

# Guide for identifying, assessing and reporting on subsidies in the fisheries sector



**Cover photograph:**

First-century AD Roman mosaic, courtesy of the Palazzo Massimo, Museo Nazionale Romano, Rome, Italy. FAO/12853

# Guide for identifying, assessing and reporting on subsidies in the fisheries sector

FAO  
FISHERIES  
TECHNICAL  
PAPER

438

by  
**Lena Westlund**  
FAO Consultant

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

ISBN 92-5-105135-6

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

Applications for such permission should be addressed to:

Chief

Publishing Management Service

Information Division

FAO

Viale delle Terme di Caracalla, 00100 Rome, Italy

or by e-mail to:

[copyright@fao.org](mailto:copyright@fao.org)

© FAO 2004

---

## PREPARATION OF THIS DOCUMENT

The basis of this document was a set of agreed principles arising from the *FAO Expert Consultation on Economic Incentives and Responsible Fisheries* held in Rome from 28 November to 1 December 2000. A first draft was produced after an extensive literature search and field-tested in four participating countries. This led to a much improved second draft that was discussed in the *FAO Expert Consultation on Identifying, Assessing and Reporting on Subsidies in the Fishing Industry* held in Rome from 3 to 6 December 2002. This version of the Guide was produced in early 2003. It is hoped that this document will be treated as a working paper and will be revised and improved as more experience in the subsidies sector is gained.

The Guide provides detailed and practical advice to fisheries professionals who identify, assess or report on subsidies in the fisheries sector. It is expected that those who lead a subsidy study will have studied economics or business at a University level. However, it is hoped that the Guide will also be used and understood by biologists, decision-makers and others who are directly or indirectly involved in the fisheries sector.

The various drafts, as well as the final version of the Guide, have been written by Ms Lena Westlund.

**Distribution:**

FAO Fisheries Department

FAO Regional and Subregional Offices

Other interested nations and national and international organizations

## ABSTRACT

FAO Fisheries Technical Paper 438 consists of ten chapters and three appendixes.

After a brief introduction to the background of the document, the Guide starts in chapter 2 by explaining to the reader how it should be used. In chapter 3, it discusses how to prepare for a study of fishery subsidies. Then, before getting into more detailed advice on the study itself, a discussion follows on “what is a fisheries subsidy?” and “what are the various categories of subsidies?” in chapters 4 and 5. This part of the document is directed at those who are not familiar with the issues surrounding subsidies in fisheries. Chapter 6 is the core of the Guide. Here the reader is exposed to the use of different assessment methods. The emphasis is on how to determine the government cost – or revenue – and the value to the industry of a subsidy. The value of a subsidy to the industry is reflected in costs and earnings it causes. Chapter 7 discusses the measurement of these factors in further detail. The following chapter deals with the relative importance of fishery subsidies and gives ideas with regard to how comparative analyses can be carried out. The final two chapters discuss reporting and also give a summary of the Guide.

Appendixes I and II present respectively a Glossary and a review of other subsidy classifications. Appendix III lists additional examples of possible subsidies under different categories.

Westlund, L.

Guide for identifying, assessing and reporting on subsidies in the fisheries sector.  
*FAO Fisheries Technical Paper*. No. 438. Rome, FAO. 2004. 71p.

# CONTENTS

Preparation of this document	iii
Abstract	iv
Abbreviations	ix
<b>Chapter 1</b>	
<b>A fisheries subsidies guide</b>	<b>1</b>
<b>Chapter 2</b>	
<b>How to use the guide</b>	<b>3</b>
<b>Chapter 3</b>	
<b>Planning and preparing for a fisheries subsidies study</b>	<b>5</b>
<b>Chapter 4</b>	
<b>What is a fisheries subsidy?</b>	<b>7</b>
4.1 A definition of fisheries subsidies	7
4.2 The context	8
4.3 The economic and institutional frameworks and the fisheries sector	10
4.4 Where and how to find the information	12
4.5 Identifying fisheries subsidies – a first list	13
<b>Chapter 5</b>	
<b>Different categories of subsidies</b>	<b>15</b>
5.1 Four categories of fisheries subsidies	15
5.2 Category 1: Direct financial transfers	15
5.3 Category 2: Services and indirect financial transfers	15
5.4 Category 3: Regulations	16
5.5 Category 4: Lack of intervention	16
5.6 International practice	17
<b>Chapter 6</b>	
<b>Assessing subsidies</b>	<b>19</b>
6.1 Framework and general principles	19
6.2 Short and long-term effects	19
6.3 The firm, the industry and society	20
6.4 Government cost and industry value	20
6.5 Assessing different types of subsidies	24
6.5.1 Presentation of subsidy examples	24
6.5.2 Investment grants	24
6.5.3 Vessel decommissioning programmes	25
6.5.4 Equity infusions and state-ownership	26
6.5.5 Income support and unemployment insurance programmes	26
6.5.6 Price support	29
6.5.7 Export incentives and other market interventions	30
6.5.8 Fuel tax exemptions	30
6.5.9 Investment tax credits and deferred tax programmes	31
6.5.10 Favourable loans and loan guarantees	32

6.5.11 Special insurance schemes for vessels and equipment	32
6.5.12 Training and extension	33
6.5.13 Inspection and certification services	33
6.5.14 Fishing port facilities and other infrastructure	34
6.5.15 Payments to foreign governments to secure access to fishing grounds	36
6.5.16 Government research and development (R & D)	36
6.5.17 Import quotas, tariffs and other border measures	36
6.5.18 Fisheries management and environmental protection programmes	38
6.5.19 Free or below market price access to fishing grounds: resource rent subsidies	40
6.5.20 Lack of pollution control	43
6.5.21 Lack of implementation of existing regulations	43
<b>6.6 Identifying and assessing subsidies – a summary</b>	<b>43</b>
<b>Chapter 7</b>	
<b>Costs and earnings analysis – the impact on industry profits</b>	<b>45</b>
7.1 The profit and loss account and the classification matrix	45
7.2 Information requirements	47
7.3 Income statement with and without fisheries subsidies	48
<b>Chapter 8</b>	
<b>Comparative analysis</b>	<b>51</b>
8.1 Relative importance of costs and values	51
8.2 Financial ratios	51
<b>Chapter 9</b>	
<b>What to include in a subsidy description</b>	<b>55</b>
<b>Chapter 10</b>	
<b>Reporting on subsidies</b>	<b>57</b>
10.1 The study report	57
10.2 Fisheries subsidies study conventions	58
10.3 Summary of the Guide	58
<b>Bibliography</b>	<b>61</b>
<b>Appendix I</b>	
<b>Glossary</b>	<b>63</b>
<b>Appendix II</b>	
<b>Other subsidy classifications</b>	<b>67</b>
<b>Appendix III</b>	
<b>More examples of possible subsidies of different categories</b>	<b>69</b>

## LIST OF TABLES

Table 1	
<b>Fisheries subsidies classification matrix</b>	<b>46</b>
Table 2	
<b>Description of fisheries subsidies – a checklist</b>	<b>55</b>
Table 3	
<b>Tentative outline for the final report of a fisheries subsidies study</b>	<b>57</b>



