

联合国 منظمة الأغذية 粮食及 والزراعة 农业组织 للأمم المتحدة

Food Agriculture Agriculture Organization of the United Nations

Organización de las Naciones Unidas Organisation des Nations Unies para la Agricultura y la Alimentación pour l'alimentation et l'agriculture

COORDINATING WORKING PARTY ON FISHERY STATISTICS

Twenty-first Session

Copenhagen, Denmark. 1-4 March 2005

Report by FAO

Author: Secretariat

Overview

The FAO fishery statistical programme was undertaken by a staff of 4 statisticians and 8 statistical support staff. Although there was less staff turn-over than in previous years, some changes did occur. In February 2003 a new officer was recruited to the post of Aquaculture Statistician, after a extensive vacancy. In 2004 one support post was lost due to the budget cuts and organizational policy on such posts. One new professional post (fleet statistician) was established with relevant professional duties in replacement of a support post vacated in 2002. However the post is not yet encumbered, and given the tight budgetary situation may have to be abolished. Following the retirement of the incumbent in December 2004, the Senior Fishery Statistician post become vacant but it is expected that the replacement process will be completed in the first half of 2005. The current FAO Human Resources policy that includes a gradual decrease in the number of support staff coupled with other personnel policies that do not permit the easy recruitment of junior staff, and continuing budgetary constraints are a source of concern as in the long run they may prejudice the current structure of the programme and its ability to continue to maintain the current work programme.

However in 2003-2004 a satisfactory level of output was maintained, due also to some input from temporary staff and consultants.

The annual statistical programme, whose output is widely used internally and externally for global analyses and policy and trend studies, included the updating of the major databases:

- Capture fishery production volume (global and regional for the GFCM Mediterranean, CECAF Eastern-Central Atlantic, the Southeast Atlantic)
- Aquaculture production (volume and value)
- Production and trade of fishery commodities
- Fishing fleet
- Number of fishers
- Supply/Utilization Accounts

In 2004, the statistical group contributed very extensively to the preparation of the 2004 edition of SOFIA (The State of Fisheries and Aquaculture) which is the FAO Fishery Departments flagship publication.

Strengthened support to capacity-building for fishery statistics is expected from the launching in November 2004 of a project (FishCode–STF) under the FishCode Programme in support of implementation of the Strategy for Improving Information on Status and Trends of Capture Fisheries (Strategy–STF) which was adopted by FAO Members and endorsed by the UN General Assembly in 2003.

External statistical and information inquiries (an average in-flow of 4-5 per day) are handled through a specific e-mail account - <u>FIDI-Inquiries@fao.org</u> - on a daily basis.

Major achievements in the FAO fishery statistics programme in 2003 and 2004 included:

- 1. consolidation of the historical time series
- 2. fine-tuning of the system of electronic questionnaires
- 3. the finalization of a revised CWP *Handbook of Fishery Statistical Standards* (that supersedes the CWP *Handbook of Fishery Statistics*)

4. The thorough revision of the fleet statistics system which was restructured to make full use of national and international vessels registers for estimating missing values.

Improvements on aspects of data processing concentrated on the development of the fishing fleet system as an Oracle database, and on the migration of capture fisheries and aquaculture databases to the same environment. Collaboration with the FIGIS project in this respect has continued to require the redefining of priorities.

Methodological work on data quality has continued. The CWP Handbook was completed with the inclusion of commodity classifications, indicative conversion factors from product to live weight and improvements to selected chapters (e.g. methodology, fishing fleet) of the former draft edition. Some progress on methodologies was achieved also through discussions at regional workshops, and participation to statistical meetings of Regional Fishery Bodies, and through collaboration with agricultural statisticians. Matters related to the improved identification of fishery and aquaculture within broad economic classifications have been discussed also with the United Nations Statistical Division.

Areas in which no satisfactory progress can be reported include: the systematic inclusion of the value of landings in the inquiry and database, the revision of nutritional factors and their more detailed accounting, the improvement of inland fisheries statistics and the integration of structural aquaculture data in the database.

Databases and their dissemination (yearbooks and other publications)

The FAO databases on capture, aquaculture, commodities production and trade of fishery products have been updated with 2001 and 2002 data and work is under way to complete the 2003 statistics which are expected to be released in around March 2005.

Regional capture databases (i.e. CECAF, GFCM, Southeast Atlantic) follow the same schedule but with a few months of delay.

A new issue (revision 7) of the FAO Fisheries Circular No. 821 ("Fish and fishery products: World apparent consumption statistics based on food balance sheets"), covering the 1961-2001 period, has been published. The publication will also be accessible in the FAO website in pdf format.

A new issue of the Bulletin of Fishery Fleet Statistics was prepared for publication in 2004, after a long intermission. Basic changes to the fleet inquiry endorsed by CWP-18 and CWP-19, respectively changing the basis of classification from GRT (or GT) classes to length overall (LOA) classes and using a simplified vessel classification, caused disruptions in the time series and delays in country reporting using the new system and in processing the statistics at FAO. Even with the simplified questionnaire, returns of the questionnaires by countries remain poor. Although the coverage of data was partial and some data are still under scrutiny, the fishing fleet database from 1996 to 1998 was finalized both for decked and undecked vessels and these data were released on the Internet in 2003, albeit with a revised structure due to the breaks in the time series due to the changes mentioned above. The new edition of the

Bulletin presents some historical data and also data for 1999-2003; the latter however are only nationally reported data or partial data referring to vessels above 100 GT, obtained from internationally compiled registers. Due to the decision of not attempting to fill the many gaps and missing data, world numbers for 1999-2003 comparable to previous years, are not available.

