



منظمة الأغذية
والزراعة
للأمم المتحدة

联合国
粮食及
农业组织

Food
and
Agriculture
Organization
of
the
United
Nations

Organisation
des
Nations
Unies
pour
l'alimentation
et
l'agriculture

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

COORDINATING WORKING PARTY ON FISHERY STATISTICS

Intersessional Fishery Subject Group Meeting

Swakopmund, Namibia 25-27 February 2015

CWP - How to improve global data collection

Author: SEAFO

Working Towards => **Unified,**
Coherent and **Harmonized** Fisheries
Data.MadePerfect();

“Simplicity is the ultimate sophistication.” - Leonardo da Vinci



Why harmonize data collection?

Why

What

Which

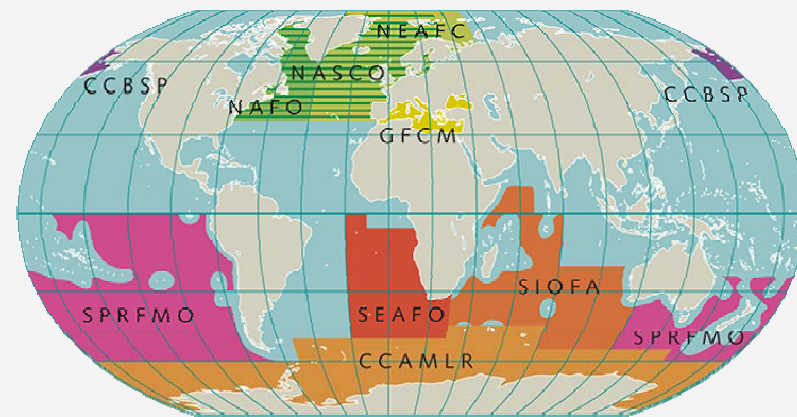
How

CWP Mandate

Closing Remarks.

- **Improved Geographic and Jurisdictional efficiencies**
 - encourage border-agnostic regulation e.g. PSC procedures
- **Better Compliance and Fisheries Management**
 - coherent and unified CMs foster compliance e.g. VMS reporting frequency
- **Better Application Development (\$ savings)**
 - Structured data will streamline development

- **Better Science**
 - Improved comparability
 - Improved completeness



Map from <http://worldoceanreview.com>

CWP Inter-sessional Fishery Subject Group Meeting

SEAFO George Campanis, February 2015



What has CWP done to improve data collection?

Why

What

Which

How

CWP Mandate

Closing Remarks.

...1

→ CWP Handbook

- Terminology (Terms / Definitions e.g. Nominal vs. Landed Catch)
- Classifications (Code systems / Codes e.g. Country Codes)
- Methodology Standards for Measurements (Logbook Data Collection)

→ Development of FAO Statistical Questionnaires

- FAO Annual Publication – *“Fishery and Aquaculture Statistics”*
 - » Capture Production
 - » Aquaculture Production
 - » Fishery Commodities



What does the Handbook contain?

Why

What

Which

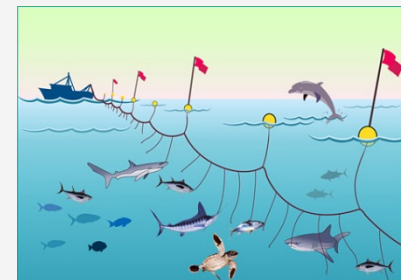
How

CWP Mandate

Closing Remarks.

...2

- **CWP HB contains descriptors, definitions and lists for:**
 - ISO 3-alpha country codes
 - Fishing Areas (General [Inland vs Marine], Statistical [Area 47])
 - Conversion Factors
 - Definition of Aquaculture (Mariculture vs. Freshwater Culture)
 - Definitions for types of Fishers (FT, PT and Occasional fishers)
 - Fishery Fleet (Vessel tonnage GRT vs GT)
 - Fishing Gear Classifications (ISSCFG)
 - Fishing Effort (STATLANT 21B)
 - Recommendations on Logbook Data Collection
 - Supply Balance Sheets on Apparent Consumption (Imports vs Exports)
 - Fishery Commodity Classifications (ISSCFC – smoked vs oil)
 - Identifiers for Aquatic Animals and Plants (ASFIS and ISSCAAP)



What global fisheries data are collected by FAO?

Why

What

Which

How

CWP Mandate

Closing Remarks.

