International Council for the Exploration of the Sea

C.M.1980/D:18 Statistics Committee Ref: Mariculture Committee

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COLLECTION OF STATISTICS ON AQUACULTURE

Ъу

The Chairman of the Statistics Committee

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#### INTRODUCTION

The Mariculture Committee has requested the Statistics Committee to look into the problem of collecting statistics on mariculture production (C.Res.1979/ 2:18). The problem was discussed by the Statistics Committee Liaison Working Group at its meeting on 19-20 May 1980 (C.M.1980/D:3). This topic was also discussed at the CWP meeting on 22-29 July 1980.

This paper is a summary of the discussions on the matter and the intention is to facilitate the further necessary considerations. The CWP report should also be noted (C.M.1980/D:19).

The problems identified during the investigations in 1979/80 are summarised below:

- a) The aquaculture concept is not clearly defined at present and a definition is a must before any statistics are collected.
- b) The boundaries between inland and marine environment in statistics are not clearly defined at present and if the aquaculture statistics are to be split into fresh-water and marine production, these boundaries must be specified.
- c) The elements of the statistics and the units these statistics are measured in must be specified prior to the initiation of a statistics programme, i.e., whether statistics on eggs, fingerlings or only the final products are to be collected. It should also be agreed whether weight or numbers should be used.

Listed below are the international organisations involved in collecting aquaculture and other fishery statistics. Their objectives are also given:

- ICES Fishery statistics are collected for fish-stock assessment purposes and for the general need of knowing the production of marine species.
- FAO The total production of fish, shellfish, clams, seaweed, etc., world-wide, is needed for estimating the contribution to the nutrition of the populations of the world.
- EUROSTAT The economy, production, supply and demand of the EEC member states must be documented enabling common economic policies to be established and implemented.
- OECD As for EUROSTAT referring to the OECD member countries.

#### PROPOSED DEFINITIONS OF AQUACULTURE

The definition will have to take the following elements into account:

a) The ownership of the site where an enterprise is running an aquaculture station. Such ownership should be established over limited areas whether the boundaries are defined by nets, dams, cages or otherwise.

b) The techniques employed may be used for classification. Much artificial production is an entire different enterprise from fishing due to the use of damming, ponds, water pumps, water-cleaning equipment, etc. However, mussel and oyster production from spat and sea ranging of salmon could be recognised as aquaculture.

In the following, two proposed definitions are given.

## BOUNDARIES FOR STATISTICAL PURPOSES BETWEEN INLAND AND MARINE FISHING AREAS

# CWP - 10/25

- 1. The various international and regional institutions have, in recent decades, made excellent progress in identifying and defining boundaries for the major marine fishing areas and for many of their sub-areas, divisions and sub-divisions.
- 2. However, the specification of boundaries on the landward side of these major marine fishing areas has not been defined very precisely. It is generally assumed to be the landward "edge" of the marine waters. Often this is considered to be the <u>high-water</u> mark. On the other hand, the low-water mark is often considered to be the point from which to calculate the base-line used to determine the width of (i) "territorial waters"; (ii) "exclusive economic zones"; (iii) "fishing zones"; (iv) "fishery zones" and (v) "patrimonial seas", etc.
- 3. At present there are no international or regional standards to serve as guidelines for drawing the boundary lines separating the (a) inland fishing area of a coastal country from (b) the adjoining marine fishing area(s).
- 4. At this stage it is important to distinguish between (a) <u>inland</u> waters and (b) internal waters. The term "internal waters" refers to those marine water areas which are on the landward-side of the baseline established by national authorities to serve as the base from which to measure seawards the coastal country's "territorial seas", "contiguous zone", "extend economic zone", "fishing zone", "fishery zone", etc. The Law of the Sea Conference, Geneva, 1958, adopted the LOW WATER LINE as this baseline. Because of irregular coastal configurations it is deemed necessary to draw geometric baselines, for example, across mouths of bays not exceeding 24 miles in width. Straight baselines could be constructed along deeply indented and island-studded coastlines. The appended map illustrates examples of indisputable "marine" areas falling on the landward side of the baseline used to calculate the seaward boundary of the "territorial waters", "extended economic zones", etc. of a coastal country. These waters are to be called "internal waters" and are not part of the "inland waters" of the country. It is possible to consider that any marine waters between this low-water baseline and the high-water mark are also part of the "internal waters" even if such areas are covered only at certain daily periods.
- 5. Regional conventions might contain clauses stating that nothing in these conventions shall be deemed to prejudice the claims of contracting parties in regard to the limits of territorial waters, fishing zones, etc. However, with regard to statistical programmes operated in terms of such conventions, these excluded areas are covered as if they were

