ISSN 0429-9337

## Report of the

# WORKSHOP ON ESTABLISHING A COORDINATING WORKING PARTY ON AQUACULTURE STATISTICS

Nakorn Nayok, Thailand, 8-10 January 2008



Copies of FAO publications can be requested from:
Sales and Marketing Group
Communication Division
FAO
Viale delle Terme di Caracalla

00153 Rome, Italy
E-mail: publications-sales@fao.org
Fax: +39 06 57053360

Web site: http://www.fao.org

## Report of the

## WORKSHOP ON ESTABLISHING A COORDINATING WORKING PARTY ON AQUACULTURE STATISTICS

Nakorn Nayok, Thailand, 8–10 January 2008

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

ISBN 978-92-5-105939-5

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to:

Applications for such permission should be addressed to:
Chief
Electronic Publishing Policy and Support Branch
Communication Division
FAO
Viale delle Terme di Caracalla, 00153 Rome, Italy
or by e-mail to:
copyright@fao.org

© FAO 2008

## PREPARATION OF THIS DOCUMENT

This is the final version of the report of the Workshop on Establishing a Coordinating Working Party on Aquaculture Statistics (CWP-AS), held in Nakorn Nayok, Thailand, from 8 to 10 January 2008 organized by FAO and hosted by NACA.

## Distribution:

Participants at the meeting
FAO Regional Offices
Directors of Fisheries
CWP participating organizations
Aquaculture–FAO Publications
Aquaculture–Marine Waters, Fishery Policy (general)

#### FAO.

Report of the Workshop on Establishing a Coordinating Working Party on Aquaculture Statistics. Nakorn Nayok, Thailand, 8–10 January 2008. *FAO Fisheries Report.* No. 863. Rome, FAO. 2008. 15p.

#### **ABSTRACT**

Following to the approval of the third session of the Committee on Fisheries (COFI) Sub-Committee on Aquaculture (New Delhi, 2006), and the twenty-seventh session of COFI (Rome, 2007) to establish an interregional mechanism for aquaculture similar to the Coordinating Working Party on Fishery Statistics (CWP-FS), the Workshop was called to address the need for data and information coordination in aquaculture and objectives, characteristics and structure suitable for the Coordinating Working Party for Aquaculture (CWP-AS).

After reviewing the data and information requirements in aquaculture and existing gaps in data collection, the necessity to harmonize standards for data, information and statistics, the relations between capture fishery and aquaculture, and structure and activities of CWP-FS, the Workshop reaffirmed the need for a mechanism to identify, establish and harmonize standards for aquaculture data, information and statistics.

The Workshop recommended the establishment of the CWP–AS within the framework of the CWP–FS, but with its own terms of reference (TORs), rules of procedure and composition to reflect the specific needs of the aquaculture sector. The Workshop further developed a detailed proposal of functions and structure of such a body including TORs, composition and operational aspects which are attached as Appendix 3.

## **CONTENTS**

Page

INTRODUCTION	1
WORKSHOP PARTICIPATION	1
OPENING OF THE WORKSHOP	1
OBJECTIVES AND TERMS OF REFERENCE OF THE WORKSHOP	1
ADOPTION OF THE AGENDA	1
ELECTION OF CHAIR	1
BACKGROUND TO THE WORKSHOP	2
STRATEGY FOR IMPROVING STATUS AND TREND REPORTING FOR AQUACULTURE	2
ROLE AND FUNCTIONALITIES OF CWP-FS IN AQUACULTURE STATISTICS	2
NEED FOR COORDINATION IN AQUACULTURE DATA AND INFORMATION	3
OBJECTIVES, CHARACTERISTICS AND STRUCTURE OF CWP-AS	
PLANNED TIMELINE FOR IMPLEMENTATION	
PRIORITY AREAS	6
OTHER ISSUES	6
CLOSING OF THE MEETING	7
APPENDIX 1: List of participants	9
APPENDIX 2: Agenda of the Workshop	11

#### INTRODUCTION

- 1. The idea of establishing a Coordinating Working Party on Aquaculture Statistics (CWP-AS) was conceived at the Expert Consultation on the Proposed Sub-Committee on Aquaculture of the Committee on Fisheries held in Bangkok, 28–29 February 2000. The Committee on Fisheries Sub-Committee on Aquaculture (COFI-AQ), during its first session in April 2002, identified data collection and reporting, to improve knowledge and management of the sector, as a priority area for future work. The COFI-AQ considered information needs for aquaculture at the global level and recommended that FAO develop a strategy for improving reporting on aquaculture status and trends similar to that developed for capture fisheries, with special attention to the quality of the information on which it is based.
- 2. In response to this recommendation, an Expert Consultation on Improving Information on Status and Trends of Aquaculture held in January 2004 reviewed and approved, with amendments, a draft Strategy for Improving Status and Trend Reporting for Aquaculture prepared by FAO. This strategy included a recommendation for FAO to consider establishing an inter–regional mechanism similar to the Coordinating Working Party on Fishery Statistics (CWP–FS). The draft Strategy together with the establishment of CWP–AS was endorsed by the third session of the COFI–AQ (New Delhi, India, 2006) and then by the twenty-seventh session of the FAO Committee on Fisheries (Rome, 5–9 March 2007).
- 3. There have already been constructive discussions on the subject during previous meetings, at sessions of COFI-AQ, CWP-FS, and at expert consultations. These discussions have already broadly shaped the functions of the CWP-AS and the expected benefits from a programme for enhancement of data collection. The "Workshop on Establishing a Coordinating Working Party on Aquaculture Statistics (CWP-AS)" was convened to develop concrete recommendations on the function, mandate and terms of reference for CWP-AS.

