

Report of the

**THIRD AD HOC MEETING OF INTERGOVERNMENTAL
ORGANIZATIONS ON WORK PROGRAMMES RELATED
TO SUBSIDIES IN FISHERIES**

Rome, 23-25 July 2003



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PREPARATION OF THIS DOCUMENT

This is the final report of the Third Ad Hoc Meeting of Intergovernmental Organizations on Work Programmes Related to Subsidies in Fisheries, held in Rome, Italy, from 23 to 25 July 2003.

Distribution:

Participants at the meeting
All FAO Members
FAO Fisheries Department
FAO Regional Fishery Officers

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ABSTRACT

The Third Ad Hoc Meeting of Intergovernmental Organizations on Work Programmes Related to Subsidies in Fisheries took place at FAO headquarters from 23 to 25 July 2003. Representatives from the Asia-Pacific Economic Cooperation Council, the Association of Southeast-Asian Nations, the Caribbean Community Secretariat, the Food and Agriculture Organization of the United Nations, the Organisation for Economic Co-operation and Development, the Permanent Commission for the South Pacific, the United Nations Environment Programme, the World Trade Organization and three invited experts attended the meeting. Mr Ulf Wijkström, FAO Fisheries Department, acted as chairperson of the meeting. The agenda contained two main items: (i) presentation and discussion of current work programmes on subsidies in fisheries and (ii) presentation and discussion of methodologies used by participating organizations to establish the effects and impacts of subsidies. Under this point, FAO presented its work programme related to fisheries subsidies. The main component of this work programme is a number of fishery-specific case studies on the impact of subsidies. The impact would be established by undertaking: (i) descriptive and qualitative trend analysis of a number of selected subsidies and indicators; (ii) quantitative analysis of the effects of subsidies on effort and resources through a simple model; and (iii) elaboration of the Hannesson framework (OECD) intended to measure the importance of the fisheries management regime in determining the impact of subsidies. Given the limited time available to undertake the studies it is expected that the results of the studies are unlikely to give final answers.

The meeting discussed at length the draft FAO work programme. It addressed the overall technical relevance and realism of the study, its objectives, the analytical procedures and models proposed for the analysis and the assumptions, limitations and concerns that need to be considered in the implementation of the work programme.

The representatives from the various Intergovernmental Organizations expressed their support of the proposed work plan, their eagerness to learn from its results, and a willingness to assist whenever possible. There was a general agreement that the proposed work constituted a very important first step in the analysis of historical impacts of fisheries subsidies in individual fisheries.

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INTRODUCTION

1. The Third Ad Hoc Meeting of Intergovernmental Organizations on Programmes of Work Related to Subsidies in Fisheries took place at FAO Headquarters in Rome from 23 to 25 July 2002.

2. Representatives from the following Intergovernmental Organizations (IGOs) participated in the meeting: the Asia-Pacific Economic Cooperation (APEC), the Association of South-East Asian Nations (ASEAN); the Caribbean Community and Common Market (CARICOM); the Permanent Commission for the South Pacific (CPPS), the Food and Agriculture Organization of the United Nations (FAO), the Organisation for Economic Co-operation and Development (OECD), the United Nations Environment Programme (UNEP) and the World Trade Organization (WTO). The names of the participants are listed in Appendix B.

OPENING OF THE MEETING

3. The Third Ad Hoc Meeting was opened by Mr Ichiro Nomura, the Assistant Director-General of the FAO Fisheries Department. His introductory speech appears in Appendix C.

4. The Third Ad Hoc Meeting agreed that Mr Ulf Wijkström, Chief of the Fishery Development Planning Service, FAO Fisheries Department, act as Chairperson.

ADOPTION OF THE AGENDA

5. The Third Ad Hoc Meeting adopted the Agenda as contained in Appendix A to this report.

REVIEW AND DISCUSSION OF ONGOING WORK PROGRAMMES

6. As a first step towards defining future of FAO work on fisheries subsidies, each participant provided a brief review of the subsidies-related work being conducted within the various IGOs and the research agendas of the three invited experts.

Overview of ongoing work-programmes

7. In preparation for this agenda item FAO had commissioned a study of work undertaken by European based IGOs on fisheries subsidies. The report "Effects and Impacts of Subsidies: a review of missions and methods" was made available to participants before their arrival in Rome. It is attached to this report as Appendix D.

8. As recommended by the previous ad hoc meeting (July 2002) FAO had invited a large number of IGOs to attend the meeting. Amongst those invited were: Association of Caribbean States (ACS), Division for Ocean Affairs and the Law of the Sea (DOALOS), European Fair Trade Association (EFTA), United Nations Conference on Trade and Development (UNCTAD) and United Nations Industrial Development Organization (UNIDO). Two representatives of Southern African Development Community (SADC) were prevented at the very last moment from attending the meeting.

Asia-Pacific Economic Cooperation (APEC)

9. Mr Stetson Tinkham presented the work of the APEC Fisheries Working Group and began by noting the direct involvement of leaders of the 21 member economies through annual Ministerial meetings, the outcomes of which include APEC Economic Leaders' Declaration. Through this Declaration, the member economies expressed support for the abolition of subsidies and endorsed the Osaka Action Agenda.

10. Charged with this mandate, the APEC Fisheries Working Group¹ made attempts to study the nature and extent of subsidies in the APEC member economies but found it very difficult to extract data on the magnitude of subsidies within member economies. In summary, the difficulty in collecting data on subsidies in fisheries is the major impediment to analyzing the effects of subsidies.

Association of Southeast Asian Nations (ASEAN)

11. Mr Somsak Pippopinyo reported on ASEAN involvement with fishery subsidies, stating that having considered a number of possible impacts and consequences on social, economic and the environmental outcomes, including potential implications on trade-related issues, ASEAN Member Countries continue to monitor and address the issues of fisheries subsidies. This is done through the ASEAN Sectoral Working Group on Fisheries (ASWGFi), under the "Program on Fish Trade". The issues are also discussed as a regular agenda in the collaborative efforts between ASEAN and Southeast Asian Fisheries Development Center (SEAFDEC) through the ASEAN-SEAFDEC Fisheries Consultative Group (FCG) meetings.

12. However, since the last report to the Second Ad Hoc Meeting of Intergovernmental Organizations on Work Programmes Related to Subsidies in Fisheries, held in July 2002, very little work has been completed for the in-depth study on fisheries subsidies in the ASEAN region. Initial work and efforts were basically focused on compilation and identification of the fisheries subsidies provided by individual Member Countries' governments. The different types and details of subsidies and their effects, however, were not yet well investigated.

13. In general, ASEAN Member Countries were of the view that most of their fisheries activities are at small-scale and non-industrial levels. Government support is to provide a vital incentive to change unsustainable fishing practices, to avoid over-fishing, and are not considered to cause significant trade distortions. A large proportion of government transfers to the fisheries sector in ASEAN Member Countries is necessary for basic infrastructure development, to keep pace with emerging global product standards, to promote change toward sustainable practices, for poverty alleviation, or for other social reasons.

14. ASEAN was also of the view that the levels of subsidies in Member Countries were low compared to other regions/countries. However, further studies on the extent and impact of subsidies are required. In this regard, ASEAN Member Countries have decided that "in collaboration with international technical organizations such as the Food and Agriculture Organization of the United Nations (FAO) and the World Trade Organization (WTO), assess the impact of government subsidies on fisheries, particularly on the needs of small-scale fisheries in the ASEAN region and sustainable fisheries.", as stipulated under the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region, which was adopted

¹ <http://www.apecsec.org.sg/workgroup/fish.html>

during the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security in the New Millennium: "Fish for the People" in November 2001.

15. Toward this end, ASEAN Member Countries intend to:

- Carry out in-depth empirical studies of the effects of fisheries subsidies on resource sustainability and trade in fish and fish products, whenever information on these effects is missing or doubtful, and before deciding on removal of fisheries subsidies.
- Assemble and review available experience on how to phase out subsidies, including an evaluation of any lessons that can be learned from the experience obtained in removing agricultural subsidies.
- Conduct a census of fishery subsidies throughout all sub-sectors of the fishery sector at suitable intervals.
- Develop an ASEAN consensus on what would constitute a suitable categorization of fisheries subsidies to be used in the forthcoming WTO negotiations on fishery subsidies.

Caribbean Community (CARICOM)

16. Mr Milton Haughton of the Caribbean Regional Fisheries Mechanism (CRFM), alerted the meeting to the lack of data, information and documentation regarding the nature, extent and impact of subsidies on the fisheries of the region. However, there is a growing interest in this subject; therefore steps are being taken within the CRFM, including strengthening the collection of social and economic data to improve understanding of the social and economic characteristics of the fisheries and in the context of these studies will seek to isolate and consider the issue of subsidies and their impact on the fisheries. In addition, CARICOM will support a short-term consultancy analyzing the impacts of trade liberalization on CARICOM countries; hence, fisheries subsidies, to be completed by December, 2003.

17. Mr Haughton noted that CARICOM countries may provide direct or indirect subsidies to the fisheries sector in the form of incentives aimed at stimulating growth and development of fisheries and aquaculture primarily by reducing the cost inputs. These have typically included the provision of subsidized fuel, duty concessions on the purchase of fishing gear and equipment including fishing boats and engines, and the provision of subsidized loans to fishermen through special credit schemes.

18. Mr Haughton further explained that the CRFM is interested in clarifying and improving understanding of the nature and extent of subsidies and their relationship to over-exploitation and trade distortions and subsequently to improve disciplines on subsidies in the fisheries sector within the context of the WTO negotiations. Mr Haughton further highlighted the special situation of the small island developing states and the need for special and differential treatment regarding future subsidy disciplines. He said that more technical assistance is needed, especially from the international environmental organizations such as UNEP and FAO to support the efforts of the countries.

19. However, government subsidies to the fisheries sector have been substantially reduced over the past two decades and the CARICOM considers subsidies to be negligible in the Caribbean. This is largely due to the structural adjustment policies adopted by the governments and the fact that resources are not available to provide significant support to the fisheries sector.

20. Following this presentation, participants' interventions revolved around the difficulties faced by many small developing states given the small-scale nature of many of their fisheries and, therefore, the dependency on subsidies to support the government management structure.

Permanent Commission for the South Pacific (CPPS)

21. Mr Alfonso Jalil reminded the meeting of the maritime policy coordination role that the CPPS plays for its four member states: Chile, Colombia, Ecuador, and Peru. The Economic Directorate of the CPPS is presently compiling studies performed by IGOs and others in major fishing countries in order to inform the November, 2003 CPPS General Assembly of on-going and completed work within the fisheries subsidies arena. These actions obey the mandates given to the General Secretariat by the "Ministerial Declaration of Santiago 2000" article 21, and the "Ministerial Declaration of Santiago 2002" article 15.

22. Mr Jalil informed the meeting that CPPS governments no longer provide significant subsidies to their fisheries; however, many fisheries were developed in the early years with the support of subsidies. There remains a great deal of interest about fisheries subsidies among these countries because of the possible links between subsidies and trade and the environment.

23. In addition, member countries would be interested in learning about the indirect effects of subsidies, provided to third-country vessels, on stocks of migratory species fished on the high seas.

24. Finally, Mr Jalil mentioned studies on fisheries subsidies within Chile and the desire of the Commission to proceed toward an analysis of the impacts on trade, environment and sustainable development of such subsidies.