part of the overall convention area. All "internal" waters on the landward-side of the baseline of the coastal belt of "territorial waters", "extended economic zones", etc. should also be considered as covered by these statistical programmes.

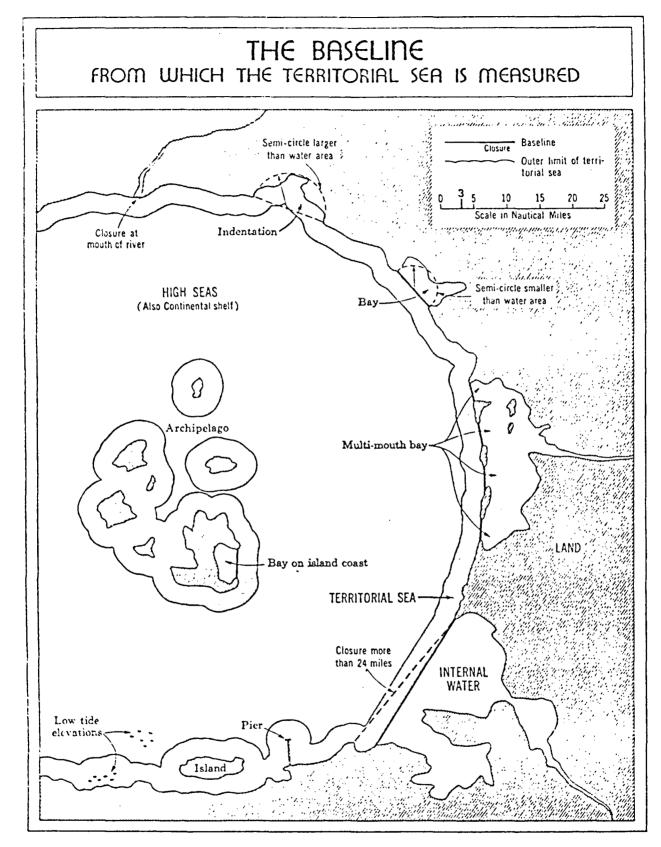
- 6. In some quarters it has been proposed that the species caught should be considered the principal criterion to identify (a) "marine" fishing areas and (b) "inland" fishing areas. This does not appear to offer a satisfactory solution. Even if one excludes the case of the anadromous and catadromous species there are a number of marine species (e.g., the European flounder) which, at certain times of the year, or at certain times in their life cycles, are encountered frequently in what would be generally accepted as inland freshwater areas. It has been reported that in certain landlocked tropical countries with no territorial access to the sea, are able to report catches of marine species in their inland waters.
- 7. Certain waters, obviously part of the sea, are of such low salinity that significant quantities of freshwater species are regularly caught at appreciable distances from the coast. A boundary based on the salinity of the waters would not be completely satisfactory. The low-salinity areas around the mouths and in the estuaries of large rivers could vary during the year. During the rainy season the flood waters pouring into the sea could significantly extend the low-salinity areas. Further, tidal influences would daily affect the salinity in river estuaries.
- 8. At the national levels, a distinction between (i) marine fisheries and (ii) inland fisheries are often made in accordance with various local requirements and priorities. These are based not only on the species caught and the localities, but also on types of craft and gear used, and the allocation of responsibilities to different government departments and ministries. In some countries the distinction is made by classifying, for administrative and statistical purposes, all fishing households or villages into either marine or inland. This breakdown could also be affected by development schemes and in some cases by the arbitrary classification of fishermen, households, etc., which may move seasonally between inland and marine fisheries.
- 9. It is obvious that national practices to distinguish between (i) marine fisheries and (ii) inland fisheries will vary significantly. The small-scale fisheries in "marginal waters", often brackish-water lagoons, estuaries etc., could, in some countries, be treated as part of the marine fisheries while in other instances similar fisheries would be allocated to the inland fisheries group.
- 10. It has been suggested that the practice of declaring all waters above the mean tide levels, including the coastal lagoons and estuaries, as part of the inland water area, as being the only practical solution. These are the areas as recognized to be inland by IPFC, COPESCAL, CIFA and EIFAC. However, a strict interpretation of this demarcation proposal would result in marine waters covering open beaches lying between the mean tide level and high water mark, to be inland.
- 11. It is also obvious that, nationally, several criteria are and must be used. At this stage the only international and regional actions that are possible appear to be:

