest strategy: The management procedures triggered in response to performance in relation to operational objectives. The pre-defined frameworks or cycles for making fishery management decisions, such as defining quotas, can include different elements, but generally consist of a monitoring program, a stock assessment method, reference points (or other fishery indicators), and harvest control rules. The harvest strategy should clarify the relationship between the elements and establish a feedback loop where evaluation determines that the fishery is not meeting established reference points of other goals.

Indicator: "An indicator indicates something." Indicators serve as neutral measures of change, while the degree or lack of change is realized via the performance score. In this framework, an indicator is a composite of multiple measures, which represent evaluative criteria across a range of performance. Where appropriate, indicators and their associated measures (used in this evaluation) are drawn from existing literature and those proven to be effective in existing evaluation and assessment schemes.

Input controls: Management measures that regulate the amount and manner of fishing (or inputs). These place limits on the total intensity of use of the gear fishers put into the water in order to catch fish. Examples include limits to the number of licenses or permits issued, restrictions on the amount of time or area in which fishing may occur, and limitations on vessel size or gear.

Key stocks: Those fishery stocks of primary importance to a fishing community, national economy, ecosystem, etc. These stocks are identified as priority or importance to commercial and recreational fisheries because of volume, value, or need for management. As used in the evaluation metrics, Key stocks will encompass a fishery's target stocks and include additional stocks of ecological and economic importance.

Legal framework: The authority under which a nation engages with other nations, regional, and international fishery management bodies to negotiate treaties, share fisheries data, collaborate in research, or adopt national plans implementing international policy. The authority may be granted, and the framework described, by the nation's constitution, legislation, or other authorizing mechanism.

Legitimate interested parties: stakeholders, individual or group of individuals who has an interest or claim that may be affected or may effect a given activity. Interest or claim may be direct or indirect.

Low trophic level: "Low Trophic" means an organism is low on the food chain. Low trophic level fish serve an important ecological role in the ecosystem by providing a critical food source for high trophic fish like tuna, cod, salmon, and swordfish. These fish that provide the main pathway for energy to flow from very low trophic levels (plankton) to higher trophic levels (predatory fish, birds, and mammals).

Management system: The framework of processes and procedures used to ensure that an organization can fulfil all tasks required to achieve its objectives. Includes, but is not restricted to, agencies or entities involved in the management of the fishery, the legislative framework within which the fishery is

undertaken, the management measures implemented and the processes and procedures that enable the collective functioning of the various components.

Management strategy: The strategy adopted by the management authority to reach established ecological, social and economic goals. In addition to the objectives, it includes choices regarding all or some of the following: access rights and allocation of resources to stakeholders, controls on inputs (e.g. fishing capacity, gear regulations), outputs (e.g. quotas, minimum size at landing), and fishing operations (e.g. calendar, closed areas and seasons)

Measures: Measures add essential resolution to the framework and break out indicators into measurable criteria that can be evaluated across a range of scoring levels. Together, the Performance Areas, Indicators and Measures of a Tier should describe all the critical components to be scored.

Management measures: [Fisheries] Management Measures are specific controls applied in a fishery to contribute to achieving the management objectives — the smallest unit of the fishery manager's tool kit. These include input controls that limit fishing effort, output controls that limit catches, and technical measures such as gear regulations, closed areas and time closures that may constrain both fishing effort and catch. Socio-economic incentives, such as quota, access and use rights like ITQs, IFQs, TURFs and similar schemes that award rights to a specific group of fishers, are also considered technical measures.

Natural resource management organizations: natural resource management agencies include those whose responsibilities relate to the sustainable use of land, water, air, minerals, forests, fisheries, and wild flora and fauna. Authorities that make decisions about land and water use that affect marine and coastal marine ecosystems may differ from the authorities that manage fisheries. Relevant examples include non-fisheries organizations such as those that regulate water quality, food safety, energy development, water allocation, forestry, or agriculture.

Output measures: Direct limits on the amount of fish coming out of a fishery, these include TACs, ACLs, bag limits and/or quotas.

Optimum yield:

> 1. The harvest level for a species that achieves the greatest overall benefits, including economic, social, and biological considerations. Optimum yield (OY) is different from maximum sustainable yield (MSY) in that MSY considers only the biology of the species. The term includes both commercial and sport yields;
>
> 2. The amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems. MSY constitutes a "ceiling" for OY. OY may be lower than MSY, depending on relevant economic, social, or ecological factors. In the case of an overfished fishery, OY should provide for the rebuilding of the stock to B_{MSY} (NOAA Glossary).

The amount of fish harvested that:

(a) will provide the greatest overall benefit to the national economy, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; or

(b) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as qualified by any relevant economic, social, or ecological factors; and

(c) in the case of an over fished fishery, provides for rebuilding to a level that produces the maximum sustainable yield in the fishery (OECD Glossary).

Opportunities and Access: Open access is the condition where access to the fishery (for the purpose of harvesting fish) is unrestricted; i.e., the right to catch fish is free and open to all. Once access is controlled (see Component 2) or limited, the policy should ensure access is available to all.