Food and Agriculture Organization of the United Nations (FAO)

25. Mr Angel Gumy provided an overview of the FAO Fisheries Department's work programme with regard to fisheries subsidies. The main recent and on-going activities of this programme include:

- *Technical activities*

Two Expert Consultations on fisheries subsidies were organized in 2000 and 2002. In the middle of 2004, FAO will hold an Inter-Governmental level Consultation to consider the issues of subsidies in fisheries. The Fisheries Department also continues to monitor the economic performance of capture fisheries and to review fisheries financial transfers.

- *Promotion of cooperation with other relevant organizations such as the WTO, OECD, UNEP and others in the field of subsidies in fisheries*

Two IGO ad hoc meetings on work programmes related to subsidies in fisheries were organized by the Department in 2001 and 2002 and the current meeting is the third one. FAO has also attended, as an observer, all relevant meetings in WTO-CTE, OECD and UNEP and others during the last four years.

- *Technical reports*

In the course of 2003 FAO will be publishing two Fisheries Technical Papers, i.e. Guide for Identifying, Assessing and Reporting on Subsidies in the Fisheries Sector- FAO Fisheries Technical Paper 438 and Introducing Fisheries Subsidies – FAO Fisheries Technical Paper No. 437.

26. With regard to future activities, the Twenty-fifth Session of the Committee of Fisheries (COFI) confirmed the importance of the subsidies issue, especially in the light of the World Food Summit on Sustainable Development (the Johannesburg Summit 2002) and the Fourth WTO Ministerial Conference (Doha). The Committee urged FAO to accelerate its work in relation to the impact of subsidies on fisheries resources sustainability and sustainable development. The Committee also encouraged FAO to continue promoting cooperation and coordination with other relevant intergovernmental organizations such as the WTO, OECD, UNEP and others in the field of fisheries.

27. The Committee also agreed that FAO should convene a Technical Intergovernmental Consultation. In this Consultation, attention should be given to a practical mandate to consider the effects of subsidies on fisheries resources, such as effects on IUU² fishing and overcapacity. Many Members recommended that the Technical Consultation should take into account the impacts of subsidies on sustainable development, trade in fish and fishery products, food security, social security and poverty alleviation, especially in the context of recognizing the special needs of developing countries and small island developing States as recognized in international instruments. COFI stated that the Technical Consultation should also consider the ways in which FAO can support the WTO's work on fisheries subsidies, noting the independence of the WTO timetable.

28. As a next step in investigating the impact of fisheries subsidies and also as part of the preparatory work for the Technical Consultation, the FAO Fisheries Department is now planning a series of case studies. The intention is to carry out six or eight case studies in different countries from different parts of the world. The overall objective of the case studies is to improve the current knowledge on what environmental, economic and social impact subsidies have and by what mechanisms these effects are created. More specifically, the intention is that the case studies will give information regarding the mechanisms by which subsidies work. Related to this, the outcome of the case studies should also give indications with regard to:

- What role do subsidies play with regard to IUU fishing and overcapacity?
- What are the particular issues with regard to developing countries?
- How can the trade-offs between positive (good) impact and negative (bad) impact on the different aspects of sustainable development – economic, environmental and social effects – be understood and measured?

29. It is expected that the case studies and the analysis of their results will provide a good insight into the above listed issues. However, it is not realistic to expect the work to give final answers. Hence, an additional objective of the work is to clearly identify further empirical and theoretical research needs.

² IUU: Illegal, Unreported and Unregulated Fishing

Organisation for Economic Co-operation and Development (OECD)

30. Mr Anthony Cox briefed the meeting on OECD's work programme with regard to fisheries subsidies. The main recent and current activities of the OECD relating to fisheries subsidies include:

- *Collection of information on government financial transfers (GFTs) in member countries and the study "Transition to Responsible Fisheries"*

The report of the study was published in 2000 and includes a review of the impact of GFTs on resources. The work has also generated a time series of government transfer data for the years 1996-2001.

- *Study on fisheries markets liberalization*

The report of the study, "*Liberalising fisheries markets: Scope and Effects*", was published in early 2003 and includes a component on GFTs using an analytical framework developed by Mr R. Hannesson. The analysis links the impact of subsidies to the type of management regime in place and to the state of the stocks.

- *Environmentally harmful subsidies*

The work on environmentally harmful subsidies is a horizontal/cross-sectoral project. A workshop was held in November 2002 to review the methodologies used and to define further work. The proceedings of the workshop will be available in August 2003. It was agreed that an analytical tool called "the checklist" would be used in a stocktaking exercise and that it should be tested in a number of sector case studies. It was felt that the checklist could constitute a practical method for identifying environmentally harmful subsidies. The fisheries sector will constitute one of the case studies. Another workshop on environmentally harmful subsidies will be held 3-4 November 2003.

- *Analysis of the broader effects of fisheries subsidies and their relation to sustainable development*

The need to look at the impact of fisheries from a more holistic perspective was identified during the work on the market liberalization study. Accordingly, the three pillars of sustainable development – the environmental, economic and social components – will be examined with a view to provide an analytical basis for a better understanding of the obstacles to policy reform. Parts of the methodological framework still need to be developed, in particular with regard to the social aspects. In the final analysis, when pulling together the three pillars, linkages and trade-offs between the different components will be explored. In addition to the marine capture fisheries, the aquaculture, processing and marketing sectors will also be included in the work. The project started this year and will be finalized in 2005.

31. Moreover, with regard to a closely related issue, a *workshop examining IUU fishing* from an economic perspective will be organized in April 2004.

United Nations Environmental Programme (UNEP)

32. Ms Anja von Moltke presented UNEP's work on fisheries subsidies. The organization's mandate gives priority to work with developing countries and economies in transition. Within this framework, UNEP is assisting countries in improving their abilities with regard to assessing fisheries subsidies and their impact, and in finding ways to reduce environmentally harmful subsidies. This work has focused on understanding the relationship between fisheries subsidies, overcapacity and the sustainable management of marine resources. The main activities are:

- *Country case studies*

Country case studies on the assessment of fishery subsidies have been carried out in Argentina, Senegal, Mauritania and Bangladesh. An important element in this work has been capacity building and the studies have involved a wide range of stakeholders. The studies have used various approaches for assessing impact of subsidies but no common methodology has as yet been developed.

- *Development of theory and analytical frameworks*

Analytical work on the impacts of different types of fisheries subsidies under different management and bio-economic conditions is being undertaken by the consultant G. Porter on behalf of UNEP. An informal Expert Consultation was organized by UNEP in July 2003 discussed the analytical framework used in the report and its initial results. The draft report is now being revised and a new version will be circulated to governments in preparation for a workshop scheduled for November 2003.

- *Workshops*

UNEP has over the last years regularly organized workshops in consultation with other IGOs. These workshops, organized on a more or less annual basis, have aimed at creating awareness with regard to issues relating to sustainable fisheries management and fishery subsidies. They involve governments, IGOs, NGOs, regional fisheries bodies and other stakeholders and provide a forum for open discussion. The next event planned is the meeting in November 2003. In this meeting, the results of the analytical work mentioned above and the UNEP country studies will be presented. Other organizations are also invited to present their work in this field. The meeting will also assess in what areas UNEP could do useful work in the future, in particular with regard to capacity building and analytical work

World Trade Organization (WTO)

33. Ms Christina Schröder from the WTO explained the history of the natural resources based products – including fish and fishery products – within the framework of GATT and WTO. While these products were discussed already in the Uruguay Round, it was only in the Fourth Ministerial Conference in Doha in 2001 that a clear mandate for negotiations on fisheries subsidies was provided and that it was agreed that the WTO rules should be clarified and improved in this regard.

34. The relevant negotiations are taking place in the Negotiating Group on Rules. The WTO members will review progress at the Fifth Ministerial Conference to be held in Cancún, Mexico, in September 2003. According to the timetable set out in the Doha declaration, the negotiations should be finalized by 1 January 2005.

35. Ms Schröder noted that, although the requirement to notify the WTO of the use of subsidies in fisheries, only twenty out of 146 member countries have supplied this information and with varying levels of detail. In order to increase notification rates, the WTO has held seminars on completing and improving the notifications.

Invited experts

36. Three invited experts, Rögnvaldur Hannesson, William Schrank, and Basil Sharp, described their work and interests concerning fisheries subsidies. Mr Hannesson described his work modelling the links between management regimes and subsidies with the OECD; Mr Schrank described his work on econometric models of the Newfoundland Fisheries, which was followed by studies in which he found that for certain years, government spending on fisheries exceeded the value of landings in these fisheries. Mr Schrank's interest lies in understanding why these situations occur.

37. Mr Sharp described his time-series work regarding New Zealand fisheries from their subsidies-based beginning through their transformation into a rights-based system. Mr Sharp stated an interest in mapping out how subsidies are transformed into observable results (e.g. stock effects, technical change).

Methodologies used by participating organizations to establish the effects and impacts of subsidies

38. Ms Lena Westlund presented a proposal for how the planned FAO Fisheries Department case studies could be carried out. She explained the mandate given to the Department by the Committee on Fisheries, pointing out the emphasis given to the impact of subsidies on overcapacity, IUU fishing and sustainable development. The main questions that the studies are going to attempt to find answers to were outlined, i.e.:

- What impact do different types of subsidies have and can subsidies be categorized according to their impact?
- What particular circumstances influence the impact of subsidies (e.g. fisheries management regimes)?
- By what mechanisms is impact created and what is the role of subsidies with regard to capacity and IUU fishing?
- How can impact be measured and how can trade-offs between different types of effects be assessed?

39. Ms Westlund suggested that case studies be carried out in 6-8 countries and that the studies only cover the marine capture fisheries subsector. It was also proposed that the focus of the studies be clearly defined and that one specific fishery be selected in each country. Moreover, the studies could focus on a selected number of subsidies that potentially lead to overcapacity and IUU fishing (infrastructure, decommissioning schemes and income support) and the impact analysis could concentrate on a limited number of aspects, e.g. effects on the

target stock and on the livelihoods of fishing communities, in particular with regard to income and employment.

40. The analytical part of the work would cover three components:

- descriptive and qualitative trend analysis of a number of selected subsidies and indicators;
- quantitative analysis of the effects of subsidies on effort and resources through a simple model; and
- elaboration of the Hannesson framework (OECD) regarding the importance of the fisheries management regime and assessment of its relevance for the case study fisheries

41. The in-country work should preferably be finalized in January 2004. The results of the individual studies would then be explored and synthesized into a report to be presented to the Technical Consultation scheduled for June next year.

42. Given the limited timeframe of the work, it was pointed out that the results of the studies are unlikely to give final answers to the questions defined above. Nevertheless, it is expected that a better understanding of the qualitative and quantitative effects of subsidies – as well as of the mechanisms by which they are created – will be achieved and that this will help formulate new research questions and define the need for further work. Copies of the presentation (in the form of printed PowerPoint slides) are enclosed in Appendix E.

43. Within this presentation, Ms Westlund provided the meeting with an outline for discussing the overarching questions and methodologies to consider when developing the FAO work plan on subsidies for the coming six months to a year. Issues considered included the following six areas:

1. Are the questions asked relevant and realistic?
2. Is the focus adequately defined?
3. What analytical procedures and models would be applicable for the analysis?
4. What assumptions, limitations and concerns need to be considered?
5. Are there aspects of the study that could be changed to benefit the IGO community better?
6. Is there scope for closer collaboration, with regard to the proposed case studies or in follow-up work?

1. Are the questions asked relevant and realistic?

44. The first question is general in nature. It allowed the meeting to ascertain whether the proposed research questions – or issues – are indeed tractable, independent of time and funding constraints.