- 3 -

- (a) the identification of the various criteria to be considered by national administrations when the latter distinguish between
  (i) inland and (ii) marine fisheries;
- (b) the collection of information as to how national decisions and practices have been reached in these fields;
- (c) the further refinement of the list of criteria in the light of the national practices;
- (d) the eventual publication of regional and international guidelines for future action by national administrations.

- 5 -Appendix I

CWP-10/25



U.S. Department of State Bureau of Intelligence & Research Sovereignty of the Sea (1969) 33 p. Revised October 1969. Geographic Bulletin No. 3

#### CLASSIFICATIONS OF AQUACULTURE AND STATISTICS ON AQUACULTURE

## Extracted from CWP-10/50

- 1. National statistics seldom separate aquaculture from fishing that is, when the products of aquaculture are not completely ignored and appear nowhere. International statistics, in particular the FAO Annual Bulletin of Statistics, include them when national figures can be found but they cannot give global or regional data under a specialised separate heading.
- 2. The vocabulary reflects this lack of precision. In English as in French, <u>pisciculture</u> alone was used some 20 years ago and referred exclusively to freshwater fish farming. Oyster farming was called ostreiculture, a branch of conchiculture or shellfish production. More recently, two new words have appeared: "<u>mariculture</u>" which refers to production in seawater as opposed to freshwater, on the grounds that "pisciculture" had never been specially reserved for freshwater; it meant fish farming in general, but in fact there was no fishfarming in salt water and consequently the word pisciculture was not covered under "mariculture", and "pisciculture" might appear to exclude molluscs and crustaceans; hence the success of the word <u>aquaculture</u>, which usage seems determined to sanction, but which is very general and covers many different situations.
- 3. The first approach will therefore be to attempt various possible classifications for the different types of aquaculture, though without going back on the distinction between freshwater, saltwater and brackish water; in fact, the distinction does not add very much: there are anadromous fish which can migrate from the seas to other waters; and when there is "culture", this implies appropriation or control of the area where the culture of aquatic animals takes place, i.e., a legal system allowing it, which has nothing to do with the saltiness of the water.
- 4. The first classification concerns the division of administrative responsibilities. This is important in the case of official statistics which are of necessity organised in terms of <u>administrative organisation</u>. It shows that in many countries aquaculture crosses administrative boundaries which, without being water-tight, nevertheless show a certain impermeability. Thus seawaters and freshwaters often come under the responsibility of different administrative bodies without any co-ordination. Furthermore, the problems facing the different administrative bodies can be in opposition to one another, when they are not quite simply contradictory. One of the major problems for the public authorities is in practice that of wholesomeness. It is therefore essential to require and ensure that aquaculture undertakings observe production standards which guarantee the good quality of their products. But on the more general level of environment there are cases where people fear that the installation of aquaculture undertakings will lead to the discharge of wastes considered to cause pollution ...., whereas, in other situations, aquaculture supplies the fry or young fish necessary for restocking rivers or freshwaters which have completely lost their previous wildlife. A particular aspect of the role of the State arises from the fact that many sites suitable for aquaculture undertakings are part of the public domain and cannot be used without statutory or even legislative action. The policy adopted can vary

considerably according to whether it seeks to encourage small producers or, on the contrary, to grant concessions to large firms. In certain countries there are even types of collective concessions, a village or a community of fishermen for example collectively managing shellfish operations in the bay on which the village or community is located. Lastly, the development of aquaculture is increasingly mentioned as a sound economic proposition and this leads to its being integrated into projects for coastal regions.