At present, work for the 3rd revision of the FAO Fisheries Circular No. 929 ("Number of fishers, 1970-200x"), is still in progress.

The backward separation of the aquaculture and capture production has now been accomplished. Both the aquaculture and capture databases (volume of production) are disseminated as separate time series beginning from 1950. The time series of value of aquaculture production starts with 1984.

The FAO fishery commodities classification (ISSCFC) has been modified in order to realign it to the revised ISSCAAP groups and it has also been expanded to include new commodities; it now contains 771 items.

Procedures for the preparation of the FAO capture and aquaculture yearbooks starting from databases located on the Oracle platform and based on XML/XSL standards have been completed, although the full system in the Oracle environment is still under construction.

Indexes of FAO English, French, Spanish and scientific names have been added to the capture and aquaculture yearbooks to facilitate access to the species items in the publications given the continuously increasing number of species items included (1,347 and 410 respectively in the 2002 capture and aquaculture yearbooks).

The FAO Yearbook of fishery commodities has been also upgraded. In the 2002 issue, data for developed and developing countries were added to tables A1 (*Disposition of world fishery production*) and A2 (*Estimated total international trade in fishery commodities*). Table A4 (International exports of fishery commodities by the Harmonized System) has also been expanded to include data according to the FAO ISSCFC.

Changes in fishing area boundaries

The South-East Atlantic Fisheries Organisation (SEAFO) held its first Session in Swakopmund, Namibia, 9-13 March 2004. The area demarcated under the Convention covers only the part of High Seas (outside EEZs) of the present FAO fishing area "34 – Southeast Atlantic". CWP-20 recommended the CWP Secretariat to "...once again inquire of SEAFO as to its intentions concerning the boundary between areas 47 and 51 and if the 30°E boundary is to be retained.", this matter should be raised at the SEAFO's Scientific Committee when it holds its first meeting, probably during 2005. However, as SEAFO's regulatory area does not cover the areas within national jurisdictions, to implement the modification from 30°E to 20°E of the border between areas 47 and 51, the full involvement of the coastal country (i.e. South Africa) in that part of the fishing area is essential, as the national authorities should collaborate in revising the backward catch data and secure the provision of future data according to the proposed new border.

Electronic questionnaires

During the inter-sessional period, the number of national correspondents utilizing electronic questionnaires to return fishery statistics to FAO has greatly improved. The table below shows the format used by national correspondents to return capture statistics in the 2002 inquiry. The major distinction is between data sent as e-mail attachments and those returned in paper format via fax or mail. Under *e-national-format* are recorded those questionnaires received via e-mail in a format either tailored by the country or following international standard (e.g. EUROSTAT). Similar definitions can be applied to the *Paper formats*. The total number of countries is greater than the number of countries that have returned capture statistics because there are cases in which there is more than one correspondent for a country (e.g. one for inland water catches and one for marine catches) and they may have used different media to return the data or the same national correspondent may have returned the data in two different formats (e.g. STATLANT and NS1).

Medium	No. countries	%
	2002	2002
e-NS1	44	21.7
e-STATLANT	18	8.9
e-national-format	65	32.0
e-formats	127	62.6
Paper NS1	36	17.7
Paper STATLANT	28	13.8
Paper national format	12	5.9
Paper formats	76	37.4
TOTAL	203	

Since 2001 all annual questionnaires are available in electronic format, downloadable from the ftp site (<u>ftp://ftp.fao.org/fi/STAT/e-questionnaires/</u>). While for the 2000 inquiry the paper questionnaires were still slightly the predominant media used to return catch statistics, in the subsequent annual inquiries the number of returns via e-mail has exceeded the returns by fax or mail.

Elasmobranch statistics

The remarkable improvement in the species breakdown of Elasmobranch reported catches observed in recent years is continuing as a result of better reporting by countries and of initiatives taken by FAO and CWP members to improve shark statistics. In 1996, the FAO capture database included data for 45 species items in the shark group. This more than doubled to 95 species items in 2002, which now represents seven percent of the total species items constituting the FAO capture database.

In 2004 the FAO Species Identification and Data Programme (SIDP) released the "Field Identification Guide to the Sharks and Rays of the Red Sea and the Gulf of Aden", and the "Field Guide of

Elasmobranchs of the Mediterranean and Black Sea" will be distributed during 2005. At its web site (<u>http://www.fao.org/fi/SIDP</u>), the SIDP in collaboration with FIGIS has so far provided 111 fact sheets of Elasmobranch species.

