EU FISHERIES POLICY IS HEADING IN THE RIGHT DIRECTION,

IS SUBSIDY POLICY ON THE SAME TRACK?

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Introduction

1. Society as we know it, perhaps in every country on earth, would not exist in its present form without economic subsidies. Economic support knows many different faces: apart from direct payments to those in need, it may be provided through public-private partnerships or bi-lateral agreements, by joining a free trade agreement or union (such as NAFTA or the EU), or as a result of historical relationships (such as the with the African, Caribbean and Pacific (ACP) countries which are former colonies of EU member states). There are countless mechanisms.

2. Subsidies are everywhere and, therefore, are a part of life. The challenge therefore is to distinguish between beneficial and harmful subsidies, promoting the former and eliminating the latter.

3. Subsidies to improve safety at sea, ensure better labour conditions, promote selective fishing gears which minimise impacts on the environment, and so forth, are not only desirable but needed, particularly when harmful subsidies have already created an inertia of bad practice. The crisis which many of the world's fisheries stocks are facing, for example, cannot be solved by simply removing the myriad of harmful subsidies which have led to their demise. The inertia of destruction is a powerful force which will last for many decades unless we take urgent action to reverse it.

4. This is implicitly recognised in the UN's development aid target of 0.7% of GDP: the 'haves' have a moral responsibility to subsidise the sustainable development of the 'have-nots'. And just as nearly everyone recognises the urgent need to provide subsidies to promote clean energy and reduce CO2 emissions, or to promote clean technologies more generally, the same recognition must be granted to the fisheries sector.

5. Although the issue of fisheries subsidies, both harmful and beneficial, is a global one, the following paper focuses on the policies of the European Union. The EU has the third largest fleet in the world with around 100,000 boats taking 10% of the world's catch. And the size of that fleet is about to increase by about 6% with the entry into the Union of 10 new members.

Europe in a Time of Change

6. Europe's Common Fisheries Policy (CFP) has been overhauled, and a revised CFP has been in effect since January, 2003. A number of important and positive changes have been made. The new CFP:

7. Aims to take a long term approach to fisheries management (as opposed to previously, when measures were adopted annually), and attempts to conserve the ecosystem as a whole rather than individual fish stocks.

8. Requires that fisheries be managed on the basis of the Precautionary Principle.

9. Addresses fishing capacity, and in particular prohibits subsidies for renewing or modernizing fishing vessels.

10. The phase in of these changes, in combination with the impending enlargement of the EU, means that it will take some time before we can look back and evaluate how well the new policies have taken root. In the meantime, there are some worrying signs, as outlined in the text below, for example in the discussion on the application of the precautionary approach.

11. It must be emphasised that EU countries have been given a grace period to continue some of their past, wrong-headed investing practices. € 3,700 million allocated in the Financial Instrument for Fisheries Guidance (FIFG, also known as IFOP) are to be spent during the period 2000-2006:

22% in modernising and building new boats and 18% in scrapping or exporting capacity. In other words, public funds are still being spent to ensure that more 'modern' boats, capable of taking more fish faster replace older more inefficient vessels. And the older vessels may not even be destroyed - they may simply be exported to other countries (**1**). By comparison, in the period 1994-1999 IFOP provided subsidies for 2,700 million ecus for modernising fleets, obtaining new agreements with third countries, subsidising fuel-dependent fishing gears, etc.

12. Likewise, unsustainable fisheries agreements continue to be made with third countries, for example the last renewed agreement with Cote d'Ivoire in 2004. Despite FAO concerns about the status of demersal stocks in the Gulf of Guinea (**2**) and the most recent analysis of the small and fragile area used for trawling along its coasts (**3**) , the EU agreement (**4**) will increase the presence of trawlers, especially deep water trawlers which are known to devastate local ecosystems. The EU has done this despite the fact that the scientific community has repeatedly alerted us to the vulnerability of these ecosystems. While 71.3% of the nearly €1,5 million payment to this African country is slated for the development of sustainable fisheries, it is incongruous to say the least to simultaneously invest in one of the most unsustainable fishing practices in existence today. This can hardly be considered an application of the precautionary approach.

13. When the new EU members join later this year, the Union will face an even greater challenge. Most of the new members have uncompetitive fishing industries with vast numbers of old boats. Malta and Cyprus are still considered as "flags of convenience". And after enlargement, companies from existing EU states that have received subsidies in the past can freely move to Lithuania, Estonia, Poland, and so forth, and ask for the cohesion funds again.

14. The EU with its enormous fishing interests (spanning 25 countries, 20 of which with fishing fleets) therefore represents an excellent "case study" for understanding these dynamic issues. In particular, it is useful to assess whether stated policy objectives are systematically backed by the type of investments (subsidies) which have the power to support or undermine them.