- 5. In fact it is this <u>economic</u> viewpoint that brings us closest to reality. It may be said that there are two types of aquaculture: the first has been in existence long enough and is sometimes very old, marketing its products, if not with large profits at least in a manner considered normal; the second is either pure research, or applied research not yet representing a really interesting commercial proposition, or is at the disposal of an industrialised world which needs to renew artificially a natural environment which it has unconsciously destroyed.
- 6. The first type of aquaculture is of varying importance according to the countries, and concerns changing species because of variations in natural facilities and in consumers' tastes. Unfortunately, this type of aquaculture does not always appear as such in the national statistics; it is necessary to know the production conditions of a particular species in the different countries and interpret appropriately statistics which do not mention this "detail" concerning the nature of the production.
- 7. There are admittedly some slightly ambiguous cases: natural beds of scallops where catching and artificially raising seed enables production to be considerably increased; experiments of this type concern species which do not migrate much (crustaceans) and also species whose regular migrations are well known (anadromous); at the other extreme there are fish caught small and kept for fattening in special enclosures. But these ambiguous cases are known whenever they are of commercial importance and it should be sufficient to take appropriate measures for collecting statistics to ensure the assembling of the necessary data. When there is no provisionin this connection, the omission is justified by the relatively minor character of aquaculture. Nevertheless, there is sometimes a contradiction between the effort made at government level, particularly by work in public research laboratories, for the development of aquaculture, and the poverty of the data relating to existing aquaculture installations.
- 8. The second type of aquaculture, when it is for research purposes, cannot be subject to accounting like commercial activities; on the other hand restocking activities may be at least partly commercial. In any case, the latter cannot provide statistics on a tonnage basis but only by number of individuals.
- 9. The variety of aquaculture techniques and species concerned and the considerable differences between countries, as well as the varying nature of this activity, make any statistical recommendation of an international character impossible. Indeed while situations may change or evolve in the near future it is better not to adopt any definitive guidelines. Emphasis should be laid on the need for national authorities and the competent statistical services, in the most appropriate manner according to national conditions, to present all the various aquaculture activities of the country in a statistically coherent and usable form.

- 10. This being said, it might be interesting to look ahead with a view to considering what might be future needs in relation to aquaculture statistics. And in this connection, with aquaculture increasing in importance because of the limits on fish catches, it is difficult to restrict consideration to aquaculture alone without referring to the whole problem of fish production statistics.
- 11. Indeed, up to the present, fishery statistics have focussed on the collection of data at the simplest point, i.e., on landing, making the necessary distinctions concerning definition of species and sometimes adding the origin (which in certain circumstances can be deduced from the species) but in general without indicating the catching method. Biologists have therefore been obliged to collect their own statistics for their research, which can be done by sampling provided there are uniform samples for the period considered. Unfortunately, economists have greater difficulty in working on samples. In any case, this absence of information on catching methods perhaps at least partly explains the backwardness of aquaculture statistics, which are either mixed with general fishery statistics or quite simply neglected.
- 12. The present trend in fishery statistics is simultaneously to require an increasing amount of information (facilitated by the exercise of increased authority by the coastal state in many fishing zones) and to process the statistics by computer. In practice, results seldom match up to the hopes expressed when these systems were launched but, in the normal course of events, matters should gradually improve; nevertheless, there are numerous difficulties of an administrative and political nature which constitute obstacles to statistical improvement. The concept of management of the resources of the sea, if based on sufficiently sound knowledge and applied with the requisite rigour, would be comparable with what on land is called extensive livestock production, whereas aquaculture corresponds rather to intensive production.
- 13. Although scientific knowledge and technological possibilities would certainly permit progress in this direction, it would be utopean to base statistical projects on such reasoning. In a more modest way we should confine ourselves to the suggestions made above and develop aquaculture statistics according to the particular requirements of this activity and especially according to practical achievements. It seems that in many coastal regions the competition between various activities for available space, the pollution risks and effective pollution as well as the difficulties inherent in aquaculture itself (disease, finding sufficiently cheap feed) constitute limiting factors which must be taken into consideration. Aquaculture is a delicate activity which is not as easily improvised as the present fashion suggests. This is a further reason for developing simple data collection systems which are essential to take stock of an activity in a state of flux.