#### **WORKSHOP PARTICIPATION**

4. The workshop was attended by 16 participants from Asia, Europe, Pacific and Latin America. The participants included experts from government agencies, international and regional organizations and a regional aquaculture producer federation. The list of participants is provided in Appendix 1.

#### OPENING OF THE WORKSHOP

- 5. The Workshop was convened at the Phukhao Ngam Hotel, Nakorn Nayok, Thailand, from 8 to 10 January 2008.
- 6. Prof. Sena De Silva, Director General for the Network of Aquaculture Centres in Asia–Pacific (NACA), local host, welcomed the participants and thanked them for attending the workshop. Prof. De Silva briefly explained how NACA functions and its role in the region. He mentioned that the development of aquaculture has now reached a level where it is time to develop and improve upon aquaculture statistics further and that good aquaculture statistics are important and pivotal for aquaculture planning and to help ensure the further development of aquaculture and its sustainability.

#### OBJECTIVES AND TERMS OF REFERENCE OF THE WORKSHOP

7. Ms Sachiko Tsuji, FAO Senior Fishery Statistician and coordinator of this Workshop, briefly explained the Terms of Reference of the Workshop. The Workshop was requested to focus on two fundamental questions: (a) What are the demands for coordination in aquaculture data and information, and (b) What are the objectives, characteristics and structure suitable for CWP-AS. It was emphasized that the participants should freely explore the idea and all contributions should be made in their capacity as individual experts, not as organizational representatives.

#### ADOPTION OF THE AGENDA

8. The agenda was adopted and is attached as Appendix 2

#### **ELECTION OF CHAIR**

9. Prof. De Silva was unanimously elected as Chairperson of the Workshop

#### BACKGROUND TO THE WORKSHOP

- 10. Aquaculture production is often an activity practised alongside agriculture especially in medium to small–scale farms and in rural settings. The statistical system required for efficient and reliable data collection in aquaculture may have more in common to that used for agriculture products, than that in use for capture fisheries data collection.
- 11. It is recognized that there are important interactions between capture fisheries and aquaculture, both at production and marketing levels, which require coordination and cooperation between the two sectors also in statistical matters.
- 12. The establishment of a CWP-AS would give support to further development and improvement in the scope of aquaculture statistics, leading to better management of aquaculture, and timely response to information needs from the technological sector which is evolving dynamically and posing new challenges in the harmonized use of terms.
- 13. The FAO has collected world aquaculture statistics since 1989 when aquaculture production statistics were separated from the global fishery production statistics. This indicates that basic standards and concepts used in FAO aquaculture statistics have endeavoured to be consistent with those in capture fisheries statistics. Both have referred to and made use of the same classifications (e.g. species, geographical areas) and reporting standards (e.g. units of measure, type of weight to be reported) ensuring full comparability of aquaculture and capture production statistics.
- 14. The future work of CWP-AS will thus focus more in areas of specific relevance to aquaculture. At the same time, substantial overlapping and boundary issues still remain, including procurement from wild stocks of fry and juveniles, on–growing/rearing of small specimen caught from the wild, and the use of wild caught fish for aquaculture feed, information related to stock enhancement practices and so forth.
- 15. A great need is also recognized for aquaculture data collection systems to cover socio–economic information of verifiable quality with comparability across countries.

#### STRATEGY FOR IMPROVING STATUS AND TREND REPORTING FOR AQUACULTURE

- 16. Mr Rohana Subasinghe, Senior Fishery Resources Officer of FAO, presented an overview on the past and current development of aquaculture and what the future development of aquaculture might look like. Currently the Asian Region is producing 80 per cent of the world's aquaculture production, with 75 per cent of that being produced in China. By 2015 it is estimated that half of the world fisheries consumption will be from aquaculture. There will be a need of additional production from aquaculture and aquaculture will likely continue to grow and become even more important in the role of producing fish for human consumption.
- 17. As aquaculture continues to grow and mature as an industry, the importance and need of reliable information and data to ensure a sustainable growth of the sector grows concurrently. The currently available aquaculture statistics require improvement including better species level reporting, inclusion of new species, development of definitions and standards, and also some degree of information about the inter-phase between aquaculture and small-scale fisheries. A particular problem identified was the lack of reliable data on the contribution of small-scale producers. Those lead to a need for establishing CWP-AS whose mandate would be to set standards and discuss issues related to aquaculture statistics.
- 18. The overall strategy for the proposed CWP-AS would be to provide a framework for gathering additional information and data to support sustainable development of aquaculture. The strategy will be implemented through arrangements ranging various geographical scales and be consistent with Article 5 of the Code of Conduct for responsible fisheries. Actions to be undertaken under the strategy should include: capacity building, global methodologies and standards, and, institutional mechanisms and procedures for statistics and trend reporting.