## LIST OF FIGURES

Figure 1		
<b>Scope of the Guide</b>		<b>1</b>
Figure 2		
<b>Planning and preparing for a fisheries subsidies study</b>		<b>6</b>
Figure 3		
<b>Definition of fisheries subsidies</b>		<b>9</b>
Figure 4		
<b>The context of fisheries subsidies</b>		<b>10</b>
Figure 5		
<b>A two-way approach</b>		<b>13</b>
Figure 6		
<b>Example of a preliminary list of fisheries subsidies</b>		<b>14</b>
Figure 7		
<b>The Guide's four subsidy categories</b>		<b>16</b>
Figure 8		
<b>Summary of main principles for assessing fisheries subsidies</b>		<b>24</b>
Figure 9		
<b>Summary of the assessment of fisheries subsidies in the country Seidisbus</b>		<b>44</b>
Figure 10		
<b>Summary of the Guide's components</b>		<b>59</b>

## LIST OF BOXES

Box 1		
<b>WTO definition</b>		<b>8</b>
Box 2		
<b>The concepts of perfect competition and efficient allocation</b>		<b>11</b>
Box 3		
<b>What to do when there is more than one suitable subsidy category?</b>		<b>17</b>
Box 4		
<b>Opportunity costs</b>		<b>22</b>
Box 5		
<b>The Producer Subsidy Equivalent (PSE) and the fisheries sector</b>		<b>23</b>
Box 6		
<b>Investment grants - An example</b>		<b>25</b>
Box 7		
<b>Defining state capital equity subsidies</b>		<b>27</b>
Box 8		
<b>State capital equity infusion and state ownership – Two examples</b>		<b>28</b>

Box 9		
<b>Income guarantee scheme - An example</b>		<b>29</b>
Box 10		
<b>Two-way subsidies</b>		<b>29</b>
Box 11		
<b>Calculating the value of a fish export promotion subsidy – An example</b>		<b>31</b>
Box 12		
<b>Fuel tax rebate – An example</b>		<b>32</b>
Box 13		
<b>Administrative costs and overhead</b>		<b>33</b>
Box 14		
<b>Depreciation costs</b>		<b>34</b>
Box 15		
<b>Assessing infrastructure subsidies - An example</b>		<b>35</b>
Box 16		
<b>Delineating subsidies, assessing cross-departmental activities and public accounting practices</b>		<b>37</b>
Box 17		
<b>Choosing benchmarks</b>		<b>38</b>
Box 18		
<b>Gear regulations - An example</b>		<b>39</b>
Box 19		
<b>Membership fees to international organizations - An example</b>		<b>40</b>
Box 20		
<b>Fisheries management and resource rent subsidies - An example</b>		<b>42</b>
Box 21		
<b>Resource rent</b>		<b>43</b>
Box 22		
<b>Structure of the fisheries sector - An example</b>		<b>48</b>
Box 23		
<b>Costs and earnings analysis - An example</b>		<b>52</b>
Box 24		
<b>Ratios - An example</b>		<b>54</b>
Box 25		
<b>Financial ratios - An example</b>		<b>54</b>

---

## ABBREVIATIONS

<b>AMS</b>	aggregate measurement of support
<b>APEC</b>	Asia-Pacific Economic Cooperation
<b>DSA</b>	daily subsistence allowance
<b>GFT</b>	government financial transfers
<b>GDP</b>	gross domestic product
<b>GATT</b>	General Agreement on Tariffs and Trade
<b>ITQ</b>	individual transferable quotas
<b>M</b>	million
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PSE</b>	producer subsidy equivalent
<b>R &amp; D</b>	research and development
<b>SCM</b>	Agreement on Subsidies and Countervailing Measures
<b>TED</b>	turtle excluder device
<b>US\$</b>	United States dollars
<b>VAT</b>	value added tax
<b>WTO</b>	World Trade Organization

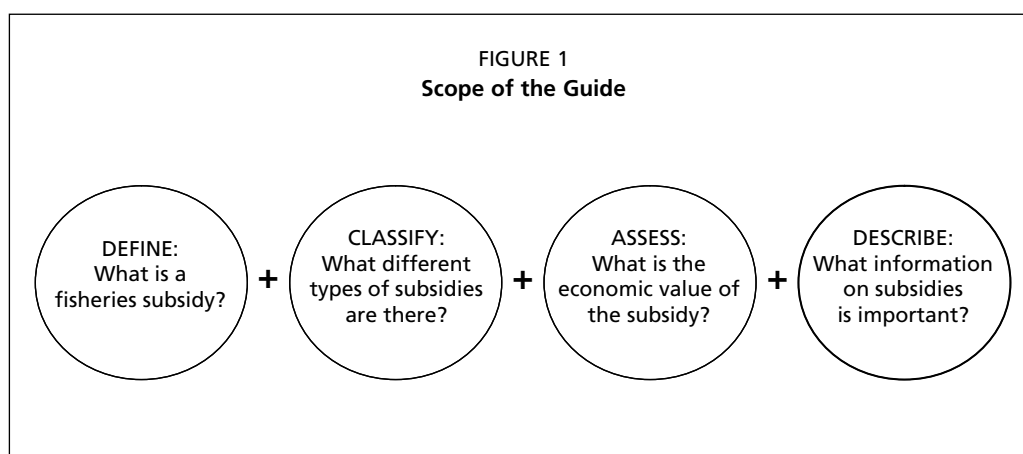
# Chapter 1

## A fisheries subsidies guide

This Guide has been developed to assist in studying fisheries subsidies. It aims at being an instrument for studies covering all different types of subsidies in all sectors of the fisheries industry and attempts to provide a flexible technical tool that can be used by those who carry out studies and prepare reports on subsidies in the fisheries sector according to their specific needs.

As such, the Guide does not provide a rigid definition of subsidies but offers a framework for how to define fisheries subsidies and it discusses and suggests definitions of different types of subsidies. The Guide does not take any position with regard to whether a subsidy is “good” or “bad”. Subsidies can increase or decrease revenues and costs of the industry, but the analysis of how this impact on industry profits eventually affects resources and trade is beyond the scope of the Guide. Hence, the Guide does not cover the analysis of the effects of subsidies on resources, fisheries and trade but aims at assisting in collecting and organizing the data on which these analyses could be based. This covers defining, classifying and quantifying fisheries subsidies as well as investigating the processes by which subsidies are provided.

The Guide is based on the main principles agreed on in the FAO Expert Consultation on Economic Incentives and Responsible Fisheries, held in Rome on 28 November – 1 December 2000<sup>1</sup>. 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, incorporating the experience from the test studies. The definitions and methodologies presented in the Guide have thus been 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 present document was finalized<sup>2</sup>.



<sup>1</sup> See FAO 2000a.

<sup>2</sup> See FAO 2002.

However, the subject of fisheries subsidies is vast and complex and the work carried out so far has not been sufficient for dealing with all aspects and issues that it includes. Therefore, this Guide should not be considered a final product but rather a flexible document that may need to be revised as more experience on how to study fisheries subsidies is acquired.

# Chapter 2

## How to use the guide

Following the two introductory chapters, the Guide is organized in eight main chapters, each dealing with a separate aspect of a fisheries subsidies study:

### Chapter 3

#### *Planning and preparing for a fisheries subsidies study*

Before starting the actual work on a fisheries subsidies study, there are several aspects to think about with regard to the objective, the scope and the resources needed.