Meetings of CECAF, GFCM and RECOFI of interest to CWP

CECAF

During the CWP intersessional period (January 2003-March 2005), the Fishery Committee for the Eastern Central Atlantic (CECAF) held the third session of its Scientific Sub-Committee (Lome, Togo, 24-26 February 2004) and its 17th session (Dakar, Senegal, 24-27 May 2004). The Strategy-STF was presented to the Committee and the modalities of implementation of that project at the regional level were illustrated. The Committee suggested that collaboration with ICCAT should be strengthened for improved monitoring of the high seas resources in the CECAF area.

GFCM

In both 2003 and 2004, the General Fisheries Commission for the Mediterranean (GFCM) held the annual sessions of its Sub-Committees (Aquaculture, Economic and Social Sciences, Marine Environment and Ecosystems, Statistics and Information, Stock Assessment), of the Scientific Advisory Committee, and of the Commission itself. In addition, an Extraordinary Session of the Commission was held (St Julians, Malta, 19–23 July 2004) as the number of required signatories for the entrance into force of the autonomous budget was reached in April 2004.

Two joint activities with ICCAT were developed during the intersessional period. The *Ad hoc* GFCM/ICCAT Working Group on Sustainable Tuna Farming Practices in the Mediterranean held two meetings and a final one is expected to be held in 2005 to finalize guidelines on this practice. Following a recommendation of the Seventh Joint GFCM-ICCAT Meeting on Stocks of Large Pelagic Fishes in the Mediterranean (Malaga, Spain, 13-14 May 2004), the FAO and ICCAT statisticians presented to the 2004 ICCAT's Sub-Committee on Statistics and Species Groups a joint paper highlighting discrepancies between the FAO and ICCAT databases for Mediterranean tuna catches. Historical data completely missing in the ICCAT database were found to be useful to complement the Task I database. FAO will continue to replace most of the data provided by its national correspondents with the ICCAT catch data. A similar work covering the Atlantic Ocean is planned to be presented at the 2005 ICCAT annual meetings.

RECOFI

The Regional Commission for Fisheries (RECOFI), which covers a portion of the FAO fishing area "51-Western Indian Ocean" mostly corresponding to the Gulf and the Gulf of Oman, held its second session in Muscat, Oman (18–21 May 2003). The first meeting of the RECOFI Fisheries Statistics Working Group was held in Shiraz, Iran (23-25 May 2004). In its second meeting planned for the first half of 2005, the Working Group is expected to formally make proposals for the establishment of new subareas in area 51 and possible modifications of STATLANT 51A (e.g. inclusion of a fixed list of species) that will be later submitted for endorsement to the following plenary RECOFI session. Provided that RECOFI member countries make available the catch data series in accordance to the agreed subareas, FAO-FIDI is committed to compile catches in the RECOFI area in a dataset and disseminate it through

FISHSTAT+. In addition FIDI participated in the First session of the RECOFI Working Group on Aquaculture, advising on appropriate data collection methodologies for the region.

Aquaculture statistics

To work towards improving information on global status and trends for aquaculture, in January 2004, the FAO Fisheries Department convened two meetings of international aquaculture experts. The first of the two meetings, the Expert Consultation on Improving Information on Status and Trends of Aquaculture, was held 20-23 January 2004. The experts included participants from five continents and a mix of government aquaculture officials, academic researchers, and representatives of producer associations and regional aquaculture organizations.

Following the Expert Consultation, the Working Group of Experts on the FAO Aquaculture Questionnaire "FISHSTAT AQ" met from 24-26 January 2004 to suggest improvements to the data collection form used by FAO in its annual inquiry to member countries for aquaculture statistics. They were asked to deliberate improvements, while keeping in mind the relevant recommendations of the preceding Expert Consultation. Many of the same experts participated in the Working Group, but additional participants representing national providers of data to FAO, as well as two survey research specialists in questionnaire design, took part in the Working Group.

These meetings are seen as the beginning of the parallel process to what has been done for status and trends reporting for capture fisheries. The outcome there was the adoption of the Strategy for Improving Status and Trends Reporting on Capture Fisheries. This document has been formally agreed and accepted by the FAO Committee on Fisheries. The process for aquaculture status and trends was envisaged to produce a similar Strategy document for the aquaculture sector. The reports of these meetings, the Draft Strategy and supporting documentation will be available as a FAO Fisheries Circular early in 2005.

Tuna farming

The fattening of wild-caught tuna is an activity of rapidly growing importance in the Mediterranean region, and other countries in other regions are considering following suit. CWP agreed (see paragraph 106 in the CWP-19 report) that the gain in weight of the tuna while in captivity should be attributed to aquaculture, whereas the original weight would be attributed to capture fisheries and, hence, would count towards national quotas. Obviously, this definition is logistically difficult to implement and guidelines should be developed in this respect. The ICCAT and GFCM Ad Hoc Working Group on Tuna Farming has been discussing these issues and is expected to issue Guidelines on Sustainable Tuna Farming. Advice on statistical procedures in accordance to CWP decisions on the matter should be included in the guidelines.

Training and statistical development

FIDI prepared and presented a paper on the status of fishery data and statistics for Africa for the African Commission for Agricultural Statistics (AFCAS) in Yaounde, Cameroon, 28-30 October 2003. Methods to integrate fisheries data collections with agricultural data collections were highlighted.

