



**Asia-Pacific  
Economic Cooperation**

**Study Into the Nature and Extent of Subsidies in the  
Fisheries Sector of APEC Members Economies**

**APEC Committee on Trade and Investment**

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## **1.0 Introduction**

PricewaterhouseCoopers was awarded a contract by Asia-Pacific Economic Co-operation (APEC), to study the nature and extent of subsidies in the Fisheries sector of APEC member economies. This contract followed a formal competition by the APEC Secretariat.

Fisheries is one of the 15 sectors targeted for early voluntary sectoral liberalization (EVSL) and, within the 15, is one of nine (9) sectors identified as fast-track candidates for accelerated trade liberalization. Overall, APEC hopes to achieve fully liberalized trade between APEC developed economy members by 2010, and between all APEC economies by 2020.

In light of this targeted liberalization, APEC Trade Ministers requested that this project be carried out, and are expecting the final results at their forthcoming meeting late in 2000.

The project is being developed with the APEC Fisheries Working Group, representing all APEC economies. Mr. Alistair MacFarlane from the New Zealand Seafood Industry Council was asked to oversee this project. This draft report represents the results of the project up to the end of Module 4: Synthesis. It is offered for discussion at the next forthcoming Fisheries Working Group (FWG) meeting now set for July 2000.

This report is the outcome of a team effort, lead by PricewaterhouseCoopers LLP. PricewaterhouseCoopers would like to acknowledge the assistance of our research partners in this project, Dr. James Anderson, Professor of Resource Economics, University of Rhode Island, USA, and Mr. Gordon LaFortune, Grey Clark, Shih and Associates of Ottawa, Canada.

## **2.0 Review of Overall Project Objectives from formal Requirements of R.F.P.**

The overall objective of this project is to identify subsidies used globally in the fisheries sector, highlight those subsidies used within the APEC region, and to clarify how the World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures applies to those subsidies.

As included in the Request for Proposals (RFP), there are 5 formal requirements for this project:

1. A comprehensive inventory of generic types of subsidization employed globally in the fisheries sector, including multi-sectoral subsidies applying also to the fisheries sector. This can be found in Section 3.
2. An inventory list and categorization of subsidies used in the fisheries sector of APEC economies. The full inventory is included in Appendix “A” of this report. How this inventory was developed is described in Section 3 of this report. Summaries of the subsidies by various categories are described in Section 4 of this report. An analysis of those subsidies, by various categories, most favoured in APEC economies can be found in Section 5 of this report.
3. An inventory of policy objectives underpinning subsidies. This can be found in Section 6 of this report.
4. An assessment of subsidies in light of the WTO Agreement on Subsidies and Countervailing Measures (SCM), which differentiates between “prohibited”; “actionable”; “non-actionable” subsidies. This can be found in Section 7 of this report.
5. Three case studies illuminating the impacts of subsidies. These can be found in Section 8 of this report.

## **3.0 Inventory of Subsidies**

### **3.1 Global Inventory of Generic Types of Subsidy**

We have developed an inventory of global generic types of subsidy as follows in Exhibit 3-1. This inventory of generic types of subsidy draws from several recent analysis, most notably the Organization for Economic Co-operation and Development (OECD), and a 1998 piece from the World Bank, Subsidies in World Fisheries: A Re-examination authored by Matteo Milazzo. Other sources included the Pacific Economic Co-operation Council (PECC) Fisheries Development and Co-operation Task Force Manila Workshop Proceedings, August 17-19, 1998, and several academic papers. Overall, however, this list of generic types of subsidies most closely resembles the OECD one.

As well, this global inventory of subsidy programs by generic types also formed the basis for our survey of subsidies in the fisheries sector by APEC economies.

### **3.2 Subsidies vs. Support Programs**

The intention of this Study was to review subsidy programs in the fishery sector. This required a review of a broad range of programs maintained by a number of countries with different cultures and different legal and government systems. To ensure that the Study included as many subsidy programs as possible, a broad definition of fisheries subsidy was adopted.

Consequently, the study has succeeded in reviewing a broad range of subsidy programs maintained by APEC Member States. However, the Study also included a number of programs that would not ordinarily be considered as providing subsidies. Included were programs such as fisheries management, conservation, enforcement and research and development.

Rather than exclude these programs, it was determined that the better course of action would be to treat these programs as subsidy programs for the purpose of this Study. This would first ensure that all programs identified as subsidy programs by participating APEC Member Economies would be reviewed.

Second, although a number of parties, including the Project Team, consider that these support programs would not constitute subsidies, we recognized that it is arguable that these programs could be considered subsidies if the costs of the programs are not passed on to the fishing industry.

Third, although one would normally assume that “support” programs would not ordinarily constitute a subsidy, this will depend on the nature of the program at issue. For example, a research and development program could be considered a subsidy if the program is administered



by grants to fishery concerns and money provided is in excess of the amounts required for research and development. The excess monies provided would be a benefit to fishery concern and, therefore, a subsidy as understood in the WTO.

Therefore, although these programs should normally be considered support programs, and not subsidies, it was considered import to included these programs in the Study.

### **3.3 Inventory of APEC Member Economies Support Programs and Subsidy**

The inventory of APEC member economy supporting programs and subsidies in the fisheries sector is in Appendix “A”. This inventory has been developed from information provided up to April 17, 2000.

The PricewaterhouseCoopers research team used three broad methods to develop this inventory. First, we used Internet sources and available published literature. Second, we sent a formal survey instrument to each economy’s representative on the Fisheries Working Group to seek factual information. In total 21 were sent out. A copy of our survey instrument is included in Appendix B following. No confidential or secret information was requested, as the aggregated results were to be available publicly. Ten completed questionnaires were returned. Third, we supplemented this survey by conducting interviews with important personnel in several APEC economies. Eventually, information was obtained on subsidies from 19 member economies of APEC.

It should be noted that it is not within the Terms of Reference of this project for any individual subsidy or support program to be assessed for consistency with the World Trade Organization’s Subsidy and Countervailing Measures (SCM) Agreement, but rather, to determine whether summary categorizations, drawn from within the total list, are, or are not, consistent with the agreement.

In order to develop the most exhaustive list possible, respondents were asked to identify “support policies and programs” for the fisheries sector in their economy. We know that some economies did not provide detail on all programs, however, we have available a more than adequate cross-section of subsidies for examination. Although supportive, not all of the programs may fairly be called a subsidy. Nevertheless, it is believed the inventory provides a reasonable basis for this study. The reader is directed to section **4.5, Quantification of Subsidies**, which compares the total estimated value of our APEC inventory with recent estimates of global subsidy values. Our numbers appear harmonious, suggesting our inventory is relatively complete. As it was impossible to conduct interviews covering all these subsidy programs, it should be noted that the study team has taken the descriptions for each at face value.

As of April 17<sup>th</sup>, 2000, we received responses to our survey instrument from the following APEC economies: Canada, People’s Republic of China, Hong Kong, Singapore, New Zealand, Philippines, United States, Mexico, Thailand, and Malaysia. We had personal contact with

fisheries officials in Canada, Chile, People's Republic of China, Indonesia, Japan, Korea, Malaysia, Mexico, Peru, Philippines and Thailand. We reviewed regulations with local authorities in Canada, People's Republic of China, Indonesia, Korea, Malaysia, Philippines, and Thailand.

Our final inventory of APEC subsidies and support programs includes 162 entries.

### Exhibit 3-1: Inventory of Global Generic Types of Subsidies in the Fisheries Sector

<p><b>1. Direct Assistance to Fishers and Fisheries Workers:</b> These include all revenue enhancing transfers to fishers and fisheries workers from government budgets.</p> <ul style="list-style-type: none"><li>• Income Support Programs – payments to supplement the incomes of fishers and fisheries workers</li><li>• Unemployment Insurance – payments targeted specifically for unemployed fishers and fisheries workers</li><li>• Worker Adjustment Programs – payments to assist displaced fishers and fisheries workers to find alternative employment</li><li>• Fisher Retraining – to assist fishers and fisheries workers to find alternative employment</li><li>• Other Direct Payments to Fishers</li></ul>
<p><b>2. Lending Support Programs:</b> These include all government-funded loans, loan guarantees, and loan restructuring at below commercial lending rates to the fisheries sector.</p> <ul style="list-style-type: none"><li>• Loan Guarantees - including loans provided by private lenders and guaranteed by government</li><li>• Subsidized Loans – loans at below market rates (calculated as the difference between market interest rates and low interest rates, applied to the total value of the outstanding loans)</li><li>• Loan Restructuring</li><li>• Other Lending Support Programs</li></ul>
<p><b>3. Tax Preferences and Insurance Support Programs:</b> These include all tax preferences and government-funded insurance support programs that benefit the fisheries sector.</p> <ul style="list-style-type: none"><li>• Fuel Tax Exemption – for fishing vessels</li><li>• Income Tax Deferral – for fishers</li><li>• Accelerated Depreciation – for taxation of fishing vessels and gear</li><li>• Favourable tax rates on specific inputs or outputs</li><li>• Vessel Insurance and Reinsurance Programs</li><li>• Other Tax Preference and Insurance Support Programs</li></ul>
<p><b>4. Capital and Infrastructure Support Programs:</b> These include all government-funded capital inputs and infrastructure investments to the fisheries sector</p> <ul style="list-style-type: none"><li>• Development Grants – for fisheries enterprises</li><li>• State Investments – in state-owned enterprises and cooperatives in the fisheries sector</li><li>• Fleet Renewal and Modernisation</li><li>• Foreign Access Payments – for deep sea fishing fleet access to foreign fishing waters</li><li>• Bait Services – provided to fishers</li><li>• Provision of fish auctions or other sales facilities and services</li><li>• Aid to Shipyards – to support fishing boat construction</li><li>• Fishing Port Infrastructure Enhancement – to provide port improvements for fishing fleets</li><li>• Harbour Facilities and Moorage – provided free or at low rates for fishing fleets</li><li>• Other Capital and Infrastructure Support Programs</li></ul>

**5. Marketing and Price Support Programs:** These include all government-funded marketing and price support programs

- Export Marketing Programs – to enhance seafood exports
- Fish Product Promotion Programs – including seafood product promotion, labeling and quality enhancement for either domestic or external markets
- Market Price Support – government support to ensure minimum prices or to keep domestic prices above world prices
- Other Marketing and Price Support Programs

**6. Fisheries Management and Conservation Programs:** These include all government-funded programs that are designed to enhance the fisheries resource base

- Vessel Buybacks – payments for the permanent withdrawal of fishing vessels
- Permit Buybacks or License Retirement (all types) – payments for the permanent withdrawal of fishing permits or licenses
- Stock Enhancement Programs – including fish habitat improvements, release of juveniles, etc.
- Fisheries Management Programs
- Fisheries Enforcement Programs
- Programs to Assess Fish Stocks
- Programs to Identify and Develop New Fisheries
- R & D – to develop new fisheries technologies
- Other Fisheries Management and Conservation Programs

## 4.0 Categorization of Subsidies

Based on the inventory of support programs and subsidies developed in Appendix “A”, the PricewaterhouseCoopers research team carried out an analysis to categorize all the programs.

For the purposes of categorizing programs or subsidies, we have chosen to classify each program in three ways:

- by Modality – how the program or subsidy operates;
- by Application – where in the fisheries sector the subsidy is used; and
- by Scale – whether the program is “small scale” or “large scale” (defined below).

### 4.1 Modalities

“Modality” refers to how the program or subsidy operates, i.e. what is its *mechanism* within the fisheries sector?

We have developed a classification list of six (6) modalities. These modalities can be seen to parallel the global generic list of subsidies described in Section 3. These are:

1. Direct Assistance to Fishers and Fisheries Workers
2. Lending Support Programs
3. Tax Preferences and Insurance Support Programs
4. Capital and Infrastructure Support Programs
5. Marketing and Price Support Programs
6. Fisheries Management and Conservation Programs

It should be noted that a few subsidies operate through more than one Modality, e.g., a Lending Support Program may also be a Capital and Infrastructure Support Program. In these cases, we have categorized it both ways.

It can also be noted that in our analysis, we did also further breakdown each of these modalities into various sub-modalities (following the list of generic types of subsidies developed in Section 3), but this did not, as a practical matter, seem to aid deriving any new findings or conclusions.

## **4.2 Applications**

“Application” is used here to differentiate *where* in the fisheries sector the program or subsidy operates. We have identified three application areas:

1. Capture Fisheries – naturally available fish biomass, taken from the seas;
2. Aquaculture – fish grown through an artificial process; and,
3. Fish Processing – transformation of any fish into food products.

This was the basis of our survey to APEC Fisheries Working Group (FWG) members, and an example of the survey is included in Appendix B.

## **4.3 Small Scale Versus Large Scale**

Finally, we also categorized the subsidy programs by differentiating between “small scale” and “large scale”.

“Small scale” refers to programs that either contain total funding allotments of less than U.S. \$10 million, or that are distributed widely, so that no one party can receive more than U.S. \$1 million. “Large scale” refers correspondingly to programs with funding allotments greater than U.S. \$10 million and where single parties or organizations can conceivably obtain more than U.S. \$1 million.

Small scale typically relates to subsidy programs that are aimed at supporting small or individual based business, for example, artisanal or traditional-culture fisheries. Large scale typically relates, in contrast, to substantial capital infrastructure programs – for example, shipbuilding. As will be brought out later (See Section 7), the small-scale (as described here) subsidy programs are much less likely to attract challenges under SCM rules than the large scale ones.

## **4.4 Comparison to Previous Research**

Our choice of these six modalities and three application areas is also useful in that they relate to existing and previous research into subsidies in the fisheries sector. For example, the Organization for Economic Co-operation and Development (OECD) has finished a draft study on fisheries sector subsidies and, as described above, it uses the same six broad classifications for modalities and the same three application areas.

An alternative approach would be to focus on subsidies from a fiscal perspective. This has been done in the past by some studies attempting to illustrate the funding of subsidies. In this approach, it is necessary to distinguish between “budgeted” and “non-budgeted” subsidies. Examples of budgeted subsidies would include direct transfers to fishers, infrastructure and capital equipment supports, market and price supports, and payments by governments of access fees to foreign countries, to allow fishing in their territorial waters. Examples of non-budgeted subsidies would include loan guarantees, and tax preferences.

This approach, distinguishing between budgeted and non-budgeted classifications can be seen as harmonious with the ones used here. At first glance, the examples of budgeted subsidies include one that is not in our list of 6 – payments of access fees. However, the question of foreign access fee payments was included in our inventory, but as a sub-set of Capital and Infrastructure Supports. In sum, we have simply amalgamated two budgeted categories into one category.

Yet another approach is distinguishing between subsidies that positively or negatively affect the sustainability of the fisheries sector. Those that imply expansion of fishing effort in the absence of any offsetting management or conservation program can be categorized as expanding the fishing “take”. Those that either limit the catch (conservation and management programs), or those that provide support for increasing the supply of fish, either by aquaculture or by artificial-release of new stock, can be described as environmentally related programs.

This report deals with this approach in two ways. First, we have included our own sixth modality “Fisheries Management and Conservation Programs” and, second, we differentiate three application areas, one of which is Aquaculture. Through these two approaches we are including the environmentally related classifications.

Finally, it has been suggested in previous studies that these may be cross-sectoral subsidies that could be used by the fisheries sector. Examples could be generic training or re-training programs. We believe we have captured this category by setting up our survey instrument to capture “support programs” and not just “subsidies” in the fisheries sector. Accordingly, overall, we believe our inventory, categorizations, and analysis can be related to previous research.

## 4.5 Quantification of Subsidies

The total value of APEC programs and subsidies developed in our inventory is estimated at \$12.6 billion. It should be borne in mind that all these figures are very approximate, and subject to change. For many of the programs, dollar value figures were available. For many others, value in local currency was given. These were converted into U.S. dollar equivalents at current exchange rates. Approximately 80% of programs could accordingly be relatively easily valued.

However, according to the research results, approximately 20% of the subsidies and support programs identified did not have any information regarding their yearly value. For these, an estimate was made based on comparing a similar program that exists within the economy where financial information was available to programs that did not have financial information. If this option was unavailable, a comparison was made to a program in another member economy with a similar economic profile. For example, if the dollar value of a subsidy was unavailable for Canada, the Research Team attempted to compare the subsidy to one of similar nature existing in the U.S. and/or New Zealand in order to quantify the dollar value of the Canadian fishery subsidy. Once similar programs were matched, the program dollar value (in terms of US dollars) was assigned to the program where financial information was unavailable. We believe this was the most appropriate method given the scarcity of information in the case of some programs.

This figure of US \$12.6 billion would be solely for APEC economies. However, these are responsible for a major share of the world's total catch in the fisheries sector. Figures from the Food and Agriculture Organization (FAO) show the total 1996 "take" of the fisheries sector in APEC economies was 85 million metric tonnes. This figure would include all sources, including high seas, coastal and aquaculture. This would be approximately 70% of the total world of approximately 121 million metric tonnes annually according to the 1996 FAO Statistics.

The figure of US \$12.9 billion would seem harmonious with the desirable alternative budgeted/non-budgeted approach. Previous research has indicated a total range of global budgeted subsidies in the fisheries sector of between US \$3.5 billion and \$4.5 billion. The attendant unbudgeted component has been calculated at between US \$6 billion and \$7 billion. The total global sum would therefore be between US \$9.5 billion and \$11.5 billion. If cross-sectoral subsidies applicable to the fisheries sector were added in, the grand total for global subsidies would be US \$11.0-13.5 billion<sup>1</sup> (all figures would be in early-to mid-1990's dollars). Allowing for inflation, and the very approximate nature of the data, the figure of \$12.6 billion for APEC, which represents 85% of the global fisheries catch, would seem harmonious with the budgeted/non-budgeted approach.

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<sup>1</sup> PricewaterhouseCoopers fisheries subsidies data is harmonious with the following report, World Bank Technical Paper Number 406, Fisheries Series, Subsidies in World Fisheries, A Reexamination, 1998, authored by Matteo Milazzo.



## **5.0 Subsidies Most Favoured in APEC Economies**

The following sections illuminate the most-used concentrations of subsidies by APEC member economies. These concentrations have been derived by categorizing the total inventory of support programs and subsidies according to the above-described modalities and applications matrix, and also according to large- or small-scale.

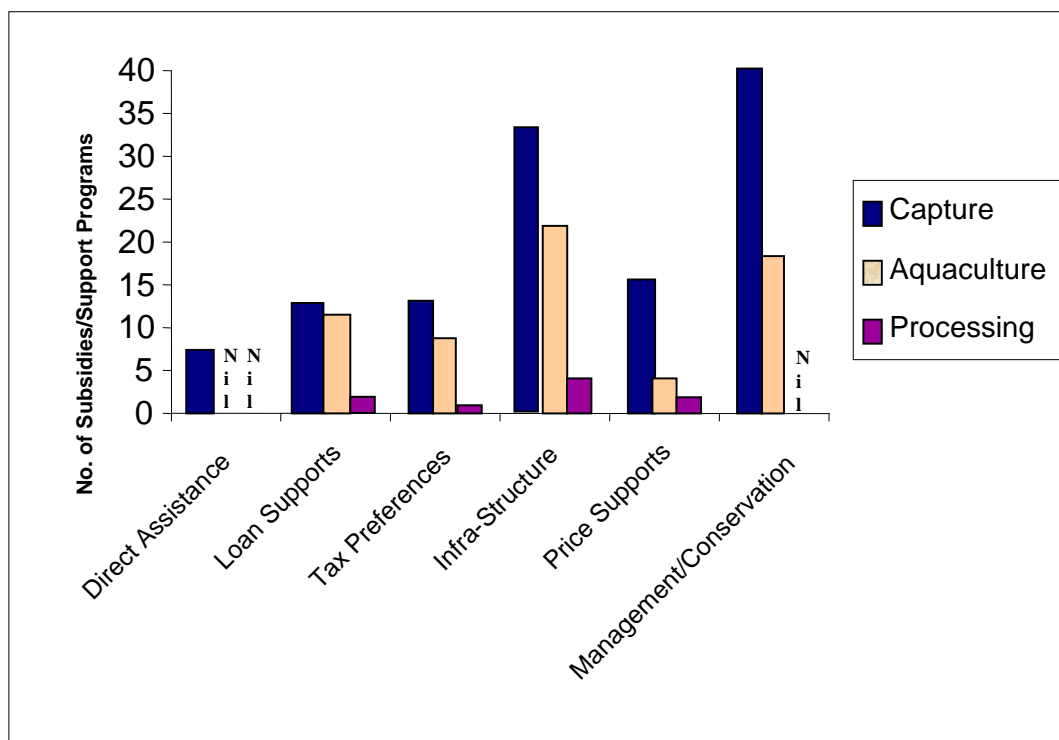
### **5.1 Concentrations of Subsidies by Number of Programs**

Exhibit 5-1 gives the distribution of programs by modality and application area.