Converting Harmful Subsidies

15. It is widely known that the fishing industry is over-subsidized. Various studies have attempted to calculate the global level of fisheries subsidies. This is not an easy task, in part because there is no agreed definition of what constitutes a fisheries subsidy (for example should fuel subsidies for all sectors - which are enormous - or port improvements be counted?). Most researchers cite the results of a 1998 study by M. Milazzo which estimates the level at US$ 14-20 billion per year, or approximately 17-25% of global fishing industry revenues (**5**). The worst offenders are reportedly the EU Japan, and China (**6**). To illustrate the insanity of this approach, in 1994 the FAO calculated that investments (including subsidies) in fisheries industries of US $124 billion yielded earnings of $70 billion (**7**). And this is not an isolated case - this is part of a long term trend. Whether due to a recognition of the failure of this approach, or the pressure generated from discussions at the WTO, the new CFP provides for the progressive elimination of at least some EU subsidies in the fisheries sector.

16. In comparison to most development issues, solving the fisheries crisis (to the extent that past damage can be repaired through active interventions at this stage) requires no new sources of funding: harmful fisheries subsidies can be converted to beneficial ones. It is a fairly straightforward matter to simply stop investing in harmful practices (fleet expansion, 'modernization' of vessels, more 'effective' fishing gears, etc.) and put the same money to better use.

17. The rules and guidance for doing so can be easily found in the policies to which governments have already committed themselves to: the recently renewed EU Common Fisheries Policy (CFP) (**8**), the FAO Code of Conduct for Responsible Fisheries (**9**), the UN Fish Stocks Agreement (**10**) , (all of which call for application of the Precautionary Principle in managing fisheries), the UN Law of the Sea (**11**), the International Plan of Action (IPOA) -IUU (**12**) and a host of other international agreements, including NGOs' alternative fisheries treaty put forward during the 1992 Earth Summit (**13**).

18. To summarize the recommendations on subsidies as emphasised in these commitments:

    - Apply the precautionary principle
    - International agreements based on surplus

- No funds for exporting overcapacity
- Fight against IUU fishing
- Small scale fishermen participation
- Fishing for food
- Promotion of selective fishing gears plus reduction/elimination of wasteful fisheries
- Reduce pollution and fossil fuel dependency
- Protection of the marine ecosystem and management based on an ecosystem approach
- Protect fisheries jobs and safety
- Avoid fisheries stocks from collapsing/ management based on the best scientific knowledge
- Reducing/eliminating other threats to fisheries, fish stocks and the marine environment as a whole.
- Therefore, taking these points into account, subsidies policy should be very simple. The following section examines what the EU has been doing in practice.

Apply the precautionary approach

19. The new CFP is meant to be based on the application of the Precautionary Principle, which is identified as an essential tool for fisheries management. A precautionary approach must be taken in particular in the development of new fisheries, new fisheries agreements and the expansion or increase of fishing effort. Therefore, many observers are hopeful that deep-sea fisheries, new fisheries agreements, new fishing gears (such as supertrawlers, pelagic trawlers rockhoppers, etc.), new targeted species, and many other developments that have taken place in the EU fleet in recent years (and caused enormous harm) will now be more rationally managed.

20. Unfortunately, this is not yet the case. The new CFP is still in a transition phase, and the fate of several fisheries is in any case locked into place due to past decisions which will be left to run their course. The Precautionary Principle has not been applied to decisions on these matters in recent years. New fisheries have been developed and new fishing gears have been introduced within the EU fleet without taking into account their impact on the ecosystems or their effect on other fishing gears and fisheries.

21. (NB: It can be argued that some of these decisions were taken prior to the formal adoption of the Precautionary Principle within the CFP. Oceana would respond that this is not a legitimate excuse. The EU and its member states signed the UN Fish Stocks Agreement in 1996, for example, which also recognised the importance of taking a precautionary approach to fisheries management. The EU was also party to other discussions and agreements such as the FAO Code of Conduct for Responsible Fisheries.)

    For example:

22. Supertrawlers with an enormous fishing capacity have been sent to Mauritania and Senegal despite FAO's concern about and recommendations on the status of East Central Atlantic stocks (**14**) For shrimp, hake and small pelagics, FAO recommended not to increase, and even to decrease slightly, the fishing effort. For cephalopods, coastal demersal species which are considered to be fully-exploited to overexploited, FAO recommended fishing reductions of up to 25%. Even the EU's own reports advise that these fishing agreements are unsustainable. A report on captures by supertrawlers in Africa indicates that of 60 species identified in the catches, 34 were totally discarded (**15**). Yet EU member states actively supported this process by subsidising the building of these boats (the German Government provided 12 million DM for the construction of the supertrawler Helen Mary (**16**); and Ireland used part of its IFOP funds to build one of the world's biggest fishing vessels - the Atlantic Dawn) and securing fishing grounds for them through paid international agreements (Senegal and Mauritania). The company SEMPSA also asked for a

subsidy of some 10.5 million euros to build refrigeration facilities for a supertrawler in the Canary Islands but the petition was denied (**17**).