#### Practical conclusions

It is a fact that in many countries, very little statistical information, if any, is available on aquaculture. The reason is that it includes some longestablished activities (oyster culture, etc.) which are traditionally recorded as part of fisheries in general and new activities for which no statistical collection or framework as yet exist. With a view to improving the situation, two suggestions are made:

## (a) <u>Definitions</u>

Compared with, say, ten years ago, many more different kinds of aquaculture exist which might lead to difficulties in distinguishing between aquaculture and "wild" fisheries. To avoid discrepancies between national practices, the following could be recommended:

Aquaculture: marine animal culture in closed, or for molluscs and seaweed, unclosed water allowing permanent husbandry of the resources.

Following this definition, oyster or other animals which are nourished by the natural food in the waters passing through the area without any additional feedstuff being supplied by the farmer would, nevertheless, be considered as belonging to aquaculture.

Conversely, smolts after release into rivers, young scallops, or even more so, young crustaceans after release in free water without special care being given after the release, leave the domain of aquaculture for normal fisheries.

## (b) Breakdown

The above definition leads to the breakdown of statistical collection into two categories:

Aquaculture for the raising of adult animals which are produced for direct consumption: this should be expressed in weight;

Aquaculture for the production of juveniles with a view to supplying farms ensuring the growth of the animals, or for re-population purposes: this should be expressed in numbers of animals produced.

#### THE IMPROVEMENT OF STATISTICS ON AQUACULTURE

## Extracts from CWP-10/24

There is an increasing demand for reliable statistics on inland fisheries and aquaculture. For example, the Joint ICES/EIFAC Working Group on Eels has reported that a scarcity of data on eel catches is a serious limitation to stock assessment work. The ICES Mariculture Committee has called for an improved availability of reliable statistics on mariculture production. Further, in many countries, aquaculture is now recognised as being a sector meriting the attention of the central authorities. However, the development of policies and the subsequent administration of these policies have to be based on reliable statistical information.

FAO and EUROSTAT discussed the need for statistics on inland fisheries and aquaculture and decided to seek the advice of the CWP on their plan to introduce trial questionnaires on these two sectors to be completed by European countries. It is hoped that these questionnaires will permit the member countries and the international organisations to identify more readily particular areas where improvements are required and will generally stimulate the authorites to improve the quality of the data.

Two problems of immediate concern to organisations collecting marine fishery statistics were the following:

a) The notes for completion of the STATLANT A series of questionnaires require that these questionnaires should be completed for "all kinds of commercial, industrial and subsistence fishing operations and activities" (paragraph 3.1) with a subsequent remark that, within this wide-ranging coverage, there were certain sectors which may have to be excluded because they are not yet covered by the national collection of data. Included in these sectors is "fish farming and shellfish culture operations" (paragraph 3.2).

The principal users of the data submitted on STATLANT A questionnaires are those concerned with the management of wild fish stocks. Provided another method of collecting the data existed, it would seem reasonable for all data relating to stocks physically isolated from the wild stocks to be excluded from the STATLANT A forms. This would entail the exclusion of all intensive fish culture (e.g., cage-reared fish) and certain extensive cultures (e.g., culture in fenced sea inlets). Data from the use of sea-ranching techniques (where, for example, young farmed salmonids are released and the adults returning to their 'native' rivers are harvested) should be included on the STATLANT A form.