### Chapter 4

#### *What is a fisheries subsidy?*

This chapter discusses the definition of a fisheries subsidy. It emphasizes the importance of having a good understanding of both the fisheries sector and of the economy of which it is a part in order to be able to define subsidies.

### Chapter 5

#### *Different categories of subsidies*

To facilitate the analysis of subsidies and to organize our information, it is suggested that fisheries subsidies are classified into four different categories.

### Chapter 6

#### *Assessing subsidies*

This is the core of the Guide where the assessment of different types of subsidies is discussed. Principles and methodologies are suggested for how to measure the government cost – or revenue – and the value to the industry of fisheries subsidies.

### Chapter 7

#### *Costs and earnings analysis – the impact on the industry*

In this chapter, a costs and earnings analysis is suggested for analysing the impact of subsidies on the profits of the industry in more detail. The classification of subsidies is expanded to include a dimension determining which type of costs or revenues that is being affected by a particular subsidy.

### Chapter 8

#### *Comparative analysis*

Building on the results from the assessment of subsidies, this chapter suggests ways of examining the relative importance of fisheries subsidies.

### Chapter 9

#### *What to include in a subsidy description*

In addition to assessing subsidies, such as estimating their economic value, there are other aspects that may be important to document and report on. A checklist for what to include in a description of a fisheries subsidy, based on the information required for the WTO subsidy notification procedures, is suggested.

## **Chapter 10**

### *Reporting on subsidies*

In this last chapter, a few ideas are given with regard to how to structure the report on a fisheries subsidies study. A number of proposed international “conventions” regarding reporting practices are also presented.

The user of the Guide should choose those parts of the document that are relevant for a particular study. Not all sections may be of interest to everyone. It is however recommended to read through the whole Guide to start with to gain a good understanding of the subject field and the issues at stake. Even though the Guide makes an effort to present the topics in the same order as they are likely to occur in the work on a fisheries study, there are several cross-cutting issues that are not possible to present in the assumed sequential order. It should also be recognized that the work is likely to be an iterative process that will take us backwards and forwards in the Guide several times. The **index** at the end of the document may be useful in this respect.

To illustrate various approaches and methodologies, several examples have been included in the Guide – in particular on how to assess subsidies – and are presented in “boxes” throughout the text. These examples refer to an invented country called Seidisbus and are not real subsidies as such. However, the contents of the examples are in most cases derived from the experience of the four prototype studies carried out for the preparation of this document. Hence, it is believed that the examples cover some of the more important subsidies as well as the most common problems related to their assessment. At the same time, it should be pointed out that it has not been possible to include all aspects and types of subsidies in the document and the Guide does not lay claim on being exhaustive or fitting all situations equally well; omissions are inevitable. It is still hoped, though, that the guidelines will help identifying and assessing all types of fisheries subsidies, whether mentioned explicitly in the Guide or not.

A **bibliography** is included at the end of the report and a glossary is found in **Appendix I**, giving explanations to some of the economic expressions and terms used in the Guide.

## Chapter 3

# Planning and preparing for a fisheries subsidies study

As with all research projects and studies, there is a fair amount to do before the actual survey work can start. Planning for a study is an important process and the quality of the preparations can be essential for how good results we achieve. Hence, sufficient time and effort have to be allocated for the planning phase of the work. Some of the questions we need to answer before we start a fisheries subsidies study are:

- What is the objective of the study, i.e. what questions is the study trying to answer?
- What scope should the study have? Should it cover the whole of the fisheries sector or only selected subsectors or regions? Should it cover all subsidy types or only certain categories?
- What are the resources available for the study? How much time do we have?
- Who should carry out the study? What competences need to be represented on the study team?
- What other preparations are needed with regard to background reading and development of methodologies?

The clearer the **objective** of the study, the more focused the work can be and better results are likely to be achieved with fewer resources. If the study is carried out in a given context, maybe requested by a department or ministry with defined terms of reference, the objective is likely to be defined as well. However, if this is not the case and if it is the first time a review is to be carried out, we may want to keep the study quite broad, giving more of a general inventory of existing subsidies and related issues. A first subsidy study may have as an objective to identify issues to be studied further.

The **scope** of the study is in some ways closely related to the next question in the list above, i.e. what **resources are available**. The more extensive the study, the more resources and time we will need. Time and resources needed will also depend on the general availability of data and the size and complexity of the fisheries sector. It is of course easier to carry out a fisheries subsidies study in a small country with a relatively limited fisheries sector for which there is already a good data collection system than in a big country with a very large – and maybe dynamic – fisheries industry for which data are generally not available with the central administration.

Nonetheless, the minimum time required for a study also in a relatively “easy” country or region is probably at least three to six months if we want to cover the whole fisheries sector, i.e. all subsectors including input industry, capture fisheries, aquaculture, processing, and marketing and distribution. This time is likely to allow us to identify the main existing subsidies and to assess and give values to most of the more direct subsidies of Categories 1 and 2 (see chapter 5). Of course, the time required also depends on the number of people in our study team and on whether we work full-time on the study or not. However, even with a large team and full-time engagements, there are going to be delays in the data collection considering the large number of contacts that will be needed for a complete sector coverage.

If we want to examine some of the more complicated subsidies in more detail, i.e. Categories 3 and 4 subsidies covering regulations and non-interventions (see chapter



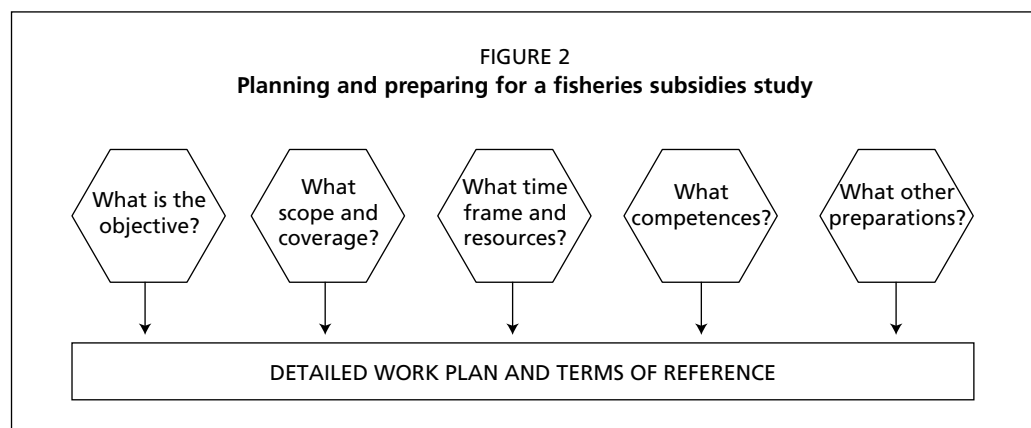
5), considerably more time will be needed. To examine issues such as free access to resources or the actual effects of gear regulations may require a focused effort. In fact, we may want to organize the study in a way that allows a separate study team to look into the details of specific issues. If only a limited number of these issues are being included and the special efforts organized at an early stage – to be carried out in parallel with other tasks – time can be saved. Nevertheless, it would be expected that a more detailed fisheries subsidies study would require at least six months to a year to complete, from the starting of the planning phase to the finalization of the report.