1.1 What impact by what type of subsidy?

45. The meeting decided that although establishing a link between subsidies and their economic, social and environmental impacts would be a difficult task, there is merit in trying to disentangle such effects, perhaps by starting with the more evident subsidies. One participant noted the utility of determining a hierarchy, if not magnitude, of effects in order to assist decision makers in prioritizing amongst the various subsidies and their tradeoffs. For example, if the subsidies take the form of either cost reducing or revenue enhancing subsidies, it would be relatively easy to make adjustment to a model and estimate the effect of such

subsidies. Other subsidies, on the other hand, would necessitate changes in the model itself adding an additional layer of complexity to the work.

1.2 What are the mechanisms and role of subsidies regarding overcapacity and IUU fishing?

46. On the link between subsidies, overcapacity and IUU fishing, the meeting clarified the notion that fisheries subsidies create incentives to invest in a fishery through adjusting the cost and revenue functions of firms; therefore, it is analytically possible to determine the link between subsidies and overcapacity. The problem of IUU fishing arises as a result of poor enforcement and from inadequate management and legal frameworks. However, the underlying economic framework for analysing IUU fishing is similar to that used for analysing non-IUU fishing. Therefore, IUU fishing could be analysed after the economic/operational links between subsidies and overcapacity have been established.

1.3 How to measure impact and assess trade-offs?

47. Given the multiple and often contradictory objectives each government faces (e.g. maximize economic development, maximize employment, minimize the effects on the environment), the meeting saw a need to focus the analysis on impacts and trade-offs among sustainable development and resource stability (i.e. trade-offs between natural and man-made capital, capital and labour).

1.4 What surrounding circumstances are important?

48. When the time-series data collected exhibit unexplainable trends, one would need to explore all possible surrounding circumstances (e.g. management regime, general economic state, expectations of fishers, stock status, access to markets, international trade) to help explain these trends. Given the limitations of the current work-plan, it was decided that management regime and stock status are to be considered the minimum country-specific circumstances to be analysed.

2. Is the focus adequately defined?

2.1 Types of subsidies potentially leading to overcapacity?

49. The meeting agreed that the subsidies to be studied should be policy relevant. The meeting discussed a list of subsidies hypothetically linked, whether overtly or less obviously, to overcapacity. The meeting then agreed that infrastructure, decommissioning schemes, income support, boat building schemes and modernization/enhancement subsidies would be amongst those useful to study. There was general recognition that a possible lack of interest amongst countries to participate in these studies would limit the possibility to select case studies on the basis of the types of subsidies that it could be interesting to analyse.

2.2 Sub-sector (marine capture fisheries)?

50. The meeting agreed to begin analysing subsidies among marine capture fisheries.

2.3 Impact on target stocks and livelihoods of fishers?

51. This question related to the prioritization amongst four general categories of subsidies impacts on sustainable development: target stocks, marine environment, macro-level economic effects, and social well-being (micro-level economic) effects. Although a complete analysis should comprise all four categories as decision makers need to know the full range of impacts, it was recognized that the effects of subsidies on the marine environment and macro-level effects should be considered when feasible. At a minimum, the analyses should determine the impacts on the target stocks and the micro-level effects (e.g. income and employment).

3. What analytical procedures and models would be applicable for the analysis?

3.1 What indicators should be used for descriptive trend analysis regarding mechanisms and impacts (capacity, resources, livelihoods)?

52. While an exhaustive list of indicators would be ideal (see examples in Table 2 of Ms Westland's report in Appendix D) the meeting needed to define a minimum set of quantitative indicators comprising stock levels and trends, value of captures, cost and revenue structures, fishing fleet size (gross tonnage, number of vessels), fishing effort, employment, and subsidies. Less emphasis should be placed on trade aspects of the fisheries, unless these data are readily available and easily incorporated into the analysis.

53. Qualitative indicators, such as governance, degree of co-management, and regime changes over time, would certainly add to the explanatory abilities of this analysis and should be included whenever possible.

3.2 Would the proposed quantitative model be useful?

54. The meeting noted that it would be highly desirable to initiate work to develop quantitative models suited for the analysis of empirical data on fisheries receiving subsidies. A simple analytical model, based on a theoretical model developed by Ragnar Arnason, was proposed by Mr Schrank. The proposed model would allow for an estimation of the magnitude of the effects of subsidies on industry profits, fishing effort, and stocks. Limitations of this model include the restriction to cost decreasing or revenue enhancing subsidies and the use of simplified production and population dynamics equations. However, this model does not contain heavy data requirements, is simple to use and interpret, other types of subsidies may be included by adjusting the effort equation, and capture limits could easily be included in the model. This model has not been tested for appropriateness in a real-world scenario; therefore, a test run using real data is necessary before applying this model to the afore-mentioned case studies. The meeting endorsed this approach.

3.3 Can the link to the OECD-UNEP work be incorporated and would it be meaningful?

55. There was general agreement that this work would be complementary to the OECD work and would follow a similar path as that of the UNEP work.

4. What assumptions, limitations and concerns need to be considered?

56. Several additional concerns were highlighted by the meeting including:

- The acknowledgement that separating the effects of subsidies from effects of other factors would be very difficult and there is no well-established empirical methodology to do so.
- A descriptive trends analysis will be useful but may not necessarily provide the linkages between subsidies and the observed effects.
- Further, long-term work will be necessary to develop complete time-series models in order to estimate elasticities, which could be used in a more complex management scheme models.
- The difficulties to obtain facts about existing subsidy schemes must be recognized and accepted both in the choice of case studies and in deciding on the reporting format.
- It would be preferable to make public all data and research results. Confidentiality of data would affect the value of the research. A blind presentation of the results (not identifying countries concerned) would restrict the ability to replicate results. However, there are also several means of providing useful information such as providing relative magnitudes of impacts in lieu of absolute magnitudes and impacts. In addition, choosing countries for which published studies already exist would assist the FAO in attaining country consent to use their data.
- The short period of time available to carry out the studies was recognized as a severe limit on what can be achieved.

57. It was suggested that the case studies would be the first empirical application of analytical work, moving one step closer to linking the theoretical knowledge with real-world scenarios. In conclusion the meeting recognized that the case studies as proposed will undertake empirical work so far not attempted at the level of individual fisheries on the relationships between subsidies and their impact on resources and livelihoods. Therefore it seemed reasonable to initiate in parallel with the proposed work programme the development of a more elaborate analytical framework (possibly in the form of an econometric model). However, such an effort would probably need at least a year's research effort just to develop the model.

5. Are there aspects of the study that could be changed to benefit the IGO community better?

58. Ms Schroder of the WTO suggested that trade aspects be built into the model in order to describe the link, if any, between subsidies and trade distorting effects. Mr Jalil seconded the need to include impacts on trade as decision makers are in need of such information. However, the difficulty of doing so and the lack of a mandate to do so place this suggestion into future research needs. Mr Cox of OECD confirmed that the work programme as proposed is complementary to the work done by OECD; work that is at a higher level of aggregation. Mr Tinkham believed that the work programme as proposed might stimulate the APEC fishery working group to develop project proposals that might be complementary in nature for the Pacific Rim Economies. Mr Haughton of CARICOM, as well as Mr Pippopinyo of ASEAN, also expressed the view that the work programme, if executed, would be beneficial to their own efforts in the field of fishery subsidies³.

³ The representative of UNEP, Ms A. Moltke, for reasons beyond her control, was unable to participate in this discussion.

6. Is there scope for closer collaboration, with regard to the proposed case studies or in follow-up work?

59. The representatives from the various IGOs expressed their support of the proposed work-plan, their eagerness to learn from the results, and a willingness to assist whenever possible. All acknowledge that this was a very important first step in the analysis of historical impacts of fisheries subsidies at the level of individual fisheries.

CONCLUSION

60. IGO representatives found the meeting useful and agreed that it is important that these meetings be continued. F AO was asked to encourage a larger number of IGOs to participate in the meeting.

ADOPTION OF THE REPORT

61. The report was adopted on 25 July 2003.

AGENDA

1. Opening of the meeting
2. Administrative arrangements for the meeting
3. Adoption of the Agenda
4. Review and discussion of ongoing work programmes
 - 4.1 Overview of ongoing work-programmes
 - 4.2 Methodologies used by participating organizations to establish the effects and impacts of subsidies
5. Adoption of the report

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**SPEECH BY MR I. NOMURA, ASSISTANT DIRECTOR-GENERAL
FAO FISHERIES DEPARTMENT**

Welcome to the Third Ad Hoc Meeting of Intergovernmental Organizations on Work Programmes Related to Subsidies in Fisheries.

Several of you have attended one or both of the previous meetings. The first took place in the summer of 2001. We organized it following the instructions of the FAO Committee of Fisheries, which met in the beginning of that year. COFI considered that some savings, and possibly some synergies, could be obtained by bringing together those directly concerned with fisheries subsidies in intergovernmental organizations.

We hope to achieve such effects also in this meeting. And we do look forward to hearing from you about your various ongoing and planned activities related to fisheries subsidies.

In addition, in this meeting we would very much like to draw on the collective wisdom of the group; this to give an appropriate shape to our own work programme.

Our concern is not about what we should achieve – that COFI has told us. In respect of fisheries subsidies COFI recommended that we should focus the Technical Consultation on subsidies to be convened next year on the relationship between fishery subsidies on the one hand and fishing capacity and IUU fishing on the other. So our concern now is: what is the best procedure for generating new and useful knowledge about the relationship between fishery subsidies, fishing capacity and IUU fishing? How should we go about developing such new knowledge?

In order for the meeting to come to some conclusions on these difficult questions we have strengthened the secretariat. We have done so first by asking Lena Westlund to review ongoing activities in IGOs on subsidies. You will have seen the result of Lena's enquiry in a document that I believe you should all have received before arriving here. Lena has also, in cooperation with our staff, developed some of the details of a potential work programme on fishery subsidies. In doing so we have relied on the work already carried out in our sister IGOs – and we are grateful for the kind reception you gave to Lena during her recent visits in Paris and Geneva.

We have further strengthened the secretariat by inviting to this meeting three well known academicians: Professors Hanesson, Schrank and Sharp. We count on them to help us and give us guidance throughout the development of the practical aspects of our work programme.

I look forward with much interest to the outcome of this meeting. Unfortunately I will not be able to spend much time with you here in the India room, but I will keep myself informed of your progress.

I wish you good luck with the meeting and an enjoyable stay in Rome.

**EFFECTS AND IMPACTS OF SUBSIDIES:
A REVIEW OF MISSIONS AND METHODS**

**A report prepared for the Third Ad Hoc Meeting of Intergovernmental
Organizations on Work Programmes Related to Subsidies in Fisheries
held in Rome from 23 to 25 July 2003**

Prepared by Lena Westlund
FAO Consultant

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ABBREVIATIONS

ACS	Association of Caribbean States
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CARICOM	Caribbean Community
CFP	Common Fisheries Policy (EU)
COFI	FAO Committee on Fisheries
CPPS	Permanent Commission for the South Pacific
CTE	Committee on Trade and Environment (WTO)
DMD	The Doha Ministerial Declaration (WTO)
EFTA	European Free Trade Association
EC	European Communities
EU	European Union
FIP	Fishery Policy and Planning Division (FAO)
GFT	Government Financial Transfer
IGO	Intergovernmental Organization
IUU	Illegal, unreported and unregulated (fishing)
MSY	Maximum Sustainable Yield
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
SADC	Southern Africa Development Community
SCM	Agreement on Subsidies and Countervailing Measures (WTO)
UN	United Nations
UNEP	United Nations Environment Programme
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	World Wild Fund for Nature

1. INTRODUCTION

The interest in fisheries subsidies in international fora continues to increase and work on environmental, economic and social effects of subsidies is carried out by several intergovernmental organizations (IGO). On the request of the 24th Session of the FAO Committee on Fisheries (COFI), the Fisheries Department took the initiative to promote cooperation among the different organizations and held the first ad hoc meeting on work programmes related to fisheries subsidies in May 2001. A second meeting was organized in July 2002 and the third meeting – for which this report has been prepared – is scheduled for 23-25 July 2003.

