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COORDINATING WORKING PARTY ON FISHERY STATISTICS

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A matrix scoring approach to characterization of the scale of fishing units: Towards statistical definition of small-scale fisheries

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- **Identified** a need for standards on Small-Scale Fisheries (SSF) to monitor SDGs (especially 14.b)
- **Noted** the FAO VGSSF, recognize a single, global definition of “small-scale fisheries” is not possible
- **Reiterated** CWP mandate to provide standards for enabling comparability of global statistics - not yet instructed to address statistics according operational scale
- **Requested** consideration to develop non-prescriptive guidelines on common elements to identify SSF:
 - Support development of a standard for SSF statistics
 - Contribute to sector-disaggregated data collection at country level
- **Recommended** that countries, regional and subregional organizations choose their own definition of small-scale according to their management needs and political incentive
- **Requested** further input and update from FAO CWP Secretariat



Linkages between SDG monitoring, FAO SSF guidelines and the work of CWP

- The SDG Indicator 14.b.1 measures policy progress of SSFs towards access to resources and markets
 - expected to provide an improved understanding of the SSF sector and to support the monitoring of the implementation of the SSF Guidelines
- An objective of SSF guidelines is to enhance public awareness and promote knowledge about SSF
 - data and information play a particularly important role in achieving this
- SSF Guidelines recognize importance of monitoring systems to assess progress on implementation (para 13.4)
 - Improved statistical monitoring of SSFs will contribute to such objective



Why characterize small-scale fisheries?

- Differentiation of scale of operations may be required for management or for focussed policy objectives
 - SSF definition may be codified management frameworks, rarely in national legislation
 - Typically single/limited number of quantitative metrics
- Global level only soft definitions
- Problematic
 - Country specificity limits comparison between countries and regions
 - Atypical operations wrongly attributed
- Challenge to practically identify small-scale fisheries
 - to support policy and management, without using a restrictive, overly rigid quantitative metric



Multiple-characteristic approach

- 1973 to present – various efforts to develop characterize difference between Small-Scale Fisheries(SSF) and Large-Scale Fisheries (LSF))
- Typically described characteristics of SSF/LSF using mixture of quantitative and qualitative descriptions
 - Mixed, qualitative terminologies (large-scale/small-scale; artisanal/subsistence; commercial/industrial)
 - Typically only three categories
 - “in or out approach”
 - Limited utility for differentiating fishing units that have mixed characteristics
- Other methods have tried to used economic performance or catch volume



Moving towards a matrix approach

- Applies a range of elements related to fishing units
- Characteristics relate:
 - Vessel size, motorization
 - Gears active/passive, mechanization
 - Storage/refrigeration
 - Crew, type of ownership
 - Time commitment, trip duration/distance
 - Harvesting operation
 - Disposal of catch, value adding
 - Integration in management system/economy
- Each characteristic has 4 levels described across a range of scale from small to industrial
- A score is given (0 to 3)
 - Aggregate score indicates location of the unit on the continuum of SSF to LSF



Utility of the approach

- Can be applied to fisheries within a country or region
 - Also has the potential for application across regions
 - But will require sufficient case material to rigorously test the method
- Analysis of scores yields rapid understanding of there are clear cut-offs between SSF & LSF
 - Also enables identification of the key characteristics which determine this
- NOTE: characterization carries no value judgement (no implications of 'good/bad' , 'desirable/undesirable')



Advantages

- Capable of accommodating the diverse characteristics of fishing units,
- Providing relatively clear cut-off for differentiating LSF & SSF
- Avoids inappropriate single-metric classifications (e.g. gear-type, vessel length)
- Enable identification of units which may be incorrectly attributed to SSF or LSF
- Approach is flexible – used for individual units, or generally to an entire fishery/fleet



Testing the application of the matrix – current status

- GFCM
 - Tested matrix using data from a single country (Lebanon)
 - Possible some other GFCM countries will also test
- Caribbean
 - Trial of the matrix with 4 WECAFC countries
 - Hope to extend to all WECAFC members in the region, for regional case study of application in the Caribbean
 - Hope to test if the matrix is broadly applicable or requires regional adjustments
- Illuminating Hidden Harvest (SSF studies)
 - Matrix used for country case studies to assist in characterising different fishery units



Feedback sought from CWP

- Is there interest to try this out as part of studies or SSF work?
- FAO (CWP secretariat) would like to contact the CWP members to collate an inventory of definitions and approaches and to inform you on this work progress