In addition to ensuring that we have enough time, it is very important that our **study team** includes the right competences. With team members that are already familiar with the fisheries sector, the economic framework of the country or region, and with the concept of subsidies in general, the work on the study is likely to be easier. However, we should be more specific than that and, firstly, it would appear absolutely essential that at least one person – the team leader – has excellent analytical skills in addition to a general knowledge of the sector and the issues as well as the necessary time and interest for investing in the study. It is important to point out that the Guide is just that: a guide for facilitating the conduct of a fisheries subsidies study. It does not, however, give a complete set of “rules” to follow or set forms to fill in. It provides a basis for creating the tools needed to carry out a study and guidelines for the identification, classification, description and assessment of subsidies in a systematic way. Still, someone needs to develop these tools and analyse the results.

Much of the work on assessing subsidies, in particular with regard to government costs, is based on information from the public accounts. Many of the calculations use accounting principles and standard methods for financial analysis. It would hence also appear important to have at least someone on the study team who is an accountant and who is familiar with the structure of the government accounting system. The team should also include an economist. Without these two disciplines, misunderstandings could occur and the results become unreliable. Likewise, access to information is fundamental for the study and this aspect also needs to be taken into consideration when appointing our study team members.

With regard to **other preparations** before starting the actual survey, it is usually always a good idea to conduct general interviews with key informants and resource persons as well as to consult existing relevant documentation in order to establish a preliminary overview of the structure of the economy, the fisheries sector and existing subsidies. This preliminary investigation is particularly important for study team members who are not familiar with the subject area.

Once we have a plan for what we would like to do, it is recommended that we put it down in writing. Clear terms of reference and a timeframe for the work, including milestones for the completion of various subcomponents, will help us to keep the right focus of the study and to monitor the work.



# Chapter 4

## What is a fisheries subsidy?

### 4.1 A DEFINITION OF FISHERIES SUBSIDIES

After having thought through the overall organization of the work and drawn up a general plan for the task ahead of us, the next thing we have to do when starting a fisheries subsidies study is to define what we mean by a fisheries subsidy.

To most of us, a subsidy is some kind of government support to the private sector, generally serving a public purpose. Looking up the term “subsidy” in a dictionary gives us that a subsidy is “a direct or indirect payment, economic concession, or privilege granted by a government to private firms, households, or other governmental units in order to promote a public objective” (FAO Fisheries Glossary and Encyclopaedia Britannica 2001).

Based on this general notion, the Guide proposes a broad definition of fisheries subsidies according to which a subsidy could fundamentally be any government intervention – or lack of intervention – that affects 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 intra-government aspect from the definition above is disregarded and subsidies are defined as actions or inactions for which the recipient is part of the private fisheries industry (and not “other government units”).

However, not everything the public sector does or does not do can be classified as subsidies<sup>3</sup> and a further qualification of the definition is needed with regard to reference points. Accordingly, we define a subsidy as something that is out of the ordinary, i.e. something that is done differently from what is customary:

*Fisheries subsidies are government actions or inactions outside of normal practices that modify – by increasing or decreasing – the potential profits by the fisheries industry in the short-, medium- or long-term*

“Government” here also includes other governments and public bodies than the ones in the country where the subsidy as such exists. This would, for example, include contributions from public and international development aid and cooperation institutions. It also of course includes actions or inactions by non-fishery government agencies and organizations. If these actions or inactions benefit the fisheries industry in a significant way, they may be fisheries subsidies even if they are not only directed to the sector. Sponsorships by private companies do however not constitute subsidies.

The “*fisheries industry*” refers to all productive subsectors of the fisheries and aquaculture sector, i.e. all types of input industry – including transport and other support services – capture fisheries, aquaculture, processing and marketing. It covers all producers and operators, both small and large-scale, engaged in recreational, subsistence and commercial activities. For our particular study, we may of course have

<sup>3</sup> For clarity, it should be mentioned that the Guide generally uses the term “subsidies”, meaning – as defined above – all government actions and inactions. Occasionally, the term support measure or support program is used as a synonym to government action or intervention. With regard to government costs (revenues) for subsidies, expressions like public expenditures, expenses or costs, and public budget implications are sometimes used meaning the same thing unless stated otherwise.

## BOX 1

**WTO definition**

It should be noted that the definition of subsidies used in this Guide is much broader than the one used in the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures (SCM) which is perhaps the most commonly cited and practically applied subsidy definition. The SCM Agreement is WTO's basic subsidy agreement and the one that currently governs trade disputes regarding the fisheries sector in this respect. 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 effect" (WTO 1994 Agreement on Subsidies and Countervailing Measures, article 1, also described in Milazzo 1998). The Guide's definition does not require any of these conditions to be fulfilled; an action or inaction is considered a subsidy if it is outside of normal practices and it affects the profits of the fisheries industry. The Guide hence considers regulatory interventions such as border measures to be subsidies as well as interventions by third-country governments while the WTO does not. The Guide also take profit-decreasing subsidies into account, something the WTO ignores.

decided that we only want to look at a group of firm, at one or a few subsectors or at an aggregate industry level (see also chapter 3 and section 6.3).

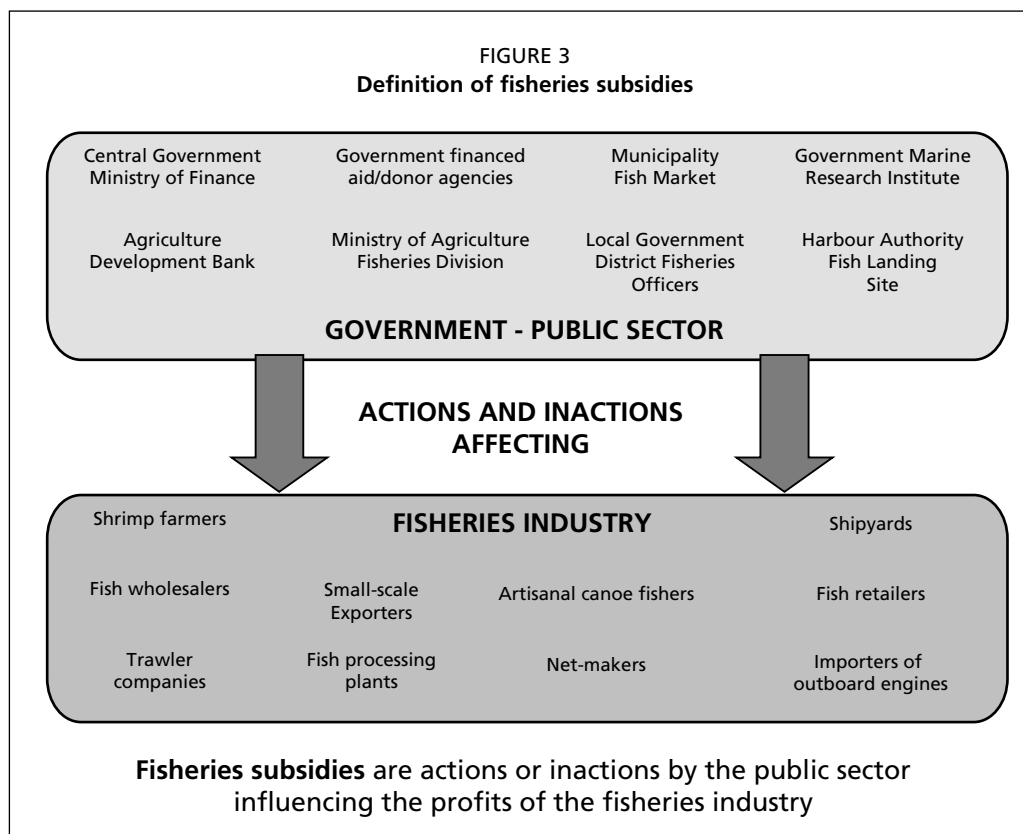
By "*potential profits*" the overall profitability of the industry is implied. However, while subsidies affect profits in the short, medium and long-term, the Guide's focus is on the more direct shorter-term financial effects as we will see when discussing how to assess subsidies in chapter 6. It should be noted that subsidies could also decrease profits. Examples of profit-decreasing subsidies would be taxes and other fees and duties, levied by the government.