The IGO meetings allow participants to exchange information and to identify opportunities for collaboration. The purpose of the present report is to facilitate this process by giving an account of some of the ongoing work and recent achievements, particularly since the last meeting in July 2002. Chapter 2 presents a summary of plans and progress of work on fisheries subsidies carried out by OECD, UNEP and WTO¹. A few comments on work by other organizations are also included and some of the academic works published recently are briefly reviewed. The work of the FAO Fisheries Department is presented in Chapter 3. Chapter 4 identifies possible synergies and links between the work of the different organizations and gives suggestions for future cooperation. Concluding remarks are given in Chapter 5.

2. REVIEW OF WORK BY ORGANIZATIONS AND INSTITUTIONS OTHER THAN FAO

2.1 OECD²

OECD has several ongoing activities with regard to fisheries subsidies. These are generally coordinated by the Fisheries Division of the Directorate of Food, Agriculture and Fisheries. The Directorate receives its mandate from the OECD Fisheries Committee but it also has close links and collaborates with other relevant directorates, e.g. the Directorates of Environment, of Trade and of Science, Technology and Industry. There is also an OECD Ad Hoc Group on Sustainable Development, whose Bureau is composed of the Chairs of the OECD Committees on Economic Policy, Environmental Policy and Social Affairs. The Ad Hoc Group oversees horizontal work on, amongst other things, environmentally harmful subsidies. The main recent and current activities of the OECD relating to fisheries subsidies concern:

- collection of information on government financial transfers (GFTs) in member countries and the study “Transition to Responsible Fisheries”;

¹ In addition to OECD, UNEP and WTO, the following organizations are also invited to the meeting: ACS, APEC, ASEAN, CARICOM, CPPS, EFTA, SADC and UN Division of the Law of the Sea.

² The information presented here is based on meetings with A. Cox and C-C. Schmidt of the OECD Fisheries Division in May 2003 and documents made available at these meetings as well as the OECD official website.

- finalization of the study on fisheries markets liberalization and identification of follow-up work;
- environmentally harmful subsidies and how to reduce the obstacles for their removal;
- analysis of the broader effects of fisheries subsidies and their relation to sustainable development.

Each of the above four activity areas is briefly presented below. It should be mentioned, though, that there are several issues cutting across the different activities and there are also links to other programmes and studies.

(i) Information on government financial transfers (GFTs) and the “Transition to Responsible Fisheries” study

The OECD Fisheries Committee has made inventories of financial support and economic assistance to the fisheries sector in OECD member countries on several occasions since 1965. As part of a study called “Transition to Responsible Fisheries”, GFTs and their impact on resources were reviewed. More detailed data on GFTs were collected for the years 1996 and 1997 and the results were published in the final report of the study in 2000. It is expected that data for the years 1999-2001 will be published in the biannual “2002 OECD Review of Fisheries Policies” and in the future in the annual “OECD Review of Fisheries in OECD Countries”.

In addition to collecting detailed information on GFTs, the “Transition to Responsible Fisheries” study also developed a definition of GFTs and a classification system for different types of transfers. GFTs are defined as “the monetary value of interventions associated with fisheries policies, whether they are from central, regional or local governments. GFTs include both on-budget and off-budget transfers to the fisheries sector”³. The classification system builds on the different ways transfers are implemented and four main types of GFTs were defined⁴:

- direct payments (grants, decommissioning payments, income support, unemployment insurance, etc.);
- cost-reducing transfers (fuel tax exemptions, subsidised loans, transport subsidies, income tax deductions, loan guarantees, government payments for access to others countries’ waters, etc.);
- general services (research, management and enforcement expenditures, market interventions schemes, support to build port facilities for commercial fishers, payments to producer organizations, etc.);

³ Page 4, OECD, 2002, OECD work on identifying and measuring subsidies in fisheries. Prepared by A. Cox for the OECD workshop on environmentally harmful subsidies 7-8 November 2002. SG/SD/RD(2002)5, Paris.

⁴ In the “Transition to Responsible Fisheries” study, GFTs were also categorized according to the objective of the programme under which the transfer was made, i.e. fisheries infrastructure; management, research, enforcement and enhancement; access to other countries’ waters; decommissioning of vessels and licence retirement; investment and modernization; income support and unemployment insurance; taxation exemptions; and other objectives.

- market price support (generally trade restrictions leading to differences between world market and domestic prices constituting transfers from consumers and taxpayers to fishers).

The fourth category – market price support – although defined and included in the classification framework, was not covered in the study but was later addressed in the fisheries market liberalization study (see below). An additional component, related to the category of general services, was included: cost recovery. This component allowed countries to report on the extent to which management costs are recovered from the industry.

With regard to the impact of GFTs on resources, the results of the study showed that the management regime under which a transfer scheme is implemented is very important in determining its effects. Moreover, it was found that capacity-reducing transfers were often targeting the improvement of industry profitability rather than resource conservation. Nevertheless, it was suggested that capacity-reducing subsidies can reduce pressure on overfished stocks when combined with adequate management measures.

The GFT data collected and reported by the OECD countries have so far mainly concerned the marine capture fisheries subsector. Information on the aquaculture, processing and marketing subsectors has been collected where available but has not been reported publicly to date. Scope for improving data collection in the future has been identified by the OECD Secretariat. The main areas of concern include:

- The data reported do not at times include enough details for more in-depth analysis.
- There is no independent validation of the information provided by countries.
- Information on off-budget support is very incomplete, for example, on fuel tax exemptions and other tax concessions any industry exemptions from fees for services (e.g. harbours, navigation aids, etc.).
- Information on regional and local transfers is usually missing; the information reported is often at a national level only.
- Market price support is not included.
- Untaxed resource rent is not part of the current GFT definition.

(ii) The fisheries markets liberalization study

The document “Liberalising Fisheries Markets: Scope and Effects” was published in early 2003 and presented the results of the study on fisheries markets liberalization. The objective of the study was to analyse “how fisheries trade and production are likely to be affected by reductions in present tariff levels and by changes in non-tariff barriers”⁵. In addition, the study looked into the effects of changes in restrictions on investment, access to services and subsidies. The need to contribute to the WTO negotiations was taken into account when the study was formulated.

⁵ Page 3, OECD, 2003, Liberalising fisheries markets: Scope and effects. Fisheries Division, Paris.

The study was carried out by using a step by step approach including (i) description of major markets, products and trade flows, (ii) inventory of border measures, assistance and restrictions, (iii) analytical classification, (iv) identification of linkages (qualitative), and (v) analysis of impact (qualitative). Initially, it was hoped that the impact could be quantified and composite indicators could be developed but, due to lack of appropriate data, these last steps were not implemented.

The study showed that international trade has grown substantially during the last decades. The OECD members constitute the main markets for fish products and there is an important trade flow from developing countries to OECD countries. The structure of tariffs and other border measures in OECD countries is very complex. The study concluded that, generally, relaxing trade barriers would lead to benefits for both importing and exporting countries. However, the effects appear to depend on the circumstances under which the market liberalization takes place, in particular with regard to fisheries management regime and resource exploitation level. The study also identified aquaculture, non-managed shared stocks and high seas fisheries, fisheries under bilateral management agreements, under-exploited fisheries and multi-species fisheries as potentially vulnerable to changes in market structure, i.e. areas in which market liberalization could lead to supply changes affecting trade and resources.

With regard to subsidies to the capture fisheries sector, the results of the study confirmed the outcome of the “Transition to Responsible Fisheries” study and showed that the effect of GFTs on trade and catches also depend on the type of management regime in place; for example, under an effective management system, transfers to the industry would have no effects on catches (Table 1).

Table 1: Effects of GFTs to the fisheries (from Hannesson, 2003)

	<i>Type of management regime</i>		
	<i>Open access</i>	<i>Catch control</i>	<i>Effective management</i>
<i>Total catch</i>	Increases in the short run but decreases in the long-run if the stock is exploited beyond MSY	Unaffected	Unaffected
<i>Long-term profitability of industry</i>	Unaffected “at the margin” but profits will rise for fishers who are more effective or have lower opportunity costs	Same as for open access	Increases
<i>Long-term effects on trade</i>	Uncertain, depends on what happens to total catch	Small, but there might be repercussions for goods other than fish	None

Source: Page 19, Hannesson, R., 2003, Effects of liberalizing trade in fish, fishing services and investment in fishing vessels. OECD Papers Offprint: No. 8, from Vol. 1, No. 1.

Professor R. Hannesson assisted the study with regard to the development of the analytical framework showing the implications of different management regimes on the effects on trade and resources. However, although this framework helped bringing about

some important insights, it was noted that it contains a number of assumptions that do not necessarily reflect the real world and hence restrict the depth of analysis. For example, the framework builds on only a limited number of management regime categories – open access, catch control and effective management – while real management situations are much more varied. It is also assumed that there is complete compliance with existing management regulations, which is rarely the case in reality.

The OECD is now continuing the analyses through its work on environmentally harmful subsidies, and fisheries subsidies and sustainable development (see below).

(iii) Environmentally harmful subsidies

The Fisheries Division's work on environmentally harmful subsidies contributes to the OECD horizontal programme on sustainable development and is part of a horizontal/cross-sectoral work programme on overcoming obstacles to policy reform initiated in 2001. In November 2002, a workshop was organized with the aim to review methodologies used for measuring subsidies in different sectors, to identify information and analytical gaps, and to define further work. It was agreed that an analytical tool called "the checklist"⁶ would be used in a stocktaking exercise and that it should be tested in a number of sector case studies. It was felt that the checklist could constitute a practical method for identifying environmentally harmful subsidies in different sectors even when different indicators and measurements for subsidies are used. Ideally, though, the workshop noted that the identification and measurement of subsidies should be made through environmental impact assessment and a general equilibrium model but unfortunately such a model is not yet available.

The fisheries sector will constitute one of the case study sectors. Work has already been undertaken with regard to the classification of subsidies and on how different subsidies react under different conditions. The analytical framework developed by Hannesson within the context of the market liberalization study is currently being further developed for use in this study. Additional dimensions have been added for bioeconomic parameters, e.g. concerning the level of capitalization of the fleet and the status of the stocks, and different categories of subsidies are examined within this context. The next step will be to apply the checklist and to examine the strengths and weaknesses of the checklist approach in informing the process of subsidy reform. This will be done by using secondary data in case studies looking at particular types of subsidies. The outcome of the work is expected to be a better understanding of the links between subsidies, the management regime and the subsidies' likely effect on the environment. However, it will not be possible to quantify the environmental effects at this stage and the analysis is undertaken using a number of limiting assumptions and the market structure and demand side are, for example, not taken into consideration. The outcome of the study will be reported to the OECD Ministerial Council meeting in April 2004.

⁶ See Pieters, J., 2002, When removing subsidies benefits the environment: Developing a check-list based on the conditionality of subsidies. OECD workshop on environmentally harmful subsidies 7-8 November 2002 (available at www1.oecd.org/agr/ehsw/).

(iv) Fisheries subsidies and sustainable development

The need to analyse fisheries subsidies in the broader context of sustainable development became clear during the work on the market liberalization study. In addition to the work on environmentally harmful subsidies, work will be undertaken more specifically focusing on sustainable development, i.e. with a holistic view covering the three dimensions social, economic and environmental effects.