FIDI continued to develop technical documents and computer software geared towards design and implementation of national fishery statistical programmes. These include:

• A theoretical paper on sampling in large and infinite populations : Safety in sampling - Methodological Notes (FAO Fishery Technical Paper No. 454, Rome 2004).

· Operations manuals for the consolidated Artfish package for the storage and analysis of

basic fishery data resulting from sample - based fishery surveys (Artbasic, Artser modules

of the Artfish 2000 for Windows, suite of statistical approaches and software).

These approaches are being successfully tested in several countries in West Africa and elsewhere. The software is also accessible through FIGIS, although FIDI regards as essential some direct training for their smooth implementation.

Ecolabelling

At the request of the 25th Session of the Committee on Fisheries (COFI), February 2003, FAO convened the Expert Consultation on the Development of International Guidelines for Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries, held on 14-17 October 2003 in Rome. The expert consultation produced draft international guidelines for the ecolabelling of fish and fishery products from marine capture fisheries. These draft guidelines comprised principles, minimum substantive requirements, criteria and procedures for the ecolabelling of fish and fishery products from marine capture fisheries. These guidelines also incorporated aspects relating to the special requirements of developing countries and countries in transition to adopt ecolabelling of fish and fishery products. The guidelines drew upon various sources including relevant guides of the International Organization for Standardization (ISO), the WTO Agreement on Technical Barriers to Trade (TBT), in particular, Annex 3 Code of Good Practice for the Preparation, Adoption and Application of Standards, and the work of the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance. As directed by the 25th Session of COFI, the draft international guidelines were submitted to the 9th Session of COFI Sub-Committee on Fish Trade, Bremen, Germany, February 2004. The COFI Sub-Committee recommended FAO to organize a Technical Consultation to further elaborate the work of the Expert Consultation and finalize the draft guidelines for their consideration by the 26th Session of COFI in March 2005. The Sub-Committee recommended that the technical consultation had to focus its work on, inter alia, (i) the further elaboration of the minimum substantive requirements and criteria of sustainable fisheries, in particular concerning the methodology for setting certification criteria; (ii) the applicable definitions of important concepts such as, inter alia, the equivalence of standards; (iii) the procedures for the validation of certification standards; and (iv) possible appeal mechanisms. On 19-22 October 2004, a Technical Consultation on International Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries was held in FAO Rome. No consensus was agreed and it was decided to convene another Technical Consultation to be held on 2-4 March 2005, two days before the starting of COFI.

Catch documentation

At the 25th Session of COFI in February 2003, the Committee indicated that FAO should continue the work on harmonization of catch certification schemes, and that this subject should be included in the

agenda of the 9th Session of COFI Sub-Committee on Fish Trade. Furthermore, the Committee noted the need for careful consideration of differences of fisheries covered by the schemes so as not to hinder normal trade of fish products legally caught (paragraph 43 of the Report of the Session).

FAO Fisheries Circular 986 "Recent Developments in Catch Certification and Trade Documentation" contains the work that has been carried out since the Expert Consultation of Regional Fishery Management Bodies on the Harmonization of Catch Certification held in La Jolla, California, on 9 - 11 January 2002. The document:

a. reviews all the existing trade documents and the instructions to complete the documents used by the regional fisheries management bodies;

b. compares the information requested by the regional fisheries management bodies in the trade documents with the information recommended by the Expert Consultation;

c. describes several of the difficulties encountered in the implementation of catch documentation schemes;

d. addresses the major problem of species identification within the wider group of tuna species and the identification of processed fish in general (including tunas). It highlights the difficulties experienced by untrained personnel in the identification of fish species and predicts the future use of genetic kits to overcome this problem;

e. recommends a harmonized trade document and outlines the information to be included in the instructions. This takes into account the existing trade documentation schemes used by the regional fisheries management bodies.

The paper contains also the recommended Harmonized Trade Document and Instructions for Completion that were examined by the 9th Session of COFI Sub-Committee on Fish Trade (February 2004), but no support was agreed to approve them. During the discussion on the harmonization of catch documentation, it was pointed out that it is difficult to develop a harmonized document from the plethora of documentation schemes that exist, especially if the objectives, scope and history of these schemes are different. Some delegates referred to the increased cost of documentation schemes and questioned whether they were feasible for all countries. Given that some elements in a harmonized document were common and others unique, the question was posed as to whether any thought had been given to halfway harmonization. Catch documentation was seen as another layer of traceability and as such had to be considered with other catch reporting schemes. Although there was no agreement on a harmonized trade document, it was remarked the risk that trade documentation would develop in different directions and that FAO has to play an important role in ensuring that this does not happen. Nevertheless, it was not considered necessary to convene another Expert or Technical Consultation. There was a general consensus that FAO should continue to work on the harmonization of catch certification schemes and it was agreed that the matter of Catch Documentation be raised at the Meeting of Regional Fisheries Bodies which will be held on 14-15 March 2005 in Rome. Some members asked the Secretariat to work toward the eventuality of a paperless system of documentation bearing in mind the technical challenges some members have at present time in realizing this option.