The left-hand (vertical) axis shows the calculated total of support programs or subsidies. The bottom (horizontal) axis is divided into six modalities. Each of the six modalities is further divided by application area – capture fisheries, aquaculture, or fisheries processing. There are, accordingly, 18 possible positions. If each position were evenly represented, then each should have 5.5% of the total number of programs, which is approximately nine. (The calculation is in reality somewhat more complex, because a few programs are categorized in more than one place, but the principle remains valid.)

Exhibit 5-1 shows certain clear concentrations of subsidies within APEC economies. The heaviest single concentration of the inventory's subsidies is in Management and Conservation Programs applied to Capture Fisheries. Out of 162 inventoried programs or subsidies, no less than 41, or over 25% of the total, fall into this single category.

**Exhibit 5-1: Subsidies – Concentrations by No. of Programs**



The second heaviest concentration is in the Capital and Infrastructure Support modality, again for Capture Fisheries applications. There are 34 programs in this concentration.

The Management and Conservation modality, and the Capital and Infrastructure modality, applied to Capture Fisheries, together form the largest concentrations. The same two modalities, applied to Aquaculture, then form the third and fourth heaviest concentrations, at 22 and 20 programs respectively.

Much less common are programs or subsidies that relate to Loan Supports, Tax Preferences, or Price Supports. However, it can again be seen that Capture Fisheries are ahead of Aquaculture in concentration by application. There are between approximately 5 and 15 programs in each of these positions.

Finally, support programs or subsidies going to Processing applications, or Direct Support to Fishers modality, are extremely limited. For Processing, there are only a tiny number in each of the Loan Support, Tax Preferences, Capital and Infrastructure, and Price Support modalities. In the case of the Direct Support modality, it all goes to Capture Fisheries applications.

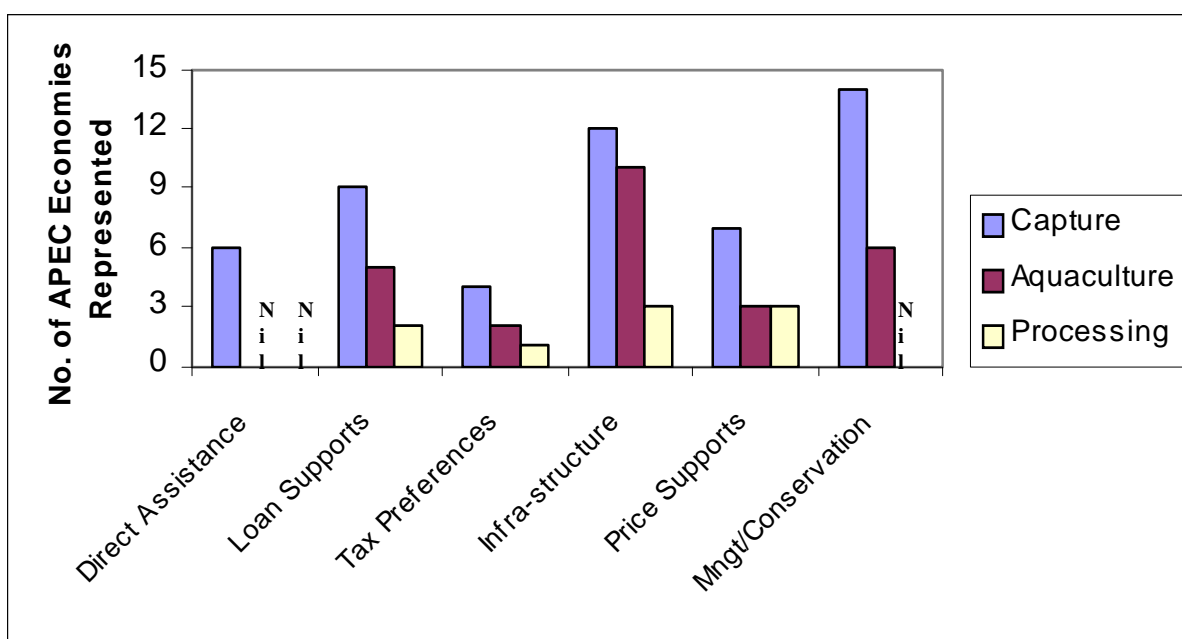
## 5.2 Concentration of Subsidies by Number of Economies

Exhibit 5-2 repeats the analysis of the inventory, but this time calculates by number of APEC member economies rather than by number of programs. (Recall that, because any given subsidy can appear in more than one category, the number of APEC economies with a subsidy in any given category can appear improbably numerous.)

What is striking about Exhibit 5-2 is that the *pattern* strongly repeats Exhibit 5-1. The concentrations are again in the Management and Conservation, and Capital and Infrastructure modalities, within the Capture Fisheries and (somewhat less) Aquaculture application areas.

This finding suggests that there is a considerable overall harmony among APEC economies in terms of the favoured concentrations of subsidies. If, for example, some economies had different favoured concentrations, then the pattern in Exhibit 5-2 could be presumed to differ from 5-1 in important respects. It does not. Virtually the exact same concentrations re-appear.

**Exhibit 5-2: Subsidies – Concentrations by No. of APEC Economies**



## 5.3 Concentrations Within Large Scale and Small Scale Programs

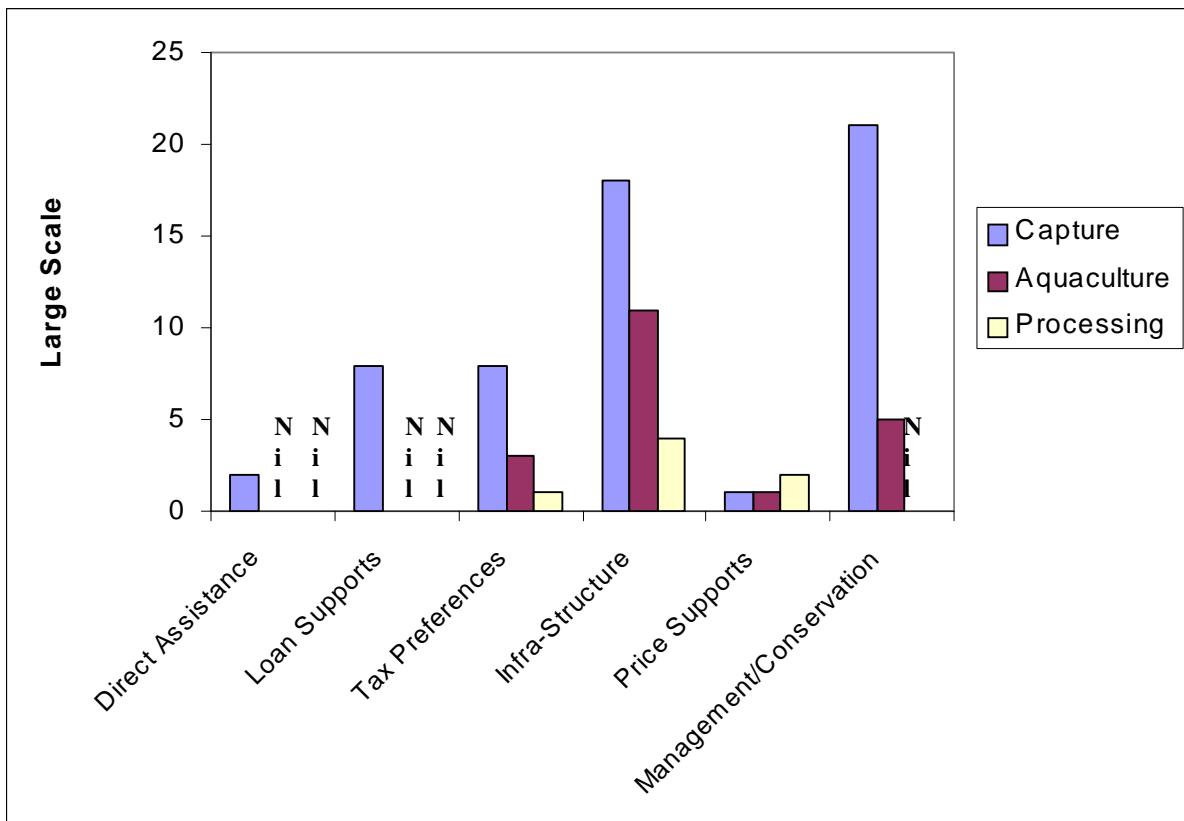
After dividing up the programs into large scale and small-scale groupings, each group was analyzed by modalities and applications.

### 5.3.1 Concentrations by Number of Programs Within Large Scale Funding

Using the definition given in section 4.3, there are 61 large-scale programs out of the 162 total. Taking only those programs that met the criteria of “large scale”, the concentrations are as shown in Exhibit 5-3.

Yet again, the profile of the Large-scale programs resembles the overall profile. The most favoured programs are those in Management and Conservation, and in Capital and Infrastructure, applied to Capture Fisheries. There are a few programs in Loan Supports and Tax Preferences, again applied to Capture Fisheries. There are also a few programs in Management/Conservation, and in Capital and Infrastructure, applied to Aquaculture. There are scarcely any large-scale Direct Assistance modality programs, and also scarcely any large-scale programs, regardless of modality, devoted to Fish Processing applications. This profile, in sum, replicates the pattern of the overall profile.

**Exhibit 5-3: Concentrations by No. of Programs, Within Large Scale Funding Allotments**



### 5.3.2 Concentrations by Number of Programs Within Small Scale Funding

Using the definition given in section 4.3, there are 101 Small-scale programs out of the 162 total. Taking only those programs that met the criteria of “small scale”, the concentrations are as shown in Exhibit 5-4.

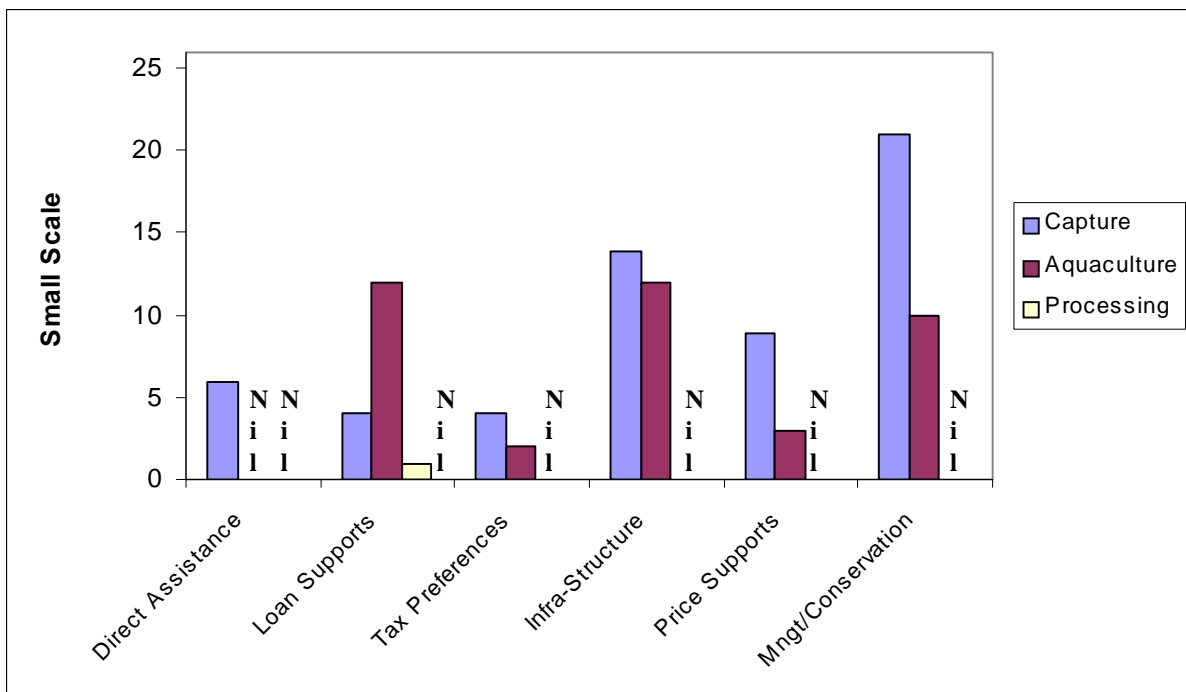
For once, the concentrations showed a somewhat different pattern.

The Small-scale programs are more broadly arrayed. There are some concentrations in Management and Conservation, and in Capital and Infrastructure applied to Capture Fisheries, which parallels the overall and large scale program profile, but there are also strong concentrations in Loan Supports, Capital and Infrastructure, and Management and Conservation applied to Aquaculture. This is a modification of the overall profile.

However, there are again scarcely any Direct Assistance modality programs, and no programs at all applied to Fish Processing. These factors follow the overall profile.

The small-scale programs are more broadly based than the subsidy programs overall. There is certainly much less concentration than for the large scale ones.

**Exhibit 5-4: Concentrations by No. of Programs, Within Small Scale Funding Allotments**



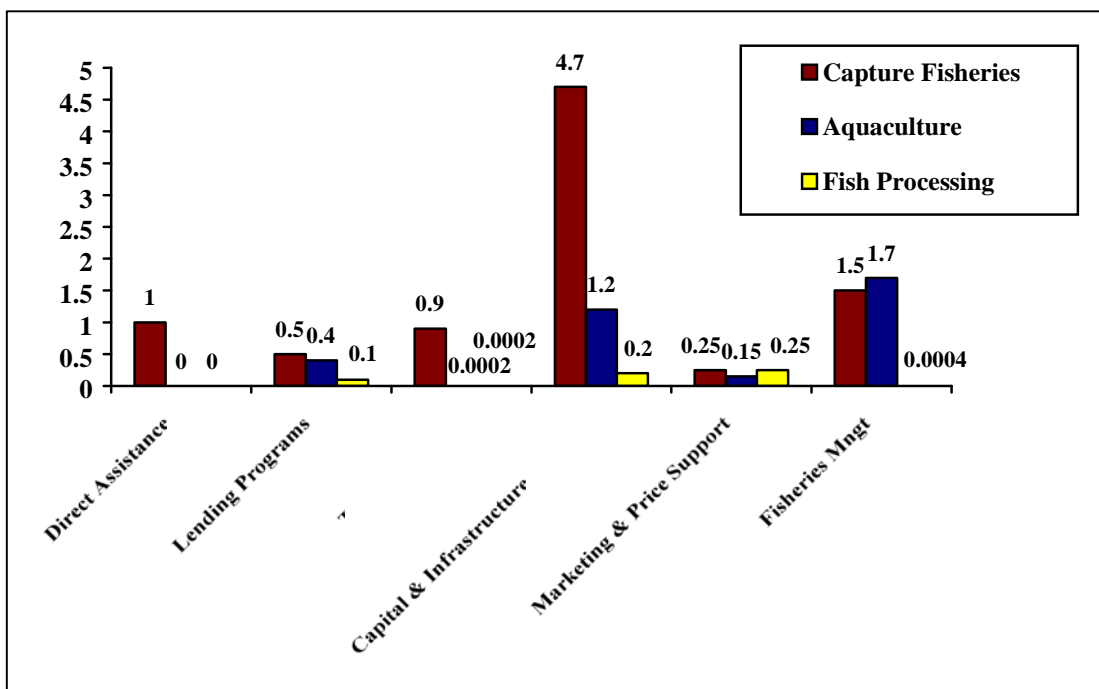
## 5.4 Concentrations of Fishery Subsidies by Dollar Value

The greatest dollar value concentration is in the Capture Fisheries Application area; this follows the usual concentration pattern. Approximately \$US 8.9 billion of the \$US 12.6 billion in total value of subsidies and programs are intended for the Capture Fisheries, over half (\$US 4.7 billion of the \$US 8.9 billion) is applied to Capital and Infrastructure Support. Many of the Capital and Infrastructure support programs are large-scale projects.

The Aquaculture support and subsidy programs are concentrated by value in the areas of Lending Support, Capital and Infrastructure Support, and Fisheries Management. This follows the pattern of the concentration by the number of programs by application.

There is very little dollar value support for fish processing programs. Approximately \$US 0.7 billion dollars worth of subsidies and programs identified were applied to fish processing. Of the \$US 0.7 billion the largest component was \$US 0.25 billion, allocated for marketing and price support programs and subsidies.

Overall, when all programs are assessed by dollar value, the pattern of concentration actually remains similar to the profile of concentrations by number of programs and concentrations by number of APEC economies. Infrastructure and Management/Conservation remain the most significant. There is a somewhat higher proportion of funding going to infrastructure than is true of the other profiles. However, this could be in keeping with the normal role of government.



## **5.5 Summary of Findings on Most-Favoured Subsidies**

To a considerable extent the two concentrations on Management and Conservation programs, and on Capital and Infrastructure programs, all applied to Capture Fisheries, are contradictory. The Management and Conservation programs carry the implication of limiting the fisheries sector “take” in Capture Fisheries in the interests of sustainability. The Capital and Infrastructure programs, on the other hand, carry the implications of expanding the fisheries sector “take” in Capture Fisheries in the interests of increasing food resources. This is precisely the opposite objective.

This uneasy balance between these two sorts of programs may be revealing a structural shift in program measures over time. A formal assessment of how programs and subsidies were changing over time was not included in this project’s Terms of Reference. However, the research team did observe from the inventory in Appendix “A” that many of the Management and Conservation programs were relatively new. Their legal basis seemed to reflect more recent dates than the corresponding ones for the Capital and Infrastructure programs. Accordingly, it may be that the Capital and Infrastructure programs are gradually being diminished while the Management and Conservation ones are being expanded.

Although this cannot be determined definitively at this time, it should be possible to track changes overtime if a similar research is repeated in the future.

The fact that the pattern of subsidy concentrations remains the same whether categorized by number of programs or by number of APEC economies would seem strongly positive for the EVSL initiative. The pattern suggests that the practical expression of policy objectives by programs is relatively harmonious across APEC economies, and should help to facilitate liberalization.

## 6.0 Policy Objectives

### 6.1 Typology of Policy Objectives

A number of different policy objectives underlie the various types of support programs and subsidies for the fisheries sector that were described in the previous section of this report. This section provides a typology of policy objectives from which subsidies have been developed. This typology has been derived by inference. Each of the subsidies in the inventory in Appendix “A” was examined from the standpoint of the question of what policy objective was most likely to cause it. As well, the various reports and academic papers consulted in the course of this study were also reviewed for clues on possible policy objectives underpinning subsidies.

The typology of fisheries policy objectives listed is probably not exhaustive, although some care has been taken to incorporate as many objectives as possible. Rather, it is representative of the range and spirit of policy objectives that underpin the development of government subsidies and support programs to the fisheries sector.

In general, each policy objectives has a two-tier effect on programs and subsidies modalities and applications. First, they can constrain or enhance fishing effort, and secondly, they can have an increasing or decreasing effect on fish stocks.

Note that these two dimensions are not the same things. A subsidy or program that supports aquaculture, for example, will have the intended effect of expansion of aquaculture operation (by lowering the costs of aquaculture and thereby encouraging investment in it) but positively impacts on fish stocks (because more fish are produced by the aquaculture process). It should be noted that some aquaculture development based programs are intended to retrain fishers to become aquaculturists, thus having the cause of reducing the capture fishing effort and expanding a process that can lead to increased fish stocks.

