

ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

RESTRICTED

Committee for Fisheries

Paris, drafted: 31st May, 1990

dist: 6 juin 1990

FI/305
Addendum 4

Or. Engl./Fr.

VARIOUS METHODS FOR MEASURING AND ANALYSING ECONOMIC ASSISTANCE

(Note by the Secretariat)

1. At the 63rd Session of the Committee for Fisheries, Member countries having already carried out quantitative and/or qualitative analyses on relevant issues regarding the study on economic assistance were invited to present their work and their conclusions. The attached paper "Measuring Economic Assistance to the Fishing Industry", has been submitted by the EC Commission.
2. This document is circulated to the Committee for Fisheries for INFORMATION AND DISCUSSION at its 66th Session, scheduled for 26-28th September, 1990.

MEASURING ECONOMIC ASSISTANCE TO THE FISHING INDUSTRY

INTRODUCTION

1. The study on economic assistance to the fishing industry should aim at analysing the different types of direct or indirect support which are applied by Member countries of the OECD. In this context, the Committee for Fisheries should examine to what extent it is possible to quantify the assistance.

2. The Community considers that highlighting the different forms of assistance will help to create a better understanding of their effects and a greater transparency which will contribute to trade development.

3. However, it would underline that, at this stage, there has been no agreement in the Committee on a definition of economic assistance in the fishing industry and it, therefore, considers that careful consideration is required before the work continues.

*

* *

4. The general extension of fishing zones to 200-miles has considerably affected the existing balance between the rights and obligations from the commercial viewpoint and those from the production viewpoint; in effect, whilst international trade is subject to the GATT rules, there are no international constraints on the conditions governing access to production, which are for the most part arbitrarily fixed by the coastal States.

5. This new situation has considerably altered the supply creation process. In effect, extension of the coastal States' management over fishery resources to the full extent of very wide zones of jurisdiction can give rise to the introduction of restrictive or discriminative barriers against countries traditionally involved in activities in these fishing zones. Such measures have a positive effect on the coastal States' economies and a negative effect on the economy of those countries which seek access to the resources.

6. Certain measures taken by coastal States effectively result in aids which benefit national fishermen and/or processors:

-- In accordance with the provisions laid down in the convention on the law of the sea, coastal States establish, on the basis of the capacity of their national fishing fleet, the surplus of the TACs which is made available to third countries. An over-estimation of the national capacity will deprive third countries of access to the "surplus" and therefore constitutes indirect assistance to the national industry which leads to a disguised restriction on world trade.

- Certain conditions imposed on third countries by coastal States in exchange for access to resources situated in their fishing zone, in particular purchasing obligations or for participation in joint ventures, give rise to significant change in the pattern of trade to the benefit of the coastal States. This can be illustrated by a number of examples, such as:
 - the obligation to purchase over-the-side national products with the result that their disposal on the international market is facilitated;
 - the obligation to land catches in the ports of the coastal States, thus promoting their processing industries;
 - the prohibition of access to third country vessels which have not been built in the coastal State.
 - The limitation or prohibition (general or discriminatory) of access to ports or port installations of certain coastal States prevents third country vessels from ensuring the transit of their catches to the market destination, results in the introduction of obstacles to trade and affects the possibilities of international commercial competition.
7. Such measures give rise to a change in the conditions of competition, affecting the level of market prices.
8. As a result, the impact of certain mechanisms introduced by countries seeking access to resources must be balanced against the fact that they result from the need to protect national activities in the face of fundamental changes in the conditions of competition.
9. In addition, the Community would emphasise that, as far as tariff aspects are concerned, the assessment of the possible support resulting from the application of customs duties must take account of whether or not they are consolidated in the GATT. Moreover, customs duties are, in certain cases, accompanied by the opening of tariff quotas at a lower rate, the impact of which must also be evaluated according to whether or not they are consolidated in the GATT.
10. With regard to a possible quantification of the assistance in the fishing industry, the Community considers that the different options proposed in document [FI/305] should be studied in order to determine the extent to which they are applicable to the fisheries sector (see Annex).

ANNEX

NOTE ON MEASURING ASSISTANCE PROVIDED TO THE FISHING INDUSTRY

I. INTRODUCTION

1. The purpose of this note is to clarify three interrelated issues in relation to the fisheries sector. These issues are i) what is from a theoretical point of view to be understood by assistance? ii) how can a theoretical measure of assistance be defined? and iii) what problems arise in defining an empirical measure corresponding to a theoretical measure, i.e. how to measure assistance in practice?