Classifications

HS/WCO

In its 25th Session, COFI gave clear instructions to FAO to work on the improvement of the classification on the Harmonized Commodity Description and Coding System, commonly referred to as the Harmonized System (HS). The HS is used as a basis for the collection of Customs duties and

international trade statistics by more than 190 countries and economies. Over 98% of the merchandise in international trade is classified in terms of the HS. It comprises about 5 000 commodity groups, each identified by a six digit code, of which about 120 cover fish and fishery commodities. This classification has been developed, introduced and maintained by the World Customs Organization (WCO), whose mission is to enhance the effectiveness and efficiency of Customs administrations. Since its introduction and general adaptation in 1988, the HS classification has undergone review from time to time and has been amended in year cycles of different length to keep the system up-to-date, in light of changes in technology and patterns of international trade. At present, the classification codes for fish and fishery products need improvement to enable the monitoring of economic trends and include a wider range of products.

The agenda item 9 of the 9th Session of COFI Sub-Committee on Fish Trade, Bremen, Germany, February 2004 reported on the work done by FAO in collaboration with WCO for a better understanding of the criteria for automatic revisions and procedure for proposed revisions. Two options for revisions of the WCO coding system were proposed in the agenda item 9: a traditional and a radical revision. The traditional proposal would enlarge the present HS classification introducing a division between commodities of farmed or wild origin, plus the introduction of several species and product forms which are at present classified in generic categories of the HS classification. The radical revision would introduce a bar code, with all the indications of the product (scientific name, product form, origin, etc.)

Delegates recommended FAO to continue its collaboration with WCO. Delegations considered options for traditional and radical revisions of the HS code as suggested by the FAO Secretariat and their implications for fish and fish products. The radical revision was seen as an interesting proposal by some delegates, but premature at the present point of time. Several suggestions for species/commodities to be added to the present HS list were formulated. Members were asked to send further suggestions for changes to the HS code for products and species to the FAO Secretariat, which is responsible to collect these proposals and prepare a list of species for WCO consideration.

ISIC/CPC

FAO is actively participating in the consultation process on the revision of the International Standard Industrial Classification (ISIC rev. 3.1) and of the Central Product Classification (CPC v. 1.1) related to the agricultural products and activities. Inside FAO, FIDI was the responsible unit for the revisions related to the fishery sector. The revision process for these two classifications, with a target date of 2007, is being conducted as a multi-stage process, in which subsequent rounds of discussion focus on general and then more detailed aspects of the revision process. For the ISIC revision, FIDI was particularly active to discourage proposals to place "aquaculture" under the division of Agriculture, and supported the proposals to identify aquaculture as a separate activity, not included under fishing. The draft of ISIC rev. 4, related to the fishery sector, which was discussed by the United Nations Statistical Commission in May 2004, is the following:

A. AGRICULTURE, FORESTRY AND FISHING

01 Crop and livestock production, hunting and related service activities

(...)

02 Forestry and logging

(...)

03 Fishing and aquaculture

031 Fishing	
	0311 Marine Fishing
	0312 Freshwater Fishing
032 Aquaculture	
	0321 Marine aquaculture
	0322 Freshwater aquaculture
033 Support services to	0330 Support services to
fishing & aquaculture	fishing & aquaculture

This draft was sent to all national statistical offices and a number of international organizations. Official comments on this draft were required by 15 November 2004. No major changes are expected related to the structure of fishing and aquaculture.

Work and discussions on CPC are still at an initial stage. While the main structure of the CPC will remain unvaried, some changes at lower levels are possible to increase the comparability of the CPC to other classifications. Such links to other classifications have always been requested by users and would enhance the usefulness of the CPC. The CPC structure will, as in the past, not mirror the Harmonized System (HS) structure. The detail of the CPC goods part will remain based on the HS. However, there may be some exceptions, where more detail is necessary than that which can be provided in the HS. This relates to cases where domestic production is significant, but the products are not internationally traded. Potential areas include agricultural products and waste products. The revision of the Standard International Trade Classification (SITC) will be taken into account as well, assuring as far as possible that CPC subclasses can be expressed in terms of complete SITC headings.

FAO proposals on the CPC revision relating to the agricultural sector (including forestry and fishery) were discussed at the United Nations Technical Subgroup (UN-TSG) meeting on International Economic and Social Classifications (18-21 October 2004, New York). Some participants indicated that, after consultation with agricultural experts in their respective countries/agencies, further comments and suggestions would be sent to FAO for refining its proposals. The revised FAO proposals should then be circulated again among the member of UN-TSG before final adoption. By the end of 2004 a draft of the new version of CPC was distributed by the UN Statistics Division to all countries for comments.

Proposed revision of the ISSCFV classification

As follow-up to the deliberations of CWP-20, internal discussions were held in FAO between FIDI and the Fishery Technology Service (FIIT). The outcome of the meeting is reported in Annex 1 to this paper which contains a proposal for CWP-21 to consider. CWP-21 should note that the FAO/ICES Working Group on Fishing Technology and Fish Behaviour (FTFB) will meet in April 2005. The draft of a new gear classification will be considered by a group of FTFB experts working by correspondence, and presented at that meeting.

Annex 2 herein contains a report on problems encountered when trying to harmonize data for the High Seas Vessel Authorization Record (HSVAR) which is a database developed to facilitate information exchange on vessels authorized to fish on the high seas as required under Article VI of the Compliance Agreement.