The work will build on the analysis of the market liberalization study and a previous study on fisheries management costs. It will also have close links with the horizontal work on environmentally harmful subsidies. The enhanced Hannesson framework approach will be used as the starting point. The intention is to develop a matrix – with management regimes and bioeconomic parameters on the two axes – for each type of subsidy and to analyse the environmental, economic and social effects under each set of given combinations. The OECD database on GFTs will be improved and used for the analyses.

While some work has already been done on the environmental and economic impact of subsidies, less is known with regard to the social effects and appropriate indicators will have to be identified for this purpose. Existing – also non-fisheries – work will be used as a basis, supplemented by special case studies with questionnaires designed to collect information from member countries. It is anticipated that this collection of information will focus on national responses to social pressures in the fisheries sector. Information on countries' broader social programmes affecting the fisheries sector will also be important.

With regard to the analysis of environmental and economic effects, it will be possible to use secondary data to a larger extent than for the study of social effects. However, the section on environmental effects will have broader scope than earlier studies and include effects on, for example, by-catch, benthos, marine pollution, gear use, fuel use, etc. The economic component will assess the economic outcome of subsidies and include effects on costs, revenues, resource rents, investment decisions, etc. An investigation of subsidies related to public goods in fisheries management and infrastructure will also be undertaken.

The three different sections – the environmental, economic and social components – will be brought together in a synthesis report. The expected outcome of the study will be an integrated analytical framework that will provide policy makers with a basis for assessing subsidy reform, both domestically and internationally. This framework will have a strong analytical basis with sound theoretical and empirical underpinnings.

The work on the study started mid-2003 with the preparation of a scoping paper and the identification of key issues. The study will be finalized in 2005.

2.2 UNEP⁷

The work on fisheries subsidies in UNEP is coordinated by the Economics and Trade Branch of the Division of Technology, Industry and Economics. The focus of the work is on the interface between trade and the environment and on enhancing countries' capacity in various areas related to trade, environment and development policies. The organization's mandate gives priority to work with developing countries and economies in transition. Within this framework, UNEP is assisting countries in improving their abilities with regard to assessing fisheries subsidies and their impact, and in finding ways to reduce environmentally harmful subsidies. This work has focused on understanding the relationship between fisheries subsidies, overcapacity and the sustainable management of marine resources. The main activities are case studies, development of analytical frameworks for the assessment of impacts of subsidies and workshops.

(i) Case studies

Country case studies on fishery subsidies have been carried out in Argentina, Senegal, Mauritania and Bangladesh. The Argentina and Senegal studies were finalized in 2001 and the results published in the UNEP Fisheries and the Environment series⁸. The reports of the studies in Mauritania and on the marine sector in Bangladesh are still in draft form, currently under revision.

The studies are implemented through 18-month projects and carried out by local institutes and involve a broad range of stakeholders. The objectives of the studies include awareness creation and capacity building alongside the more policy oriented purpose of investigating the impact of subsidies and trade liberalization.

The work has brought about important insights into the likely causes and effects regarding subsidies and resource exploitation. All the studies illustrated that short-term financial gains from trade enhancing policies and subsidy schemes can be offset by longer-term socioeconomic and environmental losses. However, it also highlighted some difficulties in quantifying the effects and distinguishing the effect of subsidies from other practices leading to, for example, overfishing. The analysis has been exploratory and descriptive and constitutes rare examples of empirical field work on this subject matter, in particular in developing economies.

(ii) Development of an analytical framework – the matrix approach

UNEP's analytical work has focused on the relationship between fishery subsidies, overcapacity and the sustainable management of fisheries. Addressing the environmental impact of fisheries subsidies, UNEP has developed a matrix for identifying these effects under different management conditions (see example in Table 2)⁹.

⁷ This chapter is based on discussions with A. von Moltke and C. Arden-Clarke of the Economics and Trade Branch in May and June 2003 and on various documents available at the UNEP websites.

⁸ UNEP, 2001, Fisheries subsidies and marine resource management: Lessons learnt from studies in Argentina and Senegal. UNEP/ETU/2001/7 (Vol.II), Geneva.

⁹ Porter, G. 2002. Fisheries Subsidies and Overfishing: Towards a Structured Discussion, UNEP Fisheries and the Environment Series, Geneva.

Table 2: Example of Porter's matrix for identifying effects of subsidies under different management conditions

<i>Subsidy type</i>	Open access No property rights Weak output / capacity controls	Open access No property rights Strong output / capacity controls	Limited access No property rights Weak output / capacity controls	Limited access Property rights Weak output / capacity controls	Limited access Property rights Strong output / capacity controls
Management services					
Subsidies to capital costs					
Decommissioning and licence retirement					
Subsidies to foreign access					
Income support					
Subsidies to intermediate inputs					

Source: Page 35, Porter, G., 2002, *Fisheries subsidies and overfishing: Towards a structured discussion*. UNEP Fisheries Subsidies Workshop, Geneva, 12 February 2001. Economics and Trade Unit (ETU).

Based on this analytical framework, UNEP is currently carrying out some further analysis of the actual impacts of different types of subsidies under different management conditions and different bio-economic conditions. For each type of subsidies the following matrix template is being used:

Matrix Template

	Effective Management	Catch Controls	Open Access
Overcapacity			
Full capacity			
Less than full capacity			

The following eight categories of subsidies are used for the purpose of this analysis:

- Infrastructure;
- Management;
- Access agreements;
- Decommissioning schemes;
- Subsidies to capital costs;
- Subsidies to variable costs;
- Income support;
- Marketing and price support.

The paper will use examples from developed and developing countries to analyse the effects of these subsidies on fishery resources. An informal expert consultation was organized by the Economics and Trade Branch on 16 July 2003 to discuss this analytical framework. Once the paper is finalized, it will be shared with governments and discussed in a UNEP workshop towards the end of the year.

(iii) Inter-organizational workshops

UNEP has on several occasions organized workshops in consultation with other IGOs. In March 2002, a workshop on the “Impacts of Trade-Related Policies on Fisheries and Measures Required for their Sustainable Management” was held in Geneva. Among the issues discussed, the difficulties of defining subsidies and linkages between subsidies, overcapacity and overfishing received particular attention. In relation to the WTO negotiations, the special conditions, needs and priorities of developing countries were also discussed. The workshop recommended that UNEP conducts further country and regional studies, in particular in cooperation with developing countries and regarding artisanal fisheries. There is also a need for best-practice documents and policy advice for the sustainable management of the fisheries sector. Another workshop will be held at the end of the year in Geneva.

2.3 WTO¹⁰

The November 2001 declaration of the Fourth Ministerial Conference in Doha, Qatar, provided the mandate for negotiations on fisheries subsidies and it was agreed to clarify and improve the WTO rules in this regard. The relevant negotiations are taking place in the Negotiating Group on Rules. The WTO members will review progress at the Fifth Ministerial Conference to be held in Cancún, Mexico, in September 2003. According to the timetable set out in the Doha declaration, the negotiations should be finalized by 1 January 2005.

Currently, subsidies in the fisheries sector are regulated in the WTO Agreement on Subsidies and Countervailing Measures (SCM). It specifies that a subsidy exists if “there is a financial contribution by a government or any public body within the territory of a Member” and this contribution fulfils certain specified conditions, or if “there is any form of income or price support in the sense of Article XVI of GATT 1994”. Moreover, benefits have to be conferred. For the subsidy to be offending, it also has to be “specific”, “prohibited” or “actionable” and cause “adverse effects”¹¹. It is argued that these provisions do not cover adequately for subsidies in the fisheries sector since these often are due to production distortions created through unequal access to resources by subsidised and non-subsidised participants in the fishery.

¹⁰ The presentation is based on discussions with C. Schröder of the Agriculture and Commodities Division in May 2003, documents made available at this meeting and on information from the WTO website.

¹¹ WTO 1994 Agreement on Subsidies and Countervailing Measures, article 1.

The SCM Agreement obliges member countries to submit notifications of subsidy programmes, including those in the fisheries sector. However, the number of notifications is low and those submitted vary with regard to content and level of detail. Consequently, WTO does not currently hold complete records.

The Committee on Trade and Environment (CTE) has studied the issue of fisheries subsidies for several years, but it is only relatively recently that there appears to be a more substantial move forward in the process.

The state of the debate on fishery subsidies at the CTE is reflected in the Report to the 5th Session of the WTO Ministerial Conference adopted by the Regular Session of the Committee on Trade and Environment held on 7 July 2003 in Geneva. The following five paragraphs are extracted from that report.

There was a general recognition of the importance of achieving the objective of sustainable development in the fisheries sector. It was recalled by a number of Members that the very fact that negotiations on the subject of fish had been launched at the Doha Ministerial Conference was largely based on the preceding CTE analysis. Subsequently, the WSSD Plan of Implementation had reaffirmed the call to clarify and improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries.¹²

A few Members maintained that poor fisheries management – taking place under open-access fisheries – coupled with increasing world demand for fishery products was at the root of declining world fisheries resources resulting from over-exploitation and illegal, unreported and unregulated fishing. In this regard, subsidies could be an effective instrument to reduce capacity, for example through vessel buy-back programmes. One Member stressed that the possible effects of subsidies on resources changed depending on resource status and fishery management regimes. The cases of skipjack tuna, and purse seine fishery in the Eastern Pacific Ocean were referred to in this regard.¹³ It was argued that there was a need for flexibility among products when determining tariff levels, taking into account the level of fishery resources and the status of fishery management.

Other Members argued that over-capacity, and, consequently, a significant part of over-exploitation of fisheries, was caused by subsidies. Even when apparently sound management regimes were in place, subsidies could destabilize fisheries management and impede the objective of reducing over-capacity. A high value tuna species was given as an example of a particular fishery which was under a multinational management regime and where stocks had collapsed. It was emphasized that it was the trade measure (the subsidy) that generated over-capacity and needed to be disciplined. Trade liberalization, in concert with sustainable resource management, could stimulate more efficient production with more long-term environmental benefits. Trade barriers in the

¹² WSSD Plan of Implementation, paragraph 31(f).

¹³ For more detail, see WT/CTE/W/226.

form of tariffs, or other non-tariff measures, were no substitute for effective resource management.

Most Members stressed that since relevant negotiations were taking place in the Negotiating Group on Rules and the Negotiating Group on Market Access the issue of fish was best left to these bodies. While agreeing that duplication of work needed to be avoided, one Member argued that the CTE needed to monitor the issue of subsidies from an over-exploitation point of view, i.e. an environmental point of view; this had always been the role of the CTE. Another Member pointed out that the CTE could contribute to the ongoing negotiations, while avoiding an isolated CTE discussion, through paragraph 51 of the DMD.

All agreed that more could be done to provide technical assistance in natural resource conservation and management through the various international environmental organizations in the fisheries sector. Some Members reiterated the importance of further studies on the effects of fisheries subsidies and referred, in particular, to the work of the Food and Agriculture Organization of the United Nations (FAO), UNEP and the OECD in this regard. One delegation in particular called for case studies with respect to the impact of subsidies on fishery resources.

2.4 Other work¹⁴

Work on fisheries subsidies is also undertaken by a number of other organizations, e.g. NGOs and regional bodies, as well as by individual countries and research institutions. Some of this work was reported on in the last IGO meeting in July 2002, e.g. by ASEAN. Among the NGOs, World Wild Fund for Nature (WWF) has been particularly active and the organization has recently been working on issues related to the new CFP and the EU partnership agreements, and on environmental aspects of the WTO negotiations¹⁵.