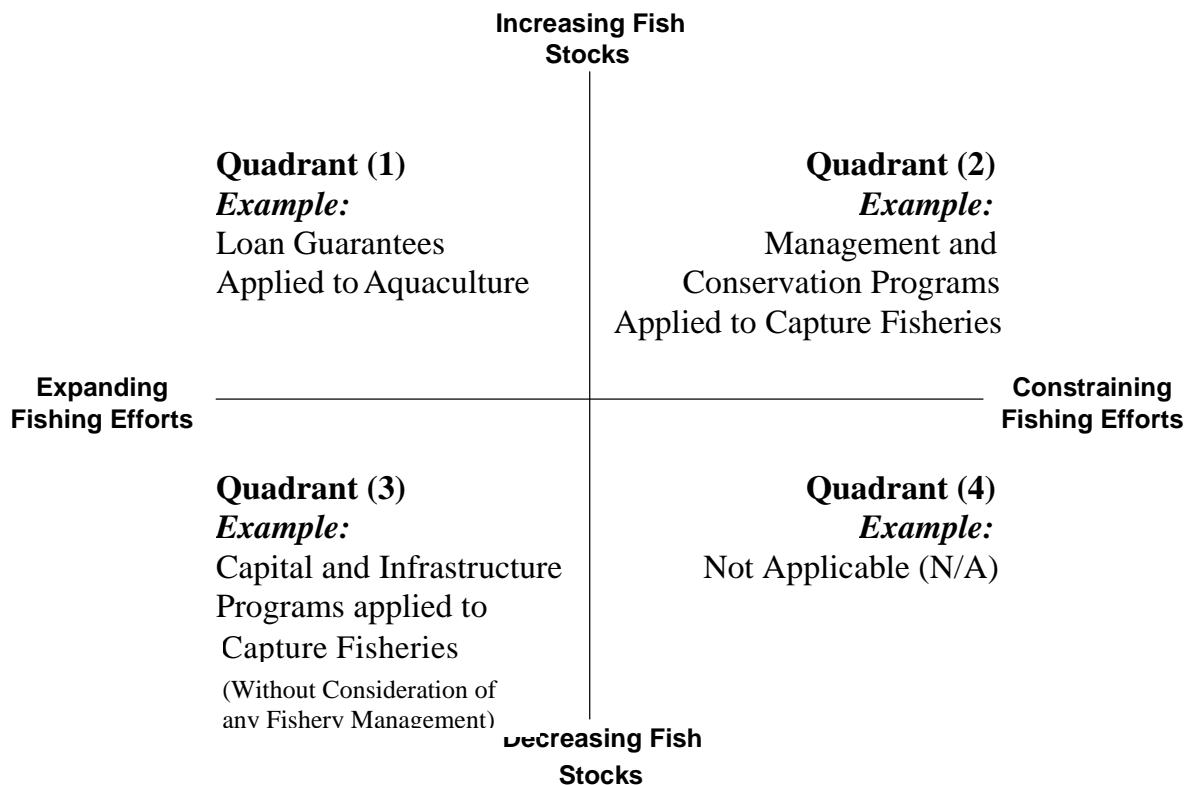
The relationship between the dimensions of expanding versus constraining fishing efforts, and decreasing versus increasing fish stocks, can be demonstrated as in Exhibit 6-1. Exhibit 6-1 establishes four policy quadrants. There is a temptation to view any subsidy or program that has the effect of increasing fish stocks as “good”, and any subsidy or program that has the effect of decreasing fish stocks as “bad”. It needs to be emphasized that such a view is not correct. As we shall see below in Section 8 (Case Studies), the reality is much more complicated.

According to the OECD Fisheries Committee’s study on the impacts of government transfer on fish sustainability, one of the findings of the study is “the possible negative effects of some kinds of transfers can be reduced or minimized when transfer policies and resource management polices are coherent.” Therefore, there is an issue regarding the efficiency of the subsidy programs.



Please note that an example has been suggested for each quadrant of Exhibit 6-1. Each example relates to the Modalities and Applications used earlier in this report. However, while three quadrants can easily be illustrated, one quadrant is unusual. This quadrant is the one involving the combination of “constraining fishing efforts and “negatively impacting fish stocks”. A hypothetical program that actually limited aquaculture, and hence reduced fish stocks while constraining fishing activities, could in principle exist, but it is very doubtful any such program exists in reality. From this project’s inventory, our research would suggest that no APEC economy subsidize efforts to constrain fishing activities with the effect of negatively impacting fish stocks. Programs for constraining fishing activities seem invariably to lead to positive impacts on fish stocks. Accordingly, this quadrant has been labelled Not Applicable.

**Exhibit 6-1: Fishing Effort or Expansion of Aquaculture Operation Versus Fish Stocks**



The other three quadrants, however, can readily be illustrated by examples drawn from the inventory.

The two-dimension model shown in Exhibit 6-1 allows a typology of policy objectives and their intended impacts. This is as follows.

## **6.2 Policies Increasing Fish Stocks by Constraining Fishing Effort (Quadrant 2)**

**Control and reduction of fishing capacity:** Excess fishing capacity is a cause of growing concern for many APEC members due to the potential threat it poses for depletion of fish stocks. Excess capacity is generally caused by a lack of control over fishers' access to fish stocks where excessive investments have occurred. Additionally, in some cases, it is also brought about by public funding of investments in new vessels or the rehabilitation of older ones. Policies to control or reduce fishing capacity are supported by subsidization measures such as vessel buy back programs.

**Environment:** Policies to improve fisheries management in order to protect the environment may also entail subsidies for example, remission of certain fuel taxes to encourage use of less detrimental fuels, or subsidies to lower costs of more environmentally benign equipment, etc.

**Fisheries management and conservation:** Improving fisheries management, in order to conserve fish stocks and ensure the sustainability of marine resources is a major policy objective behind many fisheries support programs in APEC member economies. Examples here can include Coast Guard programs, or fish stocking programs. However, it should be noted that many economies do not consider fisheries management programs a subsidy. These economies are abiding to Article 61 of the United Nations Convention on the Law of the Sea, which states that each country shall through proper conservation and management measures that the maintenance of the living resources in the EEZ is not endangered by over-exploitation (See also section 3.2 above).

## **6.3 Policies Increasing Fish Stocks by Enhancing Fishing Effort (Quadrant 1)**

**Research and Development (R&D):** Policies to encourage research and development in the fisheries sector may involve subsidies aimed at developing new knowledge to increase fish harvesting capacity without damaging sustainability, or towards developing more environmentally benign methods of fish harvesting. However, it is important to differentiate R&D that improves the efficiency of fish catch, with R&D that improves understanding of optimum harvesting of fish catch.

**Sport Fishing and Tourism:** Tourism is an important industry for several APEC economies. Policies to support tourism including sport fisheries could involve subsidies for a segment of the fishing industry. When the promotion of sports fishing causes other methods to be taken which improve fisheries management and conservation, the effect of these measures will likely be to likely enhance fish stocks.

**Aquaculture Industry Development:** Policies that promote the growth of aquaculture are likely to have the effect of increasing the total supply of fish. The inter-relationship between farm fish and wild stocks is controversial but it is likely that the total supply of fish will be increased by such measures.

#### **6.4 Policies Decreasing Fish Stocks by Enhancing Fishing Effort (Without consideration of fisheries management) (Quadrant 3)**

**Food for the national population:** Establishing and maintaining a stable food source from marine fisheries to feed the population is a fundamental policy objective for some APEC economies. Broadly speaking, this objective is more important for lower-income food-deficit economies with relatively large populations. Examples might be Capital and Infrastructure programs such as expanding ports and harbours. However, it is important to appreciate that, while subsidies intended to encourage fishers' activities to provide food may appear, at first glance, to impact fish stocks negatively, in those cases where fishing efforts produce less than Maximum Sustainable Yield, then any subsidy intended to encourage greater fishing activities will contribute to food production without compromising sustainability (See Section 8).

**Export revenue generation:** Policies to increase exports of fish and fisheries products, as well as the development of aquaculture resources are behind certain subsidies aimed at increasing fishing capacity. Examples might be shipbuilding capital support programs.

**Regional development:** Policies to assist disadvantaged fishing communities in coastal areas through regional development programs often include elements of subsidization for the fishing sector. Examples might be loan guarantees or insurance subsidies. Of course, if such subsidies encourage aquaculture, then they will enhance aquaculture production and not negatively impact fish stocks.

**Support for the ship building industry:** In some economies policies designed to support the ship building industry may include subsidized production of fishing vessels. If proper fishery management measures are not taken, this may contribute to increasing the fishing capacity beyond sustainable levels.

**Cultural preservation:** Fishing communities represent important repositories of cultural heritage and values for most APEC economies. Policies that support the preservation of fishing communities and way of life may include subsidies for the domestic fishing industry. Examples might be direct support to fishers.

**Aboriginal peoples:** Several APEC economies have significant aboriginal populations that claim to have traditional rights to certain fishing grounds and practices. Policies that encourage traditional hunting and fishing may include subsidy elements. This resembles the cultural preservation objective.

## **6.5 Policies Decreasing Fish Stocks by Constraining Fishing Effort (Quadrant 4)**

As briefly described above, while this quadrant is a theoretical possibility, in practice no program can be identified that fits this combination of negative impact and constraining fishing. Hypothetically, a subsidy program that constrained aquaculture could be an example. However, in reality, this quadrant should be viewed as Not Applicable.

## **6.6 Quantification of APEC Subsidies by Policy Intent**

The research team has endeavored to estimate the dollar value of APEC subsidies in the Fisheries sector that are based on a policy objective implying an increasing effect on fish stocks, against those that appear to be based on a policy objective implying a decreasing impact on fish stocks. Quantification of the total dollar value of all APEC programs and subsidies is estimated at approximately U.S. \$12.6 billion. As discussed above (section 4.5) this is harmonious with previous estimates of subsidies globally in the fisheries sector, if the allowance for inflation and the appropriate nature of all data. However, within APEC, our best estimate is that the total value of subsidies that have a positive effect on fish stocks is U.S. \$4.2 billion, while the total value of subsidies that have a decreasing effect on fish stocks is estimated at U.S. \$8.4 billion. The Perception, by the research team, that there is a structural shift underway in favour of relatively more Management and Conservation modality programs. This suggests that the management context of the fisheries sector is changing in favour of sustainability. As well, it should be noted that subsidies could have a different effect in practice from their intended objective. This is discussed further in section 8 – Case Studies. Accordingly, there should be no conclusion that APEC fisheries subsidies are necessarily “bad” from these figures.

## **7.0 Trade Analysis of Fisheries Subsidies**

This section considers the issue of how compatible are subsidies in the fisheries sector of APEC with the World Trade Organization's Subsidy and Countervailing Measures (SCM) agreement.

### **7.1 Objective of this Analysis**

The objective of this section is to identify those categories of subsidy program whose characteristics are most compatible with World Trade Organization (WTO) subsidy disciplines, and to identify those categories of programs which are least compatible.

There are two dimensions to this analysis. First, it is necessary to assess all the programs in our total inventory to determine how WTO rules would view them; and, second, it is necessary to assess the likelihood any would actually be challenged under WTO rules.

### **7.2 Methodology**

Each identified program was reviewed to determine whether it constitutes a subsidy, as defined by the WTO Agreement on Subsidies and Countervailing Measures. Each program reviewed was analyzed on the basis of the information available. The terms of reference of this study did not include a detailed verification analysis.

For those programs resembling a subsidy, each was then classified using WTO standards into one of the following categories: prohibited subsidy, actionable subsidy or non-actionable subsidy. The non-actionable subsidy category provision of Article 8 of the SCM agreement, lapsed on December 31, 1999. Since it was in effect during much of the study period, our results reflect its use.

Although we identified a very small number of programs which might be classified as prohibited, they did not constitute categories which could be evaluated. As a result, any comment on them would be a comment on a particular program in a particular economy, which is precluded by our terms of reference. These programs have been included as actionable and the degree of the risk of challenge assigned to them has been assessed on that basis.

Finally, each subsidy program reviewed was also classified according to the perceived risk of challenge.

A number of the programs identified in the Study could arguably be considered subsidies in the form of foregone revenue if the costs of these programs are not passed on to the local industry. These programs would include such practices as enforcement, stock management and

infrastructure development and maintenance. All these programs provide a benefit to the fishing industry, they would arguably provide a benefit if the cost of these programs were not recovered from the industry. However, the Study assumes that these support programs are simply examples of the normal exercise of authority by government that does not constitute a subsidy.

There are a number of issues related to making a determination whether or not these programs constitute subsidies which could not be resolved in the context of this report.

First, the report was premised on the basis of available information. The project team did not have jurisdiction to re-examine independently whether such programs were actually camouflaged subsidies when applied in practice.

Second, for these programs to be considered subsidies, they must be specific to the fisheries sector. These programs invariably consist of several different elements. Each element may or may not be specific to the fisheries sector. For example, all citizens could have an interest in protecting and enhancing their public resources, including fish stocks, for many different reasons. Moreover, each program is unique in its mix, so any challenge would require a detailed analysis, and this would make for very high costs on the part of any complainant.

Third, based on the information provided, it was not possible to determine accurately the value of the foregone revenue resulting from members economy's failure to operate these types of programs on a cost recovery basis. Without this information, it would be impossible to determine the extent of the "financial contribution" provided by government and the "benefit" received by producers, and accordingly, the impact of the subsidy could not be readily determined. Such an analysis would be a major task for any complainant, before any assessment of the validity of a challenge could be determined.

Finally, the programs at issue could legitimately be described as government activities undertaken in pursuit of legitimate policy objectives that are ordinarily funded by taxation. If these measures constitute subsidies in the form of foregone revenue, it could be possible to argue that public highways constitute a subsidy to any industry that uses these public facilities.

Again it should be noted that many economies do not consider government expenditures on fishery management, enforcement and research are fishery subsidies. Those economies are following Article 61 of the United Nations Convention on the Law of the Sea, as described in Section 6.2. These expenditures are necessary to implement this obligation.

In light of the foregoing, we evaluated this type of program as described. In practice such programs may or may not be subject to challenge. This would depend on the nature of their application.

### **7.3 Definition of Terms**

The term's "subsidy", "prohibited subsidy", "actionable subsidy" and "non-actionable subsidy" are taken from the WTO Agreement on Subsidies and Countervailing Measures (the SCM Agreement).

#### **7.3.1 Subsidy<sup>2</sup>**

A "Subsidy" is a "financial contribution" by government, or by an agency designated by government, that confers a "benefit".

"Financial contribution" is defined broadly and includes:

- direct or potential direct transfers of funds or liabilities (i.e., loan guarantees);
- provision of goods or services, other than general infrastructure;
- purchase of goods;
- foregone government revenue (i.e., tax credits);
- payments to a funding mechanism that carries out any of these functions; and
- any form of income or price support.

"Benefit" refers to an advantage resulting from the "financial contribution".

For example, government purchase of goods or services at a commercial rate is a "financial contribution" but does not confer a "benefit" because the purchase is made at a commercial rate – in this case, there is no subsidy. However, government purchase of goods or services at better than commercial rates is a "financial contribution" that confers a "benefit" resulting in a subsidy, because the recipient receives more than it would have received through a commercial transaction.

#### **7.3.2 Prohibited Subsidy<sup>3</sup>**

A "Prohibited Subsidy" is a "Subsidy", solely or as one of several conditions:

- contingent, in law or in fact, on export performance; or
- contingent on the use of domestic over imported goods.

"Prohibited subsidies" contingents on export performance, or "export subsidies", are subsidies whose grant is tied to actual or anticipated export performance (the subsidy is granted on the expectation that the subsidized product will be exported).

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<sup>2</sup> SCM Agreement Article 1.1

<sup>3</sup> SCM Agreement Article 3

“Export subsidies” are either *de jure* (i.e., are set out in legislation) or *de facto* (i.e., are established based on the facts surrounding the grant of the subsidy).

*De facto* Export subsidies are more difficult to establish because they are dependent on the practice of the granting authority. The information and materials available for purposes of this study are not sufficient to establish whether any of the subsidies considered would be *de facto* export subsidies.

“Prohibited subsidies”, contingent on the use of domestic over imported goods, or “import replacement subsidies”, are subsidies whose grant is tied to the use of domestically produced goods.

### 7.3.3 Actionable Subsidy<sup>4</sup>

Any “Subsidy” can be challenged as an “Actionable Subsidy” if it causes adverse effects to the interests of other WTO members.

An “Actionable Subsidy” can be challenged if the subsidy is specific to an enterprise or group of enterprises or industries (generally available subsidies are permitted).

“Adverse effects” exist when the subsidy causes:

- injury to the domestic industry of another Member;
- nullification or impairment; or
- serious prejudice to the interests of another Member.

Nullification or impairment occurs when the subsidy affects the benefits that the WTO member reasonably expected would accrue to it from joining the WTO.

“Injury” to the domestic industry is shown to exist by a consideration of the volume of subsidized imports on the price in the domestic market for like products and the impact of those imports on domestic producers of such products.

“Serious prejudice” may exist where the effect of the subsidy is to:

- displace or impede the import of like products of another Member into the market of the subsidizing member;
- cause significant price undercutting by the subsidized products, significant price suppression, price depression or lost sales; or
- increase the world market share of the subsidized product.

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<sup>4</sup> SCM Agreement Article 5



“Serious prejudice” used to be deemed to exist where:

- total *ad valorem* subsidization of the product exceeded 5 percent,
- the subsidies covered operating losses sustained by an industry,
- the subsidies covered operating losses sustained by an enterprise on an ongoing basis, or
- there is direct forgiveness of a debt by government.<sup>5</sup>

However, the provision deeming “serious prejudice” lapsed as of December 31, 1999.<sup>6</sup> It is expected that Ministers will reinstate this provision at some point, but it is not clear when this will occur. For purposes of this project, deemed “serious prejudice” is not considered in the analysis in this study because SCM Article 6.1 is no longer in effect. However, readers should bear in mind that if Article 6.1 were reinserted in the Agreement, the risk of challenge of subsidy programs offering over 5% *ad valorem* would increase.

#### **7.3.4 Non-Actionable Subsidies<sup>7</sup>**

“Non-Actionable Subsidies” are subsidies which are specific to an enterprise or group of enterprises or industries but which:

- provide pre-competitive assistance for research activities (i.e., support provided prior to development of products for market use);
- provide assistance to disadvantaged regions as part of a regional development assistance program; or
- provide assistance to promote adaptation of existing facilities (facilities in operation for at least two years) to new environmental requirements.

“Non-Actionable Subsidies” cannot be challenged unless they are “Prohibited Subsidies”.

However, the “Non-Actionable Subsidy” provisions in the WTO Agreement lapsed as of December 31, 1999.

It is anticipated that Ministers will ultimately re-institute those provisions. Until that time the “Non-Actionable Subsidy” provisions will not be in effect. Consequently, all subsidies other than “Prohibited Subsidies” will be considered “Actionable Subsidies”.

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<sup>5</sup> SCM Agreement Article 6.1

<sup>6</sup> SCM Agreement Article 31

<sup>7</sup> SCM Agreement Article 8

#### **7.4 Assessment of Risk of Challenge**

Assessing the risk of challenge of any program in advance cannot be an exact science. There are, after all, legal procedures for determining if any challenge is justified. The prospect of whether a given program is challengeable or not depends on a number of factors. For example, the size of the program makes a difference. Small-scale programs are normally much less subject to challenge than large ones. This is because it is usually accepted that such small-scale programs cannot make a major impact on world trade. Other factors include the nature of the subsidy provided and its potential impact on the market. “Adverse trade effects” is the term used to refer to the impact of the program on other countries and is assessed in terms of increased production and/or reduced costs resulting from the subsidy program. All these factors are variables in estimating the risks of challenge as a practical matter.

Accordingly, in this prospect, each program was assessed from the risk of challenge standpoint on a scale ranging from very low to high. These are explained as follows:

***Very Low risk of challenge*** - programs not likely to be considered subsidies to fishers or the fishing industry. These include programs to support enforcement, R&D, infrastructure development, stock enhancement, participation reduction (i.e., vessel or license buy-backs and fisher retirement), unemployment insurance, some income assistance and assistance to purely subsistence fishing.

***Low risk of challenge*** - programs which provide a tangential benefit direct to fishers or the fishing industry that could result in adverse trade effects or small scale programs which are not likely to result in a level of adverse trade effects likely to lead to a WTO challenge.

***Medium risk of challenge*** - programs that provide direct benefits to fishers or to the fishing industry that could result in adverse trade effects.

***High risk of challenge*** – all prohibited subsidies are considered to have a high risk of challenge because there is no need to demonstrate adverse trade effects resulting from the subsidy.

The United States representative to the APEC Fisheries Working Group raised a number of concerns related to the WTO trade analysis of the identified fisheries programs. These comments are directed to the use of risk of challenge as a means of distinguishing among domestic subsidy programs. The United States representative has suggested that all actionable subsidies are liable to challenge at the WTO.

It should be noted that this research does not distinguish between subsidy programs on the basis of risk of challenge as a means of determining whether any given subsidy is more or less consistent with WTO obligations. The WTO SCM does not contain gray areas. Prohibited subsidies are WTO inconsistent. Actionable subsidies that result in: (I) injury to the domestic industry of another member, (ii) nullification or impairment, or (iii) serious prejudice, are also

WTO inconsistent. All the subsidy programs identified that fall into the above-noted categories are liable to challenge and are liable to be found to be inconsistent with WTO obligations.

However, in conducting the trade analysis, the Study Team was cognizant of the fact that the WTO assumes that Member States act in good faith and meet their obligations. Consequently, the Study Team did not determine whether or not individual subsidy programs were consistent with WTO obligations. This is a matter for Dispute Settlement Panels convened under the WTO at the request of a Party willing to challenge the program.