Other issues

Collaboration with CWP agencies continued with intensified data exchange with tuna agencies and CCAMLR. Consultations with CWP members have been held via e-mail on statistical-related issues such as modification of FAO official names for tuna species and for a common definition among FAO, ICCAT and GFCM of the "tuna farming" practice.

A project is underway to develop a new version of the FISHSTAT software.

FIDI staff contributed actively to the preparation of FAO's State of World Fisheries and Aquaculture 2004 (SOFIA 2004) which will be available in early 2005. Part 1 of SOFIA 2004, which is the World Review of Fisheries and Aquaculture, relies very heavily on FAO's fishery statistics, and preparation of this Part, as well as much of Part 4 which is the Outlook, was conducted by FIDI.

Work on the re-assignment of FAO capture statistics by Large Marine Ecosystems was finalized and results analyzed clustering LMEs; a study on trends in oceanic captures (either epipelagic or deep waters) funded by the World Resources Institute was also completed, and both studies were published in FAO Technical Paper no. 435, "Trends in oceanic captures and clustering of large marine ecosystems: two studies based on the FAO capture database.". A study on depleted species based on the FAO capture database by major areas was also published in 2004 as FAO Fishery Circular No. 1011, entitled "Depleted marine resources: an approach to quantification based on the FAO capture database".

A consultant was hired to undertake medium and long term fish supply and demand projections for all countries, taking FIDI's food balance sheets as a reference base. The study is to be published as part of a set of studies on demand (FAO Future prospects - Medium term demand for fish 2010-2015).

ANNEX 1

Outcome of a meeting between FIDI and FIIT on Revision of the proposed ISSCFV draft version considered by CWP-20

Paragraph 81 of CWP 20 meeting report was reviewed by the meeting in order to respond to the questions raised by CWP, and make a revised classification proposal.

<u>CWP remark1</u>: "Purse seiners: the sub-categories American seiner and European seiner should be reworded to 'Purse Seiner: American type', and 'Purse Seiner: European type'.

Meeting agreed

<u>CWP remark 2</u>: "The introduction of a 'Purse Seiner: Chinese type' category should be considered. To that effect SEAFDEC will liaise with FAO".

 \rightarrow the FIIT experts will liaise with Asian fishing technologist colleagues on this matter and provide an answer within the very next weeks.

CWP remark 3: "Multipurpose vessels: Polyvalent should be renamed 'Multipurpose' ".

 \rightarrow Meeting agreed

<u>CWP remark 4:</u> "the multipurpose category should be reduced as much as possible, in order to avoid facilitating reporting against this opened category; the 'Pelagic trawler – purse seiner' would be an obvious category under multipurpose vessels".

→ in order to avoid facilitating reporting against this opened multipurpose category, the meeting agreed that maintaining it at the second level made it less visible. The FIIT experts recommended to keep at this second level the basic distinction between 'multipurpose trawlers' and 'multipurpose non trawlers'. At the third level of the classification below these two categories ('ie examples'), children categories reflecting size classes (below or above 12m) were not deemed suitable: first of all if any size split had to be considered this would be at 24 m length; secondly the multipurpose categories organized by size class correspond to well identified typologies of gear combinations and it would be better to name these categories in accordance with this fact; finally, considering that 'multipurpose non trawlers' are all under 24 m, there is no need at this stage to define children categories as examples. The following table reflects the recommended revision.

Former category	New proposal	Actual size range
Multipurpose trawlers		
multipurpose trawlers<12m	Trawlers in combination with longline, trap, gillnet dredge	<24m
multipurpose trawlers>12m	Purse seiners – Pelagic trawlers	>24m
Multipurpose non trawlers	Multipurpose non trawlers (longline, gillnet, trap)	<24m
multipurpose trawlers<12m	-	
multipurpose trawlers>12m	-	

ANNEX 2

High Seas Vessels Authorization Record (HSVAR): Application of standards

1. Introduction

Summarized are the main issues met, in the application of standards, while processing and preparing the vessel records received from the Compliance Agreement Parties in order to upload them into the HSVAR database application.

1.1 Lack of standards

In order to facilitate the submission of vessel data, most of the countries signatory to the Agreement have received, from FAO, a document containing detailed information on the Compliance Agreement's requirements, including an explanation for each HSVAR database field (see Information requirements document) It was noted, however, that data supplied from the countries still lacked the use of standard measurements and classifications.

Length: is mandatory information in the FAO Compliance Agreement and is defined as follows:

length (m) (mandatory)

The length in metres according to the following:

actual -

for any fishing vessel built after 18 July 1982, 96 percent of the total length on a waterline at 85 percent of the least moulded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline.

registered -

for any fishing vessel built before 18 July 1982, registered length as entered on the national register or other record of vessels.

Length data received from the Parties is in the form of Length Overall (LOA), Registered length and Length between perpendiculars (LBP). Most times, thought, the type of length is not specified.

Tonnage: is considered as optional information in the Compliance Agreement and is defined as follows:

Gross register tonnage (GRT) (optional)

The Gross Tonnage is the overall volume of a ship's hull, including crew cabins, storerooms and machinery spaces. Gross Registered Tonnage of the vessel as entered on the national register or other record of vessels. Should be expressed in metric tons.