In the academic sphere, Hannesson has already been mentioned in connection with his work with the OECD. Hannesson has also written several other papers on subsidies in the fisheries sector, e.g. a review of support programmes in the Nordic countries¹⁶. This paper looked at the development of subsidies during the 1990s and explored their effect by also looking at the development of catches, fishing fleets and the number of fishermen during the same period. However, the effect of subsidies on landings and on the state of the fish stocks was not clear.

¹⁴ The work cited here does not constitute an exhaustive list of existing activities; only a few main examples are given.

¹⁵ See, for example:

Institute for European Environmental Policy, 2002, Subsidies to the European Union fisheries sector. Paper commissioned by WWF European Fisheries Campaign;

Martin, W., Lodge, M., Caddy, J. and K. Mfodwo, 2001, A handbook for negotiating fishing agreements. WWF Promoting Sustainable Fisheries Conservation and Management;

WWF, 2001, Hard facts, hidden problems: A review of current data on fishing subsidies. WWF Technical Paper.

¹⁶ Hannesson, R., 2000, Fisheries subsidies in the Nordic countries. Paper commissioned by WWF.

In their paper on the impact of subsidies on the ecosystems of the North Atlantic, G. R. Munro and U.R. Sumaila developed an econometric model for investigating the effects of subsidies under different management regimes¹⁷. They showed that subsidies could be harmful to the resource also under a property rights system, which is contrary to the commonly held view that subsidies do not increase catches under an effective management system. Moreover, they argued that subsidies that generally are considered beneficial, e.g. decommissioning schemes, could have a negative environmental impact under certain circumstances.

Arnason developed a theoretical, generic, model for examining the impact of subsidies on fishing effort, fishing capital and the economic performance of the fishery¹⁸. He concluded that the economic benefits from subsidies are in most cases insignificant and that subsidies often lead to increased fishing effort. However, depending on the status of the industry when the subsidies are introduced, the short-term gains to the industry could be quite substantial. He also pointed out that capacity-reducing subsidies could have negative effects unless combined with effective management.

Schrank looked at Arnason's analysis in the context of tracing the linkages between subsidies and their effects on fisheries resources¹⁹. Arnason's analysis focused on profits – resulting from a subsidy programme – and how expected profits lead to changes in fishing effort. The fishing effort, in turn, affects the fish stocks. Schrank suggested that Arnason's model could be further developed into an integrated econometric model including a marketing sector, a processing sector and a harvesting sector. He also proposed that the effects and costs of fisheries management should be included. Such a model could give indications of the order of magnitude of the response by the fishery to a subsidy programme. However, the data requirements would be considerable. Schrank, Roy and Tsoa developed a model of this type for looking at employment prospects in the Newfoundland ground fishery²⁰.

As can be seen from the examples of academic work cited above, various modelling and simulation work has been carried out and is still ongoing. However, even though the linkages between subsidies and their environmental and economic impact are understood to some extent, more work is needed for improving the knowledge of the details of the underlying mechanisms. There is also a general lack of data on subsidies and work on quantifying the effects of subsidies is missing. Likewise, very little work has yet been

¹⁷ Munro, G.R. and U.R. Sumaila, 2001, Subsidies and their potential impact on the management of the ecosystems of the North Atlantic. In Pitcher, T., Sumaila, U.R. and D. Pauly (eds.): Fisheries Impacts on North Atlantic Ecosystems: Evaluations and Policy Explorations. Fisheries Centre Research Report. Fisheries Centre, University of British Columbia.

¹⁸ Arnason, R., 1998, Fisheries subsidies, overcapitalization and economic losses. In Overcapitalization and subsidies in European fisheries: Proceedings of a workshop, Portsmouth, U.K., 28-30 October 1998. Portsmouth: Centre for the Economics and Management of Aquatic Resources of the University of Portsmouth.

¹⁹ Schrank, W. (in prep.), The linkage between the subsidy and its effects. Annex I to FAO Technical Paper on Introducing fisheries subsidies (draft).

²⁰ Schrank, W.E., Roy, N. and E. Tsoa, 1986, Employment prospects in a commercially viable Newfoundland fishery: An application of "An econometric model of the Newfoundland groundfishery". Marine Resource Economics, Vol. 3, No. 3, pp 237-263.

done on the social effects of subsidies or on their impact on sustainable development seen from a more holistic perspective.

It should also be mentioned that there are several issues, closely related to subsidies, on which work is being undertaken, e.g. IUU fishing, fisheries management costs and overcapacity, including decommissioning schemes. It is, however, outside the scope of this report to review these activities.

3. WORK ON SUBSIDIES BY THE FAO FISHERIES DEPARTMENT

The FAO Fisheries Department's work on subsidies is coordinated by its Fishery Policy and Planning Division (FIP). The department receives its mandate from the Committee on Fisheries (COFI). In 1992, FAO pointed out that subsidies were having negative effects on capture fisheries. In the 23rd Session of COFI in 1999, explicit references were made to FAO's role in analysing these effects and in the end of 2000, an "Expert Consultation on Economic Incentives and Responsible Fisheries" was organized by the Fisheries Department. As a follow-up to this meeting and acting on the recommendations by the 24th COFI Session, a technical tool called "Guide for identifying, assessing and reporting on subsidies in the fisheries sector" was developed last year (2002) as a first step towards an improved understanding of the qualitative and quantitative effects of subsidies. This year, the Department has been asked by COFI to continue the work by looking into the impact of fisheries subsidies on resources, trade and other economic and social aspects of sustainable development. Accordingly, the Department intends to carry out case studies in collaboration with a number of member countries through which the issue can be analysed in an empirical way. A Technical Consultation on the impact of fisheries subsidies will be held in the middle of 2004 to which the results of this work will be presented. Moreover, as mentioned in the introduction and the reason for this document, the department is organising the "3rd ad hoc Meeting of IGOs on Work Programmes Related to Subsidies in Fisheries" on 23-25 July 2003.

(i) Expert Consultation on Economic Incentives and Responsible Fisheries

The preparations for the Expert Consultation included a thorough inventory of ongoing research activities and existing literature on fisheries subsidies and their effects. Four desk studies were carried out reviewing, among other things, forms and definitions of subsidies. In the consultation, the experts were asked to find an operational definition of subsidies and to identify ways and strategies by which more could be learnt about the effects of subsidies in a practical and affordable manner.

The consultation was not able to produce an exclusive definition of fisheries subsidies that could be used for measurement, analysis and political debate. None of the existing definitions in common use were found to be adequate. Instead, it was concluded that four different sets of subsidies needed to be defined. The consultation also concluded that there was very little empirical evidence of the direct casual relationship between subsidies to the fisheries industry and harmful effects on the aquatic resources. Moreover,

the current state of knowledge on the magnitude of subsidies and their impact on trade was found to be limited.

(ii) The Guide

As a response to the conclusions of the Expert Consultation and according to the recommendations made by COFI, a Guide was developed for assisting governments and institutions in studying fisheries subsidies. This Guide is designed as a practical and flexible tool for those who carry out studies and prepare reports on subsidies in the fisheries sector. However, the Guide does not cover the analysis of the effects of subsidies on resources, fisheries or trade, but aims at assisting in collecting and organising the data on which these analyses would be based. This covers defining, classifying and quantifying fisheries subsidies as well as investigating the processes by which subsidies are provided. Considering the lack of quantitative data on fisheries subsidies, it was felt that this limitation was a necessary first step towards an in-depth analysis of the impact of subsidies.

The Guide is based on the main principles that were agreed on in the “FAO Expert Consultation on Economic Incentives and Responsible Fisheries”. In early 2002, a preliminary draft Guide was prepared, based on available literature and information. This draft was then tested by the carrying out of prototype studies in four different countries after which it was revised to incorporate the experience from the test studies. The definitions and methodologies presented in the Guide were thus developed by combining available theoretical knowledge with practical experience. A final draft version of the Guide was discussed in the “FAO Expert Consultation on Identifying, Assessing and Reporting of Subsidies in the Fishing Industry” in December 2002 before the document was finalized. The document is currently (2003) being printed in the FAO Fisheries Technical Paper series.

The Guide proposes a broad definition of subsidies, including all government interventions – or lack of interventions – that affect the fisheries industry and that has an economic value. This economic value is interpreted as something having an impact on the profits of the fisheries industry. The action, or non-action, should also be something that is out of normal practice, i.e. something that does not apply generally to other industries. The Guide does not take any position with regard to whether a subsidy is “good” or “bad”; subsidies are only seen as government actions, or non-actions, that increase or decrease revenues and costs of the industry.

Four categories of subsidies are defined in the Guide, i.e.:

- 1 Direct financial transfers (investment grants, grants for safety equipment, vessel decommissioning programmes, equity infusions, income guarantee schemes, disaster relief payments, price support, direct export incentives, etc).
- 2 Services and indirect transfers (investment loans on favourable terms, loan guarantees, ports and landing site facilities, payments to foreign governments to secure access to fishing grounds, government funded research and development programmes, international cooperation and negotiations, fuel tax exemptions, etc.).

- 3 Regulations (import quotas, direct foreign investment restrictions, environmental protection programmes, gear regulations, chemicals and drugs regulations, fisheries management, etc.).
- 4 Lack of intervention (free access to fishing grounds, lack of pollution control, lack of management measures, non implementation of existing regulations, etc.).

With regard to assessing subsidies, the Guide uses two complementary approaches for measuring the value of a subsidy: based on the cost (revenue) to the government and estimated according to the value to the industry. These values are often different and in an analysis of the impact of subsidies, it is probably the latter that is of most interest.

The Guide also gives recommendations for how to examine the effect of subsidies on industry profits in more detail, what comparative analyses that could be made with the information collected with the help of the Guide, and how to describe and report on subsidies.

(iii) Country case studies

As a next step in investigating the impact of fisheries subsidies, the FAO Fisheries Department is now planning a series of case studies. The overall objective of the project is to improve the current knowledge of the impact of subsidies and by what mechanisms these impacts are created. More specifically, the intention is that the case studies will give information on:

- What impact do different types of *subsidies* have and can subsidies be categorized according to their impact?
- By what *mechanisms* is impact created and what is the role of subsidies with regard to capacity and IUU fishing?
- What particular *circumstances* influence the impact of subsidies?
- How can *impact* be measured and how can trade-offs between different types of impacts be assessed?

It is expected that the case studies and the analysis of their results will provide a good insight into the above listed issues. However, it is not realistic to expect the work to give final answers. Hence, an additional objective of the work is to clearly identify further empirical and theoretical research needs.