It is important to note that the action (or inaction) does not have to be specifically directed to the fisheries industry – it can be something also applicable to other economic sectors – but if the fisheries industry benefits (or suffers) economically compared to industry in general, the Guide defines it as being a fisheries subsidy.

**4.2 THE CONTEXT**

When we say that a fisheries subsidy is an action or inaction that is outside of normal practices, or non-customary, we need to know what we mean by "non-customary" in order to be able to distinguish between subsidies and normal – or general – actions and inactions. The best way to do this is to define what is general and use this situation as the benchmark for "normality" against which the government actions or inactions are measured, i.e. anything that is different from our normality reference point is non-customary and hence a subsidy.

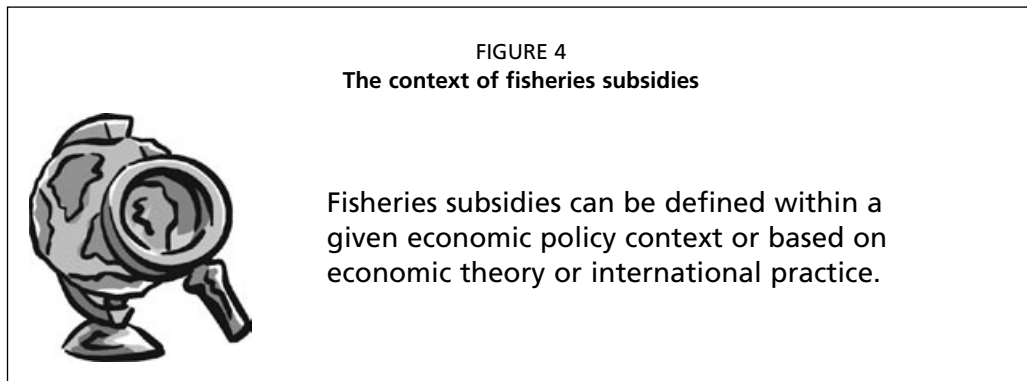
It is conceivable that sometime in the future countries will agree on what is "normal" in a global context and therefore useful as international benchmarks and criteria for defining subsidies. Such benchmarks could *inter alia* include: interest rates for investment loans, standard fuel prices and minimum levels of cost recovery for fisheries management. However, because such standards do not exist presently and because it would take time to reach an agreement on them, it is suggested that standards represented by the overall economic framework of the particular country – or region – under study could be used. Accordingly, the reference points would refer to other sectors in the country, or group of countries, i.e. the "normal" situation without subsidies is represented by the circumstances industry in general operates under in the



country or region and fisheries subsidies are defined and measured as deviations from these conditions. For example, in a country where public services are provided so to say free of user charge – because they are financed through the tax system – it would be considered normal that also the fisheries industry benefits from certain services without them being defined as subsidies. On the other hand, in a country where cost recovery is the norm, the same benefits to the fisheries sector are subsidies if not directly paid for by the industry.

However, this approach would be unsatisfactory if we want to make comparisons between countries or regions. On some occasions, there may be alternative standards or guidelines that we can use. For example, if the results of the subsidy study are to be used in an investigation of the effects of subsidies on international trade in fish and fish products, we may want to adapt the definitions we use for our study according to those that are contained in the WTO Agreement on Subsidies and Countervailing Measures (see also Box 1).

If this is not the case, we could consider turning to economic theory for objective advice. This aspect is briefly discussed in Box 2 below. Another source of guidance is the arena of international practice. Even if there is not an established definition of fisheries subsidies, a number of research and other studies have been carried out giving views on what government actions and inactions should be considered subsidies. Examining the existing literature on the issue may not give us all the answers but could still be a good help on the way. We should also remember that subsidies are generally not studied in a vacuum and that the objective and scope of our particular study may give us guidance as to how to define our subsidies and what to include. In chapter 5 below, where different categories of subsidies are discussed, we will look into what international practice tells us about subsidy definitions. We also come back to the issue of benchmarks in chapter 6 where the quantitative assessment of subsidies is discussed.



### 4.3 THE ECONOMIC AND INSTITUTIONAL FRAMEWORKS AND THE FISHERIES SECTOR

In order to be able to identify fisheries subsidies according to the above definition, we need a good understanding of the overall economic and institutional frameworks within which our subsidies are to be defined. We also, of course, need to know about the fisheries sector. Moreover, quantitative information on several economic and financial issues is needed as benchmarks when assessing the value of the subsidies, something that is discussed in chapters 6 and 7 below.

The type and extent of information needed on the economic and institutional frameworks and the fisheries sector depends on the objective and scope of our particular study; the coverage of our surveys should be appropriate to the task at hand. Nevertheless, some general recommendations on survey contents are given below.

A **baseline survey of the macro-economic and institutional frameworks** to be used for identifying and assessing fisheries subsidies could include the following aspects:

- *Policy and legal framework*

We need to understand the overall political framework with regard to the role of the public sector. What is the general policy with regard to cost recovery of public services? What government market interventions are there? What is the role of state-owned enterprises? Are there support programmes for businesses, e.g. for regional development, infant industry, etc.? What ministries or government departments are responsible for these policies and programmes and how are they organized?

We should also look into more specific policy and legal matters, particularly in areas that are likely to be relevant to the fisheries sector, e.g. environmental policies and general pollution control measures, food safety and sanitation standards, labour and employment laws, and practices with regard to user right policies in the natural resources sector.

- *Interest rates and monetary policies*

Information on commercial interest rates is needed for determining whether the fisheries industry benefits from loans on favourable terms and for assessing other possible subsidies related to investments. As far as possible, the real alternative financial cost should be used as the benchmark and where different commercial interest rates are used for different types of investment – usually according to the perception of risk – care should be taken to use the rate corresponding to the particular situation. The baseline survey may hence need to list different commercial rates. It should be noted that this might mean including usury rates in an informal market if this is the factual market alternative. If information on commercial rates is lacking, an appropriately adjusted inter-bank offered rate or the rate of return for government bonds might serve as useful guidance.

Information on other general loan and credit conditions, such as the need for collateral or typical amortization periods, could also be included in the baseline

## BOX 2

**The concepts of perfect competition and efficient allocation**

Basic economic theory tells us that perfectly competitive markets will produce an efficient allocation of resources. However, there are many ways in which markets can fail. Three of the more important ways in which this happens concern imperfect competition, externalities and public goods. Governments generally intervene to remedy these shortcomings, e.g. by antitrust legislation, the regulation of negative spill-overs or the internalization of externalities – such as pollution – through taxes and the provision of public goods or the establishment of property rights.