23. Pelagic trawling has been introduced in several areas of the Northeast Atlantic despite other more selective fishing gears being available, and despite data showing a high level of by-catch especially for some protected species such as cetaceans (**18**). The EU has facilitated the introduction of this fishing gear to new areas through money allocated to modernization;

24. Rockhoppers and rollers have been introduced on trawlers, allowing this fishing gear to be introduced to new areas already known to be of high sensitivity and vulnerability and of great importance for fish stocks. Many highly sensitive areas have already been destroyed as a result of these technologies, despite scientific reports which revealed their devastating impact and which should have served to alert decision-makers prior to allowing these fishing gears to be used (**19**). A portion of the modernization subsidies provided by the EU have been oriented to these fishing gears and international events subsidised by EU countries have been used to promote such technical "improvements". A recent analysis (**20**) made by the Agricultural Economics Research Institute (LEI) pointed out that EU financial assistance has lead to a substantial increase in fishing effort with an increase in the number of trawlers, the replacement of older vessels by larger and more powerful new ones, a general increase in engine power, or the introduction of a major technological innovation: the mid-water trawl.

25. It will now be incumbent upon the EU to show that it has taken the Precautionary Principle into account when allocating any new subsidies. The transition phase for applying the new CFP will last until the end of 2004. Fisheries industries are free to continue with "business as usual" for the next few months, and several funding and fisheries agreements which have been previously signed or agreed covering a longer stretch of time will ensure that bad EU practice continues for several more years. It is now up to the EU to face the challenges of reversing the damage of the bad decisions taken in the past.

International agreements based on surplus

26. the EU is signing new agreements and searching for new fishing grounds despite reports funded by the European Commission which have shown that most of the agreements already in force violate the UN Law of the Sea. (**21**) Under the terms of the Law of the Sea , Fisheries Agreements must be only signed if a "surplus" exists. Similarly The FAO Code of Conduct for Responsible Fisheries says that agreements must be made within the context of sustainable fisheries.

27. But this is not the case. For example, another recent report (**22**) funded by the EU concluded that "agreements are, therefore, generally signed without any guarantee that they will be implemented in a context of sustainable fisheries" and that "under the current conditions, FA's and FA-related activities are not sustainable".

28. Recent reports analysing the evolution of fisheries in the East Central Atlantic (ECA) area in the last 50 years indicate a dramatic change in stock status during this period "from a situation where 90% of the main resources were classified as having undeveloped fisheries to the present when 68% are classified as mature or in decline(**23**)". There are also indications that the biomass of fishes (excluding small pelagics) has declined by more than three quarters during these 50 years, while catches multiplied by 20 in the first two decades of that period . So it can hardly be argued that there is a surplus of fish in this area.

29. For the ECA, which includes the waters off Mauritania and Senegal - the most important fishing ground for the European Distant Water Fleet - In its 1994 report on the state of the world's fisheries, FAO (**25**) likewise painted a sobering picture of the status of the fish stocks there: 82% of the stocks of all commercial species were considered fully fished, overfished, depleted or recovering. More recent reports from FAO continue to note the dangerous trend of many demersal species in this area and the sharp decline of their biomass (**26**). Only one other area in the world has been more overexploited than this one. And the percentage climbs to 90% in the cases of demersal fish, some pelagics, crustaceans and molluscs.

30. The EU allocates an enormous amount of money to fisheries agreements. During 1993-2000, FA's represented 28.5% of the total CFP budget (**27**) . In 2002, the total amount spent on those FA's was some 190 million euros. Such expenditure is not re-charged to the fishing companies and vessels which benefit from this access, and is therefore a (none-too-well) hidden subsidy.

31. Between 1993 and 1997, The EU had to pay approximately 1,053 million Euros (or in American terms, more than a billion Euros) for a yield of some 2.9 million tons (an average of 590,000 tons a year)(**28**) which works out to roughly 36 cents per kilo - a significant percentage of the total price which consumers or taxpayers must ultimately pay.

No funds for exporting overcapacity

32. The EU has been promoting the increase of fishing capacity in third countries through exporting overcapacity, promoting fisheries exports and creating joint ventures. Between 1992 and 2000 EU companies signed 152 joint ventures involving 241 boats, representing some 88,319 GRT; these deals were subsidised with 281 million Euros from the EU. Half of these companies are Spanish, and the rest are Portuguese, Italian, Greek, French and Danish. As of 2000, these vessels were fishing in the waters of 28 countries; 77% of them in Africa, 22% in South and Central America and 1% in Europe(**29**).