Tonnage data received from the Parties is in the form of Gross Registered Tonnage (GRT) and, in a few cases, Gross Tonnage (GT). Data providers do not usually append any information on how the tonnage measurement is determined.

Vessel type: is considered mandatory information in the Compliance Agreement and is defined as follows:

Type of vessel (mandatory)

Refers to the type of vessel as defined by the ISSCFV (International Standard Statistical Classification of Fishery Vessels by Vessel Types).

Vessel type data received from the Parties does not follow the ISSCFV classification system.

Gear type: is considered optional information in the Compliance Agreement and is defined as follows:

Gear type (optional)

Refers to the type of gear operated by the vessel as defined by ISSCFG (International Standard Statistical Classification of Fishing Gears).

Gear type data is not always available from the contracting Parties, when available it hardly ever follows the ISSCFG classification system.

1.2 Lack of definitions

As mentioned above, FAO has compiled a document containing the explanation of each HSVAR database field including a specific name for each field. Due to the use of different field names and lack of explanation of these, it has not been always possible to match the HSVAR database fields with the ones contained in the High Seas Vessel Register Tables supplied by the Parties to the Agreement.

For example vessel length data is hardly ever accompanied by a measurement definition.

1.3 IMO Number

Following the CWP 19th Session recommendations, it was decided that FAO would work towards the adoption of a unique and stable vessel identifier. For this purpose, the inclusion of a HSVAR_ID identifier in the HSVAR database was proposed. In addition it was stressed that the adoption of the IMO number (the Lloyds identification number) would strengthen the HSVAR identifier (60% of the vessels included in HSVAR database could have this number). For this reason, the need to elaborate a quick system to retrieve this information from Lloyds database seems necessary. The Lloyd's database is searched using the "common search criteria"¹ and among these the vessel type: "fishing" and the flag. Once this first search has been run the result page is all the fishing vessels that fly the searched flag and that are registered with Lloyds. In order to assign, when possible, the IMO number to the HSVAR vessels, the following fields should be matched: Vessel name, year of build, length (if same measurement used) and GT (if same measurement used).

2. Country situation

BENIN (12 vessels)

Data was submitted in November 2003.

 \checkmark Data was checked against Lloyd's database: only two fishing vessels found in Lloyd's database and not matching HSVAR vessels.

✓ Created also a FIGIS VESSEL HISTORY database table.

 \checkmark Two vessels are registered in Sudanese ports, no CD_PORT_ID could be assigned because there are no Sudanese ports in the FIGIS REF PORT table.

 \checkmark No Callsign, this information in mandatory in the Agreement (back to the country).

✓ VESSEL TYPE: does not follow the ISSCFV standards.

 \checkmark GEAR TYPE: does not follow the ISSCFG standards. The information available on gear is: type of fishing method (back to the country).

 \checkmark Consider inserting in HSVAR database a field for local names for vessel and gear types.

- ✓ **TONNAGE**: is in GRT.
- \checkmark LENGHT: it is not specified the type of length measured (back to the country).

 \checkmark Names and addresses of 2 owners are missing (mandatory in the Agreement) (back to the country).

EU updated list (2669 vessels)

Data submitted in February 2004.

 \checkmark In the previous submission, vessels were 2622.

 \checkmark No IMO number submitted and no intention of submitting in the future as they use the EU Internal Number, a unique code while the high seas fishing vessels are registered in the EU. This information can be extracted from Lloyd's database.

 \checkmark VESSEL TYPE: starting from September 2004 such information will be available and they will adopt the International standard codes (ISSCFV).

¹ Lloyds Maritime database can be searched using different "search criteria": engine, dimension, hull, best contact etc. The common search criteria include the criteria most commonly used for searching vessels in databases such as: IMO number; Name; Type of vessel; Flag; GT; Year of build, Country of build; Callsign.

 \checkmark GEAR TYPE: for the moment they still have supplied standard abbreviations for gear, the ISSCFG code will be adopted starting from September 2004

 \checkmark TONNAGE: is measured in GT, GRT (according to the Oslo convention and in accordance with a definition to be laid down by the Member States). From 1 September 2004, all EU vessels must have been re-measured in GT.

 \checkmark LENGTH: is measured in LOA and Length between perpendiculars (LBP) (both measures and definitions are supplied).

✓ NAME AND ADDRESS OF OWNER: the EU has supplied such information for 82% of their HSVAR vessels (including the names and addresses of the operators). Such information is still not complete but the EU has committed to supply the missing data by the end of 2004.

 \checkmark WHERE BUILT: This info is available for just over 30% of EU vessels. Such information is still not complete but the EU has committed to supply the missing data by the end of 2004.

NAMIBIA (6 vessels)

Data was submitted in February 2004

✓ They have given a VESSEL_ID and a PORT_REGISTRY_NUMBER which of the two is equivalent to the VESSELREGNBR ?? (back to the country for clarification).

 \checkmark Checked in Lloyds database but none of these vessels are registered with Lloyds.