#### ROLE AND FUNCTIONALITIES OF CWP-FS IN AQUACULTURE STATISTICS

19. Ms Sachiko Tsuji, Secretary of the CWP-FS, explained the history and current situation of the CWP-FS in the context of aquaculture. The CWP-FS meets every two years and has in the past also organized inter-sessional meetings. The role of the CWP-FS is the continuous review of the requirements of fisheries statistics for different stakeholders, setting standard concepts, definitions, classifications and methodology for fisheries statistics and providing assistance for

coordination among organizations. It was explained that the current members of the CWP–FS have limited expertise in aquaculture, though some of the members, e.g. EuroStat, the Organisation for Eocnomic Co–operation and Development (OECD) and the South–East Asian Fisheries Development Center (SEAFDEC), have competence of or interest in aquaculture statistics. The proposed CWP–AS does not have to encompass the same membership as CWP–FS, however. The current "CWP Handbook of Fishery Statistical Standards" provides a broad base for data collection and statistics including aquaculture data and statistics.

- 20. In the discussion following the presentation, the Workshop was in agreement that the CWP-AS should be formed and moved onto identifying demands for coordination in aquaculture data and information. It was suggested the new CWP-AS should be integrated into the existing CWP-FS, as a subsidiary body of comparable standing as the capture fishery component under overarching CWP-FS. In that case, composition of subsidiary bodies could include other components such as small-scale and inland fisheries in addition to marine capture fisheries to aquaculture. The Workshop felt that CWP-FS currently has a strong focus on issues relating to highly-migratory and straddling marine stocks and that many of the other components have not received adequate attention which include aquaculture, socio-economic information, small-scale producers, inland fisheries and so forth. Although the Workshop agreed to focus its discussions on aquaculture related issues, it was considered important to highlight those issues of limited coverage such as inland and small-scale fisheries for attention and further consideration by CWP-FS.
- 21. It was noted that there are strong interactions between fisheries and aquaculture, i.e. the use of fisheries resources as feeds (e.g. fishmeal and fish oil), the use of wild fish for seeds and the stocking of open waters with aquaculture produced seed. These issues could be addressed more effectively in a CWP-AS.

## NEED FOR COORDINATION IN AQUACULTURE DATA AND INFORMATION

- 22. The Workshop recognized that the capture fisheries sector has more internationally-related issues than aquaculture, because it deals with international properties/resources or shared resources. Aquaculture on the other hand, is almost completely under national jurisdiction. However, as the international trade of aquaculture related products is increasing there are now calls for an international body/forum to discuss and assist with the development of standards and promote harmonization.
- 23. The structure of CWP-AS was discussed with some focus on relation with the existing CWP-FS. If a CWP-AS is formed as a subsidiary body of CWP-FS, CWP-AS would need to report to CWP-FS. It was noted that the existing statutes of CWP-FS clearly indicate "aquaculture" within its purview. The CWP-FS can form subsidiary "groups" but forming a new separate statutory body for aquaculture would be problematic if not impossible. A separate body for aquaculture also raises the problem of harmonization/communications between the two separate bodies. While CWP-FS restricts its participating organizations to "intergovernmental organizations", CWP-AS needs to accommodate a broader representation. This is necessary since aquaculture is largely a national activity, and there are very few intergovernmental organizations that have a competence in aquaculture. It was discussed if membership should be based primarily on regional organizations and inter-agency organizations or if the CWP-AS should be expanded to include member countries. It was agreed that the inclusion of all national member representatives would make the CWP-AS an overly large and slow down the progress of the formation of a needed body. Representation by regional producer associations is considered as more appropriate for memberships. It may also be appropriate to have representatives from the major producer countries. However, in conclusion, the workshop decided that depending on the topic covered the relevant countries should/could be invited/nominated through the appropriate regional organization.
- 24. The Workshop noted that the twenty-second session of the CWP welcomed the activities to develop a CWP-like body for aquaculture and to keep the CWP closely involved. The Workshop agreed to recommend having CWP-AS within the CWP-FS with its own representative composition. Current CWP-FS members which have a competence of or express its interest in aquaculture include EuroStat, FAO, the General Fisheries Commission for the Mediterranean (GFCM), the International Commission for the Conservation of Atlantic Tunas (ICCAT), OECD, SEAFDEC and the Secretariat of the Pacific Community (SPC). There are currently a few intergovernmental organizations with a competence in aquaculture which would be desirous to apply for participation in CWP-FS. Some other nonmanagement Regional Fisheries Bodies may also have an interest in aquaculture.