33. More than 100 boats operating under joint ventures are fishing in countries with which the EU has agreements. In addition, subsidies for more than 20 new projects of this kind have been requested by several EU companies. European fishing companies involved in joint ventures are therefore competing with the official European fleet for the same resources. And because both activities are ultimately subsidized by the EU, the economic benefits of such a policy for the citizens of Europe are questionable to say the least.

34. It should be noted that joint ventures were commonplace in some European countries before they became EU members; between 1977 and 1990; for example, the Spanish fleet exported 245 vessels with 124,018 GRT creating 132 companies(**30**).

35. With the first EU joint ventures, it was clearly recognised that this was a strategy being used to reduce fishing effort in European waters while simultaneously exporting the excess capacity to other areas, and thus avoiding having to reduce the overall capacity. This strategy continues today, though it is couched in more acceptable terms: it is presented as a means of getting more "equitable" and "respectful" fisheries agreements with other countries. And instead of talking about export of capacity, they are called "second generation agreements" and presented as a good way to get access to fishing grounds through "partnership agreements".

36. An EU agreement with Argentina signed in 1998 officially ushered in this new approach to exporting overcapacity. Although Spain dominates the market, other countries have joined the game. Of the 29 boats operating under joint ventures in this one South American country, 24 of them are Spanish, 2 are British, 2 are German and 1 is Italian (**31**)

37. The boats exported by the EU thanks to joint venture agreements have increased the fishing capacity in many areas. This is especially true in some African countries, including Kenya, which between 1992 - 2000 had suffered a 110% increase in GRT, Guinea Conakry a 96% increase, and Angola, an 85% increase (**32**)

38. The EU has spent an enormous amount of money to reduce or export its fishing capacity and to renew its fleet.

EU investments on the fishing sector

EU subsidies to the fishing sector (in million ECUS)[33]				
	1986-1993		1994-1999	
	Construction and modernization	Withdrawal and export of capacity	Construction and modernization	Withdrawal and export of capacity
Belgium	2.27	9.18	13.50	10.54
Denmark	8.67	81.93	42.07	75.48
Germany	18.55	50.90	38.37	20.34
Greece	15.11	74.45	19.05	42.36
France	48.17	41.51	40.62	32.38
Ireland	14.98	5.46	13.61	7.42
Italy	71.11	86.73	116.32	208.36
Netherlands	1.23	41.45	3.08	19.00
Portugal	47.51	89.35	44.30	110.07
Spain	124.34	247.73	458.36	567.08
UK	22.42	8.30	15.50	32.98
Finland	---	---	4.25	2.68
Sweden	---	---	20.89	8.00
Total	374.36	736.99	829.92	1136.69

Fight against IUU fishing

39. EU countries and companies have been shown to be involved in IUU fishing and/or have given them support by allowing them to use their harbour for landing their catches, resupply, etc. Whether or not this is an issue of 'subsidizing' bad practice is open to interpretation. Certainly by allowing them to use of harbours or other facilities which are financed by European taxpayers it is arguable that they are benefiting from an indirect subsidy. And given that no distinction has been made up until now between legal and pirate fishermen when it comes to providing subsidies it is safe to assume that governments are subsidizing IUU fishing.

40. An aerial survey carried out by Megapesca (**34**) in an unnamed country of West Africa found many infractions made by foreign fleets that habitually pass through, unreported and unpunished. Half of the boats encountered fishing were doing so illegally; almost 95% of them were found inside the Inshore Exclusion Zone that some African governments have established in order to protect artisanal fisheries from both overfishing and collision. Half of the vessels bore no name.

41. In 2001, a regional catch monitoring scheme carried out in the EEZ of Madagascar showed that illegal and unreported fishing was higher than previous thought. Catches were estimated at approximately 31% higher than declared, and half of the reports were submitted late.

42. FAO has asked for more involvement of the EU in the fisheries management of the ECA, complaining that EU vessels' logbooks were presented late, and with little or no biological information.

43. Spain is one of the most contentious countries in the international debate on IUU fishing. Despite the Spanish government's adoption of laws (**35**) to stop or, at least, make more difficult the involvement of Spanish companies in IUU fishing, ports such as those in Galicia (Marin and Vigo) and the Canary Islands (Tenerife and Las Palmas) are often utilised by IUU boats. Oceana has highlighted this problem in a report provided a recent OECD workshop in Paris on IUU fishing activities (**36**).

44. The Coalition of Legal Toothfish Operators (COLTO) has repeatedly explosed the European involvement in IUU fishing in the Southern Ocean. COLTO has found more than 20 boats fishing illegally, with Galician (Northwest of Spain) owners or operators.(**37**) .Oceana has discovered several of these vessels using Spanish harbours and facilities for loading, repairs or re-supply.

45. 45. Despite the European Commission's stated intent to apply the FAO's International Plan of Action against IUU fishing (IPOA-IUU) (**38**) the Council of Fisheries Ministers have not reached agreement yet and almost no country has developed national laws to implement it.