...3

- **FAO Questionnaires** (*Accessible via the CWP – FAO Website*)

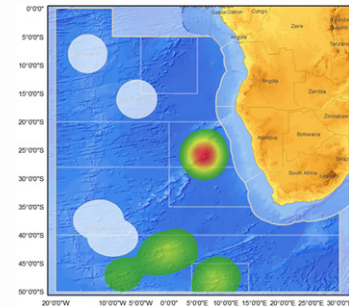
<<ftp://ftp.fao.org/FI/DOCUMENT/cwp/handbook/annex/AnnexT1.pdf>>

→ National Summaries

- Capture Production (NS and IW forms)
- Aquaculture (AQ forms)
- Trade (FC1 and FTR forms)
- Others (Fleet, Fishers, Conversion Factors etc.)

→ Area Summaries

- STATLANT (CCAMLR, NAFO, ICES, CECAF, GFCM, SEAFO)
- FISHSTAT (51A, 57A - Indian Ocean)
- STATPAC (87A – CPPS)



Which data needs to be standardized/harmonized?

Why

What

Which

How

CWP Mandate

Closing Remarks.

- Fisheries Data Collection (non-exhaustive list)

Scientific

Observer Forms

Research Surveys

STATLANT

Capture Production

AQ Production

RFB Science

National Reports



Management

VMS

CDS

PSC

Vessel Registry

Authorised Ports

IUU

Observer Forms

Port Inspection

At-Sea Inspection

Catch Reporting

RFB MCS

Economic

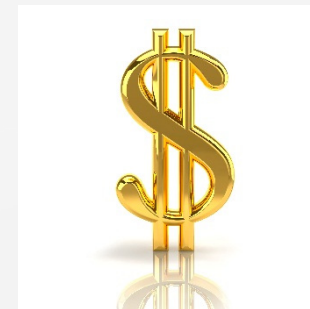
Commodities

Imports/Exports

Fleet

Fishers

National Reports



How can we harmonize global fisheries data?

Why

What

Which

How

CWP Mandate

Closing Remarks.

We Recommend a Bottom-Up Approach (what do the users need?) to fill Gaps – Create Metadata descriptions:

1. Identify all information (forms) being collected
2. Identify all data collected in the forms
3. Create an inventory of data including: data types, lists, definitions
4. Develop metadata descriptors based upon forms identified in point 1. Evaluate existing schemas (SDMX, FiMES, FLUX etc.)
5. Publish a repository (Global Fisheries schema) on the FAO website, including linkages between schemas.
6. Expose inventory via web services (API - REST)

<http://www.fao.org/fishery/topic/18046/en>



How can CWP achieve 'data coherence'?