- 25. Though participation in the CWP-AS would not imply the right to be a member of the CWP-FS, the membership of the CWP-FS would still need to be broadened to provide some competence in aquaculture.
- 26. In February 2007 the International Organization for Standardization (ISO) established a technical committee (ISO/TC 234) Fisheries and Aquaculture. The first meeting in October 2007 (Bergen, Norway) established a proposal on three thematic areas. It is recommended that CWP-AS should keep close contact with the ISO technical group. FAO has already made a request for ISO to brief on their ongoing work and expect that there will be close dialogue in the future.
- 27. Currently there is a lack of a systematic approach for data collection on aquaculture and standardized and harmonized data collection methodologies and analysis would be useful for producer federations, national and regional bodies, especially in resolving discrepancies in statistics among different sources. Producers and government statistics are often in disagreement and this is partly due to different collection and analysis methods and reporting requirements.
- 28. Harmonization of standards from aquaculture statistics is needed particularly for its contributions to monitor and manage the aquaculture sector and hence a contribution to food security, as well as adding value to export oriented production. The increasing number of issues related to trade is being seen in aquaculture, which includes how aquaculture is valued, or considered to be liable to tariffs, costs of production, and possible subsidies. Having some harmonization on aquaculture statistics will assist in the equitable evaluation of real costs of production and enable more effective dialogue on issues related to trade.
- 29. It is important to have a common language (i.e. definitions of various terms) and comparable data between countries. Increasing focus on traceability and food safety requirements are also calling for more detailed data and information management. The definitions and terms used currently are rather loosely defined. With the increasing international trade in aquaculture products, there is a need for more accurate definitions. It is important to maintain perspectives as to what purpose the terms are to be used. For example, the definition of "small–scale" may differ between when assessing the contribution of small–scale aquaculture and when evaluating application for subsidies or incentives to small–scale farms.
- 30. The issue of harmonization and improved definitions in trading areas will provide greater transparency and clarity in the use of terms. How they might be applied by, for example WTO or similar organizations, needs to be addressed. Areas which relate to this include: (a) environmental cost/accounting; (b) contribution of the sector to economies; (c) application of subsidies; (d) "real costs" of production.
- 31. Discussions took place regarding what specific areas were currently the cause of confusion and needed further clarification. It was mentioned that the interactions between aquaculture fisheries and agriculture sub-sectors were areas lacking information, clear definition, and clear identification of monitoring responsibilities. Currently, the catch component utilized as feeds for aquaculture and livestock have no formal terms (e.g. multiple definitions for trash/low value fish). There are similar issues with data and information on the use of wild seed for aquaculture. Other examples noted were: (a) interactions between fisheries and aquaculture; (b) the use of aquatic resources from floodplains/rice fields and (c) rice field aquaculture.
- 32. It is important to properly assess aquaculture's contribution to the economy and livelihoods via employment, food security and income generation. In the agriculture statistics there might be aquaculture related information available, but there may still be significant parts of the aquaculture sector which are not covered in any statistics. In particular holdings which do not fall under an "agriculture holdings" category such as coastal cage aquaculture, lake/reservoir/river cage aquaculture, seaweed and other forms of mariculture. There is therefore the potential for incomplete coverage of the aquaculture sector by an agriculture census.
- 33. The use of primary resources such as the use of water and land is a facet which would benefit from more standardized terms. The terms and concepts developed for agriculture use are often meaningless in a context with aquaculture activities. Standardized terms more focussed on aquaculture but comparable with already established ones would assist more appropriate allocation of primary resources between agriculture and aquaculture sub–sectors, better planning initiatives and more effective water management and protection of the resource.

- 34. Aquaculture operations are often integrated as part of multifunctional operations including agriculture or other income generation type activities. In such examples a clear definition of the aquaculture component is important.
- 35. There is a need for a proper evaluation of aquaculture to get the real value and importance of aquaculture represented in the statistics. For example aquaculture for household usage (i.e. very small–scale domestic focused aquaculture) is often omitted in national statistics. Therefore, a significant proportion of small–scale production is potentially unreported and the contribution of this component of the sector is undervalued. Importance to put ample focus on the small–scale aquaculture sector was noted.
- 36. Proper accounting of aquaculture products not directly used for food is another area which needs standardization and harmonization. Currently FAO statistical reporting mostly relates to production for food purposes. However, the non-food products of aquaculture are not directly related to food security but have implications for income generation and livelihoods of the producers, and needs more attention.
- 37. Discussion noted those issues that could be considered "statistical issues", including: Introductions of species, transboundary movements, health and disease reporting (although this is covered by the International Office of Epizootics (OIE), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) movements/species and reporting and aquarium and ornamental trade.
- 38. Ornamental species should also be taken into consideration because the activity of producing ornamental fish generates income. The majority of ornamental fish species produced in freshwater are derived from aquaculture operations. Marine ornamental species are still largely wild caught, although there is also an increasing trend to culture these species. Domestically produced and traded ornamentals are largely ignored by trade reports. Internationally traded ornamental species are reported by value but rarely by weight, which indicates a challenge in developing standardized methods for the reporting of quantities of traded ornamental species.
- 39. Seaweeds for alginates and products which are not primarily directed for consumption (i.e. their derived products such as agar, carageenans and alginates are used as food additives but may also be used for industrial non-food purposes).
- 40. Discussion took place on what should be covered under a potential CWP–AS. It was agreed that information on non–food use species produced from aquaculture should be included. The CWP–AS would have a primary focus on aquaculture for food production, but would also be expected to provide appropriate guidance on production from aquaculture for non–food uses. The workshop was informed that a SEAFDEC Regional technical consultation recently developed a recommendation to modify reporting framework for statistics to compile statistics on ornamental fish under aquaculture.
- 41. The aspect of potential aquaculture development in international waters was noted. Whilst the EEZ waters used for aquaculture will be under national jurisdiction, statistical reporting aspects for the cases when aquaculture expands to the open ocean could be investigated and discussed.