The Study Team was also cognizant of the fact that, with the exception of prohibited subsidies, the trade effect of the subsidy program is not deemed to exist. That is, for all domestic subsidy programs, the onus is on the party challenging the subsidy program to demonstrate the trade effects (such effects are as described above).

In light of the foregoing, it is apparent that the Study could not have determined whether or not any particular subsidy provided by an APEC Member was, in fact, inconsistent with WTO obligations. The Study Team could conclude, with a high degree of certainty, that any prohibited subsidy programs were inconsistent with WTO obligations. However, because the programs would be permitted to be continued until such time as they were challenged, the Study Team did not state that these were inconsistent with WTO obligations but merely stated the obvious, that these programs stood a high risk of challenge.

With respect to domestic subsidy programs, the Study Team believes it understood both the operation and monetisation of the program at issue. However, as noted above, these programs would only be considered consistent, or inconsistent, with WTO obligations based on a review of their actual impact on the market and on their impact on other WTO Member States. Moreover, this impact could change over time depending on changes in the relative condition of the market. Therefore, the Study Team could not determine whether or not these subsidy programs were inconsistent with WTO obligations.

Based on experience in dispute settlement, the Study Team reviewed the subsidy programs at issue and assigned a risk of challenge to each program. This was a subjective determination, but it was guided by the fact that a domestic subsidy is actionable depending on its market impact. Considering this fact, the Study Team concluded that large scale-programs are more likely to result in the market impacts necessary to successfully challenge a subsidy at the WTO. Conversely, small-scale programs would be less likely to result in the necessary market impacts and would be less likely to be challenged at the WTO. Relying on this consideration, the Study Team assigned a risk of challenge for each domestic subsidy program ranging from very low to medium.

The Study Team did not assign any domestic subsidy program a high risk of challenge in order to distinguish these from the prohibited export subsidies. This reflected the fact that the WTO does not require a Member State to establish the market impact of a prohibited export subsidy.

This also reflected the fact that, to date, there have been no challenges to domestic subsidy programs in the WTO, or previously in the GATT.

It should also be mentioned in passing that the WTO does not assume that subsidies are, by their nature, “bad” and therefore inconsistent with trade obligations. Rather, subsidies are value neutral and are only considered WTO inconsistent if they result in adverse trade effects. The economic effect of a subsidy, is the use of government funds to offset the cost of the subsidized product so that it can be offered at a lower price. If the subsidy does not result in adverse trade effects, it will provide a benefit to other Member States that will receive imports at a lower price (this benefit can even also arise in the case of prohibited subsidies). Therefore, the WTO does not prohibit the use of subsidies, it prohibits the use of particular subsidies. Furthermore, the WTO leaves it to the Member States affected to decide whether or not to challenge the particular subsidy.

In conclusion, the Study Team did not distinguish between subsidies solely on the basis of whether or not they are consistent with WTO obligations. Rather, the Study Team assessed the risk of challenge of the programs reviewed as a practical means of differentiating between those programs.

## **7.5 WTO Special Case - Treatment of Developing and Least Developed Countries**

The WTO provides preferential treatment so-called to developing and least developed countries by allowing them to use export subsidies up to certain levels.

Developing countries may apply export subsidies for eight years after the WTO entered into effect, subject to the requirement that they not increase the level of export subsidy provided and that they be phased out over the period. Developing countries may seek an extension beyond the eight-year period through consultations with the WTO Subsidies Committee.

Least Developed countries are not subject to the prohibition on export subsidies. Least Developed countries may also apply import replacement subsidies for a period of eight years from the date that the WTO entered into effect.

## **7.6 Analysis Assumptions**

This section provides background to our analysis of all of the subsidy programs identified in Appendix A. The Terms of Reference of this project do not include publishing these results on an individual program basis. Rather, our objective is to identify *categories* of subsidies that are most likely to be incompatible with the WTO SCM Agreement.

For this analysis, it has been assumed that:

- the monies associated with the subsidy programs are fully allocated in each year of the program;
- all subsidy programs are active (i.e., that they continue in effect);
- direct assistance, foregone government revenue, loan guarantees are all to be included;
- the purchase of goods or services by government or the provision of goods or services by government is made at better than commercial rates, thereby conferring a benefit; and,
- that APEC countries are subject to WTO disciplines.

### *Subsidy Model Analysis*

The model analysis is intended to act as a guide to assist the reader in understanding the process applied in assessing the risk of challenge of the programs considered. As noted, because the programs considered were identified as support programs, all programs were treated as if they were subsidy programs regardless of whether they met the definition of subsidy set out in the SCM Agreement.

The analysis process applied in this study can be broken down into two steps. The first step was to classify the program being considered as a prohibited subsidy or actionable subsidy. This was accomplished by determining whether the subsidy was a prohibited subsidy; that it, was it contingent on export performance or on import replacement. If the program could not be classified as a prohibited subsidy it would automatically be classified as an actionable subsidy.

Non-actionable subsidies were established as an exception to the disciplines that applied to actionable and countervailable subsidies. Because the non-actionable subsidy provisions in Article 8 of the SCM Agreement lapsed as of December 31, 1999, all programs that would have been considered non-actionable previously are now considered actionable. To address the possibility that the non-actionable subsidy provisions would be reinserted in the SCM Agreement, those actionable subsidies that would have been considered non-actionable have been identified as “Actionable/Non-Actionable”.

The second step was to determine the risk of challenge associated with the subsidy. Risk of challenge differs depending on the classification of the subsidy program and the burden of proof on the party challenging the particular subsidy program. There is no requirement to demonstrate the trade impact of a prohibited subsidy for it to be successfully challenged. As a result of this reduced burden of proof, the risk of challenge for prohibited subsidies is considered high.

However, to successfully challenge an actionable subsidy, the party bringing the complaint must demonstrate that the subsidy has resulted in adverse effects. That is, that the subsidy has resulted in injury to its domestic industry, has caused nullification or impairments of benefits reasonably expected to accrue under the WTO, or has caused serious prejudice.

Generally, as proof of the impact of the subsidy is a necessary element of a successful complaint, it was considered that the risk of challenge of actionable subsidies would be less than the risk of challenge of prohibited subsidies.

To determine the risk of challenge of each actionable subsidy considered, the report attempts to assess the potential adverse effects flowing from the subsidy. These adverse effects are described in terms of the impact of the subsidy program on increased production, or reduced cost of production, or both. This approach was adopted because it was considered the best means of determining whether the subsidy program at issue could result in an impact on other parties that could give risk to a challenge.

The potential adverse effects resulting from any program were determined by considering the size of the program and the intended effect of the program. For example, a large-scale program intended to modernize or expand the fleet would likely result in increased production at reduced costs (to reflect the lower cost of operation of new equipment). This increased production at reduced costs was assumed to lead to an increase in fish on the market that would compete more effectively with fish produced by other member economies, resulting in injury to the industry or interests of those member economies. In these circumstances, the program would be considered to have a medium risk of challenge.

As a further example, a large scale program intended to support vessel retirements and license buy-backs would be considered to have a low or very low risk of challenge because the program should result in a decrease in production and should have little or no impact on costs. The net result should be more room on the market for fish produced by other economies. Therefore, the program should result in little or no adverse effect.

Finally, a small-scale program intended to support artisanal production for home consumption would be considered to have a low or very low risk of challenge. First, as a small-scale subsidy, the program would likely have little impact on the market. Second, as the program is aimed at artisanal production for home consumption, it is unlikely that the program would either produce fish for commercial use or produce enough fish to have a measurable impact in terms of offsetting purchases of imported fish on the domestic market.

It is important to note that SCM Article 6.1, which deemed serious prejudice to exist if the ad valorem subsidization exceeded 5%, has also lapsed. The risk of challenge of actionable subsidies was assessed on the basis that Article 6.1 does not apply and the economy challenging the subsidy would bear the burden of demonstrating serious prejudice in all cases. However, should this section be reinserted into the SCM Agreement, it would be easier to challenge subsidies that meet the 5% ad valorem threshold.

## 7.7 Findings

The overall findings from this analysis suggest that few of the programs are likely to be both Actionable and with a Medium or High Risk of Challenge – 10 out of 162. While 29 out of the 162 are considered probably non-actionable, this still leaves 133 that could conceivably be actionable. However, out of this 133, there are 123 that are considered to have a very low or low risk of challenge. Accordingly, only 10 are viewed as both actionable and with a medium or high risk of challenge.

This surprisingly low proportion of total programs (10) that appear to be potentially incompatible with the WTO SCM Agreement is also reflected in their estimated total dollar values. Inferring from the data available, the research team's best estimate is that all ten programs involve approximately US \$370 million in total value. (The very approximate nature of this estimate is emphasized). This is a small proportion of the US \$12.6 billion estimated for all the programs in the inventory.

This low proportion may seem surprising, but there are logical reasons for it.

First, many of the programs are small scale (101 out of 162). Very often (although not always; see below) these can be exempted by virtue of having a low or very low risk of challenge. The impact in the APEC marketplace is accepted as limited. As well, many of the small-scale programs are directed at regional development, or as programs to support adjustment for environmental reasons, and these are allowed in WTO rules.

Second, the concentration of both large scale and small-scale programs in the Management and Conservation modality is not likely to attract challenges. It can be anticipated that these will be accepted as necessary adjustment programs.

Third, some of the programs in the Capital and Infrastructure program, even if large scale, can be anticipated to be accepted as legitimate functions of government. They are not subsidies within the context of WTO rules, or they are non-specific. For example, ports and harbours infrastructure may aid fishers, but they are also necessary for loading and unloading tradable products, or may be used primarily by pleasurecraft, or may be maintained for safety and security reasons. All of these types of programs are sufficiently generic that they are not Actionable.

Fourth, several fisheries subsidies identified in the study may or may not be defined as subsidy programs. These include government programs aimed at: increased enforcement; rehabilitation of fishery habitat; enhancement of fish stocks; fishery management; maintenance of government infrastructure; and programs that simply act to direct monies to other programs that simply act to direct monies to other programs that actually assist the fishery. Many economies believe programs of this type do not constitute a financial contribution specifically to the fishery sector resulting in a benefit, and therefore do not constitute a subsidy program. However, because these

were identified in the study process, it was felt that they should be reviewed as if they were subsidy programs (See also section 3.2 above). In each case, the program was assessed as having a very low risk of challenge. But it should be noted that the result of including these programs in the analysis is that they tend to skew the results in terms of making subsidies in the fisheries sector look more numerous than is truly the case.

## **7.8 Decision Tree**

We have derived a “Decision Tree” to illuminate the categories of subsidy that represent relatively problematic programs.

This Tree is represented in Exhibits 7-1 to 7-3.

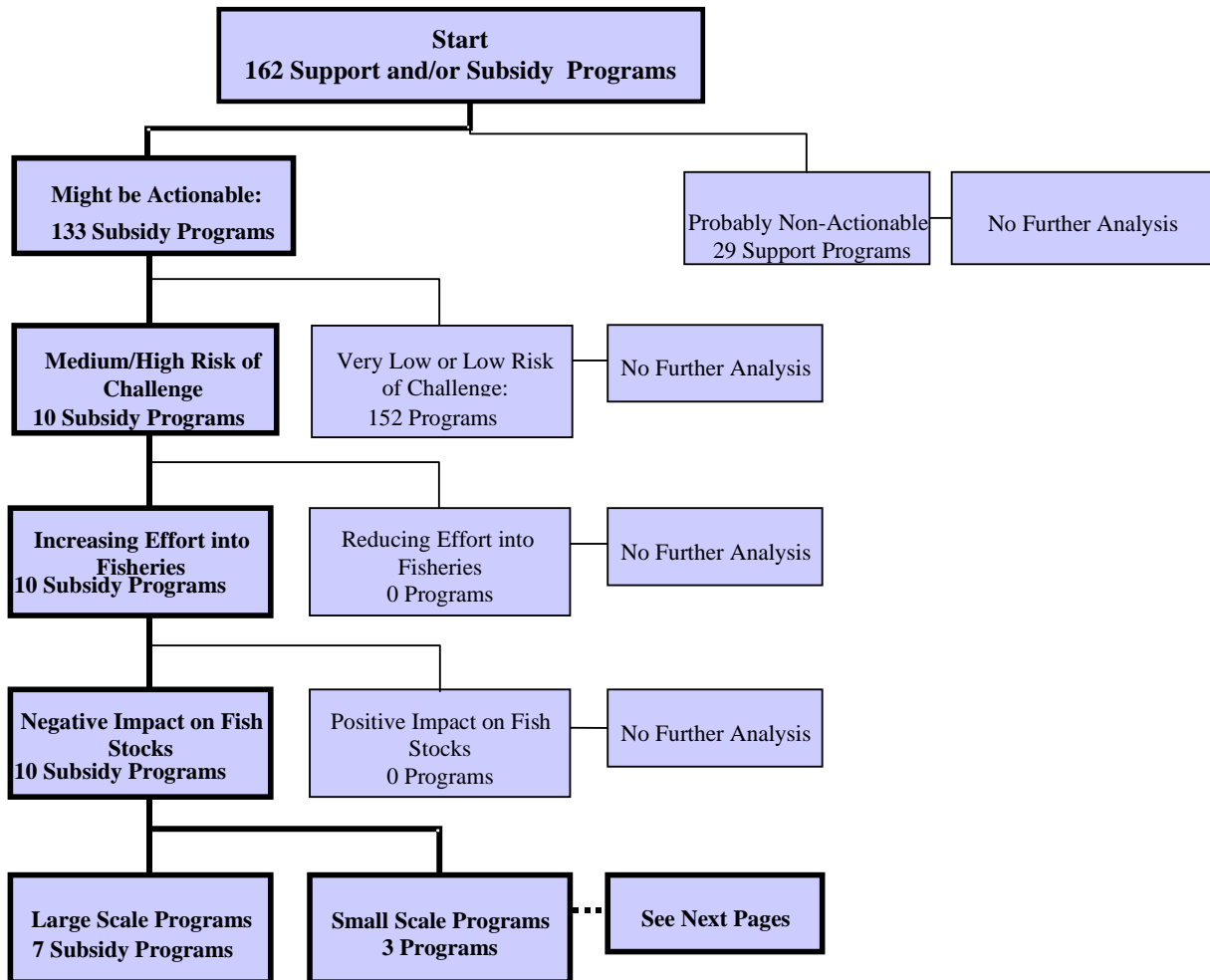
Exhibit 7-1 gives the structure of this tree, and 7-2 and 7-3 gives details of how many programs fall along key patterns. The first and second levels reflect our assessment of program against WTO SCM Disciplines. The first level of Exhibit 7-1 focuses on dividing programs into those that could be Actionable and those that are probably Non-Actionable. The Non-Actionable ones require no further analysis. It should be noted that the programs classified “probably non actionable” were considered “support programs”. The second level differentiates those with a Medium or High Risk of Challenge against those with Low or Very Low Risk of Challenge. (This is by far the single most important divide). Those with a Low or Very Low Risk of Challenge require no further analysis. There are now 10 programs left to consider.

The third and fourth levels reflect our policy objective typology from section 6. The third level differentiates those that increase effort into the fisheries sector against those that constrain effort. Those that constrain efforts would probably require no further analysis but there are none in the 10 that fall in this group. All 10 intend to expand efforts. The fourth level of the Tree differentiates between positive and negative impacts on fish stocks; those with positive impacts would also presumably require no further analysis, but none fall into this category. All 10 still-remaining programs have negative impacts on fish stocks.

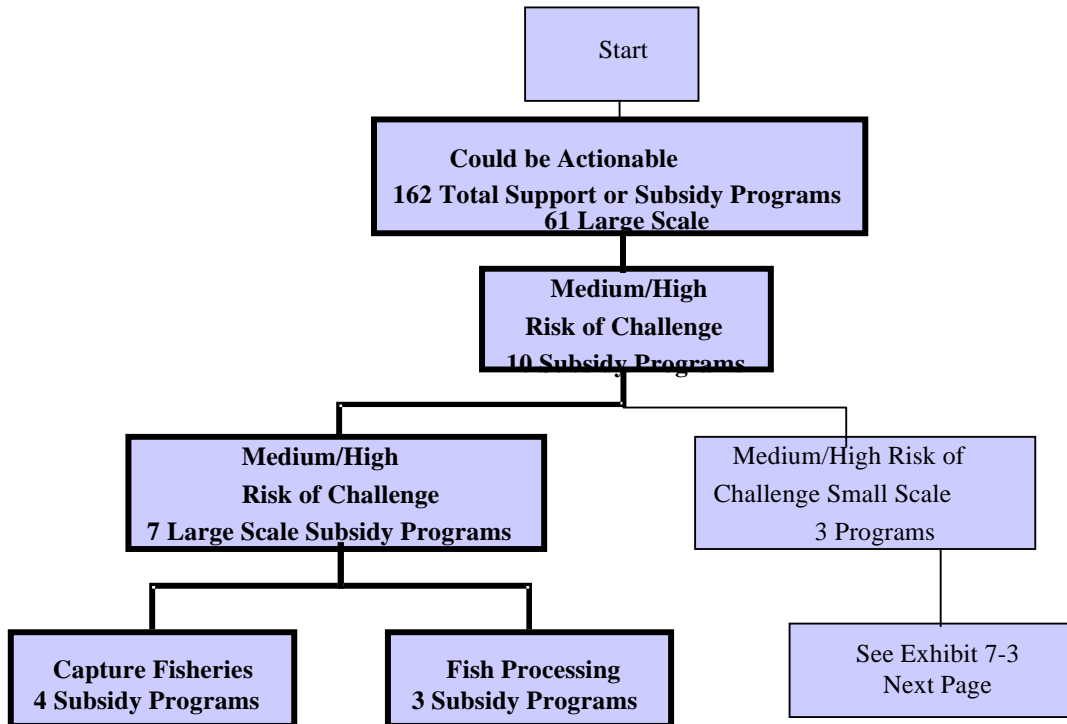
Finally, the Tree differentiates between Large-scale and Small-scale programs. There are 7 in the large category; there are 3 in the small. These are further disaggregated in Exhibits 7-2 and 7-3.



**Exhibit 7-1: APEC Decision Tree**



**Exhibit 7-2: APEC Decision Tree: Large Scale Programs**



**Exhibit 7-3: APEC Decision Tree: Small Scale Program**

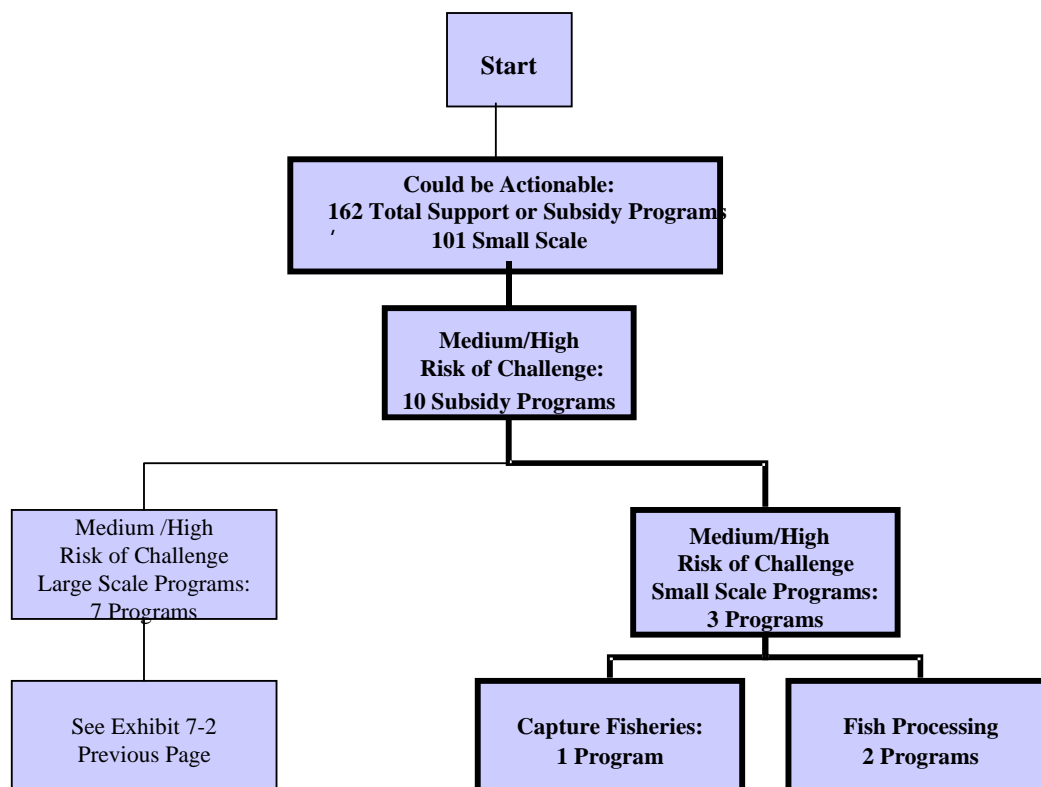


Exhibit 7-4 gives a different breakdown of this group of 10 programs identified as least compatible with the WTO SCM.