Why

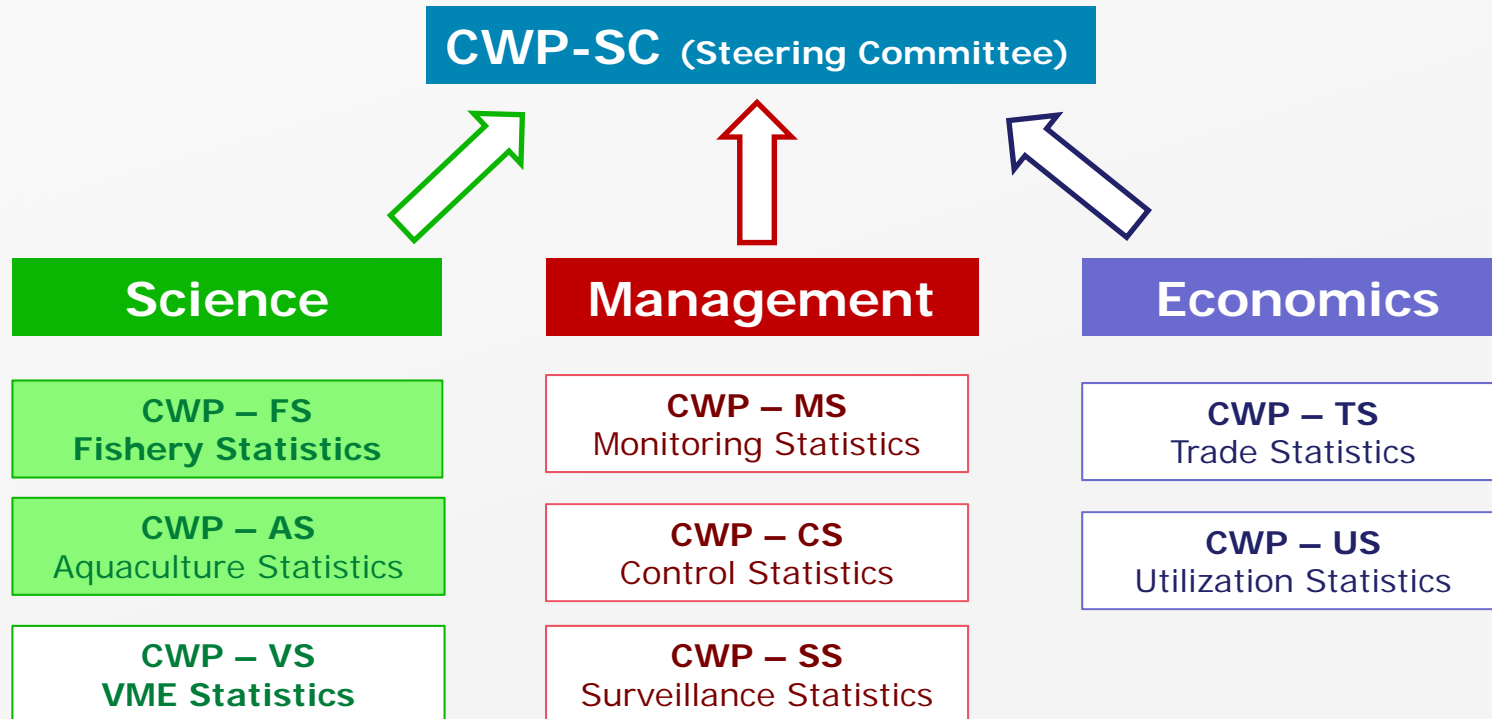
What

Which

How

CWP Mandate

Closing Remarks.



Refer to <http://www.fao.org/docrep/003/v4250e/V4250E03.htm> for definition of MCS

Refer to <http://www.fao.org/fishery/topic/2888/en> for definition of economic Trade/Utilization



Does the CWP currently have a mandate?

Why

What

Which

How

CWP Mandate

Closing Remarks.

TERMS OF REFERENCE. The Coordinating Working Party on Fishery Statistics (CWP) shall:

- (i) keep **under continuous review** the requirements for fishery statistics (including aquaculture) for the purposes of **research, policy-making** and **management**...
- (ii) agree **standard concepts, definitions, classifications** and **methodologies** for the collection and collation of fishery statistics;
- (iii) make **proposals** and **recommendations for action** in relation to the **collection, collation** and **dissemination** of fishery statistics, recognising the need to coordinate activities so as to **avoid duplication**.

Ref.: <http://www.fao.org/docrep/003/w0036e/w0036e0c.htm#ANNEX%20%20Statutes>



Some questions?

Why

What

Which

How

CWP Mandate

Closing Remarks.

Do the CWP have enough expertise to develop and agree on elements for Science , Management, and Economic data standards?

What facilities/resources exist within the FAO to assist with the development of a Global Fisheries Schema?

How can the implementation of agreed standards be made ubiquitous (RFBs, members states, academia)? Is COFI a potential vehicle?

How can we engage experts to assist with the development of unified standards?



Some questions?

Why

What

Which

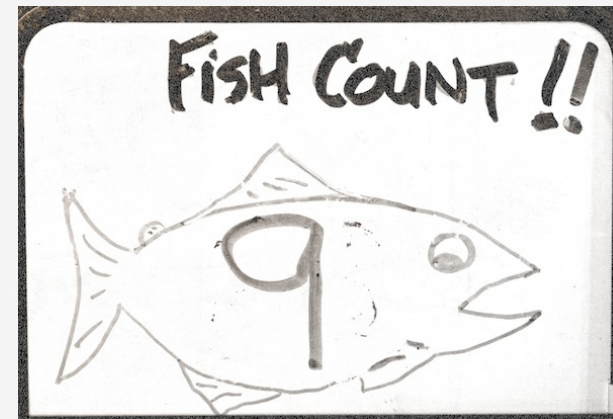
How

CWP Mandate

Closing Remarks.

Section Q of the HB states - Methodology:

*Looking at fisheries in a global perspective requires that each national fisheries statistical programme will become a **component of an international dataset of fishery statistics**. Such integration of different datasets (each created through national programmes), is in general **feasible** when national systems **utilize a common regional or inter-regional set of statistical standards**, and apply internationally recognized definitions, classifications and codes.*



“Insanity: doing the same thing over and over again and expecting different results.”

Albert Einstein