In addition to trying to correct market imperfections, modern governments also intervene by using a system of taxation and transfers to produce a more fair distribution of income than what the perfectly competitive markets create. Moreover, since the 1930s, governments have assumed a third role; to use fiscal and monetary policies to promote long-term economic growth and to stabilize excessive unemployment and inflation rates.

Interventions by governments hence cover a variety of measures. Different schools of thought in economics have different views on what types of measures that are more important, what the role of the government should be and what is better left to the market forces. These views have also changed over time. Since the 1980s, there has been a trend back towards the competitive-market pole of earlier days within the concept of the welfare state; in the modern mixed economies, markets direct day-to-day economic life and governments intervene with regard to social conditions, e.g. health care, pensions, etc (Samuelson and Nordhaus 2001). It should be recognized, though, that government policy is also influenced by institutional arrangements and public sector resource availability, making generalized international descriptions of government interventions difficult.

Considering this as well as our broad definition of subsidies and the great variety of economic theory, it is difficult to give general advice on how to apply the latter when identifying subsidies in practice; detailed analysis – appropriate to the specific situation – would generally be required. Nevertheless, the concepts of perfect competition and efficient allocation of resources could theoretically be used as benchmarks for defining subsidies. An expert group of the OECD concluded in 1993 that “the concept of assistance to the fishing industry in a country should be defined as government intervention or lack of government intervention which distorts the allocation of resources in that country relative to an efficient allocation” (OECD 1993, paragraph 76). However, when Schrank and Keithly (1999) discuss the possibility of using the theoretical concept of perfect competition as a benchmark, they conclude that the criterion is “too amorphous to serve as an operational concept” (Schrank and Keithly 1999, page 157). The main reasons for this include the difficulties in establishing exactly what the norm of the perfect market is and in isolating the specific distorting or correcting effects of a government action (or inaction) (see also Box 5).

Schrank and Keithly instead suggest basing the definition of subsidies on a wider framework which is the concept of the firm’s costs and revenues. A government intervention that affects a firm’s costs or revenues – or that modifies market imperfections that in turn affects the firm’s costs and revenues – and hence also potentially has an impact on its profits, should be considered a subsidy. The Guide’s definition is based on this concept. However, we are still left with the problem of finding a suitable benchmark; if we define subsidies in relation to potential changes in profits, we need to decide against what these changes are measured. This definition of benchmarks become even more crucial when we want to measure the economic importance of subsidies (see chapter 6).

survey, as well as information on monetary policies of importance with regard to the credit system. We also need to have a good picture of the institutional set-up of the financial and credit sector.

- *Tax regulations and social security coverage*

Information on the overall public revenue and tax system that might be relevant includes VAT rates, for different goods and services if differentiated, and corporate tax rates including general rules for, among other things, depreciation allowances for fixed assets and tax deference possibilities.

With regard to employment and labour costs, the main features of the tax systems for individuals need to be covered as well as the general social security structure, including rules for obligatory contributions and common benefits.

- *Trade regulations and border measures*

Tariff and non-tariff border measures should be looked into, giving details on differences between different types of goods and services. Border restrictions with regard to direct investments, ownership or the exertion of certain professions or commercial activities also need to be considered as well as regulations with regard to immigration and labour movements. Depending on the scope of our study, we may also want to know about what relevant international trade agreements there are and what regulations are applied by our main trading partners.

- *Exchange rates and currency regulations*

We need to know if there are any capital movement or foreign currency restrictions, especially if they apply in different ways to different sectors of the economy. Official and unofficial exchange rates of importance to the business community should also be looked at.

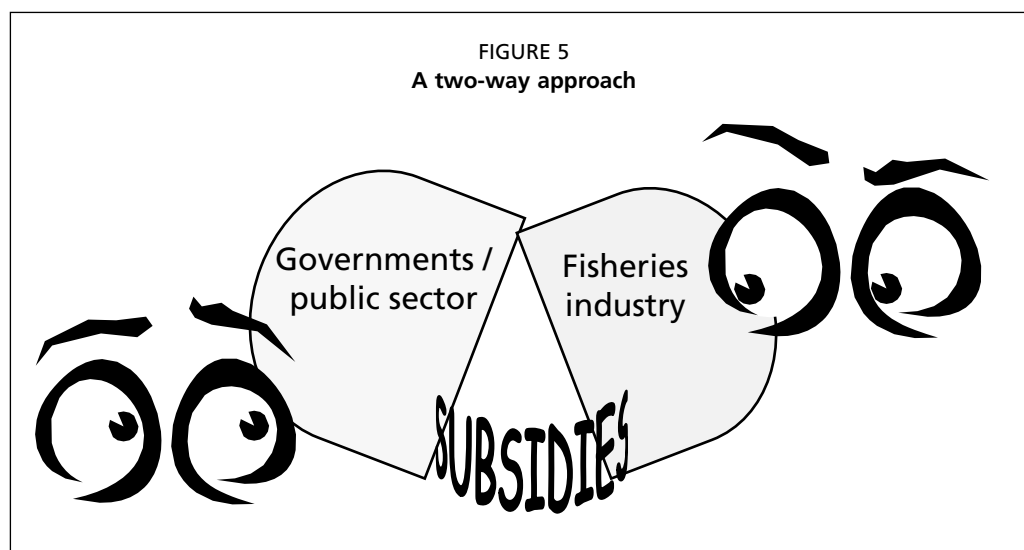
In a **review of the fisheries sector**, we would like to identify and investigate all *fisheries specific policies and regulations*, e.g.:

- Public market interventions in the fisheries sector, e.g. price policies, state-owned enterprises, support programmes, etc.
- Fisheries management and access right regimes
- Water and land use regulations for aquaculture
- Fish safety and hygiene regulations
- Capital markets and credit schemes relevant to the fisheries industry
- Tax regulations for the fisheries industry
- Social security policies and regulations with regard to labour in the fisheries industry
- Trade regulations and border measures regarding fish, fishery products and input goods

#### **4.4 WHERE AND HOW TO FIND THE INFORMATION**

The bullet points in section 4.3 above cover a large number of different types of information needed for the fisheries subsidies study. Depending on the competences and positions of the people in the team carrying out the study, some of this information may be easy to find, e.g. in a ministry or department of fisheries, information on fisheries management regimes is likely to be readily available. General information on issues that we already know something about, for example, regarding economic policies or tax regulations, may also be quite straightforward to get. In the same way, some subsidies may be easy to identify. Certain support schemes, e.g. an investment grant scheme, may be commonly known and therefore not difficult to investigate.

However, there are other issues that may be outside our normal work area or field of competence. There may even be aspects that we do not know about at all and consequently a risk that certain subsidies are not discovered. Therefore, we need to consult a wide range of information sources. To ensure to the extent possible that all subsidies are identified, it is suggested that we approach the exploration of subsidies



from two angles, i.e. from the point of view of the provider and from the point of view of the recipients.