- ✓ No ports of Namibia are in the FIGIS_REF_PORT table.
- ✓ **VESSEL TYPE**: not supplied with the ISSCFV coding system (back to the country).
- \checkmark Additional information is given on the function of the vessel (i.e. fishing, factory)
- ✓ **TONNAGE**: is given in GRT
- \checkmark LENGTH: it is not specified the type of length measured (back to the country).
- \checkmark There is information on the building material

SYRIA (22 vessels)

Data was submitted in April 2004

- ✓ Checked in Lloyds database but no fishing vessels are registered there.
- ✓ Created also a FIGIS_VESSEL_HISTORY database table.
- ✓ No ports of Syria are in the FIGIS_REF_PORT table.

✓ In the original data there is a field called:" Name & Number & Port of Registry. Is what they call "Number" equivalent to the HSVAR "VESSELREGNBR"?? (back to the country).

 \checkmark In year built, for 2 vessels, there is also indication on the date of alteration.

✓ VESSEL TYPE: not supplied with the ISSCFV coding system (back to the country). In the original data this information is contained in a field called "method of fishing: (i.e. trawler).

✓ **TONNAGE**: is in GRT.

- ✓ **LENGTH**: is measured in LOA.
- \checkmark There is information on type of engine and build material.
- \checkmark For 2 vessels there is also a field "remarks" where it says that the vessel is under maintenance.

CYPRUS (54 vessels)

Data was submitted in May 2004

 \checkmark Checked in Lloyds database and some vessels are registered with Lloyds, the IMO number (in Lloyds) is equivalent to the **VESSELREGNBR** in the original file. (only 5 records).

✓ They have an **INTERNAL ID** (back to the country to see how it works).

✓ Some ports are missing in the FIGIS REF_PORT table.

✓ **VESSEL TYPE**: not supplied with the ISSCFV coding system (back to the country). In the original data vessels are divided into 2 sheets: trawlers and polyvalent vessels.

 \checkmark GEAR TYPE: Is expressed using the standard abbreviations with the exception of the geartype OFG?? (back to the country).

✓ **TONNAGE**: is expressed in GT

 \checkmark LENGTH: it is not specified the type of length measured (back to the country).

GHANA (110 vessels)

Data was submitted in June 2004.

 \checkmark Inserted IMO number when available in Lloyds database. Some vessels with identical name in list from Ghana and Lloyds might differ for other vessel characteristics.

 \checkmark Besides a registration number they also have provided an **OFFICIALREGNBR**, I have checked if similar to Lloyds: same number of digits (7) but they all start with 31 not like the IMO number (back to the country). Besides two vessels have the identical Official number.

✓ Created also a FIGIS_VESSEL_HISTORY database table.

 \checkmark They have supplied additional information such as crew size; material of build; date of registration; hold capacity; storage method and engine model.

 \checkmark There are two vessels with the same IRCS.

✓ Company is the owner or the Operator??? Should be Owner (back to the country).

✓ VESSEL TYPE: not supplied with the ISSCFV coding system (back to the country). Besides some vessel types are not in the FIGIS_REF_VESSEL_TYPE table (i.e. SHRIMPER; TUNA P\L (I have used pole and line vessels (LP) and TUNA P\S (I have used tuna purse seiners (SPT).

✓ **GEAR TYPE**: is missing they have supplied fishing method. Should it be transformed into gear?? (i.e. trawling is trawl)

✓ TONNAGE: is GRT

- ✓ LENGTH: is measure in LOA
- ✓ **DEPTH**: is moulded.

USA updated list (848 vessels)

Data was submitted in September 2004.

 \checkmark They have supplied IMO number for 186 vessels.

✓ Some names of ports are missing in the FIGIS REF PORT table.

✓ 3 vessels have a CD CALLSIGN that is identical to the VESSELREGNBR (back to the country).

 \checkmark They have supplied information both on the SHIPYARDBUILT and on the CD BUILD PORT.

 \checkmark They have supplied additional fields such as: buildmaterial, crewsize, holdcapacity, Corporate name.

✓ With the information available the HSVAR VESSELAUTHORIZE database table has been created.

 \checkmark VESSEL TYPE: is forwarded using codes similar to the ISSCFV but not identical, had to transform them.

 \checkmark TONNAGE: is in GRT (back to the country to see if can supply tonnage in GT).

✓ **LENGTH**: is Registered length (back to the country to see if can supply LOA).

NORWAY (updated list 113 vessels)

Data was submitted in November 2004-12-08

- \checkmark Checked Lloyds database for IMO number. This number could be assigned to a few vessels.
- \checkmark There is no information on where the vessel was built (this is mandatory in the Agreement)
- ✓ VESSEL_TYPE: They have used the ISSCFV standard abbreviation
- ✓ **GEAR_TYPE**: There is no information on gear used
- ✓ **TONNAGE**: is in GT
- ✓ **LENGTH**: is LOA

JAPAN (1890 vessels)

Data submitted in 2001

- \checkmark No Imo number supplied, this information can be extracted from Lloyds database.
- \checkmark Problems with the formatting of vessel name; vessel owner and manager name and vessel owner and management addresses.
- ✓ VESSEL_TYPE: They have used the ISSCFV classification system
- ✓ **GEAR_TYPE**: There is no information on gear used
- ✓ **TONNAGE**: is in GRT
- \checkmark LENGTH: it is not specified the type of length measured (back to the country).