Performance Area: Performance Areas are the subject areas within each Tier to be scored. These Performance Areas are disaggregated to indicators, which are comprised of measures. Performance Areas are linked across tiers to maintain consistency throughout the framework.

Performance of the management system: Managers use review and evaluation systems to assess performance and outcomes of the policy implementation for which they are responsible. Strategic plans, budget documents, performance indicators, assessment of accomplishment toward goals, performance reviews, periodic reports to legislative or other oversight bodies, and similar evaluation activities are among the tools in system evaluation.

Policy framework: The set of principles and long-term goals that form the basis of making rules and guidelines. This framework provides the logical structure of the policy to give overall direction to planning and development of management and avoids or addresses any serious internal policy conflicts and/or inconsistencies. The framework encompasses the tiers and all areas of performance to be measured.

Precautionary approach: Application of prudent foresight that takes uncertainties into account so as to reduce or avoid risk to the resource, the environment, and people. The precautionary approach enables decision-makers and managers to take action with incomplete knowledge by evaluating the likelihood of events and magnitude of the impacts of fishery management. Considerations include the effects of irreversible change on future generations, avoidance of undesirable outcomes, implementation of corrective measures in a timely manner, conserving the productive capacity of the resource, matching capacity with sustainable levels of the resource, periodic review of fishing authorization and activities, and documented adherence to the requirements of the management framework. (GSSI; NOAA Glossary; FAO, 1996, para 6).

Principle elements: Statement of what the state and legitimate interested parties have agreed will provide optimal benefits in the long term with specific goals to guide management strategies. Elements include purpose; underpinning values/tenets; objectives; strategies; actions; outcomes; performance indicators; management plans and operational rules; periodic review.

Productivity: Relates to the birth, growth and death rates of a stock. A highly productive stock is characterized by high birth, growth, and mortality rates, and as a consequence, a high turnover and production to biomass ratios (P/B). Such stocks can usually sustain higher exploitation rates and, if depleted, could recover more rapidly than comparatively less productive stocks (FAO Glossary; NOAA Glossary).

Rational: Rational behavior refers to a decision-making process that is based on making choices that result in the optimal level of benefit or utility for an individual or firm, assuming that the firm or individual would rather be better off. Most conventional economic theories are based on the assumption that all individuals taking part in an action or activity are behaving rationally.

Recognized: acknowledge the validity or legality of.

Related disciplines: Experts in disciplines related to fishery management may include scientists in academia, in government agencies that manage non-fishery natural resources (e.g. water, agriculture, coastal planning), in private sector fishery businesses, or non-governmental organizations.

Relevant factors to be considered in an allocation that is fair and reasonably calculated to promote conservation may include economic and social consequences of the action, food production, consumer interest, dependence on the fishery by present participants and coastal communities, efficiency of various types of gear used in the fishery, transferability of effort to and impact on other fisheries, opportunity for new participants to enter the fishery.

Scoring levels: The scoring levels of the FGT recognize increasing performance. Measures of Basic and Adequate are essential for establishing sound and durable fisheries management, while Good and Better measures will promote more sustainable management. The scoring levels imply different states achieved under the various indicators; however, we recognize broad definitions at each of the levels.

> **Basic:** forming an essential foundation or starting point; fundamental.
>
> **Adequate:** satisfactory or acceptable in effective promotion and achievement of sustainability.
>
> **Good:** demonstrated to be more effective or appropriate to promoting and achieving sustainable management.
>
> **Better:** effective in promoting and achieving sustainable management.

Small scale fisheries: Small scale fisheries are rooted in local communities as important contributors, particularly in developing countries, to nutrition, food security, sustainable livelihoods and poverty alleviation, though they remain poorly understood. This sector typically uses relatively small gear and vessels and low levels of technology and investment per fisher. Small-scale fisheries contribute about half of global fish catches; and about two-thirds of those catches destined for direct human

consumption[2]. These fisheries have considerable cultural importance and may operate outside of managing authorities and are therefore an important factor for fishery improvement.

Sustainable: The capacity to sustain or maintain. There are numerous definitions of sustainability, but all converge on the need to reconcile environmental, social and economic demands for present and future generations.

Subsidies: Fisheries subsidies are government actions or inactions that are specific to the fisheries industry and that modify — by increasing or decreasing — the potential profits by the industry in the short-, medium- or long-term. Examples of subsidies include reduced fuel tax rates, investment grants, price supports, low- or no-cost landing sites and facilities, reduced rates for vessel loans, vessel buybacks, public financing of port construction and maintenance.

Target species or stocks: Those species, or stocks, that are primarily sought by the fishermen in a particular fishery. The subject of directed fishing effort in a fishery and therefore the managed stocks.

Technical measures: Technical measures such as gear regulations, closed areas and time closures may constrain both effort and catch. Socio-economic incentives, such as access and use rights like ITQs, IFQs, TURFs and similar schemes that award rights to a specific group of fishers, are also considered technical measures.

Triple bottom line: a business approach to full-cost accounting that refers to three pillars: people (social), planet (environmental) and profit (economic).

[2] Small-scale Fisheries and Aquaculture & Family Farming - http://www.fao.org/family-farming/themes/small-scale-fisheries/en/