II. SPECIFIC PROBLEMS OF DEFINING A THEORETICAL MEASURE OF ASSISTANCE TO THE FISHING INDUSTRY

Which policy instruments should be taken into consideration?

2. The policy measures which effect the level of assistance may be divided into domestic policy measures and border measures. Domestic measures include taxes and subsidies linked to output, the use of intermediate and primary inputs and quantitative restrictions on production and input use. Border measures may be divided into measures which effect the free flow of commodities such as tariffs, export subsidies and quantitative restrictions on import and export and measures which effect the free flow of primary factors such as restriction on the migration of labour and on capital investments. Border measures which restrict the free flow of labour and capital are, in general, not taken into account in defining measures of assistance. They are, for example, not taken into account in defining the PSE (Producer Subsidy Equivalent) which is calculated by the OECD as a measure of the assistance to the agricultural sector.

3. The restriction on the free flow of capital and labour across the borders has, in general, no sector specific effect if the flow of commodities is free. One such exception is industries which exploit natural resources and where the economic activity therefore has to take place in a certain geographical location. Restriction on the access of foreign labour and capital to the exploitation of natural resources may significantly effect the return to domestic primary factors employed in the industries concerned. For the fisheries sector, this is particularly true because the movement of labour and capital, i.e. fishing vessels sailing from the fishing zone of one country to the fishing zone of another country, is particularly easy. Restrictions on the free access to fishery resources for foreign fishermen may provide a very significant assistance to the fishermen of the country imposing the restrictions. The assistance provided by such restrictions will not be captured by measures of assistance like the PSE, as currently calculated by the OECD.

Whereas limiting a measure of assistance to policy measures which prevent the free flow of commodities may be acceptable for other sectors, a measure of assistance which leaves out policy measures which restrict the free movement of capital and labour would, in the case of the fisheries sector, be far from reflecting the true level of assistance.

How to define the bench-mark situation of no assistance?

4. The theoretical welfare economic starting point for the calculations of measures of assistance is that no government intervention is desirable from the point of view of economic efficiency. This is not the case for the fisheries. Government intervention is needed in order to assure the optimal use of resources. The bench-mark from which government intervention should be measured is therefore not a situation without government intervention but a hypothetical situation characterised by a level of exploitation of the fishery resources which is optimal from the point of view of economic efficiency.

5. The bench-mark from which distorting government intervention according to theoretical welfare economics should be measured, is the resource allocation which would be obtained if the TAC (total allowable catch) were fixed at the level corresponding to the MEY (maximum economic yield) and the quotas distributed to the fishermen in the form of ITQ (individual transferable catch quotas). The government intervention in such a situation would be to specify the TAC and to police that no catch were made by fishermen who did not have a corresponding ITQ. The domestic fisheries sector could be said to receive no support if all fishermen, irrespective of origin, were able to purchase the ITQ at a market determined price and if the industry received no other government support, i.e. if output and input prices were equal to world market prices (adjusted for transport costs).

III. DEFINITION OF A THEORETICAL MEASURE OF ASSISTANCE

6. The primary factors employed in a certain industry may be said to be protected if government intervention, which is not justified by market failure, increases their return over the return which they would have received without government intervention.

7. From a theoretical welfare economic point of view, a measure of assistance for the fisheries sector should therefore indicate to what extent the resource allocation has been distorted in favour of the domestic industry by government intervention which goes beyond what is needed to correct market failures, i.e. beyond what is needed to establish the bench-mark situation mentioned above.

8. It would be possible, at least conceptually, to quantify the assistance to the fisheries sector as that subsidy which would be necessary to induce the fisheries sector to make a fishing effort corresponding to that which is

actually observed, if all other government interventions which are not justified by the need to assure an efficient management of the fisheries resources were replaced. The government policy measures which should be taken into account include:

- a) TAC which do not correspond to the MEY and which are not distributed to the fishermen in the form of ITQ;
- b) Regulations which prevent foreign fishermen from obtaining access to the fishery resources at the same conditions as the country's own fishermen;
- c) Tariff and import restriction on fish, either in the form of processed products or in the form of fresh fish;
- d) Export subsidies;
- e) Subsidies to the use of inputs;
- f) Subsidies to capital formation;
- g) Taxes on or restrictions on the use of inputs purchased by foreign fishermen;
- h) Obligations in return for fishing rights which distort trade.