## OBJECTIVES, CHARACTERISTICS AND STRUCTURE OF CWP-AS

- 42. The Workshop agreed to recommend the establishment of CWP-AS as a subsidiary body of CWP-FS. The Workshop further discussed how such a CWP-AS would function and the structure of such a body and developed a detailed proposal which is attached in Appendix 3.
- 43. During the discussion, the Workshop noted that several areas of fisheries, such as inland and small–scale fisheries, which have linkage to aquaculture, have not received adequate attention. The Workshop considered that more integrated CWP–FS which covers the whole range of data, information and statistical issues relevant to fishery and aquaculture would be a preferable future direction, where independent multiple bodies work on specialized areas such as aquaculture and marine capture, under the overarching administrative umbrella of CWP–FS. The Workshop urged CWP–FS to initiate its consideration.

#### PLANNED TIMELINE FOR IMPLEMENTATION

- 44. It was informed that the outcome of this Workshop would be reported to the next session of CWP-FS to be held in February/March 2009 for its consideration of the formation of CWP-AS as a subsidiary body. The Workshop agreed that it would be important to seek preliminary informal feedback from CWP participating organizations regarding the recommendations of the Workshop.
- 45. The outcome of this Workshop will be reported to the fourth COFI-AQ to be held in Chile in October 2008.
- 46. If CWP-FS were to agree the proposal by this Workshop, the establishment of CWP-AS will be reported to the subsequent session of COFI. This timeline indicates that CWP-AS could be formalized in February/March 2009 at the earliest.
- 47. The Workshop noted the importance in maintaining the momentum that has been created and in continuing communication regarding issues on aquaculture statistics among interested organizations. In that context, the Workshop strongly recommended to have a short discussion in conjunction with the COFI–AQ session in Chile (October 2008).

#### PRIORITY AREAS

- 48. The workshop discussed areas which required specific attention by the CWP-AS. The areas identified include:
  - i) Identification of areas of data and information needs.
  - ii) Define terms and establish guidelines for data collection with clear indication of reporting responsibility in the areas including a) area of interaction with capture fisheries, e.g. terms and reporting format of feeds, seeds, enhanced stocking, b) non-labour included holdings, e.g. use of aquatic resources from floodplains/rice fields, c) fish holding outside national jurisdiction, d) when partial aquaculture related information being collected through agriculture statistics, d) use of primary resources as water and land in a way to assist comparison between agriculture and aquaculture sub-sectors and more effective allocation and management of the resource, e) information and data relevant to trade with special focus to environmental cost/accounting, contribution of the sector to economies, application of subsidies, and "real costs" of production.
  - iii) Harmonization: the workshop recognized the need to harmonize the terminology used in all statistical data collation, and to this end, to provide suitable definitions, where lacking, and also to ensure the harmonization in the methodologies to be adopted by each sub–sector, as far as possible.
  - iv) Guidance to properly assess aquaculture's contribution to food security, economy, livelihoods, employment, and income generation, with special attention to cases like a) small-scale sector including household usage, b) aquaculture as part of multifunctional operations including agriculture or other income generation type activities.
  - v) Recommendation to CWP-FS and other bodies.

In the attempt to identify areas for urgent attention, several areas were noted which include: a) unaccounted and not properly accounted production in light of food security, b) harmonization of basic concepts and definitions, and c) methodology to speed up dissemination.

## OTHER ISSUES

- 49. It was noted that regional organizations could provide estimates and supporting information which would be complimentary to the FAO official statistics. It was pointed out that such data should be considered separately from official statistics. Some of this information would be considered as preliminary or provisional estimates which would be available in a more timely way than nationally reported statistics.
- 50. On this matter NACA informed of its ongoing activity of estimating "actual" aquaculture production figures of member countries which will be disseminated on the NACA webpage when it becomes available.