By modality, it can be seen from Exhibit 7-4 that Capital and Infrastructure programs are the modality category that is most likely to be inconsistent with the SCM – four of the ten fall into this category. Moreover, three of these four Capital and Infrastructure programs are applied to Capture Fisheries.

Close behind in terms of modality that is questionable by WTO SCM rules is Marketing and Price Supports; this category has three out of the ten least-compatible programs. However, in this case, the three are all applied to Fish Processing.

**Exhibit 7-4: Breakdown of 10 Programs with Medium/High Risk of Challenge**

<b>High/Medium Risk of Challenge by Application and Scale</b>							
	<b>Direct Assistance to Fishers and Fisheries Workers</b>	<b>Lending Support Programs</b>	<b>Tax Preferences and Insurance Support Programs</b>	<b>Capital and Infrastructure Support Programs</b>	<b>Marketing and Price Support Programs</b>	<b>Fisheries Management and Conservation Programs</b>	<b>Total</b>
<b>Capture Fisheries</b>	-	-	2	3	-	-	<b>5</b>
<b>Aquaculture</b>	-	-	-	-	-	-	-
<b>Fish Processing</b>	-	1	-	1	3	-	<b>5</b>
<b>TOTAL</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>-</b>	<b>10</b>

It is very noteworthy that no less than six out of the ten programs, identified as least-compatible with the WTO SCM, fall into just two of the 18 possible Modality/Applications matrix positions. These two categories are Capital and Infrastructure modality programs applied to Capture Fisheries (3 programs), and Marketing and Price Supports applied to Fish Processing. Accordingly these two categories of support programs or subsidies are most questionable from the standpoint of the WTO SCM Agreement.

On the other hand, there are no programs, identified as having poor compatibility with the WTO SCM, in either the Direct Assistance to Fishers or the Fisheries Management and Conservation modalities, and this is true across all three Application areas.

The finding that the Fisheries Management and Conservation modality is unlikely to create disharmony with the WTO SCM Agreement is not surprising. The intent of this sort of program modality is broadly to enhance sustainability. Programs with such intent are not likely to attract challenges under the WTO guidelines, and evidently the structure of these that exist within APEC, taken at face value, do not suggest different (and more damaging) motivations.

However, the finding that the Direct Assistance to Fishers modality, as implemented by APEC member economies programs, does not cause problems with the WTO SCM is a much more surprising result. The APEC member economies programs using this modality are apparently reserved for small-scale operations, whose import on economies and international trade would likely be accepted as limited, or the Direct Assistance programs are used actually to encourage adaptation to new environments (which is also accepted).

Accordingly the Modalities of Direct Support to Fishers and Management and Conservation programs are the two categories that are apparently most compatible with the WTO SCM Agreement. As well, programs in the Aquaculture Application area, regardless of Modality, are also a category that seems most compatible with the Agreement.

## **8.0 Implications of Subsidies on International Trade and Fisheries**

### **8.1 Introduction**

Our research suggests that the total value of support programs and subsidies in APEC amount to approximately US \$12.6 billion. As we have seen, these subsidies are implemented through a variety of modalities, such as: direct cash payments and tax breaks, income supports, low-cost port facilities, marketing and price supports and other measures. They are used to encourage investment in sectors that offer employment in often struggling coastal regions, stimulate economic development, stabilize income, and enhance national security by reducing dependence on imported goods.

Some governments have programs that may become subsidies for activities that potentially could harm fish stocks and distort international trade. Currently, a number of fisheries are considered overexploited as a result of mismanagement, habitat degradation, and other factors. In more recent efforts, however, governments faced with overfishing have actually used subsidies or subsidy reductions to attempt to diminish the negative environmental and economic impact of overexploitation. Some of the more common “environmental” subsidies have been used to ease the transition from environmentally harmful fishing practices to more sustainable practices, support stock enhancement, and reduce the impact of previous subsidies in an effort to increase fish stocks. Rebuilding fish stocks, however, is often a gradual process, even under the most effective management regimes, due to the biological and environmental uncertainties that exist.

The impact of subsidies on trade and the natural environment has aroused heated debates. In this section, we present three case studies. We have deliberately kept these at a theoretical level in order to examine the relationships that exist between demand, supply and fish stocks and how subsidies might alter these relationships. This study attempts to formally address the effect of subsidies (and their reduction) on trade and fisheries using vessel subsidies and vessel buyback, fish stock enhancement, and access fees as examples.

Two distinct approaches need to be merged to evaluate the impact subsidies have on world fisheries and trade. The first section demonstrates the approach frequently used by international trade economists to analyze the impact of subsidies. This analysis frequently focuses on the implications of a subsidy on export and import levels, producer and consumer surplus, government revenue, and employment, while generally assuming an upward-sloping supply curve. When considering fisheries, however, assumptions regarding the general supply relationship do not hold. In particular, in an open-access fishery, the supply curve is likely to be backward bending rather than upward sloping. The nature of fishery supply and its implications for trade are discussed in detail.

## 8.2 Conventional Approach to International Trade Analysis

An objective of conventional international trade analysis is to determine the implications of policy affecting trade for consumers, government expenditures, and industry in all countries involved. More recently, the focus of trade analysis has been expanded to include implications for the health of natural resources as well. In the interest of simplicity, this analysis has been restricted primarily to the implications of a subsidy on trade of a natural resource in a two-economy trade scenario. (There is a brief discussion below concerning the implications if this simplifying assumption is relaxed.) Even in this specific scenario, it is clear that the implications of a subsidy are not always discernable.

The graphs in Figure 1 represent the trade relationship between two economies, economy A and economy B (Tweeten 1992). Under free trade, an economy will import where domestic demand exceeds domestic supply and export where domestic supply exceeds domestic demand. In this scenario, economy A is the exporter, since its excess supply is greater than excess supply in economy B. Therefore, economy B is the importer. The intersection between excess supply (ES) of economy A and excess demand (ED) of economy B (shown in Figure 1) determines the equilibrium price level (P) and quantity (Q) where trade exists (assuming free trade and no transfer costs). The level of exports from economy A are calculated by subtracting  $Q_A$  from  $Q_{AC}$ . Imports in economy B equal the difference between  $Q_{BC}$  and  $Q_B$ .

Consider a subsidy that decreases the marginal cost of production for the exporter, economy A. This will cause a downward shift in both the domestic supply curve of economy A and the excess supply curve. From graphical analysis, it is clear that price (P') decreases and trade (Q') increases due to a subsidy in economy A.

**Exhibit 8-1: Summary of Figure 1: Conventional Analysis of a Subsidy Which Lowers Marginal Cost**

	EXPORTING ECONOMY	IMPORTING ECONOMY
<b>Consumers</b>	Consumption increases and prices decrease.	Consumption increases and prices decrease.
<b>Government Expenditure</b>	Depends on cost of implementation and the efficiency of the subsidy.	Not directly affected.
<b>Industry</b>	Domestic supply increases. Change in employment depends on the nature of the subsidy. Exports increase. Lower price per unit. Subsidy may increase net revenues.	Domestic production decreases. Employment will likely decline.
<b>State of the Natural Resource</b>	Depends on the relationship between supply and natural resource exploitation.	Depends on the relationship between supply and natural resource exploitation.

The fundamental implications of the subsidy are presented in Figure 1. Economy A consumers increase domestic consumption from  $Q_{AC}$  to  $Q_{AC}'$  while facing a lower price per unit ( $P'$ ). Economy B consumers also face a reduced price per unit ( $P'$ ) and increase consumption of imports. Government expenditure in economy A cannot be extrapolated from Figure 1, since expenditure is dependent on both the cost of implementing the subsidy and the efficiency of the subsidy. The subsidy will have no direct impact on government expenditures in economy B.

What are the implications for industry in economies A and B? Economy A's production (and exportation) increases, and economy B's production decreases. Increased production does not necessarily imply a proportional increase in economy A's employment. Instead, changes in employment depend upon the type of subsidy implemented. For instance, if economy A's cost of extracting or harvesting a natural resource decreases due to the subsidization of more efficient machinery or extraction method, this may decrease the need for physical labor. In this case, employment will decrease in the subsidized industry. However, if the subsidy does not change technology, employment should decrease in the importing economy and increase in the exporting economy.

What this traditional approach to international trade analysis fails to take into account is the effect on the natural resource. Fish are a renewable resource, but only within certain biological limits. As will be seen in the next section, the effect of subsidies will be different, depending on the state of the resource in terms of its capacity to continue reproduction, at the point when any given subsidy is implemented.

### **8.3 The Bioeconomics of Fishery Supply**

As mentioned earlier, the general assumptions of conventional trade analysis, specifically upward sloping supply, do not hold for fisheries in many cases. In particular, a backward bending supply will result when a fishery is open access (Anderson 1977). This section describes the transformation of a biological model of harvest-effort relationship into an economic model of open-access fishery supply.

Understanding the basic harvest-effort model is the first step in understanding how a backward bending supply curve is derived. This curve (Figure 2) is a derivation of the basic logistic growth model that is used to model the basic growth rate of many biological populations. The logistic growth model assumes that growth rate increases at low stock levels until maximum sustainable yield (MSY) is reached. Growth rate then declines as environmental carrying capacity becomes limiting. The maximum sustainable stock (population) is reached at the environmental carrying capacity. At any point above carrying capacity, the growth rate becomes negative and population declines. MSY is reached at the peak of the growth curve.

If there is a direct relationship between the equilibrium fishing effort and fish stock, the yield-stock curve can be directly transformed into a fishing yield-effort relationship (Anderson 1977;



Hannesson 1993). This relationship is illustrated in Figure 2. Fishing effort is generally measured using fishing days, number of nets or traps, and so on.

The next step in the transformation to an economic model of fishery supply is to convert the yield-effort relationship into a dollars-effort relationship. This is demonstrated in upper-right-hand graph of Figure 2. Note the x-axis still represents fishing effort, but the y-axis now represents dollars. This is accomplished by calculating total revenue (TR) and total cost (TC) curves. TR equals harvest multiplied by a price. In this case, TC is equal to a constant cost per unit effort multiplied by the level of fishing effort. For given output price and effort cost, equilibrium in this open-access fishery is reached where TR equals TC. Any increase in effort beyond this equilibrium is not sustainable, since cost outweighs revenue and fishers are forced out of the fishery. Similarly, effort below equilibrium is not sustainable, since effort will increase as long as fishers incur profits. Note that for an incremental increase in TR, effort increases, but by a decreasing rate.

In Figure 2, we arrive at backward bending supply by linking price to effort and effort to harvest, as shown in the upper-left-hand graph. The logic of the curve is as follows. As price increases, equilibrium effort increases, creating an upward sloping curve until MSY is reached. Continued price increases result in additional effort, which drives down fishing stock and the corresponding sustainable harvests (Anderson 1977).

Most open-access fisheries will result in a long-run supply curve that has this characteristic backward bending shape. Fishery managers, however, are increasing their use of total allowable catch (TAC) systems to curb the threat of overfishing and decreased harvests. These systems fundamentally change the supply relationship. If successful, the TAC restricts production to the upward-sloping portion of the fishery supply curve and ensures that the fish stock will not be depleted. Beyond a certain price, supply effectively becomes unresponsive to output price, or perfectly price inelastic.

#### **8.4 The Impact of Subsidies in an Isolated Economy**

This section provides a basic analysis of vessel buyback, access payments, and stock enhancement programs in an isolated economy. A more detailed analysis of the implications of each of these subsidies in an international trade is provided in section 8.5.

##### ***Vessel Subsidies in Isolation***

According to Milazzo (1998), shipbuilding is among the most heavily subsidized industrial sectors in the world. The most common vessel subsidies include: investment subsidies for operating countries, construction subsidies, tax benefits for shipyards, export credits, and loan guarantees. Most countries that have received shipbuilding subsidies in the past, such as: France, Italy, Japan, Norway, and Spain, are now major fishing powers, partially the result of these subsidies. Vessel subsidies contributed to increased fishing capacity until the early 1990s, when many of the world's fish stocks were considered to be harvested at or below MSY. Since

overexploitation threatened to reduce the sustainability and profitability of fisheries, many of the same governments that initially subsidized vessel building began to implement vessel buyback programs. Some of the goals of vessel buyback are to simultaneously conserve fish stocks, improve economic efficiency in the fishery sector, and compensate those displaced from the fishery.

A basic model of the implications of vessel subsidies in an isolated market appears in Figure 3. In principle, vessel buyback is the antithesis of vessel subsidizing; therefore, this model can be used to analyze the impact of vessel buyback programs as well. At this point, the model need only contain a fishery supply curve for an isolated economy in order to provide a clear picture of the impact of subsidies on the fishery.

Figure 3 illustrates supply ( $S$ ) in an open-access fishery before vessel buyback and supply ( $S'$ ) after an effective buyback program (one that reduces effective capacity). Vessel buyback has effectively raised the marginal cost of production for fishers in this fishery. Note, this subsidy does not impact maximum sustainable harvest. It does indicate that if the fishery's stock is below  $MSY$ , an effective buyback program should increase harvest given price (in the long run). If the fishery is operating with stock above  $MSY$ , the opposite will occur.

An effective buyback program provides an opportunity for fish stocks to recover, as maximum effort is constrained, shifting harvests from the backward-bending portion of the fishery supply curve. There is no guarantee, however, that buyback will shift supply. One explanation of this phenomenon is that a reduction in the number of fishing vessels does not necessarily ensure that effort and other inputs will decrease proportionately. Also, fish stock may be overexploited to the point that stock cannot recover to its original level. Another explanation is that the fishery has such excess capacity that even a relatively extensive buyback program will not impact the industry's fishing effort.

### ***Access Fees in Isolation***

The establishment of 200-nautical mile exclusive economic zones (EEZs) gave sovereignty over living resources within the EEZs to respective coastal states and restricted unauthorized access to the EEZs by foreign fishing fleets. While coastal states' authority over the use of fish resources within these zones increased dramatically, many of these states did not possess the infrastructure necessary for exploitation of their respective fish resources. Consequently, many of the coastal states awarded access to their fisheries to countries possessing distant-water fleets in return for access fees and other forms of payment.

When these foreign access payments are paid by the government, they reduce costs to the fishing industry and are clearly a subsidy. Access payments can assume many forms; one is government-to-government payment known as a "direct transfer of funds."

The implications of transferring fishery access from one economy to another are examined in Figure 4. This basic model shows that after a transfer of access, fishery supply in the economy purchasing access shifts rightward as the economy's new supply curve is the summation of their

domestic harvest and the supply of the foreign fishery. The area of shift in the purchasing economy's supply is equal to the original supply of the economy selling access. Economy A has essentially purchased the total fishery supply of economy B.

In turn, economy B has no fishery supply after access has been transferred to economy A. Fish price will decline, and quantity will increase in the economy acquiring access rights.

### ***Fishery Enhancement in Isolation***

Fishery stock enhancement, such as salmon enhancement, is an example of what some would consider a subsidy that would potentially have a positive effect on fish stocks. Much of the decline in fish populations, such as salmon, is due in large part to degraded or lost habitat, directly linked to economic activities. For example, one cause of habitat destruction and declining stock was the erection of large, multipurpose dams. These dams disrupted the flow of water in order to provide hydroelectric power, flood control, and irrigation to surrounding areas. This disrupted the migration and reproductive cycle of salmon. Dams, coupled with deforestation and other factors, also contributed to the salmon decline. To mitigate these losses, hatchery operations have been developed to replace wild stocks and enhance salmon stocks. Enhancement has also been used to help increase fishery income and employment.

The impact of enhancement programs on the state of wild salmon stocks is of interest in this analysis. Anderson (1985, 1986) concludes that if hatchery stocks are allowed to intermix with wild stock, they can have detrimental effects on the wild stock. One reason is that the wild stock must now compete with the enhanced stock for habitat and feed. In addition, fishing effort will most likely increase with an increased availability of fish. In an intermixed fishery, fishers generally cannot distinguish between wild and hatchery fish. This puts additional harvest pressure on the wild salmon population and may lead to exploitation rates beyond those that existed prior to the enhancement.

A basic model of the implications of fishery enhancement in an isolated market appears in Figure 5. The model shows that total supply of fish (wild and enhanced) will increase. The graph on the left of Figure 5 illustrates the case where enhanced stocks and wild stocks are separate. In this case, total harvest will increase, price will go down, and wild harvest will likely increase if the fishery is originally harvested beyond MSY. In contrast, the graph on the right indicates that if stocks intermix, wild harvests do not necessarily improve, although total harvest improves.

## **8.5 Analysis of Subsidies in International Trade**

This section provides a more detailed analysis of vessel buyback, access payments, and fishery enhancement in an international trade setting. In each case, it is assumed that trade only includes economy A and economy B. Economy A is the exporter in each case, and economy B is the importer. A graphical analysis of each subsidy is provided in Figures 6, 7, and 8. A thorough discussion of the implications of each subsidy for consumers, government expenditure, the fishing industry, and the state of the natural resource is provided below.

### ***Vessel Buyback in An Exporting Economy (A)***

This section provides a perspective on the implications of vessel buyback programs on international trade, which was introduced in Figure 3. The analysis follows the basic structure of conventional trade analysis, but differs in that it represents fishery supply as backward bending rather than upward sloping. Based on the assumptions that supply is backward bending, what are the implications of a successful buyback program for consumers, government, fisheries, and the health of the natural resource?

Figure 6 shows the fundamental implications of vessel buyback (in an overfished, exporting economy). In this case, after fish stock and effort adjust, consumers in both the exporting and importing countries consume more at lower prices than before the vessel buyback program. Increased production in the exporting economy results from reduced effort and increased fish stock.

**Exhibit 8-2: Summary of Figure 6: Impact of Vessel Buyback Given Fishery is Initially Harvested Below MSY Stock in Both Import and Export Countries**

	<b>EXPORTING ECONOMY</b>	<b>IMPORTING ECONOMY</b>
<b>Consumers</b>	Price decreases and quantity increases.	Price decreases and consumption increases.
<b>Government Expenditure</b>	Depends on cost of implementation and efficiency of buyback program.	No direct effect.
<b>Industry</b>	Effort decreases. Employment decreases. Price decreases. Harvest may increase.	Effort decreases. Employment decreases. Harvest may increase.
<b>Natural Resource</b>	Effort decreases, stock increases.	Effort decreases, stock increases.

Government expenditure on the buyback program by the exporting economy is highly dependent on the cost of implementation and efficiency of the program. Government expenditures in the importing economy, in this case, will also not be directly impacted by the vessel buyback program in the exporting economy. However, in both fisheries, effort and employment should decrease if the vessel buyback program is effective. Note that the harvest in each economy may increase or decrease, depending on the state of the fisheries prior to implementation of the program.

The impact on the health of the natural resource is expected to improve as effort decreases and fish stock increases in both economies. Based on previous studies of the effectiveness of vessel buyback programs, it may not be a reasonable assumption that vessel buyback is an effective means to decreasing fishing effort. In many cases where vessel buyback was used to restrict the number of vessels (or fishing licenses), existing vessels would simply increase effort; older vessels were replaced by newer, more efficient vessels; and fisheries used more inputs, such as labor and capital (Holland *et al.* 1999).

### ***Access Fees and International Trade***

In this example, it is assumed that the access fees are paid by the government in economy A to provide it's fishing industry sole rights to harvest the fish in economy B. This, in effect, shifts the supply from economy B to economy A, resulting in an aggregate supply for economy A, labeled  $S_{w/access}$  in Figure 7. This results in price, (P), and quantity  $Q_{AC}$ , consumed in economy A. As illustrated, there is no international trade between the economies, and there is no domestic fishery in economy B. However, the government in economy B receives a payment from the government in economy A.

**Exhibit 8-3: Summary of Figure 7: Implications of Access Fee Programs**

	<b>EXPORTING ECONOMY</b>	<b>IMPORTING ECONOMY</b>
<b>Consumers</b>	No change.	No change.
<b>Government Expenditure</b>	Revenue from access fee eliminated.	Cost of access fee eliminated.
<b>Industry</b>	Effort and employment increase.	Effort and employment decrease.
<b>Natural Resource</b>	No change.	No change.

If the access fee subsidy was removed (and the industry in economy A did not pay for access), economy A's supply curve would shift to the curve,  $S_A$ . Assuming in equilibrium, a fishing industry developed in economy B with a similar cost structure to the one in economy A, economy B's supply would be given by  $S_B$ .