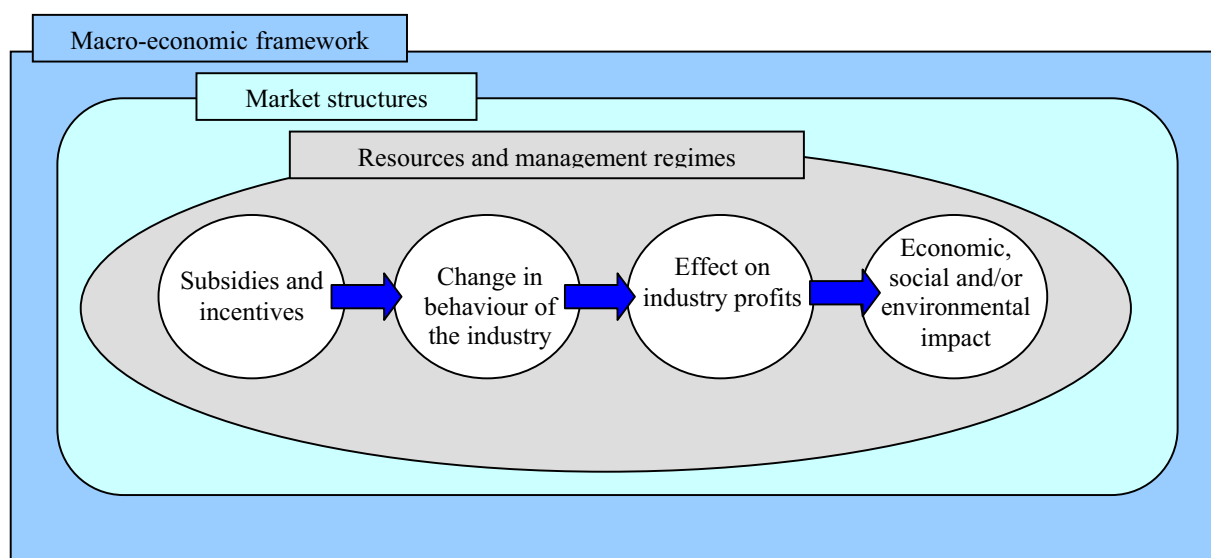
The intention is to carry out 6-8 case studies. They will be carried out in different countries from different parts of the world with special consideration being given to developing economies²¹. While it will be important to understand the overall situation of the fisheries sector in the various case study countries, the focus of each study should be on one particular subsector, e.g. one specific fishery, in order to allow for an in-depth analysis. Moreover, the focus will be on the more explicit subsidies, i.e. direct and indirect transfers and services.

²¹ At the time of preparation of this report, the list of case study countries was not yet finalized. The preliminary list of candidates includes the countries of the ASEAN region, Chile, Iceland, Morocco, Norway, Spain, Sweden and Trinidad and Tobago.

With regard to the conceptual framework and the mechanism for how the impact of subsidies is produced, it is assumed that a subsidy leads to a change in industry profits through the incentives it provides and the consequent change in behaviour which in turn leads to the economic, social and/or environmental impact²². This happens within the context of (see Figure 1):

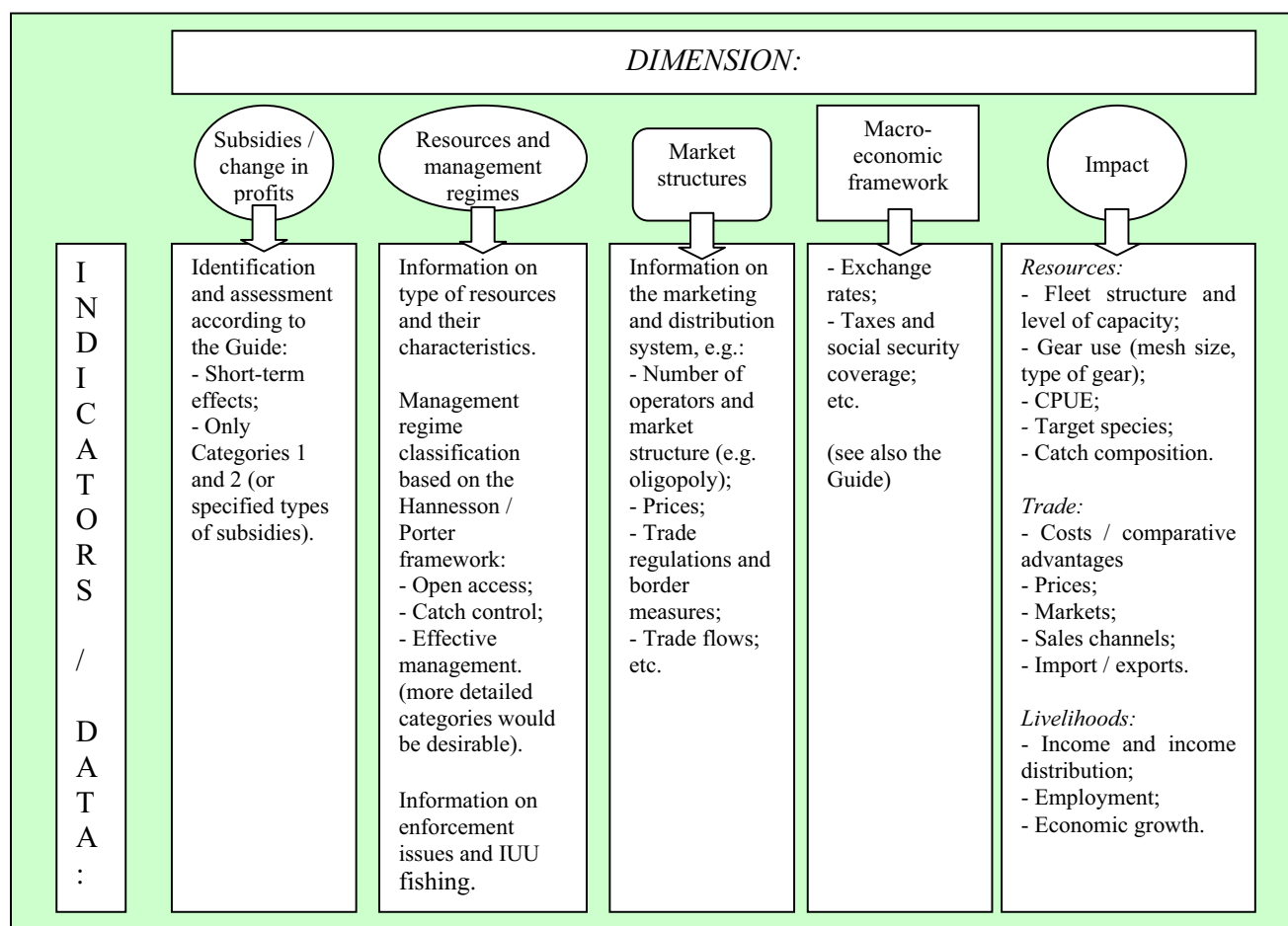
- the characteristics of the resources and the fisheries management regime
- the market structures (up- and downstream)
- the overall macro-economic framework.

Figure 1: Mechanism and context of fisheries subsidies



In order to analyse the impact of subsidies, these aspects and the links between them would have to be investigated. However, in order to keep the studies within a manageable and workable format, it is necessary to define a limited number of key issues and indicators. These issues and related indicators still need to be clearly defined and should be based on existing economic theory and the current understanding of the mechanisms of fisheries subsidies. Naturally, they should be relevant for the overall objectives of the work. Expected problems with data availability should be taken into account when deciding the level of detail of the analysis and there may be a need to use slightly different indicators in different case study countries. Figure 2 below gives a schematic overview over the different aspects, or dimensions, and what the indicators could be. The indicators should be studied in a historical perspective; the data collection should preferably cover a time series of at least 10 years.

²² This is of course a simplification and the real process would be iterative, especially in the longer term.

Figure 2: Elements of a study of the impact of subsidies

According to the schema in Figure 2, the data collection will consist of:

- *Identification and assessment of existing subsidies*
This work will be based on the methodologies outlined in the FAO “Guide for identifying, assessing and reporting on subsidies in the fisheries sector”. However, only subsidies of Categories 1 (Direct financial transfers) and 2 (Services and indirect transfers) will be included.
- *Information on the overall framework and in particular on the characteristics of the resources, the management regimes, the market structures and the macroeconomic framework*
This information will describe the context in which the subsidies exist and how it has change over time.
- *Assessment of changes in the state of resources (including vessel capital), in trade and in the livelihoods of the operators (the fisher communities), in the short- and long-term*

In the analysis phase, the relations between the different dimensions will be explored according to the defined key issues. The “impact” (on resources, trade and livelihoods – last column in Figure 2) may be explained by a subsidy or/and by other “happenings” in any of the other dimensions²³. It may be that a subsidy only has a certain effect under specific circumstances. These likely causes and effects will be identified and looked at in a descriptive way and through simple qualitative models as well as by analysing them in the context of existing economic theory and through econometric estimation and modelling techniques. The academic work referred to in section 2.4 above, as well as other similar research work, will be explored in this context. Moreover, particularly with regard to the relation between the impact of the subsidy and the management regime, the results will be reviewed within the context of the findings of the OECD and UNEP studies using the framework/matrix developed by Hannesson²⁴ and Porter²⁵.

With regard to the implementation procedure and the time frame, the country case studies will be carried out by local institutions/individuals in cooperation with the FAO Fisheries Department. FAO will provide technical backstopping during the course of the study in the form of visits by a consultant/staff member. Each case study will produce a report covering the results of the data collection, the elements of the analysis and its conclusions as well as a description of the methodologies used and possible problems encountered. Part of the report can be kept confidential if this is a requirement of the host government. The case study reports need to be ready by January 2004. The results of the individual studies will then be explored and synthesized into a final report that will be presented to the forthcoming FAO Technical Consultation. More details on the tentative in-country work programme are given in Table 3.

It is expected that important links can be made between the case studies and work carried out by other organizations and institutions. Lessons learnt by OECD and UNEP in their work will be taken into account. Moreover, it is expected that the work will support the WTO negotiations regarding fisheries subsidies.

(iv) Technical Consultation on Subsidies and Fisheries

The Technical Consultation on Subsidies and Fisheries is scheduled for June 2004. The meeting will be organized in conjunction with two other consultations, i.e. on IUU fishing and overcapacity. According to the recommendations given in the 25th Session of COFI, the fisheries subsidies consultation should also consider the effects of IUU fishing and overcapacity in the context of effects of subsidies on fisheries resources. Many COFI members also recommended attention to be given to the impact of subsidies on sustainable development, trade, food security, social security and poverty alleviation, in particular with regard to the special needs of developing countries and small island states.

²³ Questions to be asked could include, for example: Is there a correlation between an increase in fishing effort and the value of fleet modernization subsidies? What combination of variables best explain an increase in fishers' income, e.g. fluctuations in the value of the local currency, price support, a change in the market structure, and so on?

²⁴ Hannesson, R., 2003, Effects of liberalizing trade in fish, fishing services and investment in fishing vessels. OECD Papers Offprint: No. 8. From Vol. 1, No. 1.

²⁵ Porter, G., 2002, Fisheries subsidies and overfishing: Towards a structured discussion. UNEP Fisheries Subsidies Workshop, Geneva, 12 February 2001. Economics and Trade Unit (ETU).

Moreover, the consultation should consider how FAO can support the WTO work. It is expected that the outcome of the case studies described above will constitute an important input to the consultation.

Table 3: Tentative program for in-country work – FAO case studies

<i>Step</i>	<i>Tasks</i>	<i>Time frame</i>
1	Agreement with host government and contract established with implementing partner.	July 2003
2	Data collection – phase 1 – in accordance with methodologies outlined in the Guide: <ul style="list-style-type: none"> Subsidies of categories 1 and 2 (see for example sample summary table in the Guide’s Figure 9); Structure of the fisheries sector (see sample table in the Guide’s Box 22); Macroeconomic framework (see section 4.3 of the Guide). NB. The data should cover a period of approximately 10 years (while the samples in the Guide show one year only).	1 month (Jul – Sep 2003)
3	Planning of data collection – phase 2: <ul style="list-style-type: none"> Review of the data collected and the general data availability and quality. Selection of the particular segment of the sector that should be studied in detail. Identification of suitable indicators and variables to be examined with regard to changes in the state of resources, in trade volumes/values and patterns, and in the livelihoods of fisher communities (see examples given in Figure 2). Assessment of further data collection needs with regard to subsidies, structure of the sector and macroeconomic framework. Establishment of work and survey methodologies for the continuation of the data collection (e.g. data sources – primary and secondary, sample population, questionnaires, etc). This planning exercise should preferably take place in cooperation with the FIP consultant/staff member during a backstopping visit.	1-2 weeks (Jul – Sep 2003)
4	Data collection – phase 2: according to plan under 3.	2 months (Sep-Nov 2003)
5	Analysis	1 month (Oct-Nov 2003)
6	Preparation of draft country field report	Deadline for draft report: 31 Dec 2003
7	Finalization of country field report	31 Jan 2004
Backstopping missions should preferably take place during step 3 (planning of Data collection phase 2) and at the beginning of (or in preparation for) step 5 (Analysis). However, the exact timing of these visits remains flexible since the work is likely to start at different times in different places and since the availability of the consultant/staff member will have to be taken into account.		