9. The theoretical measure described above is conceptually close to the theoretical PSE. It includes, however, the assistance implied by restriction on the access to the fishery resources and on the commercial activities of foreign vessels and excludes transfers created by schemes to secure the efficient management of the fishery resources.

IV. SPECIFIC PROBLEMS OF DEFINING AN EMPIRICAL MEASURE FOR THE FISHERIES SECTOR

10. It will be difficult to provide an empirical measure corresponding to a theoretical measure of assistance as the one described above for two reasons: firstly, because such a measure has to be model-based, secondly, because of the character of fishery products.

An empirical measure requires the use of a model

11. The empirical measure of assistance for sectors where the problem of market failure does not arise may be calculated on the basis of national account data without the need for a model, as in the case of the PSE calculated by the OECD for the agricultural sector. The theoretical benchmark of no assistance for production sectors where there are no market failures implies no government intervention. Any transfer, due to government intervention, may therefore be considered as generating a distortion. For the fisheries, this is

not the case because the bench-mark situation of no distortion involves a certain government intervention. The level of this intervention can only be established using a model based on assumptions which can only be verified to a certain extent. It is for this reason more difficult to establish an operational procedure for calculating an empirical measure of assistance for the fisheries sector than for other sectors. The scope for disagreement on model-based measures is clearly much greater than for measures which may be derived on the basis of national account data only.

The nature of the fishery products

12. Further complications arise because:

- a) Fresh fish is a perishable product and is therefore, in general, not traded at the world market;
- b) Fishery products are both a raw material and as processed products rather inhomogeneous; this necessitates complicated conversion schemes;
- c) A fair amount of the support to the fishing industry (in the sense of the industry catching the fish) is indirect. Either because the industry benefits from support given to the processing industry, or because the support is provided in terms of investment grants or in terms of restricted access to the fishery resources for foreign vessels;
- d) It is very difficult to separate the fishing industry (in the sense of the industry catching the fish) from the fish processing industry (which is using the raw fish as raw material). Consider, for example, that fish is often processed at sea.

13. This makes it very difficult to establish measures of assistance for individual types of raw fish. It is, in general, not possible to observe a world market price and it may even be difficult to establish a domestic producer price because the products are so inhomogeneous. The complications in this respect are similar to those for fruit and vegetables which is one of the few important agricultural products for which the OECD, in fact, does not calculate PSEs.

14. The alternative approach to directly observing the difference between the domestic producer price and the world market price (corrected for transport costs), is to calculate how much the domestic producer price for raw fish has been increased due to government intervention concerning both processed products and raw material (due to domestic subsidies, border measures, quantitative restrictions on both production and import and restriction on access for foreign vessels). Such a procedure clearly requires a number of economic and technical hypotheses particularly in respect to points c) and d) which are difficult to make in an objective way.

15. It might be more feasible to establish a global measure of assistance for all fishery products. In particular, if the measure is established for the fisheries sector as a whole including the processing industry, and not only for the fishing industry (in the sense of the industry catching the fish). International trade is, after all, more important for processed fishery products than for raw fish. Even this might be difficult because the distinction between what are fishery products and what are food products is difficult to make.

V. CONCLUSION

16. A relevant theoretical measure of assistance for the fisheries sector will need to take into account not only the border measures related to the flow of fishery products but also of restriction on the free movement of labour and capital, i.e. the access given to foreign fishing vessels and the restrictions on their commercial activities.

17. The bench-mark concept of a situation without assistance cannot, in the case of the fisheries sector, as for other sectors, be defined as a situation without government intervention. The PSE measure developed by the OECD for use in measuring the assistance to agricultural products seems therefore, on theoretical ground, not to be appropriate, as such, for use in the case of the fisheries sector.

18. It might be possible to define a theoretical measure of assistance which takes into account both these considerations, but the actual measurement of assistance, whatever the theoretical measure, will be very difficult due to the fact that fishery products constitute a very inhomogeneous group of products, that world market prices are, in general, not available for these products and that a major part of the support is given indirectly, i.e. either to processed products, as input subsidies, or in terms of restricted access for foreign vessels.