Certain problems in the distinction between fishing of wild or native stocks and aquaculture occur with shellfish. For example, what should be the treatment of production of mussels where frames are placed in the sea to encourage the settling of spat and facilitating the subsequent harvesting or where an area is simply scattered with oyster shell to encourage the settling of spat. It is proposed that the aquaculture questionnaire should be completed for all data relating to stocks physically isolated from the wild stocks, or are grown on an artificial substrate which has been placed in the water and facilitates harvesting. b) It is difficult to provide a clear distinction between marine and inland fisheries. A distinction based on the fish species caught could cause problems because, even excluding the case of anadromous and catadromous species, there are a number of marine fish (e.g., the European flounder) that at certain times of the year or at certain times in their life are frequently found in what might normally be termed freshwater. Similarly, there are certain freshwater fish that are tolerant of, at least, brackish waters.

A distinction based on administrative or geographical limits could also give rise to problems. For example, in some countries the bodies responsible for the management of inland waters have powers extending beyond the mouth of rivers. If such administrative areas were to be used to define the regions in which fisheries were to be classified as freshwater fisheries, a good proportion of what is currently and rightly classified as marine production would have to be re-allocated. A geographical limit determined by the salinity of the water would also not be completely satisfactory. In certain areas at certain times of the year the waters have a high salinity while at other times there is a great influx of freshwaters.

FAO and EUROSTAT believe that, initially at least, it would be unwise to formulate a precise definition of inland and marine fisheries. It would be better to leave the distinction as a decision for each respondent member country. In the light of their experience some general guidelines could then be drawn up. Care would have to be taken to exclude the possibility of double counting between the questionnaires for inland and marine fisheries, particularly, as is mentioned below, there may be different authorities within a member state completing the two questionnaires.

The correspondents in member countries for most of the international organisations requiring fishery statistics are normally those concerned with marine fisheries. Frequently there has been considerable difficulty in obtaining statistics on inland fisheries even when it has been found subsequently that the statistics are freely available from another authority within that country. Thus, before the introduction of the questionnaires there will have to be discussions with the member countries to determine to whom they should be sent in order to obtain the best results.

Annexed to this document are the propositions for the questionnaires and the accompanying notes for completion.

#### NOTES FOR THE COMPLETION OF FORM STATLANT AQ

#### FORM FOR THE REPORTING OF STATISTICS ON AQUACULTURE

Copies completed with calendar year data for 19

should be submitted to reach

#### FAO

#### before

### 31 May 19

#### 1. PURPOSE OF THIS FORM

- 1.1. This form is to be used by national offices for reporting each year to FAO the annual data on aquaculture production.
- 1.2. The particulars of the annual data to be reported for the calendar year are as follows:

the number and production of aquacultural enterprises operating within the land territory and economic zone of the reporting country;

the production is to be recorded in the live weight equivalent of the product.

1.3. Countries using automatic data processing systems, which can provide computer printouts reflecting a format of data presentation similar to that of the form could, instead of completing the form, provide copies of such computer printouts.

#### 2. GENERAL REMARKS

#### 2.1. Form STATLANT AQ

This form is designed for the reporting of the production by species items and the number of aquacultural enterprises operating within the territory of the reporting country.

A number of blank forms is provided which should be sufficient for drafting and reporting purposes.

#### 3. DEFINITION OF COVERAGE

3.1. General coverage

The data required are the production and number of aquacultural enterprises employing techniques where the species reared are physically isolated from wild stocks (see paragraph 5.3) or are grown on an artificial substrate which has been placed in the water and facilitates harvesting.

#### 3.2. Possible exceptions to this coverage in the national data

By means of footnotes to the form or in a separate memorandum, indicate if any particular "branch" or "sector" of the national aquaculture industry cannot be covered by the data provided, and, whenever possible, provide estimates or give some indication of the magnitude of the quantities not included in the body of the form.