Small scale fishermen participation

46. Very few EU fishing agreements include the participation of small scale fishermen. Even within the EU, small scale fishermen's associations are accustomed to being excluded from key meetings and funds.

47. Artisanal fishermen represent between 60 and 90% of the fishermen in most EU countries but they do not receive the same percentage of attention or benefits as the large scale industrial fleet operators.

48. Traditional fishermen are disappearing from many European countries as a result of the policy to invest in industrial fisheries, despite the fact that these have been proved to be unsustainable. In Belgium and Holland, almost all of the fishing boats are industrial trawlers (**39**).

49. In more recent fisheries agreements, the EU has increased the proportion of funds directed to support local industry, local fisheries, surveillance, training, land facilities and other fisheries related issues. But this is not being done consistently. The percentage of funds for such purposes in different agreements ranges from 2% to 60% (**40**). While the EU has repeatedly expressed its commitment to help develop local fishing capacity, only 1% of the total financial compensation is dedicated to this purpose and only 9 of the 17 agreements in force in 2000 included any small scale fisheries support. In just a few of agreements such expenditures reach significant levels, such as those with Equatorial Guinea, Comoros and Seychelles, amounting to 18% to 36% of the total compensation (**41**).

Fishing for food

50. The aid and subsidies provided to countries on the basis of EU fisheries agreements often have strings attached. All too often, the money is invested in projects which promote exports of desirable fish products for rich Northern markets. This money could be put to far better use by serving the interests of the countries involved for example by ensuring a stable supply of food for local consumption.

51. The EU is very interested, for example, in promoting its tuna fisheries in the Indian Ocean, and helping improve the port facilities necessary for increasing exports from this area. Consequently in its agreements with a number of Indian Ocean countries, an important part of the funding is tied to promoting the adequacy of harbours and export facilities. In Comoros, EU assistance is helping to upgrade the quay for receiving tuna catches. In the Seychelles, preferential trade treatment is granted by the EU for canned tuna from the Indian Ocean, with 96% of the production dedicated for export to the EU market. The EU has carried out a partnership programme called PROINVEST with a budget of €110 million to promote investment and technology flows to enterprises operating within key sectors in the ACP States (**42**).

52. EU investments in these agreements appear to be guided more by its own economic interests and than any humanitarian motive. While this may be perfectly legitimate, there has never been any kind of impact assessment, as far as we're aware, which examines whether this kind of investment is affecting local access to affordable food products. It is hard to imagine that there would be no impact, with local consumption made to compete directly with the more lucrative export market.

Promotion of selective fishing gears plus reduction/elimination of wasteful fisheries

53. the EU has identified the majority of the most unselective fishing gears and fisheries in the EU but this has not resulted in a reduction of the problem. On the contrary: to our knowledge the EU has not presented a single paper advocating the use of more selective fishing gear despite the fact that such gear is already available in many areas. Instead of pushing for improvement and working towards an increase in efficiency of existing selective fishing gears, the EU has opted for attempting to marginally reduce the huge impact of gears already known to cause major damage.

EU fishing groups with the highest levels of discards (**43**)

Área	Fishing gear	Target species	Landing	Discards
IVbc	Beam trawling	Sole, dab, turbot, brill, plaice	120,000	270,000
IV	Bottom trawling	Haddock, cod, whiting	220,000	224,000
VII/VIII	Bottom trawling	Hake, megrim, anglerfish	45,000	5,000
VII/VI /IV	Bottom trawling	Nephrops	50,000	13,500
IVb	Bottom trawling and beam trawling	Prawn	14,000	9,350-25,750
VII Celtic Sea	Gillnet	Hake	300	porpoises
NE Atlantic	Bottom trawling	Grenadier	13,352	11,921
NE Atlantic	Bottom trawling	Nephrops and shrimp	5,543	35,000
Greece	Bottom trawling	Hake, sparids, flatfish and shrimp	20,000	8-10,000
Jonic Sea	Bottom trawling	Demersal species	?	?

54. By-catches and discards are amongst the main concerns of fisheries management. Every year, more than 27 million tonnes of fish is discarded worldwide. In the NE Atlantic, where most of the EU fleet operate, the level of discard is estimated at approximately 2.7 million tonnes per year. But the real level of by-catch and discards is not fully known. There isn't even an estimate of the number of specimens damaged after escaping from the net or having a trawl pass over them.

55. Most of these wasteful techniques have been promoted by EU governments by systematically avoiding reductions in fishing quotas and ignoring discards in the TACs,

56. FAO has also shown that nine of the twenty most wasteful fisheries in the world (in terms of the number of fish discarded in relation to that landed) are located in the Northeast Atlantic.