Under free trade, economy B will become an exporter, and economy A an importer. Assuming no transfer costs, in equilibrium, economy A will import the amount  $(Q_{AC} - Q_A)$ . From the consumer's perspective, this will result in the same consumption and price as existed under the access subsidy. After adjustment, consumers will see no change. However, fishing effort (and likely employment) in economy A will decline and effort (and likely employment) in economy B will increase. Expenditure for access fees from government A will be eliminated, and receipts to government B will cease. Assuming the structure of fishery management systems in each economy is unchanged, there will be no direct effect on fish stocks in either economy.

### ***Fishery Enhancement in An Exporting Economy (A)***

This section contains analysis of the impact of enhancement in an exporting economy (A) on the demand and supply of fish stock in each economy. It also attempts to determine the equilibrium price and quantity after the implementation of a fishery enhancement program. For simplicity, this analysis considers a two-economy scenario where both fisheries exhibit a backward bending supply relationship.

As seen in Figure 8, economy A's supply shifts rightward due to an increase in enhanced fish stock. Consumers in economy A increase consumption from  $Q_{AC}$  to  $Q_{AC}'$  at a lower price,  $P_w'$ . The harvests in economy A also increase from  $Q_A$  to  $Q_A'$ . Increased harvests lead to increased employment and increased exports.

The impact on the state of economy A's fishery depends on where and how the enhanced stocks are released and how the fishery is managed. If enhanced stocks do not interact with wild stock, wild stocks will likely increase, as price and effort targeted at wild stocks decrease, as shown in Figure 8. If intermixing occurs, wild stocks may decline, since increased effort and increased competition among the enhanced and wild stocks raise the likelihood of wild stock being harvested beyond MSY. Still, total fish supply may increase with intermixing, since the increase in hatchery-raised fish offsets wild stock losses.

After enhancement in economy A, economy B's consumption increases and the price of fish decreases to  $P_w'$  as a result of increased imports. As prices decrease, effort decreases. This will eventually lead to increased fish stock and most likely increased harvest. With decreased effort, the wild stocks should recover to a higher level than before the enhancement subsidy was implemented in economy A.

Since fishery enhancement programs are highly variable, the amount of government expenditure required (from economy A) to enhance stock to a desired level is determined by a program's specific characteristics and its effectiveness.

**Exhibit 8-4: Summary of Figure 8: Implications of Enhancement Programs**

	<b>EXPORTING ECONOMY</b>	<b>IMPORTING ECONOMY</b>
<b>Consumers</b>	Consumption increases and prices decrease.	Consumption increases and prices decrease due to increased imports.
<b>Government Expenditure</b>	Depends on efficiency of the enhancement program.	Not directly affected.
<b>Industry</b>	Harvest increases. Employment increases. Exports increase. Lower price per unit.	Lower effort will lead to increased fish stock and likely increase in harvest.
<b>Natural Resource</b>	If stocks do not intermix, increased wild stock; but with intermixing, wild stock may decline.	Lower effort will increase wild fish stocks.

## 8.6 Implications of Relaxing the Two-Economy Assumption

It may be worthwhile to consider briefly the implications of subsidies on trade beyond the two-economy model used above.

The objective of a subsidy in the isolated-economy case can be assumed to be a desire to obtain an economic advantage. Then the effects are as described above; in particular, the economy seeking the advantage may or may not receive it depending, for example, at what point along the

supply curve (whether above or below the MSY) the economy has reached, and/or how well the subsidy is designed and managed, and/or various other factors as described.

The issue with subsidies at the all-economies level is that the total fishing effort can increase with a net loss in total production. This can be seen by reference to Figure 2 described earlier. The subsidies have the effect of lowering costs. This causes equilibrium effort to increase. The MSY is reached sooner. Beyond MSY, production falls. Any further subsidies at this point will actually cause fishing stock to decline.

Moreover, policies for protecting certain species of fish (for example, an international moratorium on fishing for some species) may be rendered less effective by subsidies. If there is a total allowable catch (TAC) within one species, the effect of subsidies may be to switch fishing effort to stocks where the TAC is not fully taken up or where there is no effective management of the fishery. The supply of fish has been constrained (protection), but the encouragement for fishing effort remains. Subsidies are thus creating an upwards-distorted fishing effort relative to fishing stocks.

## 8.7 References

It seems useful to add references that are specific to this section. They are as follows:

Anderson, James L. 1985. Private Aquaculture and Commercial Fisheries: Bioeconomics of Salmon Ranching. *Journal of Environmental Economics and Management* 12 (1): 353-370.

Anderson, James L. 1986. Implications of Private salmon Aquaculture on Prices, Production, and Management of Salmon Resources. *American Journal of Agricultural Economics* 68(4): 866-879.

Anderson, Lee G. 1977. *The Economics of Fisheries Management*. Baltimore: The Johns Hopkins University Press.

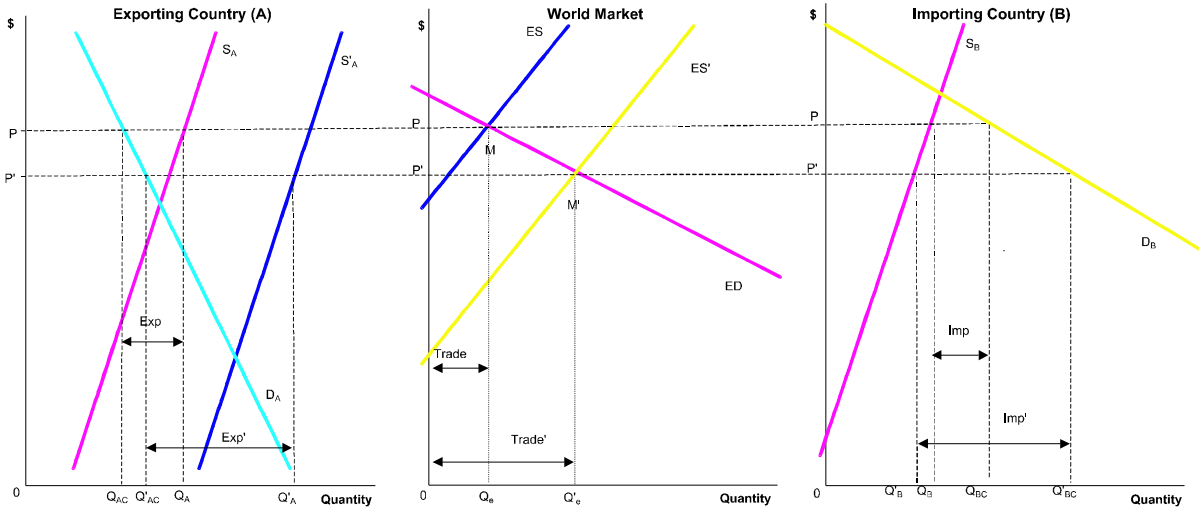
Hannesson, Rognvaldur. 1993. *Bioeconomic Analysis of Fisheries*. New York: Halsted Press (an imprint of John Wiley & Sons).

Holland, Daniel, Eyjolfur Gudmundsson, and John Gates. 1999. Do Fishing Vessel Buyback Programs Work: A Survey of the Evidence. *Marine Policy* 23(1):47-69.

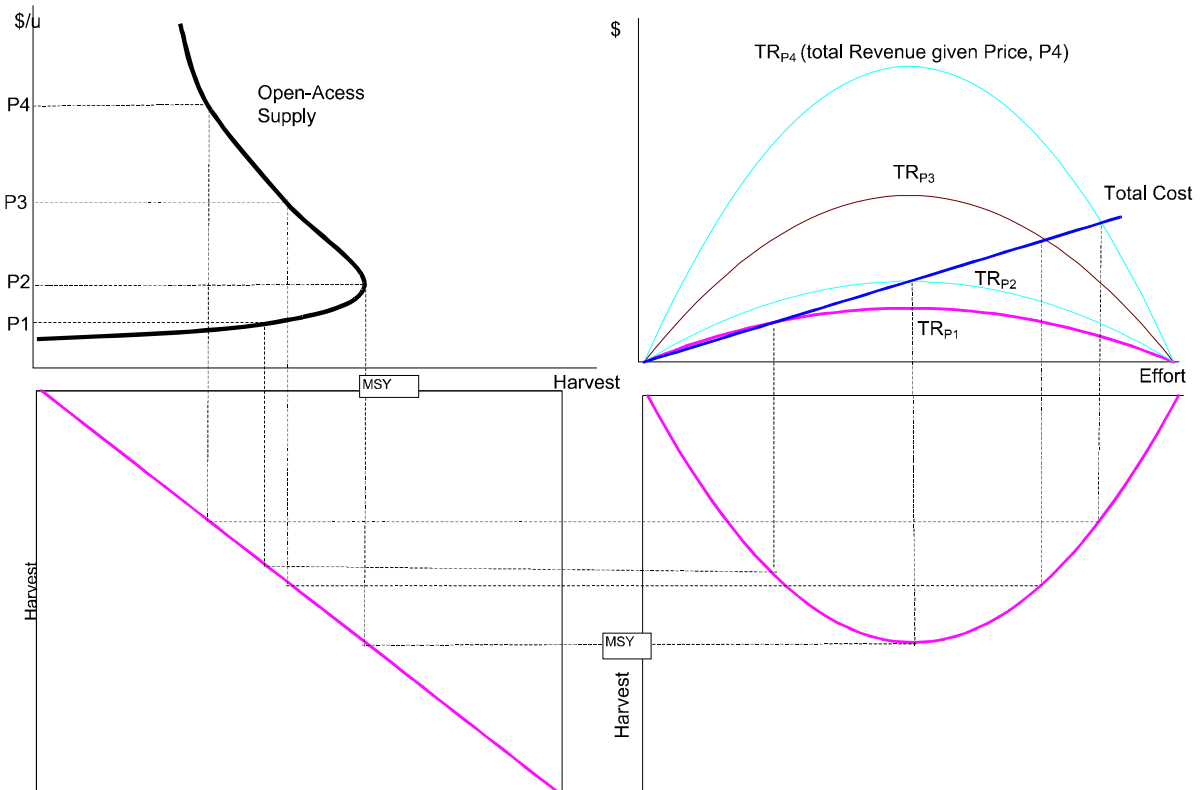
Milazzo, Matteo. 1998. *Subsidies in World Fisheries: A Reexamination*. Washington, DC: The World Bank.

Tweeten, Luther. 1992. *Agricultural Trade: Principles and Policies*. Boulder: Westview Press, Inc.

**Figure 1: Trade Relationship Between Two Countries**

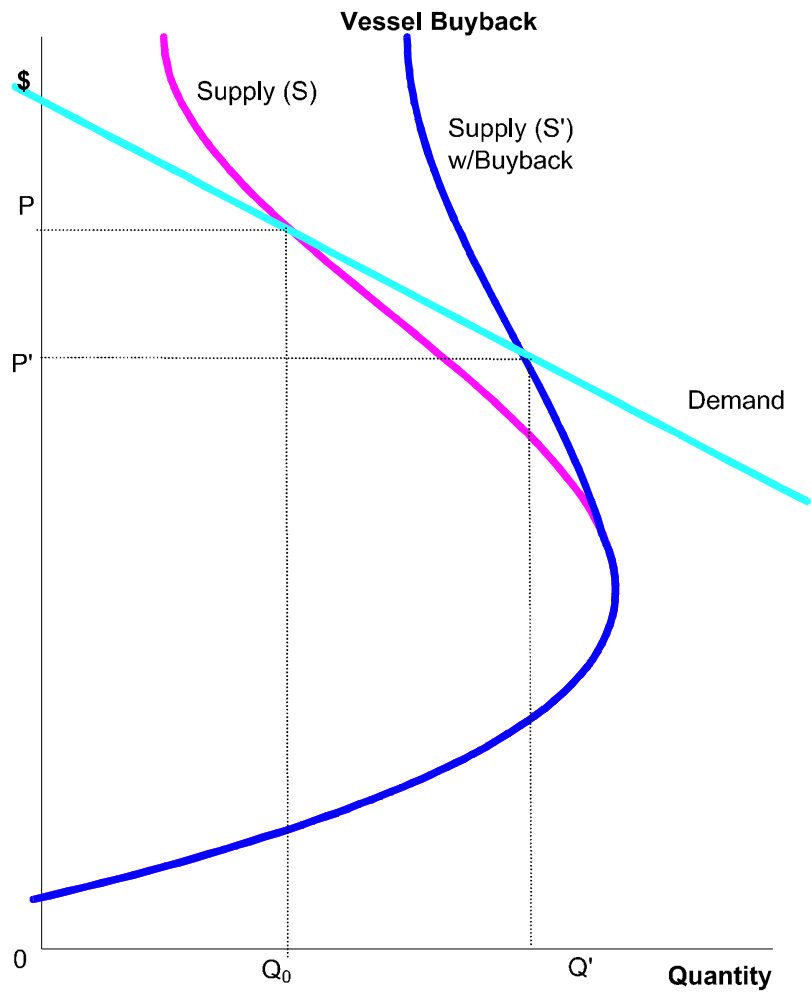


**Figure 2: Backward Bending Supply**

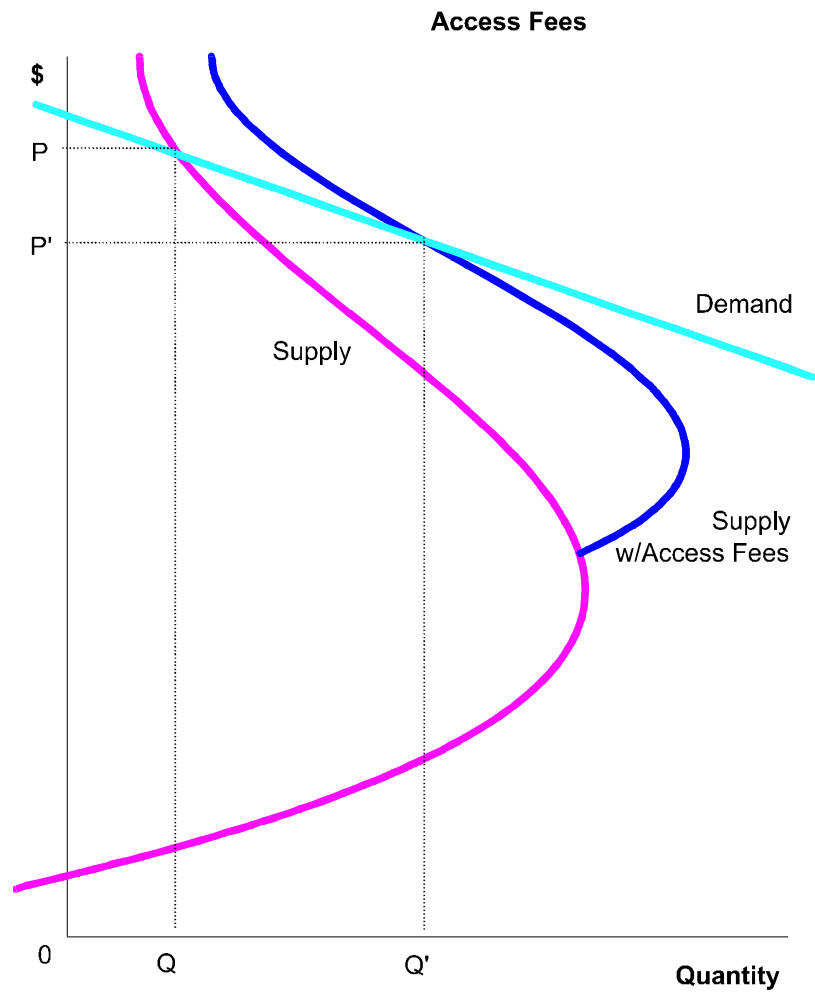




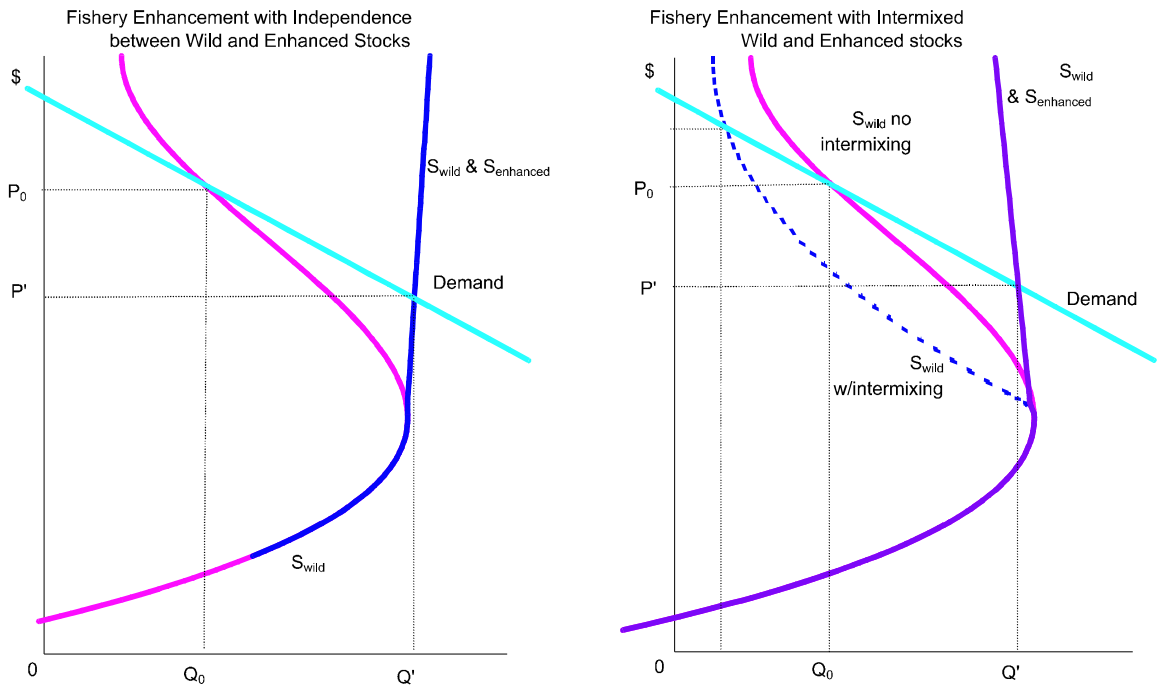
**Figure 3: Implication of Vessel Buyback Programs**



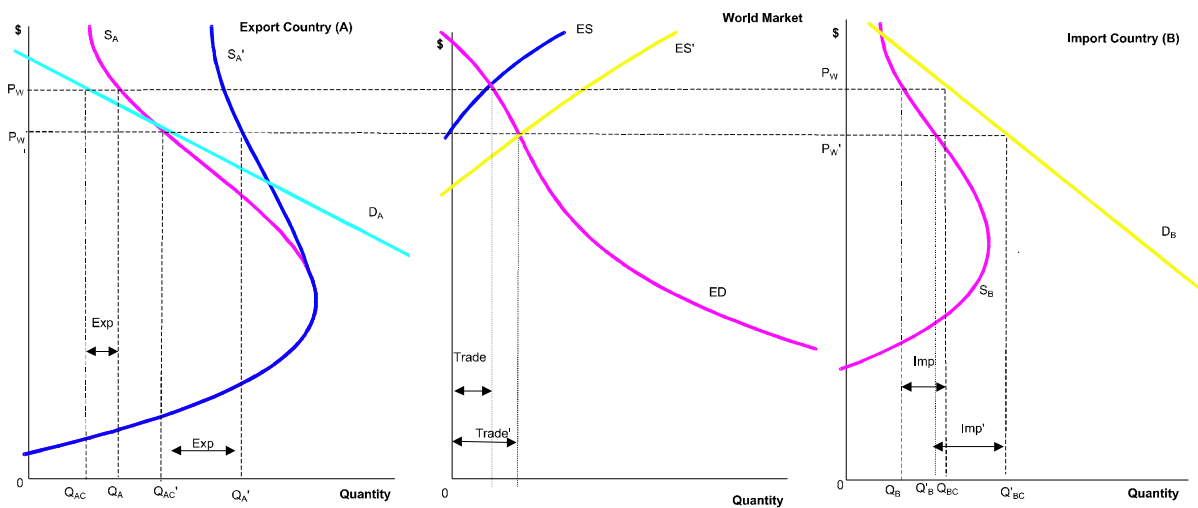
**Figure 4: Implications of Transferring Fishing Access From One Economy to Another**