- 51. SEAFDEC informed the workshop that based on the agreement of its member countries, SEAFDEC will use the new aquaculture reporting form that will be harmonized with the FAO form and expects that this could facilitate improved reporting of aquaculture statistics in its area of competence.
- 52. SPC noted that it intends to develop a review of aquaculture statistics and reporting in its region of competence and this could contribute to the process.

#### **CLOSING OF THE MEETING**

53. The Workshop thanked NACA, the local host, for a well organized workshop and arrangements. The Chair thanked all participants for a good and constructive discussion. The Workshop was formally closed.

#### APPENDIX 1: LIST OF PARTICIPANTS

Tim Adams

Director, Marine Resources Division Tel.: +687-262000 Secretariat of the Pacific Community (SPC) Fax: +687-263818 BP D5, 98848 Noumea, New Caledonia E-mail: tima@spc.int

Debasish Chaudhuri

Director, Fishery Statistics, Department of Animal Husbandry, Dairving and Fisheries Ministry of Agriculture, Room No. 154, Krishi Bhawan, New Delhi 110001, India

+91-11-23070279 Tel.: Fax: +91-11-23070279 E-mail: trgdebasish@yahoo.com

Jon A. Grottum FEAP, PB.1214

Pirsenteret, N-7462 Trondheim, Norway

Tel.: +47 92041804 Fax: +47 95352206 E-mail: jon.a.grottum@fhl.no

Tel.:

Hassanai Kongkeo

Advisor, Network of Aquaculture Centres in Asia-Pacific, PO Box 1040, Kasetsart Post Office Bangkok 10903, Thailand

Fax: +66-2-561-1727 E mail: hassanai.kongkep@enaca.org

+66-2-561-1728

Per Sandberg

Director, Statistics Department Norwegian Directorate of Fisheries Strandgaten 229, Bergen 5817, Norway Tel.: +47-9301412 E-mail: per.sandberg@fiskerider.no

**Braulio Cubillos Segovia** 

Servicio Nacional de Pesca, Victoria 2832 Valparaíso, Chile

Tel.: +56-32-2819342 Fax: +56-32-2819340

E-mail: bcubillos@sernapesca.com

Sena De Silva

Director General. Network of Aquaculture Centres in Asia-Pacific PO Box 1040, Kasetsart Post Office Bangkok 10903, Thailand

Tel.: +66-2-561-1728 Fax: +66-2-561-1727 E-mail: sena.desilva@enaca.org

**Karoly Valentinyl** 

HAKI, Research Institute for Aquaculture & Irrigation, 5540 Szarvas Anna-liget 8, Hungary

Tel.: +36-66-515 302 +36 66312142 Fax: E-mail: valentil@haki.hu

Laszlo Varadi

Director, HAKI, Research Institute for Aquaculture & Irrigation, 5540 Szarvas Anna-liget 8, Hungary

Tel.: +36-66-515 302 Fax: +36-66-312 142 E-mail: varadil@haki.hu

Pouchamarn Wongsanga

South East Asian Fisheries Development Centre (SEAFDEC), PO Box 1046 Kasetsart Post Office, Bangkok 10903 Thailand

Tel.: +66-2-940-6326 Fax: +66-2-940-6336 E-mail: pouch@seafdec.org

Xie Yingliang

East China Sea Fisheries Research Institute Chinese Academy of Fishery Sciences 300 Jungong Road, Shanghai 200090, China

Tel.: +86-(0)21-5553050 E-mail: xieyingliang@hotmail.com

#### **FAO Secretariat**

Sachiko Tsuji

Senior Fishery Statistician

Secretary of the Coordinating Working Party on

Fishery Statistics

Fishery and Aquaculture Economics and Policy

Division

FAO Fisheries and Aquaculture Department

Viale delle Terme di Caracalla

00153 Rome, Italy

Rohana Subasinghe

Senior Fishery Resources Officer (Aquaculture), Fisheries and Aquaculture Management