### 4. COMPLETION OF BOXES (a) THROUGH (k)

## 4.1. <u>Box (a): Year</u>

Insert the calendar year for which the data are reported.

## 4.2. <u>Box (b): Country</u>

Insert the name of the reporting country or its component territory where applicable.

4.3. Boxes (c) through (i)

These boxes may be used to indicate exceptions to the coverage of the data or other remarks.

## 4.4. Box (k): Numbering of sheets

This box is to be used to number the sheets of STATLANT AQ form.

#### 5. COMPLETION OF LINES 1 THROUGH 24

5.1. For the species items listed in Column C of the form, insert on lines 1 through 24 the number of enterprises culturing the species and the production (expressed as the live weight).

The blank lines in Column C (i.e., lines 6-8, 10, 14, 17, 18, 20, 22 and 23) are to be used for inserting the names of species produced which do not appear in the pre-printed list of species.

Should the number of blank lines in Column C prove insufficient for the insertion of all species items for which separate statistics are nationally available, please use additional blank forms for these entries.

#### 5.2. Number of enterprises

The number of enterprises to be recorded in Column E is the number of <u>local units</u>, not the number of parent companies, engaged in the production of each species. Since some enterprises may be producing more than one species the "total" recorded on line 24 of Column E may not correspond to the total of lines 1-23 inclusive.

## 5.3. Total production

The data to be recorded in Column F is the total aquacultural production of each species, subject to the restrictions in paragraph 5.6.

#### 5.4. Production for human consumption

The data to be included in Column F should be all quantities sold for human consumption. Thereby excluded are quantities sold to other enterprises for "growing-on", quantities sold to enclosed sport fisheries and quantities sold for restocking of enclosed waters.

### 5.5. Weight unit for production

The weight unit to be used to express the data on production is the LIVE WEIGHT EQUIVALENT in metric tons.

## 5.6. The concepts of production

The following must be taken into account when determining the coverage of PRODUCTION:

- a) <u>Adjustments</u>
  - (i) Conversion factors (yield rates) are to be used to convert those quantities recorded on a product weight to their LIVE WEIGHT equivalent;
  - (ii) The production data refer to the calendar year of marketing.
- b) Production data include:
  - (i) All quantities produced in conditions where the fish are physically isolated from the wild stocks or grown on artificial substrates which have been placed in the water and facilitate harvesting. Thus, included are the products from intensive culture in closed systems and systems where fish or shellfish are cultured in semi-open conditions but where the escape is minimal (e.g., cage rearing of finfish).
- c) Production data exclude:
  - (i) All quantities produced in conditions where the fish are released to mix with the wild population (e.g., fish for restocking and fish ranching techniques) or where a substrate is improved but does not facilitate harvesting (seeding of an oyster bed to encourage settling of spat).

-15- FORM FOR REPORTING STATISTICS ON AQUACULTURE PRODUCTION												
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A B C			D	E		F		G		(A)		
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<u> 1 F</u>	FCP	Common carj		108							1	
2 F	FTE	Tench			110							2
- F	FRO	Roach		107							3	
<u>4</u> F	FCG	Grass carp			112							<u>4</u>
5 F	FPP	Pike-perch			103			<u></u>				_5_
6			. <del>.</del>						<u>., </u>			6
7												_7
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9 EI	LE	European ee	2		152	<u> </u>						9_
<u>10</u>						<u> </u>						10
<u>11 SA</u>	AL	Atlantic sa		153							11_	
<u>12 CO</u>	ЭН	Coho salmon		161							12	
13 TR	R	Rainbow tro	out		155							13
14												14_
15 SO	DL	Common sole	)		212							15
<u>16 TU</u>	JR	Turbot			202						*****	<u>16</u>
17												17
18			- , <b>-</b>									18
<u>19</u> SB	3G	Gilthead se	abream		316							<u>19</u>
20												20
<u>21 MU</u>	JF	Striped mul	let		364				<u></u>			21
22												22
23						 			<u></u>	ļ		23_
24		TOTAL										24