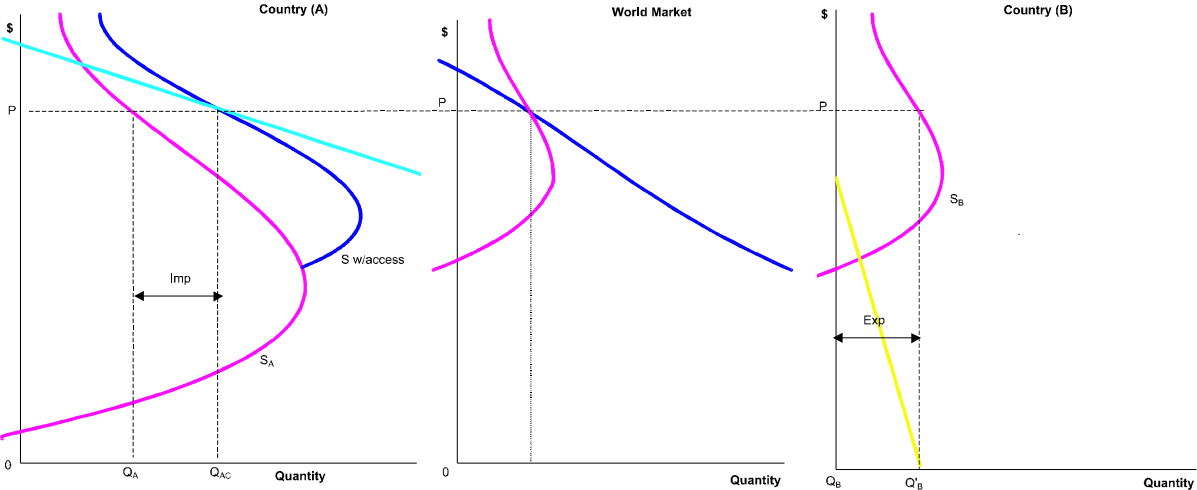
**Figure 5: Fisheries Enhancement**



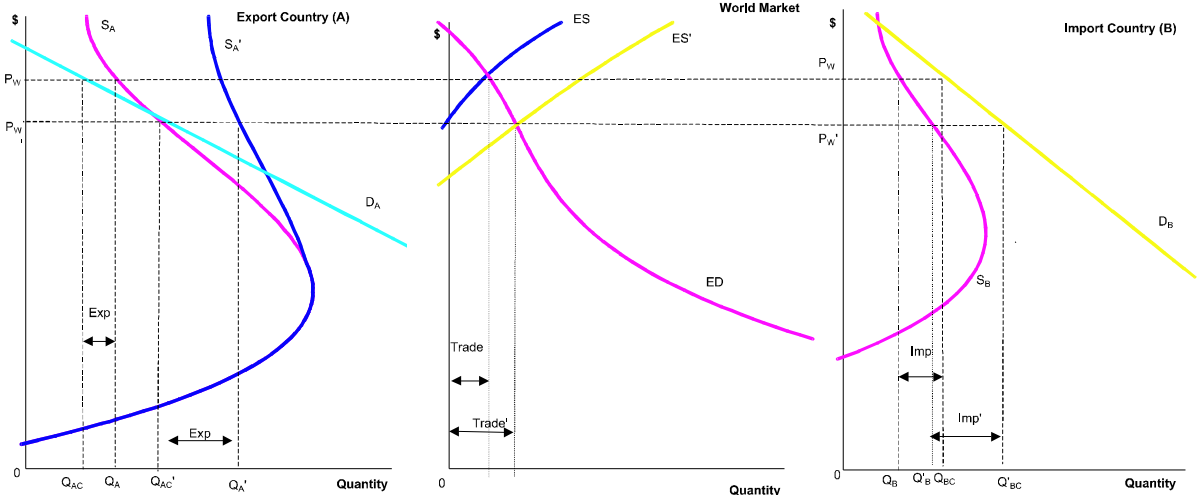
**Figure 6: Vessel Buyback and International Trade**



**Figure 7: Access Fees and International Trade**



**Figure 8: Fishery Enhancement and International Trade**



## 9.0 Conclusions

### 9.1 Findings

The main findings and conclusions from this research can be summarized as follows:

- An inventory of subsidies and support programs in the fisheries sector of APEC shows 162 entries across the 19 APEC economies for which information was obtained.
- The overall profile of subsidies shows that the most favoured subsidies in APEC are those using Management and Conservation, and Capital and Infrastructure, modalities, applied to Capture Fisheries. The next most favoured subsidies are the same modalities, but applied to Aquaculture. There are scarcely any subsidies in the Direct Assistance modality, and very few for Fish Processing applications regardless of modality.
- The overall profile of subsidies in terms of concentrations in the fisheries sector within APEC remains relatively the same, regardless of whether it is drawn on the basis of number of programs in each category, or drawn on the basis of number of APEC economies represented by programs in each category. This suggests a considerable harmony of policies and programs in the fisheries sector across APEC economies. There is some evidence that a major structural shift may be underway in terms of the “mix” of program modalities. Newer programs appear to favour Management and Conservation, whereas older ones appear to have been more Capital and Infrastructure oriented.
- The research team has endeavoured to estimate the dollar value of APEC subsidies in the Fisheries sector that are based on a policy objective implying an increasing effect on fish stocks, against those that appear to be based on a policy objective implying a decreasing impact on fish stocks. Quantification of the total dollar value of all APEC programs and subsidies is estimated at approximately U.S. \$12.6 billion. As discussed above (section 4.5) this is harmonious with previous estimates of subsidies globally in the fisheries sector, if the allowance for inflation and the appropriate nature of all data. However, within APEC, our best estimate is that the total value of subsidies that have a positive effect on fish stocks is U.S. \$4.2 billion, while the total value of subsidies that have a decreasing effect on fish stocks is estimated at U.S. \$8.4 billion. The Perception, by the research team, that there is a structural shift underway in favour of relatively more Management and Conservation modality programs. This suggests that the management context of the fisheries sector is changing in favour of sustainability. As well, it should be noted that subsidies can have a different effect in practice from their intended objective. This is discussed further in section 8 – Case Studies. Accordingly, there should be no conclusion that APEC fisheries subsidies are necessarily “bad” from these figures.
- Very few programs and subsidies would seem to be incompatible with the WTO SCM. Only ten out of 162 are assessed as being both potentially Actionable, and with a medium or high risk of challenge. Of the total 162, 29 are viewed as probably non-actionable. Of the remaining 133 that might conceivably be actionable, 123 have a very low or low risk of challenge. Accordingly, only 10 programs are viewed as both conceivably actionable, and

with a medium or high risk of challenge. The risk of challenge is a major determining factor. Many more subsidies and programs might in principle be Actionable, but are too small scale, excusable as regional development, or are some form of environmental adjustment, which is exempt.

- The research team's best estimate of dollar values suggests that the 10 programs identified as least compatible with the WTO SCM Agreement carry a total value of approximately US \$370 million. This is also a surprisingly low proportion of the total US \$12.6 billion estimated for the entire APEC inventory.
- Case study analysis shows that the effects of subsidies on trade are not always self-evident. This is because of the distinctive, backwards-sloping supply curve in the fisheries sector beyond a certain Maximum Sustainable Yield (MSY) point. Regrettably, even subsidies designed to enhance fish stocks, or vessel buy-back programs designed to constrain fishing efforts, all of which are intended to be positive for fisheries sustainability, cannot be guaranteed to have precisely the intended positive effect. However, subsidies designed to expand fishing efforts may turn out to be compatible with fisheries sustainability provided the point of MSY has not been reached in a given fishery.
- Of the 10 programs identified as appearing least-compatible with WTO SCM, no less than six fall into just two positions (out of 18) in the Modality/Applications matrix. There are three programs in the category of Capital and Infrastructure applied to Capture Fisheries; and there are three programs in the category of Marketing and Price Supports applied to Fish Processing. Accordingly these two categories appear to be the ones least compatible with the WTO SCM Agreement.
- Conversely, the Modalities of Direct Assistance to Fishers, and Management and Conservation, appear to contain no programs within APEC (regardless of Application area) that would appear to have poor compatibility with the WTO SCM Agreement. Accordingly, these two categories are the ones assessed as most compatible with the Agreement. This is a surprising result in the case of the Direct Support to Fishers modality; the explanation lies in the small-scale of the APEC programs in this category, and the fact that they appear to be acting in practice as means to adapt to new environments.
- The results of this research also provides a framework for each economy to review its own programs.

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**Appendix “A”**  
**Inventory of Support Programs in the**  
**Fisheries Sector of APEC**

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## **Introduction**

This inventory is derived from information available up to April 17, 2000.

Out of 21 economies participating in APEC, information on support programs and subsidies was available for 19. These are included here.

Information coming available after April 17, 2000, or changes to the programs herein included, beyond April 17, 2000 has perforce not been considered here.