4. SYNERGIES AND COOPERATION

4.1 Common understandings and links

Reviewing the achievements and work programmes of the different organizations discussed above, a number of common understandings, priorities and concerns are evident, for example.:

- Practical policy advice is the most needed end result.
- The importance of the WTO negotiations and the need to contribute to this work is generally recognized;
- Developing countries have special needs which should be clarified, particularly in the context of sustainable development and the social effects of fisheries subsidies;
- The relationship between subsidies, overcapacity and IUU fishing is acknowledged but clear information on the linkages and mechanisms appear to be lacking;
- There is a close relationship between subsidies and fisheries management and a subsidy cannot be analysed without also looking at the surrounding management system;
- There is a general lack of detailed data on fisheries subsidies and of theoretical frameworks and models by which subsidy data can be analysed. This is true in particular with regard to social effects of subsidies. There is also a general lack of empirical studies on fisheries subsidies and their impact.

The IGOs work on behalf of their membership and the outcome of their efforts should be useful to their member governments. With regard to fisheries subsidies, the demand is for practical policy advice. Considering that our understanding of the impact of subsidies is still fairly rudimentary, concrete policy advice may still be some way off. In the meantime, partial advice may be better than no advice at all. It can also be noted that the OECD's check-list approach is an example of a "short-cut" that may serve as an important entry point and prove useful.

WTO plays a central role for the work on fisheries subsidies since it is the organization with the most extensive powers to enforce new subsidies disciplines, i.e. once negotiations have been concluded and a new – or amended – agreement reached. However, the WTO as an organization does not have the resources and competences to investigate and research the underlying issues in detail and is hence dependent on inputs from its member countries, directly or through other IGOs. This need to contribute to the WTO work is acknowledged by the IGO community and their membership and cooperation is taking place.

The question of the special situation of developing countries and their need for differential treatment with regard to future fisheries subsidies disciplines is considered a concern but so far no concrete proposals have been formulated as to how to deal with the issue in practice. This may be related to the fact that little is known about the effects of subsidies on the social and economic dimensions of sustainable development. Work on

these aspects is now being taken up by both FAO and OECD, the latter however focusing on its membership of developed countries.

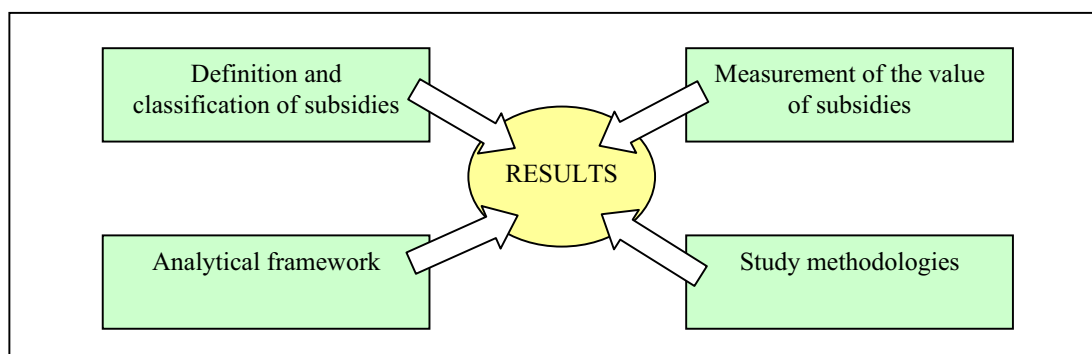
It is generally accepted that there is a strong relationship between subsidies leading to increased fleet capacity – and overcapacity – and harmful effects on fisheries resources. This relationship, together with trade issues, has been the focus of much of the work up to now, e.g. by UNEP and by academic institutions. The proposals for new subsidy disciplines by the EC, the United States and Chile to the WTO are also based on this concept. Likewise, the influence of the fisheries management system on the effects of subsidies constitutes a core concept in many of the studies. The current work of OECD and UNEP is investigating the theoretical framework further and FAO proposes to include empirical analyses within this context in its forthcoming case studies.

So far, there has been little quantitative work carried out on the effects of subsidies. Efforts are still being concentrated, on the one hand, on the search for theories and models explaining the mechanisms by which the impact of subsidies is created and, on the other hand, on remedying the lack of data on fisheries subsidies. Once more substantial progress has been made in these two areas, the conditions for moving from qualitative to quantitative analysis will improve significantly. With regard to explanatory theories and models, the work by OECD on market liberalization has contributed to understanding the effects on trade and production and so has much of the academic work. The FAO case studies are expected to provide inputs for future quantitative models even though the results to be presented next year are more likely to be qualitative considering the relatively short time available for the case studies. They will also constitute important contributions in the form of empirical work, something that is currently lacking. On the issue of improving the availability and quality of data on fisheries subsidies, the FAO Guide is proposed as a practical tool for facilitating data collection and reporting.

4.2 Compatibility of methodologies and comparability of results

The above overview shows that there is a clear common ground for work on fisheries subsidies and many points of contact between the activities of different organizations. This may not be surprising since all strive in the same direction, i.e. towards a better understanding of the impact of subsidies that eventually can lead to policy advice. However, the mandates, objectives and approaches of different organizations are likely to differ and this section looks into the compatibility of the various methodologies used and their results.

In this context, it may be useful to divide up the work process in different components. Figure 3 shows the five main elements of a subsidies study that will be discussed below: definition and classification of subsidies, measurement of their value, analytical framework, study methodology and results.

Figure 3: Components of a fisheries subsidy study

Most work on fisheries subsidies includes some sort of classification of the different types of subsidies. While there seems to be a common understanding that subsidies need to be classified for analytical purposes, there is as yet no generally accepted classification system; different organizations use different structures. The views also differ between different institutions with regard to the actual definition of subsidies. FAO is probably providing the broadest definition – also including government non-interventions as a subsidy category – while the WTO definition is much more specific. The reasons behind these differences in definitions and classifications are related to differences in mandates and objectives as well as to different analytical approaches. While it would perhaps be difficult to agree on a single set of definitions – which would also probably not be necessary – it could be useful to agree on a common terminology. In any case, the differences need to be noted and care should be taken to avoid confusion.

Different methodologies are also used for the measurement of the value of subsidies. The OECD, for example, measures the value of a GFT as the monetary value of the government intervention, i.e. the direct public budget implication of the transfer. FAO proposes, in its Guide, two complementary measurements: the cost to the government and the value to the industry. The former includes, in addition to the actual budgetary expenditure, the administrative cost (e.g. personnel and overhead) for implementing the subsidy scheme and – in some cases – the capital opportunity cost. The value to the industry can be something quite different and is preferably estimated based on a corresponding market price value²⁶. These differences in measurement methods would be likely to create ambiguities if results from different quantitative analyses were to be compared. It would hence appear desirable to agree on common methodologies for quantifying subsidies. However, with regard to the qualitative analyses in many of the current studies, the inconsistency constitutes less of a problem. In this context, the general difficulties in obtaining data on subsidies could be mentioned; there is a lack of reliable and comprehensive information on subsidies – regardless of measurement method used – and this deficiency can only be remedied through increased cooperation from governments.

²⁶ The Guide suggests a number of alternative principles for estimating the industry value when market prices are either not available or not applicable.

Looking at the different analytical frameworks and methodologies that are being used, it appears that much of the work currently carried out is exploratory, i.e. more a search for new methodologies than the implementation of existing ones. It is hence difficult to discuss the compatibility or non-compatibility of different approaches. Nevertheless, some common ground is found also here; the basic concepts of the Hannesson framework and Porter's matrix, mentioned on several occasions in this document, appear to be generally accepted. They do, though, contain a number of assumptions that need to be understood and investigated. If applied in different contexts, care has to be taken when analysing and comparing the results.

With regard to study methodologies, a range of different approaches is used, e.g. case studies, desk studies, qualitative analyses, econometric estimations, etc. There does not appear to be any particular concerns for non-compatibility between different approaches – they rather complement each other – but it could be desirable to carry out more empirical work, i.e. including the collection of quantitative data on subsidies. The specific objectives of a particular activity, or the resources available for a study, will influence the methodologies used. For example, the UNEP case studies (in Argentina, Senegal, Mauritania and Bangladesh) were carried out by local institutions and involved the participation of stakeholders since the purpose of the projects was not only to study the impact of subsidies as such but also to promote capacity building. The results may hence have a somewhat different focus than those of a pure research project. Similarly, the OECD work on developing a check-list for the identification of environmentally harmful subsidies may not lead to quantitative results but may create a practical policy tool.

In summary, it would appear that the results of the current activities of the IGO community are generally compatible with each other and mutually useful. However, as for the interpretation of research results in general, there is a need to understand the underlying methodologies and objectives. For future quantitative work, care will need to be taken to use compatible methods for measuring subsidy values.

4.3 Scope for future cooperation

Cooperation between different organizations can take place at different levels, e.g.:

- Exchange of information;
- Division of work;
- Realization of joint projects.

It is evident that there is an ongoing exchange of information; the IGO meetings are good examples of this. There are also both bilateral interactions and more informal contacts taking place, and the results of work by one organization is used by others, e.g. FAO's intention to use the Hannesson and Porter framework/matrix. However, considering the different memberships and mandates of the different organizations, there are naturally limits for the extent to which work can be jointly planned and executed. Nevertheless, it

would appear that there is scope for increased cooperation. Some of the issues such cooperation could concern include:

- Harmonization of the methodologies used for measuring the value of subsidies, for example by empirical testing of the approaches proposed by the FAO Guide.;
- Common efforts to support and encourage countries to collect data and report on fisheries subsidies;
- Realization of case studies with joint terms of reference on selected aspects of environmental, economic and social effects of subsidies. This could be an option for the next phase of programming of studies after the results of current OECD, UNEP and FAO studies have been evaluated next year;
- Consideration of the possibility to establish an overall priority plan for work on fisheries subsidies, including the identification of the most pertinent research questions and a clear understanding of who does what.
- Establishment of procedures for contacts and coordination within the IGO community to ensure that contradictory messages are not conveyed to the different memberships. This aspect will become more important in the future when the results of different studies start to lead to policy advice on a bigger scale.

5. CONCLUDING REMARKS

More and more work is being carried out with regard to the impact of fisheries subsidies and the picture is slowly getting clearer – at least with regard to identifying the pertinent issues to study. However, even more work and concerted efforts are needed to reach a level of knowledge sufficient to constitute a basis for giving sound advice for how to come to terms with the apparent problems with existing subsidy regimes.

Some of the work currently taking place has been presented in this report together with thoughts regarding their interrelationship and future cooperation possibilities within the IGO community. The presentation and the discussions should be supplemented and continued in the IGO meeting and it is hoped that this will lead to constructive results and constitute another step on the way towards understanding the impact of fisheries subsidies.