In order to do so, we need to identify:

- *All government agencies and organizations that are involved in the fisheries sector and that may provide subsidies – in one form or another – to the sector.*

The relevant bodies may be fisheries specific agencies – such as a fisheries ministry or department – or non-fisheries, e.g. a research institute or a health authority. There may also be international organizations, or foreign donor governments. Semi-public and interest groups in the form of, for example, trade unions or producer organizations, should also be identified. They are likely to provide support to the industry that they in their turn receive public funding for.

- *The actors in the fisheries industry who receive or benefit from fisheries subsidies.*

These are the companies and individual operators that are active in fishing, aquaculture, production of inputs, processing, marketing and trade, etc. Making an inventory of the economic activities of the sector and listing main groups of companies and operators according to subsector, size, business form, etc., will give a good picture of the organization of the fisheries industry and also help us identify who should be consulted in the process of identifying and assessing fisheries subsidies.

Accordingly, it is recommended that – in addition to the framework and sector surveys suggested above – we make an extensive inventory of all relevant institutions as well as carry out a thorough review of the fisheries industry. The latter is further discussed in chapter 7. The institutional inventory is important in several ways. It gives us information on potential subsidy providers and hence helps us identify subsidies in a practical way. In-depth information on the institutional arrangements is also important when we assess subsidies (see chapter 6).

#### 4.5 IDENTIFYING FISHERIES SUBSIDIES – A FIRST LIST

Once we have identified all the stakeholders i.e. all parties involved or concerned with the fisheries sector, and we also have a fairly clear idea of what information we need, we can start collecting information and identifying the relevant subsidies. The information gathering can take many different forms – review of existing documents and reports, questionnaires, interviews, discussions, telephone calls, enquires by letter, etc. – and methodologies suitable for each particular situation have to be adopted. We may occasionally also want to consult people outside our group of stakeholders, i.e.



FIGURE 6  
Example of a preliminary list of fisheries subsidies

PRELIMINARY LIST OF FISHERIES SUBSIDIES			
Subsidy	Description	Responsible authority	Recipients / beneficiaries (subsector)
1. Investment grants	Storage and transport equipment	Department of Fisheries	Aquaculturists
2. Fuel tax rebate	Lower tax on fuel for fishing vessels (reimbursement retroactively)	Department of Fisheries	Fishers registered with DOF
3. Provision of landing site facilities	Landing sites provided free of charge	City municipalities	Artisanal subsector
4. No resource access fees	Fishing vessels do not pay licence fees	?	Marine capture fisheries subsector

companies or representatives of professionals in economic sectors outside fisheries, to clarify benchmarks and reference points.

The extent of the data collection and the depth of analysis will depend on the objectives of our particular study and the terms of reference that we have given it. It is likely that we want to investigate far beyond a simple listing of existing fisheries subsidies and the subsequent chapters of this Guide suggest and discuss various types of analyses. However, whatever the level of detail we have agreed on for our study, it is generally a good idea to draw up a list early on of already identified subsidies and of situations and support measures that could potentially be defined as subsidies once we have investigated them further. This working document could also contain short descriptions of the subsidies, and information on the responsible authority (provider) and the recipients, and will – when finalized – provide a summary overview of the subsidies in the fisheries sector (see Figure 6).

# Chapter 5

## Different categories of subsidies

### 5.1 FOUR CATEGORIES OF FISHERIES SUBSIDIES

When working on identifying subsidies, we will realize that there are many different types of fisheries subsidies. Some situations and measures can quite indisputably be identified as subsidies, both in a national context and according to economic theory and international practice, e.g. fishery specific grants and other direct financial transfers from the government to the private fishing industry, while we may have more doubts with regard to a situation of, for example, apparent lack of pollution control. Moreover, depending on the objective of our study, we may have decided that we only want to look at the most direct subsidies and that we do not have any interest or time for carrying out the often quite comprehensive and time-consuming analyses related to more indirect or non-intervention subsidies (see also chapter 3).

Consequently, to facilitate the organization and analysis of our subsidies information, the Guide suggests that we classify fisheries subsidies into four main categories, i.e.:

1. Direct financial transfers
2. Services and indirect financial transfers
3. Regulations
4. Lack of intervention

### 5.2 CATEGORY 1: DIRECT FINANCIAL TRANSFERS

The first category includes **all direct payments by the government to the fisheries industry**. These subsidies are likely to have a direct effect on the profits of the industry and can also be negative (i.e. payments from the industry to the government). Their cost (revenue) to the government can usually be found in the public budget and its direct value to the industry will appear directly in the cash flow of the recipient firms. Subsidies belonging to this category are easy to identify and it would generally not be difficult to find consensus when defining these subsidies.

#### Examples of Category 1 subsidies include:

Investment grants (e.g. to purchase vessels or for modernization), grants for safety equipment, vessel decommissioning programs, equity infusions, income guarantee schemes, disaster relief payments, price support, direct export incentives, etc.

Profit-decreasing subsidies in this category would include, for example, various taxes and fees, and import/export duties.

### 5.3 CATEGORY 2: SERVICES AND INDIRECT FINANCIAL TRANSFERS

The second category covers **any other active and explicit government intervention but which does not involve a direct financial transfer as specified under Category 1**. Category 2 subsidies are services provided by the public sector or indirect financial transfers, e.g. tax rebates. Their cost may or may not be specified in the public budget and the value to the industry does usually not appear explicitly in the accounting of the recipient industry.

#### Examples of Category 2 subsidies are:

Investment loans on favourable terms, loan guarantees, special insurance schemes for vessel and gear, provision of bait services, indirect export promotion support,

inspection and certification for exports, specialized training, extension, 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, investment tax credits, deferred tax programmes, special income tax deductions, etc.

#### 5.4 CATEGORY 3: REGULATIONS

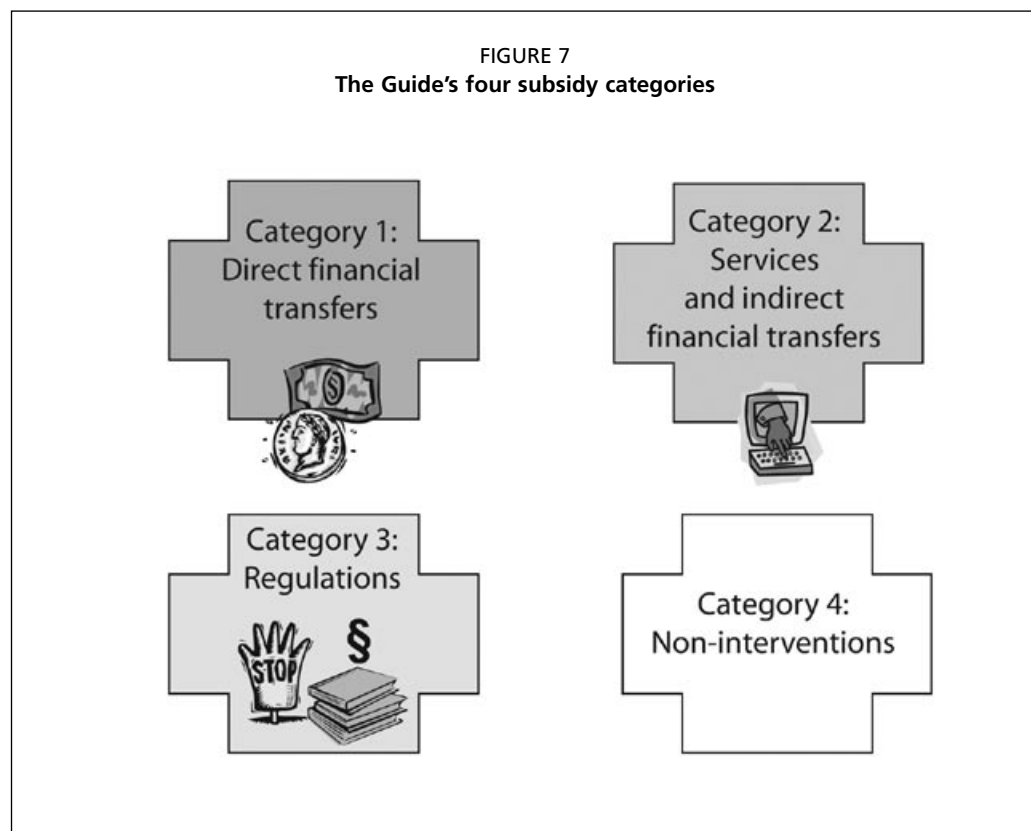
Our third category of fisheries subsidies includes **government regulatory interventions**. The government cost of Category 3 subsidies – usually an administrative cost – may be accounted for among other public expenditures for management and regulations and be difficult to identify. The value to the industry does usually not appear directly in the accounting of the industry unless it is a profit-decreasing subsidy entailing an expenditure for the industry (for example, the obligatory procurement of a certain type of gear).