Division

FAO Fisheries and Aquaculture Department

Viale delle Terme di Caracalla

00153 Rome, Italy

Simon Funge-Smith

Senior Fishery Officer FAO Regional Office For Asia and the Pacific

Maliwan Mansion, 39 Phra Atit Road

Bangkok 10200, Thailand

Jesper Clausen

APO Aquaculture FAO Regional office for Asia and the Pacific

Maliwan Mansion, 39 Phra Atit Road

Bangkok 10200, Thailand

David Lymer

**APO Fisheries Statistics** 

FAO Regional office for Asia and the Pacific

Maliwan Mansion, 39 Phra Atit Road

Bangkok 10200, Thailand

Tel.: +39 06 570 55318 Fax: +39 06 570 52476

E mail : sachiko.tsuji@fao.org

Tel.: + 39 06 570 56473 Fax: + 39 06 570 53020

E-mail: rohana.subasinghe@fao.org

Tel.: +66 02 697 4149 Fax No: +66 02 697 4445

E-mail: simon.fungesmith@fao.org

Tel.: +66 02 697 4242 Fax: +66 02 697 4445 E-mail: jesper.clausen@fao.org

Tel.: +66 02 697 4273 Fax: +66 02 697 4445 E-mail: david.lymer@fao.org

## APPENDIX 2: AGENDA OF THE WORKSHOP

## 8 January 2008 (Day 1)

Morning session	
08.30-08.45	Welcome remarks by Sena De Silva (NACA)
08.45–09.00	Meeting arrangements and other administrative issues by Hassanai Kongkeo (NACA)
09.15-09.20	Objective and terms of reference of workshop by Sachiko Tsuji (FAO)
09.20-09.25	Election of chair
09.25-09.30	Adoption of the Agenda
09.30-09.45	Background on strategy for improving status and trend reporting for aquaculture <i>Rohana Subasinghe (FAO)</i>
09.45–10.00	Background on role and functionalities of CWP–FS in aquaculture statistics Sachiko Tsuji (FAO)
	Coffee break
10.30–12.00	Demands for coordination in aquaculture data and information (Chaired by Sena De Silva)
	Lunch
Afternoon session	
13.30–14.30	Demands for coordination in aquaculture data and information (Chaired by Sena De Silva) (Continued)
	Coffee break
14.45–17.15	Demands for coordination in aquaculture data and information (Chaired by Sena De Silva) (Continued)
17.15–17.30	Summary of Day 1
18.30	Dinner

## 9 January 2008 (Day 2)

## Morning session

08.30–10.00 Objectives, characteristics and structure of CWP-AS (Discussion)

- Objectives and terms of reference
- Membership
- Functions, rules of procedure
- Organs, institutional structure including relationship with CWP-FS

Coffee break

10.30–12.00 Continued on Objectives, characteristics and structure of CWP-AS

(Discussion)

- Objectives and terms of reference
- Membership
- Functions, rules of procedure
- Organs, institutional structure including relationship with CWP-FS

Lunch

#### Afternoon session

13.00–17.30	Field visit to CP-Royal project
18.30	Dinner hosted by FAO and NACA

## 10 January 2008 (Day 3)

## Morning session

08.30-09.00	Planned time-line for implementation (Discussion)
09.00-09.15	Any other business
09.15–12.00	Presentation of Report
	Lunch
13.30-15.00	Presentation of Report (continued)
15.00-15.30	Close of the Meeting
10.00 10.00	close of the meeting

#### APPENDIX 3: RECOMMENDATIONS

#### Introduction

Aquaculture now accounts for nearly half (45 percent) of the world's food fish consumption and this ratio is expected to reach 50 percent by 2015. Although aquaculture development and management take place almost exclusively within the national boundaries and EEZ waters, aquatic products are increasingly traded regionally and internationally. This implies that the information regarding aquaculture production and products should be communicated much wider than national boundaries and highlights an importance for internationally common understanding of definitions, descriptions and methods of analysis and reporting on aquaculture. Recognizing this, the Committee on Fisheries Sub–Committee on Aquaculture at its third session in New Delhi, India, in September 2006 endorsed the concept of establishing a Coordinating Working Party on Aquaculture Statistics (CWP–AS) to provide advice on matters related to information for aquaculture and to facilitate the establishment of standardized concepts, methodologies and software for use in data collections. The Committee on Fisheries (COFI) at its twenty–seventh session in Rome, in March 2007 subsequently endorsed the establishment of a CWP–AS.

Establishing standard concepts, definitions, classifications and methodologies for aquaculture data, information, and statistics will contribute to improved monitoring and management of the aquaculture sector and help achieve sustainability. Establishment of standards and guidelines for data and information collection will also assist countries, particularly those with small–scale farming practices, to assess aquaculture contributions to food security and poverty alleviation. Improved information and data standards on production systems will also assist in fulfilling the demand for traceability and food safety requirements.

The Workshop on Establishing a Coordinating Working Party on Aquaculture Statistics, held in Nakorn Nayok, Thailand, from 8 to 10 January 2008 <u>reaffirmed</u> the need for a mechanism to identify, establish and harmonize standards for aquaculture data, information and statistics and <u>recommended</u> the establishment of a Coordinating Working Party on Aquaculture Statistics (CWP–AS).

The Workshop noted that the information requirements for the aquaculture sector is quite divergent from those for the capture fisheries sector, which demands more detailed and integrated structural and socio–economic data. On the other hand, both sectors share common data requirements especially in terms of species and commodities. The Workshop also recognized a number of significant interactions between aquaculture and capture fisheries which include sourcing of feed and seed resources for aquaculture from capture fisheries, capture–based culture and culture–based fisheries, and stock enhancements practices. The Workshop recognized that the Coordinating Working Party on Fisheries Statistics (CWP–FS) covers aquaculture in its Terms of Reference, however noted that it does not currently pay adequate attention to aquaculture issues.

Considering the above, the Workshop <u>recommended</u> that CWP–AS should be established within the framework of the CWP–FS, however that it should have its own Terms of Reference, rules of procedure and composition to reflect the specific needs of the aquaculture sector and thereby empowered to achieve the overarching objectives. Particularly, in recognition of the fact that aquaculture is an activity almost entirely undertaken within national boundaries, and in order to reflect this, the Workshop <u>agreed</u> that the composition of CWP–AS should be broader than that of the CWP–FS.