The most wasteful European fisheries

Fishery	World ranking	Nº discards per Nº landed
Whiting trawl	4th	2.83
Haddock trawl	6th	1.94
Nephrops trawl	8th	1.70
Hake trawl	11th	1.18
Cod Danish seine	13th	0.79
Haddock Danish Seine	14th	0.70
Whiting Danish seine	16th	0.64
Cod trawl	17th	0.51
Plaice trawl	18th	0.42

57. European fleets are not only wasteful in European waters. Several reports contain partial estimates of discards made by the EU Distant Water Fleet in African waters. FAO has documented that rates for trawlers range from 1.48 kg discarded for every kilo landed of the target species (finfish) to 2.72 kg (shrimp) in the ECA area (**44**). Data specific to Senegal has shown that the numbers range from 1.5 to 9.0 kg for shrimp (**45**) . FAO has expressed its concern about such high levels of by-catch for these and other fisheries, (cephalopods, the pelagic trawlers for horse mackerel, sardinellas and other small pelagics and gillnets and long line fisheries catching seabream, sharks or tuna) (**46**) .

58. In the last bilateral agreement with Mauritania the EU demanded that the legal size for cephalopods be reduced from 500 g. to 300 g., but this was not accepted. Inexplicably, however, trawlers and long-liners for hake were allowed to increase by-catches.

59. EU fishing policy clearly is promoting wasteful techniques. By-catch and discards are not counted in the calculation of TAC's which means that the real impact of fishing and the actual volume of catches are systematically ignored. Species that have no commercial interest are for the most part not even taken into account, for example corals, gorgonians, plants and some protected species. This is clearly not a precautionary approach, nor can it be considered as part of a sustainable fishing effort. Yet subsidy policy does not take into account whether gear is more or less selective; clearly this should change.

Reduce pollution and fossil fuel dependency

60. Fuel subsidies cannot by any stretch of the imagination be considered an environmentally beneficial subsidy. In some countries trawlers consume as much fuel as cars and the level of consumption is higher than what would normally be expected from their reported engine power. In Iceland, for example, the consumption of fuel by the fishing fleet is bigger that that of industry or air transport, and equal to that of car transportation (**47**) .

61. In fact, many trawlers use more powerful engines than they have registered. The General Secretariat for Marine Fisheries in Spain for example has recognised that an unknown number of trawlers are using engine three times more powerful that those registered (**48**). It is unfathomable that the EU rewards this fraud by subsidising even this excess level of fuel consumption.

62. A 1999 German study (**49**) on subsidies for herring fisheries found that the average profits of trawlers over 12 meters was on the order of 46.885 DM thanks to fuel subsidies. If these subsidies were eliminated, then the deficit of this fleet would be around 40,398, as fuel subsidies amounted 87,283 DM. They would also need almost 7 times more indirect and direct subsides (such as the ones focussed on promoting work places) to continue their activities than other more selective fishing gears.

63. The problem of energy consumption goes beyond the issue of fuel to power the engine to reach the fishing grounds. Trawling is an active fishing gear; therefore in contrast to passive gear, trawling is based on continuous fuel consumption. Indeed, trawling has been found to the most energy-intensive fishing method. An analysis of the Norwegian fleet showed that trawlers need more than double the fuel consumed by other fishing fleets.

64. A comparison (**50**) on the fuel consumption among different North European fleets gives very similar results:

Use of fuel in fishing vessels

Fishing gear	Kg. fuel/Kg fish			
	Denmark	Iceland	Norway	Sweden
Trawlers	1,44	0.6-1,0	0.4-1.0	1.5
Longliners	---	0.2-0.3	0.1-0.4	---
Coastal	0,33	0.1	0.1-0.4	0.41

Protection of the marine ecosystems and management based on ecosystem approach

65. One of the best ways to protect marine ecosystems is to avoid their physical destruction. Therefore, fishing gears which have a major negative impact on habitats should be banned. Bottom trawling should be at the top of the list, as it is intrinsically destructive. Trawling, by its very nature alters the ecosystem (though perhaps 'bulldozed' is a more accurate reflection of reality). So-called improvements to this gear have not served to reduce its impact, but to increase it, such as the introduction of rockhoppers and rollers that allow trawlers to operate in new areas by smashing rocks and reef ecosystems.

66. A high percentage of the most valuable marine ecosystems are threatened by trawling. Corals, sponges and other biogenic reefs are in grave danger from trawling. ICES has recommended a ban on trawling on coral reefs, but the EU has only approved the protection of discrete small areas (i.e. the Darwin Mounds).

67. More than a thousand scientists worldwide have asked for a halt to trawling on coral and sponge reefs, and are calling for a moratorium on high seas trawling (**51**).

68. OSPAR (**52**) has recommended the creation of a network of Marine Protected Areas in the Atlantic with the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment.