#### Some examples of Category 3 subsidies are:

Import quotas, direct foreign investment restrictions, environmental protection programmes, gear regulations, chemicals and drugs regulations, fisheries management, etc.

#### 5.5 CATEGORY 4: LACK OF INTERVENTION

The last and fourth category covers the area of **lack of government intervention** and may be the most difficult one to deal with. Category 4 comprises inaction on behalf of the government that allows producers to impose – in the short or long-term – certain costs of production on others, including on the environment and natural resources. By definition, they do not imply a direct expenditure to the government (but may represent foregone revenue) and their value to the industry is often implicit.



**Examples of this type of subsidies include:**

Free access to fishing grounds, lack of pollution control, lack of management measures, non implementation of existing regulations, etc.

**5.6 INTERNATIONAL PRACTICE**

As can be seen, the Guide's classification in categories builds on the modality of the subsidy, i.e. what the mechanism is of the subsidy, and what type of government action it represents.

The WTO definition of subsidies was discussed in Box 1 and it would appear that our Categories 1 and 2 correspond quite closely to the WTO definition. However, the WTO ignores the "reverse" – profit-decreasing – subsidies, such as taxes, as well as actions (or inactions) by foreign governments and international organizations. Moreover, the provision of most infrastructure and border measures are not considered subsidies by the WTO. In addition, the WTO narrows the range of subsidies down to those being relevant in the context of trade, using a number of criteria.

In their report on the *Transition to responsible fisheries: Economic and policy implications*, the OECD defines government financial transfers (GFTs) as measures that "alter the incentive structure faced by participants in a sector" (OECD 2000, page 129). This characterization is relatively close to the Guide's definition of subsidies but the OECD uses the monetary value of the government intervention as the practical criterion for its definition instead of the effect on the industry's profits as used by the Guide. The list of interventions defined as GFTs is more extensive than the WTO's

**BOX 3****What to do when there is more than one suitable subsidy category?**

Some subsidies may fall into several different categories at the same time. Duty on imports of fish and fishery products, for example, may – as a regulatory intervention – protect local producers and would hence be a profit-enhancing Category 3 subsidy for the processing industry. At the same time, it may be a profit-decreasing Category 1 subsidy for fish importers and retailers who are paying the import duties. Likewise, most subsidies are impacting not only on the direct recipient of the subsidy but will be "carried along" in the downstream production and distribution chain and it could at times be difficult to determine which stage in the chain should be considered the true direct beneficiary. Market facilities at a landing site, for example, benefit both the fishers – the sellers – and the traders and processors – the buyers. When studying subsidies, each measure and support program has to be analysed individually and should be classified according to its particular characteristics. Naturally, there are subsidies that are difficult to put in one "box". The Guide suggests using the most *direct* and *main* impact on revenues or costs of the industry or firm as the criteria for the classification and the Guide's focus is on the short-term financial effects. Probably without exception, all subsidies have indirect consequences, side effects as well as a longer-term impact but, even though their importance is recognized, these should not be the main concern for the classification at this stage and their detailed assessment is generally outside the scope of this Guide (see also chapter 6).

It should also be remembered that the examples of subsidies and of how to classify them in this Guide are only there for guidance. The objective and framework of our particular fisheries subsidies study may require a certain structure of the information and we may find that we want to classify certain measures or situations in a different way from what is recommended in the Guide. We will also most certainly find subsidies that are not specifically mentioned in the Guide.

and includes direct payments (corresponding to the Guide's Category 1), cost reducing transfers (corresponding closely to the Guide's Category 2 including, for example, loan guarantees and tax rebates), general services (covering management and research expenditures, provision of fishing ports and other services, etc., included in the Guide's Categories 2 and 3) and market price support<sup>4</sup> (i.e. in particular border measures which are in the Guide's Categories 1 and 3 depending on their modality). It would hence appear that the OECD's definition of GFTs is very similar to the Guide's definition of subsidies, with the important exception of Category 4 – non-interventions. However, in an earlier report, the OECD states that lack of government intervention can constitute an implicit subsidy to the use of the fish resource (OECD 1993).

A study on subsidies in the APEC member economies adopted a definition of subsidies and support programs similar to the one used by the OECD (PricewaterhouseCoopers LLP 2000). It was however pointed out that a number of parties did not consider some of the so-called support programs, included in the study, to be subsidies. These support programs included fisheries management, conservation, enforcement and research and development. Still, it was recognized that "it is arguable that these programs could be considered subsidies if the costs of the programs are not passed on to the fishing industry" (PricewaterhouseCoopers LLP 2000, page 3).

In a World Bank study, Milazzo reviewed resource rent subsidies and the practice of levying user fees in the fisheries sector (Milazzo 1998). He concluded that there appears to be a trend towards increased use of fishing fees for management purposes. Moreover, he suggests that a subsidy created by the non-recovery of government fishery management costs could be compatible with the WTO Subsidies Agreement, although not explicitly addressed therein.

From the above discussion, it appears that the explicit government interventions of Categories 1 and 2 are generally accepted as being subsidies according to international practice. With regard to Categories 3 and 4, these subsidies represent more implicit benefits (or detriments) to the industry and here the arguments are not quite as clear. Still, it would appear that there is tendency towards a broader definition of subsidies and we may want to consider this when we identify the subsidies for our study, especially if the results are to be used in cross-country comparisons.

There are of course many ways of classifying subsidies and also many possible subcategories available. Some of the main aspects found in the literature according to which subsidies can be classified are reviewed in **Appendix II**. A list containing more examples of subsidies from the different categories presented here is found in **Appendix III**.

---

<sup>4</sup> Market price support was not included in the work presented in the report but is subject to a separate study. Different methods are needed for identifying and measuring market price support than those used for other GFTs (see OECD 2002).