#### **Terms of Reference**

The Workshop <u>recommended</u> that the CWP–AS should have the following objectives (to remain consistent with the objectives of the CWP–FS):

- 1. keep under continuous review the requirements for information and data on aquaculture statistics
- 2. develop standard concepts, definitions, classifications and methodologies for the collection, collation, analysis and dissemination of aquaculture data, information and statistics, and
- 3. make recommendations for coordination and harmonization of activities in collecting, analysing and disseminating aquaculture statistical data and information.

## In particular the CWP-AS shall:

- 1. identify and discuss major issues and requirements on aquaculture information, data and statistics;
- determine those issues and needs of importance requiring action to improve information, data and statistics for increasing the sustainable contribution of aquaculture to food security, economic development and poverty alleviation;
- 3. recommend actions to coordinate and harmonize aquaculture information and statistical data collection, collation and dissemination procedures;
- 4. advise on mechanisms to prepare, facilitate and implement action towards meeting the growing demand for timely and reliable information, data and statistics on aquaculture;
- advise on the strengthening of international collaboration to assist developing countries in improving and harmonizing aquaculture information, data and statistics collection, collation and dissemination procedures;
- 6. advise on the preparation of technical reviews on information, data and statistics on aquaculture of international significance.

The CWP–AS should have a primary focus on aquaculture for food production. It may also provide appropriate guidance for data collection on aquaculture production for non–food use, including species destined for ornamental purposes, alginate, pharmaceutical and other types of processing for non–food use.

The CWP-AS should maintain close coordination with other organizations with relevance to and interest in aquaculture and related activities (e.g. WTO, CWP-FS, CODEX ALIMENTARIUS COMMISSION, FAO-ES, OIE, ISO/TC 234, etc.) in order to ensure consistencies with existing systems and procedures and avoid duplication.

## Composition

The CWP–AS shall be composed of experts nominated by participating organizations which have a competence in aquaculture statistics. The following shall be the participating organizations initially:

- 1. the current participating organizations of the CWP–FS having relevance and/or interest in aquaculture statistics;
- 2. other regional organizations relevant to aquaculture statistics; and
- 3. regional associations of aquaculture producers and service providers.

Participating organizations may admit other intergovernmental or non-governmental organizations having relevance in aquaculture statistics to be participating organizations. Participating organizations may withdraw from the Working Party.

The Workshop recognized that a participating organization of the CWP–AS will not necessarily be a participating organization of the CWP–FS. The interested regional organizations participating in the CWP–AS are encouraged to apply for participation to the CWP–FS.

### Operational aspects

The CWP-AS would hold its regular sessions in conjunction with the COFI Sub-Committee on Aquaculture, on a biennial basis. The importance of participation by major producing countries was noted but the Workshop agreed their participation should be ensured through invitation by participating organizations. When discussing issues relevant to both aquaculture and capture fisheries, CWP-AS should extend the invitation to participating organizations of CWP-FS.

The CWP-AS could establish ad hoc working groups, as appropriate, to discuss specific issues, with participation of experts nominated by participating organizations. The Workshop recognized the need for frequent discussion during the initial years. Depending on the topics covered, relevant countries, stakeholders and interested groups should be invited through nomination by participating organizations. Outcomes from ad hoc working groups should be reported to and endorsed by CWP-AS regular sessions.

Chair of CWP-AS should report the outcomes of its regular sessions to CWP-FS sessions and should regularly inform the COFI Sub-Committee on Aquaculture.

English would be used for meetings, report writing and dissemination of outcomes.

Following to the approval of the third session of the Committee on Fisheries (COFI)
Sub-Committee on Aquaculture (New Delhi, 2006), and the twenty-seventh session of COFI
(Rome, 2007) to establish an interregional mechanism for aquaculture similar to the Coordinating
Working Party on Fishery Statistics (CWP-FS), the Workshop was called to address the need for
data and information coordination in aquaculture and objectives, characteristics and structure
suitable for the Coordinating Working Party for Aquaculture (CWP-AS).

After reviewing the data and information requirements in aquaculture and existing gaps in data collection, the necessity to harmonize standards for data, information and statistics, the relations between capture fishery and aquaculture, and structure and activities of CWP-FS, the Workshop reaffirmed the need for a mechanism to identify, establish and harmonize standards for aquaculture data, information and statistics.

he Workshop recommended the establishment of the CWP-AS within the framework of the CWP-FS, but with its own terms of reference (TORs), rules of procedure and composition to reflect the specific needs of the aquaculture sector. The Workshop further developed a detailed proposal of functions and structure of such a body including TORs, composition and operational aspects which are attached as Appendix 3.

ISBN 978-92-5-105939-5

ISSN 0429-9337



TR/M/I0005E/1/04.08/1500