69. The greatest threat to deep sea fish and ecosystems today is unsustainable fishing practices.(**53**) Their longevity, slow metabolism, low fecundity and reproductive rate, and other physiological characteristics make these species highly vulnerable to overfishing, and have potentially little resilience to overexploitation.(**54**)

70. One of the clearest impacts of deepwater fisheries is on benthic habitats (**55**) . Deepwater trawling is likely to seriously impact the fragile and slow growing deep-water benthic fauna (**56**). In some trawled areas, benthic biomass has been reduced by 83% and the number of species by 59% in a comparison to unfished areas (**57**). On one heavily fished seamount, 95% of the bottom was bare rock in contrast to 10% on the most comparable unfished seamount (**58**).

71. New trawling fleets are able to deploy their fishing gear in ever deeper waters, reaching some 1,400 meters below the surface. Trawling tracks have already be identified at those depths (**59**). In one survey trawl marks were visible in 2 to 12% of all photographs at depths between 700 and 1300 m (**60**) .

72. The risk of severe depletion, and even extinction, of elements of the benthic seamount fauna is increased by their high specific habitat requirements (**61**), localized distributions and high levels

of local endemism (**62**) . Due to the slow growth and uncertain recruitment of these habitats, recovery may be on the order of millennia, and extinction of endemic species is possible (**63**).

73. Impacts on some of the most sensitive and valuable marine ecosystems include:

74. Scientists have recognised that, "In general, wherever bottom trawling overlaps with occurrences of corals, there is a possibility of damage (**64**)". The General Secretary of the Scientific Advisory Body of ICES has described the situation in less uncertain terms: "towing a heavy trawl net through a cold water coral reef is a bit like driving a bulldozer through a nature reserve"(**65**). Several researchers have found damages in coral reefs all over the Atlantic from 200 to more than 1,200 meter depth (**66**) . Otter trawlers can sweep ca 33km2 of continental shelf-break habitat (**67**) in some 15 days. The US National Marine Fisheries Service has estimated that in an area off Alaska, a boat can drag-up over 2,200 lbs of deep-sea coral in just one trawl pass (**68**). In Norwegian waters, trawling has damaged 30%-50% of the coral reefs (**69**) . Damage has also been reported from other parts of the ICES area, e.g. the Darwin Mounds northwest of Scotland, south of the Wyville Thomson Ridge, and in the Porcupine seabight in Irish waters.

75. Maërl beds have been shown to be very sensitive to fishing activity such as trawling and scallop dredging. A 2002 study showed the destruction of wide areas, and no sign of recovery even four years after the disturbance (**70**).

76. Gorgonians and soft corals have been found to be very vulnerable to physical destruction from fishing (trawling being the most physically destructive method of fishing) and its recovery can take more than 10-125 years (**71**).

77. Trawling is decimating fanerogam sea beds. In the Mediterranean this is one of the main causes of deterioration of the marine benthos (**72**); in this sea, between 40% and 50% of the Posidonia oceanica prairies have been damaged by trawling (**73**). Other fanerogams, such as Cymodocea nodosa or Zostera spp. are not even protected by EU laws.

78. Ironically, with all of the harmful subsidies the EU has provided over the years, it has never included within its IFOP or any other fisheries oriented funds a specific budget dedicated to protect marine areas, not even those that are essential for fisheries good management, health and recovery.

Protect fisheries jobs and safety

79. The EU fleet is composed mostly of small boats, less than 12 meters (**74**). This fleet has traditionally been very closely related with the social welfare and culture of coastal communities, providing them with food, jobs, earnings and sustainability. In contrast, industrial fleets offer fewer benefits to traditional fishing communities. They employ fewer people, and can move freely.

80. Several International agreements and declarations have recognised the importance of small scale fisheries for local people, but the EU nonetheless continues to promote industrial fisheries that directly impact the very survival of local fishing communities. Subsidies granted for scrapping small boats in favour of building larger ones has been a clear case in point.

81. The overexploitation of fish stocks has reduced the prospects for creating new jobs at sea and has resulted in the deterioration of labour conditions for fishermen as a result of the need to increase fishing effort in order to catch the same amount of fish.

82. The common practice of industrial fishing under flags of convenience (FOCs) has further diminished labour conditions. The International Transport Workers Federation (ITF) has repeatedly highlighted the deplorable labour conditions onboard IUU fishing vessels that violate some of the most fundamental human rights (**75**). Among the FOCs listed by the ITF are several European flags (or dependencies of EU, or soon to be EU, governments) including Bermuda, Cyprus, Germany (second Register), Gibraltar, Malta, and the Netherlands Antilles (**76**).

83. Despite these widely known problems, the EU has approved regulations to facilitate the commercialization of fish products from these fleets in Europe. It should also be noted that international conventions such as CCAMLR (**78**) and ICCAT (**79**) have agreed to control the catches of several IUU fleets.

Avoid fisheries stocks from collapsing, and management based on the best scientific knowledge

84. As traditional fishing stocks grew scarcer, countries stepped up investment in developing new fisheries, or converting into "commercial" fisheries those species that were traditionally discarded. During the eighties, attention turned to researching new exploitable stocks in deeper waters and this has lead to new deep-sea fisheries, most of them by trawlers. As noted previously, the newest trawlers can deploy their fishing gear deeper and deeper, reaching some 1,400 meters below the surface.

85. Yet deep-sea fisheries also result in high by-catch and their impact upon the ecosystem is believed to be more disturbing than those in shallower waters. Physiological attributes such as longevity, slow metabolism, low fecundity and reproductive rate make these species highly vulnerable to overfishing with potentially little resilience to overexploitation (**80**).

86. Several deep fisheries have proven to be very wasteful. In the North Aegean Sea, for example, 60% of the species caught between 300-400 m depth were species without commercial value and therefore discarded.

87. Deep-sea fisheries have significantly reduced the abundance of the main target species (**81**). ICES has found that many deep-water stocks are heavily exploited and some are even severely depleted (**82**). In the Rockall Trough (northeast Atlantic) abundance indices, expressed as Catch Per Unit Effort (CPUE), have declined by as much as 50% in five years for the principal deep-water species (**83**).

88. Depletion of species from deep-sea environments may have long-term ecological implications, but most of them are still poorly understood (i.e. reduced stock size and age structure, species replacement, alterations on prey/predator balance, etc (**84**)).

89. Orange roughy (*Hoplotethus spp.*) is one of the most heavily exploited species in deep waters and on seamounts. This species is being fished all over the world, mainly around seamounts. For example in Chilean waters where concentrations were discovered in 1997-1998 (**85**) and Peru where Pacific orange roughy is targeted together with deep red shrimps and deep crabs' species that were originally caught as by-catch in toothfish (*Dissostichus eleginoides*) fisheries (**86**).

90. There are signs that this fishery is heading the way of so many others before it. An assessment in 2002 of orange roughy in the Southern Pacific indicated that biomass was in the range of 7 to 13% of prefishery biomass (**87**). The sustainable yield for orange roughy in Australia/New Zealand has been estimated at only about 1-2% of pre-exploitation biomass (**88**).

91. Other species are in trouble as well. Species previously thought to be able to resist higher yields are already showing signs of exhaustion, such as the roundnose grenadier (*Coryphaenoides rupestris*) that is depleted in the Northwest Atlantic (**89**) ; or the blue ling (*Molva dypterigia*) which has been rapidly depleted in many areas.

92. Both ICES (**90**) and the Scientific, Technical, Economic Committee of Fisheries -STECF-) (**91**) have sounded the alarm on the status of several stocks, including hake in the southern part of the NEAFC area and cod in the North Sea and other Atlantic regions. Despite their advice to impose moratoria for fishing on those stocks, the European Commission has only asked for a fishing effort reduction between 50 and 65%. And even then, EU members rejected these cuts and blocked any effort to try to ensure recovery of the stock through science-based management. Unfortunately, this is not an isolated case; policy makers have repeatedly ignored scientific bodies' alerts and advices. This is not only a total abrogation of responsibility; it is a clear violation of their own commitments to apply the Precautionary Principle to fisheries management.

93. New and deeper fisheries have been able to develop thanks to EU support for this industry, by finding new fishing grounds following the overexploitation of shallower ones. Governmental agencies have invested large amounts of money over the years in the search for and identification of new "exploitable" stocks.

Conclusions

94. Subsidies are commonplace in today's world, and can have both positive and negative effects. The United Nations should work to ensure that subsidies respect and reflect the international agreements already signed and ratified by most countries. The UN has proposed reaching international agreements which ensure that subsidies can be used positively to achieve the aims of those agreements.

95. Oceana respects the legitimacy of the cultural, social, political and even economic interests of a country in investing its money to support a certain industry, region, or another country. The UN, however, has a role to monitor such investments to ensure that they do not undermine international agreements, or discriminate against or leave behind any country or region. The International Community must work together to make this possible.

96. The United Nations Environment Program (UNEP) can help to identify both good and bad practices by creating guidelines that must be applied before giving subsidies. To accomplish this, UNEP can use the International agreements already signed by a majority of countries, like UNCLOS, the Convention relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, the Biodiversity Convention, the different International Plan of Actions of FAO (IPOA's), the decisions within the regional bodies for the management of fishing stocks (ICCAT, GFCM, IATTC, etc.) and all the other tools already widely accepted by the International Community.

97. Most international agreements provide a more than sufficient basis with which to prepare guidelines that indicate which type of subsidies would be considered harmful or beneficial. UNEP should consider using fisheries subsidies as a case study or pilot project in this light.

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