### Fisheries Subsidy Inventory-April 17, 2000

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
AUS 1.0	<b>AUSTRALIA</b>  Government Financial Support	In 1997-98, total transfers associated with Australia's Commonwealth fishery policies were budgeted to be AUD 21.4 million (USD 15.9 million) - 124 per cent more than in 1996-97. Table 2 provides details of the types of transfers. The budgeted increase reflects increased spending on fisheries management and an expected decrease in recovery of research and development costs from the fishery sector. Most of the government's costs for research, management and enforcement are charged to the sector.	OECD, Subsidy Document	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan guarantees</li> </ul> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> <li>• R&amp;D- to develop new fisheries technologies</li> </ul>
	<b>BRUNEI DARUSSALAM</b>	Did not report.		
CDA 1.0	<b>CANADA</b>  Fisheries Alternative Programme (FAP)	"Fisheries Alternative Programme (FAP)": grants and contribution toward eligible costs, loan insurance and interest buy-downs, the objective of which is to "provide financial assistance to projects or activities which lead to the long-term diversification of affected fishery-dependent communities and/or to employment for workers displaced by the downturn in the fishing industry." The assistance may cover activities including "the establishment of new business, expansion or modernization of existing ones, development of new products or services, and the development of business infrastructure to achieve economic diversification or economic expansion in affected fishery-dependent areas of Atlantic Canada." (G/SCM/N/38/CAN)	WTO, WT/CTE/W/80/Add.1, 21 September 1999  WTO, WT/CTE/W/80 9 March 1998	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>• License retirements</li> <li>• Loan Guarantees</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
CDA 2.0	<b>CANADA</b>  Coastal Quebec  Special Economic Development and Adjustment Fund for Quebec Fishing Communities	"Coastal Quebec": the assistance takes the form of repayable or non-repayable contributions, which aim at "speed[ing] up the adjustment and long-term economic development of the fishing communities most affected by the decline of bottom-living fish stocks." (G/SCM/N/38/CAN)	WTO, WT/CTE/W/80/Add.1, 21 September 1999  WTO, WT/CTE/W/80 9 March 1998	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees</li> </ul>
CDA 3.0	<b>CANADA</b>  Newfoundland & Labrador Department of Fisheries & Aquaculture  Shellfish Aquaculture Working Capital Fund	Project-specific working capital. Loans up to 30% of eligible project costs to a maximum of CDN \$250,000. Maximum term of 10 years at a fixed rate set at prime + 1%. Marine shellfish culture enterprises with sufficient water available to potentially produce 300,000 pounds of product annually. Eligible aquaculture species will initially be limited to blue mussels. Initiatives with total project costs under \$100,000 will not be considered.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>
CDA 4.0	<b>CANADA</b>  Enterprise PEI Funding Services  Shellfish Aquaculture Financing Program	Acquisitions of long-term water site leases, industry-specific equipment, lease site development and production costs. (1) a series of annual term loans, or (2) demand loans  Up to 100% financing for lease development and crop production costs.  Up to 75% of lease site and equipment costs.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		Primarily existing shellfish producers' holding/acquiring not more than 100 acres of inter lease site(s).		
<b>CDA 5.0</b>	<b>CANADA</b>  Canada/PEI Regional Economic Development Agreement  Aquaculture Business Enhancement Initiative	Expenditures related to increased production or efficiency. Conditional contributions – 50% of eligible capital costs to a maximum of CDN \$15,000 (USD \$10,000). Aquaculture enterprises in a development phase culturing species other than mussels.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>
<b>CDA 6.0</b>	<b>CANADA</b>  New Brunswick Department of Fisheries and Aquaculture  Shellfish Aquaculture Development Program	Seedstock and specific equipment. Direct loans or loan guarantees: 50% of eligible capital costs, 80% of approved operating costs. Eligible to Oyster and mussel culture enterprises which have invested at least CDN \$10,000 (USD \$6,600) in capital costs.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>
<b>CDA 7.0</b>	<b>CANADA</b>  New Brunswick Department of Fisheries and Aquaculture  Freshwater Finfish Site Assessment and Business Plan Development Program	Pre-development work to assess the suitability of a site with respect to production capacity, environmental suitability and investment risk.  Contributions for: <ul style="list-style-type: none"> <li>▪ Water quality and quantity testing – 60% of costs to a maximum of \$20,000 (USD \$13.33 million).</li> <li>▪ Site plan/business plan preparation – 60% of costs to a maximum of CDN \$10,000 (USD \$6,600).</li> </ul>	PricewaterhouseCoopers Data	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> <li>• Other capital support programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		Technology improvement – 60% of costs to a maximum of CDN \$20,000. New and expanding land-based aquaculture facilities proposing to achieve a minimum annual production of 30 tones.		
<b>CDN 8.0</b>	<b>CANADA</b>  New Brunswick Department of Fisheries & Aquaculture  Aquaculture Incentive Program	Direct Loan – New construction and equipment purchase.  Loan guarantee – 80% of approved total operating costs. Direct loans or loan guarantees.  Eligible costs for capital expenditures must not exceed CDN \$500,000 (USD \$333,300). Marine shellfish and finfish enterprises.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>
<b>CDA 9.0</b>	<b>CANADA</b>  Nova Scotia Department of Fisheries & Aquaculture  Fisheries Loan Board	Direct loan – new construction and equipment purchase. Loan guarantee – 90% of approved total operating costs. Direct loans or loan guarantees. Eligible capital costs – 80% to a maximum of CDN \$500,000 (USD \$333,330). Working capital loan guarantee up to a maximum of \$1 million. Marine aquaculture enterprises.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees -including loans provided by private lenders and guaranteed by government</li> </ul>
<b>CDA 10.0</b>	<b>CANADA</b>  Quebec – Ministère de l’Agriculture, des Pêcheries et de l’Alimentation du Québec	Eligible expenditures covering production processing and marketing. Loans limited to: <ul style="list-style-type: none"> <li>▪ Experimental Phase (60%)</li> <li>▪ Pilot Trial (50%)</li> <li>▪ Commercial Phase (35%)</li> </ul>	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Development Program for Commercial Fisheries and Aquaculture	Maximum financial aid of CDN \$400,000 (USD \$266,660). All aquaculture enterprises with some regional/sectoral restrictions.		Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul>
<b>CDA 11.0</b>	<b>CANADA</b>  Société de développement de l'industrie maricole (SODIM)	Marine aquaculture enterprises in the Gaspé area. Flexible financial support for start-ups and diversifications. Maximum financial aid of CDN \$1,000,000 (USD \$666,660) over 3 years. Marine aquaculture enterprises in the Gaspé area.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul>
<b>CDA 12.0</b>	<b>CANADA</b>  Fisheries Renewal BC  Development and Diversification Program	None specific but expenditures must be consistent with Program objectives. Grants and loans, to a maximum of 40% of total eligible costs, or CDN \$150,000 (USD \$100,000), whichever is less. Eligible for Shellfish Aquaculture Enterprises.	PricewaterhouseCoopers Data	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
CDA 13.0	<p><b>CANADA</b></p> <p>TAGS (The Atlantic Groundfish Strategy) Income Support</p> <p>Year Established: 1994</p>	<p>Intended Program Recipients: Displaced fishers and fisheries workers due to the groundfish crisis.</p> <p>Geographic Scope: Atlantic Canada</p> <p>Estimated Annual Cost of the Program: CDN \$326.4 million</p> <p>Department Responsible for the Program: Human Resources Development Canada</p> <p>Name of Legislation or Mandate Establishing the Program: Income support</p> <p>Policy Objectives of the Program: Income support to facilitate labour adjustment</p> <p>Program Description: Income support was provided to eligible fishers, trawler workers and plant workers affected by the Atlantic groundfish crisis. The eligible recipients must agree to participate in the labour adjustment programs offered under TAGS.</p> <p>Major Fish Stocks Affected by the Program: All major Atlantic groundfish stocks.</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries</b></p> <p>Direct Assistance to Fishers and Fisheries Workers</p> <ul style="list-style-type: none"> <li>Worker Adjustment Program-payments to assist displaced fishers and fisheries workers to find alternative employment</li> </ul>
CDA 14.0	<p><b>CANADA</b></p> <p>Fishers Unemployment Insurance</p>	<p>Intended Program Recipients: Self-employed fishers</p> <p>Geographic Scope: National</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries</b></p> <p>Direct Assistance to Fishers and Fisheries Workers</p> <ul style="list-style-type: none"> <li>Unemployment Insurance-</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1956	<p>Estimated Annual Cost of the Program: CDN \$198.6 million (USD \$132 million)</p> <p>Department Responsible for the Program: Human Resources Development Canada</p> <p>Name of Legislation or Mandate Establishing the Program: Unemployment Insurance Act</p> <p>Policy Objectives of the Program: Short-term income support for unemployed fishers</p> <p>Program Description: Fishers UI was designed to protect self-employed fishers from the uncertainties of the fishing industry due to high seasonality and fluctuating catch rates. Two benefit periods of 26 weeks are available to accommodate the summer and winter fisheries respectively. Wage earning fishers and fish plant workers are only eligible for regular UI.</p> <p>Major Fish Stocks Affected by the Program: All fisheries.</p>		payments targeted specifically for unemployed fishers and fisheries workers.
<b>CDA 15.0</b>	<b>CANADA</b>  TAGS and PSRS (Pacific Salmon Revitalization Strategy) Active Adjustment Measures	<p>Intended Program Recipients: Displaced fishers and fisheries workers due to the Atlantic groundfish and Pacific salmon crises</p> <p>Geographic Scope: Atlantic Canada and British Columbia</p>	Canadian Department of Fisheries and Oceans	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers <ul style="list-style-type: none"> <li>• Fisher Retraining-to assist fishers and fisheries workers to find alternative employment</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1994	<p>Estimated Annual Cost of the Program: \$36.6 million (USD \$24.4 million)</p> <p>Department Responsible for the Program: Human Resources Development Canada</p> <p>Name of Legislation or Mandate Establishing the Program: Labour adjustment</p> <p>Policy Objectives of the Program: To facilitate labour adjustment within and outside the fisheries</p> <p>Program Description: Active adjustment measures were designed to facilitate access to employment through career planning and counselling, mobility assistance and support for re-employment; to prepare individuals for work through literacy and basic skills training; and to enhance employment opportunities through support for entrepreneurship and restoration of the environment and communities.</p> <p>Major Fish Stocks Affected by the Program: All major Atlantic groundfish stocks and Pacific salmon stocks.</p>		
<b>CDA 16.0</b>	<b>CANADA</b>  NCARP (Northern Cod Adjustment and Recovery Program) and TAGS Early Retirement	<p>Intended Program Recipients: Older fishers and fisheries workers (55-64) affected by groundfish crisis</p> <p>Geographic Scope: Atlantic Canada</p> <p>Estimated Annual Cost of the Program: \$19 million</p>	Canadian Department of Fisheries and Oceans	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Permit Buybacks or License Retirement (all types)- payments for the</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Programs</p> <p>Year Established: 1992-1994</p>	<p>(USD \$12.67 million)</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO) and Human Resources Development Canada (HRDC)</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries management</p> <p>Policy Objectives of the Program: To reduce dependency on fisheries</p> <p>Program Description: Bridging income support was available to older fishers and fisheries workers (55-64) eligible for NCARP or TAGS until they reach 65. The entire NCARP Early Retirement Program and the fishers component of TAGS Early Retirement Program were administered by DFO while HRDC managed the TAGS fisheries workers component. Fishers who opted for early retirement were required to surrender their groundfish licence, personal fishing registration and any other fishing licence in accordance with conditions set by DFO.</p> <p>Major Fish Stocks Affected by the Program: All major Atlantic groundfish stocks.</p>		<p>permanent withdrawal of fishing permits of licenses</p>
<b>CDA 17.0</b>	<p><b>CANADA</b></p> <p>Harbour Infrastructure</p>	<p>Intended Program Recipients: Fishing industry and recreational boaters</p>	<p>Canadian Department of Fisheries and Oceans</p>	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1973	<p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: \$48.2 million (USD 32.1 million)</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Fishing and Recreational Harbours Act</p> <p>Policy Objectives of the Program: Maintenance of safe harbours that meet present and future needs of fishing industry and other small craft users</p> <p>Program Description: The Small Craft Harbours (SCH) Program is responsible for the administration and maintenance of 1,190 commercial fishing harbours and 563 recreational harbours under the Fishing and Recreational Harbours Act (as of April 1, 1998). The Program is currently in a transition stage. To improve the operation and safety of federal harbour infrastructure support to the fishing industry, commercial fishing harbours are being managed in partnership with harbour users. Responsibility for day-to-day management and operations of harbours critical to the industry is being transferred to local, client-run Harbour Authorities as a result. At the same time, DFO is proceeding on the divestiture of</p>		<ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement-to provide port improvements for fishing fleets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>the remaining recreational harbours and derelict or inactive fishing harbours out of the federal inventory.</p> <p>Major Fish Stocks Affected by the Program: All fisheries</p>		
CDA 18.0	<p><b>CANADA</b></p> <p>Regional Economic Development</p> <p>Year Established: 1963</p>	<p>Intended Program Recipients: Qualified small and medium-sized businesses</p> <p>Geographic Scope: Atlantic Canada and Western Canada</p> <p>Estimated Annual Cost of the Program: CDN \$22.0 million (USD \$14.6 million)</p> <p>Department Responsible for the Program: Atlantic Canada Opportunities Agency (ACOA), Canada Economic Development (CED), Western Economic Diversification Canada (WEDC), National Research Council (NRC) and Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Rural and regional economic development</p> <p>Policy Objectives of the Program: To provide greater access to capital and information for small and medium-sized enterprises, and to provide assistance to local communities to take increased responsibility for their own economic development</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries and Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>CDA 18.0</b>  <b>Continued</b>	<b>CANADA</b>  Regional Economic Development  Year Established: 1963	<p>Program Description: Strategic investments to improve the environment for regional economic growth are made possible through economic development agreements with the provinces. Assistance has been provided to eligible projects from the fishery sector as well as other economic sectors mainly in the form of repayable contributions. Most of the fisheries projects were aimed at general resource enhancement and development, demonstration projects, training, productivity improvement, and increasing energy efficiency. More recently, federal assistance has been focused on aquaculture development and conversion of processing facilities for non-traditional species or value-added products. No assistance has been given to processing projects that will increase the throughput of groundfish species in Atlantic Canada. In addition, there is NRC's Industrial Research Assistance Program (IRAP) that provides support to Canadian small businesses in adopting new technologies and developing new products and processes for commercial markets. ACOA, CED and WEDC are also responsible for the regional delivery of special federal adjustment measures to assist communities in coping with major, sudden downturns in local economic conditions such as in the case of TAGS and PSRS</p> <p>Major Fish Stocks Affected by the Program: All</p>	Canadian Department of Fisheries and Oceans	<b>Capture Fisheries and Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		fisheries  * WEDC not available.		
<b>CDA 19.0</b>	<b>CANADA</b>  TAGS and PSRS License Retirement Programs  Year Established: 1994	Intended Program Recipients: Qualified Atlantic groundfish and Pacific salmon license holders  Geographic Scope: Atlantic Canada and British Columbia  Estimated Annual Cost of the Program: CDN \$109.2 million (USD \$72.8 million)  Department Responsible for the Program: Fisheries and Oceans Canada (DFO)  Name of Legislation or Mandate Establishing the Program: Fisheries management  Policy Objectives of the Program: To reduce dependency on fisheries  Program Description: The federal government established independent Harvesting Adjustment Boards in each of the Atlantic provinces and an independent Fleet Reduction Committee in British Columbia to carry out the license retirement programs. All eligible Atlantic groundfish license holders and Pacific salmon license holders were	Canadian Department of Fisheries and Oceans	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Permit Buybacks or License Retirement (all types)- payments for the permanent withdrawal of fishing permits or licenses</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>invited to submit retirement proposals which were reviewed by the above independent bodies in their respective provinces. The license retirement programs on both coasts were conducted through a reverse auction bidding process in which the preference was given to the lowest ratio of bid amounts to landings.</p> <p>Major Fish Stocks Affected by the Program: All major Atlantic groundfish stocks and Pacific salmon.</p>		
<b>CDA 20.0</b>	<p><b>CANADA</b></p> <p>Salmon Enhancement Program</p> <p>Year Established: 1977</p>	<p>Intended Program Recipients: Fishing industry and Canadian public</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: CDN \$26.8 million (USD 17.9 million).</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Resource development</p> <p>Policy Objectives of the Program: Resource development through partnership and public engagement</p> <p>Program Description: The program consists of government operated and contracted hatcheries and</p>	Canadian Department of Fisheries and Oceans	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Program-including fish habitat improvements, release of juveniles</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>spawning channels. It also runs volunteer enhancement projects with a wide public participation, including salmon enhancement and habitat restoration work in inland rivers and streams, and release of juvenile salmon.</p> <p>Major Fish Stocks Affected by the Program: Pacific and Atlantic salmon</p>		
<b>CDA 21.0</b>	<b>CANADA</b> Fisheries Management	<p>Intended Program Recipients: Fishing industry and Canadian public</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: CDN \$45 million (USD \$30 million)</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Resource management</p> <p>Policy Objectives of the Program: To ensure sustainable utilization of fishery resource, in partnership with stakeholders.</p> <p>Program Description: The program involves the development of fishery management plans, policies and programs, regulating access to and participation in</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries Management and Conservation Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>the fishery through licensing, implementation of the Aboriginal Fisheries Strategy and participation in land claims negotiations, and advancing Canada's international interests in resource conservation.</p> <p>Major Fish Stocks Affected by the Program: All fisheries.</p>		
CDA 22.0	<p><b>CANADA</b></p> <p>Fisheries Enforcement</p>	<p>Intended Program Recipients: Fishing industry and Canadian public</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: CDN \$78.7 million (USD \$52.5)</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Conservation and protection</p> <p>Policy Objectives of the Program: To ensure compliance with Canadian fisheries legislation to conserve and protect the fishery resource for the benefit of Canadians.</p> <p>Program Description: The program involves the enforcement of the Fisheries Act and regulations, as well as management measures through aerial</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Enforcement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>surveillance, vessel patrols, deployment of observers on fishing vessels and the activities of fishery officers stationed in fishing communities across Canada.</p> <p>Major Fish Stocks Affected by the Program: All fisheries</p>		
CDA 23.0	<p><b>CANADA</b></p> <p>Stock Assessment</p>	<p>Intended Program Recipients: Fishing industry and Canadian public</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: CDN \$86.6 million (USD \$57.7 million)</p> <p>Department Responsible for the Program: Fisheries and Oceans Canada (DFO)</p> <p>Name of Legislation or Mandate Establishing the Program: Scientific research</p> <p>Policy Objectives of the Program: To provide scientific basis for managing the fishery resource for its sustainable utilization.</p> <p>Program Description: The program involves conducting stock assessment and related research on all major marine and freshwater fishery resources (i.e. all exploited species of fish, invertebrates, marine mammals and marine plants), and conducting research</p>	Canadian Department of Fisheries and Oceans	<p><b>Capture Fisheries and Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>on sustainable development of aquaculture and prevention of communicable fish diseases.</p> <p>Major Fish Stocks Affected by the Program: All fisheries</p>		
CHL 1.0	<p><b>CHILE</b></p> <p>Discount for scientific research costs</p>	<p>The only subsidy-related program, which is stated in the Chilean Fisheries and Aquaculture Law, is that in which the Law requires that the actors pay to the Republic's General Treasury Board the fishing and aquaculture related patents. If the payment of such patents comes in time before it is due, and if voluntary hand in the funds to the Fondo de Administración Pesquera (Fishing Management Fund), you will receive a discount for scientific research costs (Fondo de Investigación Pesquera - Fisheries Research Fund FRF). Annually the FRF administers close to 4 million US dollars.</p>	Interviews with Chilean Fisheries Officials	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>R &amp; D – to develop new fisheries technologies</li> </ul>
PRC 1.0	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Hainan Province Marine Fishery Development Program</p> <p>Established August 1998</p>	<p><b>Part 1 of Description</b></p> <p>The Hainan Provincial People's Government on August 15, 1998 announced the program. The objective of the program was to increase a total marine production to 750,000 tons by 2002 in the province with annual growth rate at 12% and 76% more than the 1997 figure. In order to achieve the above objective, the Province issued the following seven-point incentive policies for the Hainan Marine Fishery Development Program:</p>	Complete Collections of China's Fishery Laws and Regulations, pp1459-1462.	<p><b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>Favourable tax rates on specific inputs or outputs</li> <li>Other tax preference and insurance support programs</li> </ul> <p><b>Aquaculture</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>Favourable tax rates on</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ul style="list-style-type: none"> <li>• Elimination of import tariffs and VAT taxes on imported materials for infrastructure construction of marine fishing ports, seafood warehouses, etc;</li> <li>• Preferential treatment to the land use, for marine fishery production and infrastructure projects. For a planned marine aquaculture projects, the lowest preferential prices for land use and no fee for seawater use;</li> <li>• Priority to be given to provide sufficient electricity for marine aquaculture production at a reduced price;</li> <li>• Tax preferences for marine production in the coastal areas. Five years after the beginning of income generation, 50% of agricultural specialty taxes will be refunded; For the province-identified priority marine seed multiplication farms, 100% agricultural specialty taxes will be refunded for next five years; For marine capture fisheries around the Nansha Island, no agricultural specialty taxes will be levied at all;</li> <li>• Development Loan Program will be allocated to support a shrimp aquaculture program in the province;</li> </ul>		<ul style="list-style-type: none"> <li>• specific inputs or outputs</li> <li>• Other tax preference and insurance support programs</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul> <p><b>Fish Processing</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Favourable tax rates on specific inputs or outputs</li> </ul>
PRC 1.0	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Hainan Province Marine Fishery</p>	<p><b>Part 2 of Description</b></p> <ul style="list-style-type: none"> <li>• Financial incentives provided by the planning, fiscal and financial departments of the Province. First, in the next five years, the Province's planning department will arrange more than USD</li> </ul>	Complete Collections of China's Fishery Laws and Regulations, pp1459-1462.	<p><b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Favourable tax rates on specific inputs or outputs</li> <li>• Other tax preference and</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Development Program</p> <p>Established August 1998</p>	<p>\$500,000 a year to support the seaport construction. In the meantime, the Province will also increase the investment in seed multiplication farms, R&amp;D, and the construction of marine fishing supervision boats; Second, the Department of Finance of the Province will arrange USD \$625,000a year to support import of marine technology, research, experiment and demonstrations; additional USD \$125,000 million for marine fishing technical training, and another USD \$500,000 for interest payments of the loans borrowed to develop the marine industry in the province; Third, a total of USD \$6.25 million loans from the Agricultural Comprehensive Development Loan Program will be allocated to support a shrimp aquaculture program in the province;</p> <ul style="list-style-type: none"> <li>• Reform of the system for fishing port construction inputs. Multiple input system will replace the state-only input system for fishing port construction. Investors will have the right for the land use and fishing port use fees;</li> <li>• Permit for those technology advanced marine-capture enterprises from other provinces to register in Hainan Province to work with Hainan's enterprises to operate in the Nansha fishing area.</li> </ul>		<p>insurance support programs</p> <p><b>Aquaculture</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Favourable tax rates on specific inputs or outputs</li> <li>• Other tax preference and insurance support programs</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul> <p><b>Fish Processing</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Favourable tax rates on specific inputs or outputs</li> </ul>
<b>PRC 2.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>	<p><b>Part 1 of Description</b></p> <p>The program was announced by the Fujian Provincial</p>	Complete Collections of China's Fishery Laws and Regulations,	<p><b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Fujian Province Fishery Pillar Industry Development Program</p> <p>Established May 1997</p>	<p>People's Government on May 24, 1997. The objective of the program is to increase total fishery products to 4.8 million tons by 2000 with GDP in the fisheries sector reaching USD \$5 billion RMB (the 1990 price). The above two figures will further reach 8 million tons and USD \$ 10.7 billion by 2010. In order to achieve the objective, the Province announced the following policies to support the program.</p> <ul style="list-style-type: none"> <li>• Encouragement of foreign and Chinese Taipei businessmen to invest in the fisheries sector in the province. Tax preferential treatments for foreign investors: Foreign-invested fisheries enterprises with more than ten years, will enjoy tax holidays, from the day of profit making, for the first two years. From the third to fifth years, only half income taxes are supposed to be levied but those income taxes will be refunded for foreign investors; and the sixth to tenth years, a half of income taxes will be refunded; For foreign-invested seaports, warehouses, and seed multiplication farms with more than 15 years of operation, the above incentive policies also apply.</li> <li>• Establishment of a marine fishery development fund to support the marine fishery industry in the province (no amount of money is specified). The needed foreign exchanges and supporting funds for marine fisheries development projects will be arranged as priority; No agricultural specialty taxes will be levied for marine fisheries products.</li> </ul>	pp1178-1182.	<ul style="list-style-type: none"> <li>• Other tax preference and insurance support programs</li> </ul> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> </ul> <p><b>Aquaculture</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Other tax preference and insurance support programs</li> </ul> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ul style="list-style-type: none"> <li>Financial support for the development of the fisheries sector in the province. From 1997, the province will arrange more than USD \$ 437,000 to support "Seafood Basket Project". Every year, 100,000 <i>mu</i> (a Chinese unit of area, equals to 0.0667 hectares) of the increased shallow coastal areas will be designated for aquaculture purpose with an interest subsidy of USD \$12.50 per <i>mu</i>; 10,000 freshwater fishnet boxes will be added every year with a direct subsidy of USD \$12.50 per box. The province will arrange USD \$375,000 to subsidize the interest payment for the development of marine fishery industry in the province.</li> </ul>		
<b>PRC 2.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>  Fujian Province Fishery Pillar Industry Development Program  Established May 1997	<b>Part 2 of Description</b> <ul style="list-style-type: none"> <li>During the period of the Ninth Five-year Plan, the provincial planning and financial departments will arrange another USD \$3.75 million to subsidize the construction of fishing ports and harbours.</li> </ul>	Complete Collections of China's Fishery Laws and Regulations, pp1178-1182.	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> </ul>
<b>PRC 3.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>  Guangdong Province Fishing Ports Financing	The program was jointly announced by the Guangdong Department of Finance and the Guangdong Department of Oceans and Fishery on June 1, 1994. The objective of the ten-year program is to increase the overall capacity of Guangdong's fishing ports to meet the needs of the development of	Complete Collections of China's Fishery Laws and Regulations, pp1396-1400.	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Program</p> <p>Year of Establishment: June 1994, but effective until 2003</p>	<p>the fisheries sector in the province. In order to meet the objective, the following financing formula was proposed:</p> <ul style="list-style-type: none"> <li>From 1994 to 2003, a total of USD \$10 million will be arranged annually to support the construction and renovation of the fishing ports in the province. In which, USD \$4 million (25%) will be provided by the provincial government, and another USD \$2.5 million (25%) will be offered by governments in cities and counties, and the remaining USD \$5million (50%) will be shouldered by townships and fishermen in the province.</li> </ul>		fishing fleets
<b>PRC 4.0</b>	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Anhui Province Fishermen Getting-Rich Program</p> <p>Year of Establishment: September 1997</p>	<p>The program was announced by Anhui Provincial People's Government on September 25, 1997. The objective of the program is to enhance the Fishermen Getting-Rich Program launched by the provincial government in early 1994 and extend the project to 2000 with the purpose of realizing 2 million tons of fishery products every year and the total GDP of USD \$1.25billion in the fisheries sector in the province by 2000. In order to reach the goal, the following policies were announced:</p> <ul style="list-style-type: none"> <li>A 10% increase of government financing to the fishery sector in the fisheries sector. Starting from 1998, the provincial government will increase annually 10% of its investment in the fisheries sector on top of previous investment commitments</li> </ul>	Complete Collections of China's Fishery Laws and Regulations, pp1138-1139.	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
PRC 5.0	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Heilongjiang Province Fisheries Sector Development Program</p> <p>Year of Establishment: April 1997</p>	<p>of USD \$625,000 per year.</p> <p>The program was announced by the Heilongjiang Provincial People's Government on April 21, 1997. The objective of the program is to increase the fishery product to 350,000 tons, in which the fishery aquaculture output reaching 300,000 tons by 2000. During the same period, the total GDP in the fisheries sector will reach RMB4 billion and per capita income of fishermen in the province will reach USD \$ 400 dollars. In order to achieve the objective, the province has decided to:</p> <ul style="list-style-type: none"> <li>• increase the provincial investment in the fisheries sector and to lobby for more investment from the central government (no specific figures were given);</li> <li>• provide tax holidays for individuals and enterprises that enter the fisheries sector. For example, three-year income tax holidays will be given to those who have started aquaculture business in newly developed water areas. For those who have started aquaculture business in rice patties, three-year agricultural specialty tax holidays will be also granted.</li> </ul>	Complete Collections of China's Fishery Laws and Regulations, pp958-960.	<p><b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Income Tax Deferral-for fishers</li> </ul> <p><b>Aquaculture</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Income Tax Deferral</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Programs- including fish habitat improvements, release or juveniles, etc</li> </ul>
PRC 6.0	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Guizhou Province Fisheries Sector</p>	<p>The program was announced by the Guizhou Provincial People's Government on August 12, 1998. The objective of the program is to reach the fishery product to 50,000 tons by the turn of the century. In order to achieve this goal, the province has provided the following incentives:</p>	ete Collections of China's Fishery Laws and Regulations, pp1558-1560.	<p><b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Other tax preference and insurance support programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Development Program  Year of Establishment: August 1998	<ul style="list-style-type: none"> <li>All the levels of government planning and financial departments will increase the provincial fisheries sector development funds annually (no specific figures were given). For some areas, fisheries projects should be put on the priority along with the Agricultural Development Project, the Vegetable Basket Project, and the Green Industrialisation Project (no specific information about those projects).</li> <li>A three-year agricultural specialty tax holiday will be granted to those who are designated as Fishery Poverty Alleviation Projects, Fishery Industrialization Projects, and Specialty Seafood Development Projects.</li> </ul>		<b>Aquaculture</b> Tax Preferences and Insurance Support Programs <ul style="list-style-type: none"> <li>Other tax preference and insurance support programs</li> </ul>
<b>PRC 7.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>  Shanxi Province Fisheries Sector Development Program  Year of Establishment: June 1998	The program was announced by the Shanxi Provincial People's Government on June 20, 1998. The objective of the program is to increase the fishery product to 60,000 tons, the GDP in the fisheries sector to USD \$75 million, and the per capita income of fishermen to USD \$ 750 by 2000. In order to reach the goal, the Province has provided the following incentives: <ul style="list-style-type: none"> <li>All the levels of the governments will support the development of the fisheries sector in the province. From 1999, the province will arrange USD \$250,000 from the provincial budget to support the programs on breed improvement, disease prevention, R&amp;D, and fishery wildlife protection</li> <li>Tax holidays will be granted to the fisheries</li> </ul>	Complete Collections of China's Fishery Laws and Regulations, pp1617-1620.	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>Stock Enhancement Programs- including fish habitat improvements, release or juveniles, etc.</li> <li>R &amp; D- to develop new fisheries technologies</li> </ul> <b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>Stock Enhancement Programs- including fish</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		sector. For fish seed and breed production, and approved R&D projects, no agricultural specialty taxes and income taxes will be levied. For aquaculture projects in the newly developed wastelands and wastewater, a three-year agricultural tax holiday will be granted. For the projects financed by the World Bank loans, no agricultural specialty taxes will be levied during the loan repayment period.		habitat improvements, release or juveniles, etc <ul style="list-style-type: none"> <li>R &amp; D-to develop new fisheries technologies</li> </ul>
<b>PRC 8.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>  Guangdong Province "Fishing-Holiday" Relief Fund  Year of Establishment: June 1999	The program appeared in an investigation report in the July 1999 issue of <i>China Fisheries</i> published by the China Academy of Fishery Sciences. The objective of the fund is to assist the fishermen who suffered economic losses from the imposed non-fishing period ("fishing holiday"?). The incomplete statistics show that the total relief fund was close to RMB3.3 million in the province, in which USD \$62,500 came from the provincial budget, and USD \$125,000 to be contributed by the Shenzhen Special Economic Zone.	Interview with officials at the Fisheries Bureau in China, January 5, 2000.	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers: <ul style="list-style-type: none"> <li>Income Support Programs</li> </ul>
<b>PRC 9.0</b>	<b>PEOPLE'S REPUBLIC OF CHINA</b>  The Chinese Central Gov't Fishing Port Construction Fund  Year of Establishment: Unknown	The information was provided by the officials at the Fisheries Bureau in the Ministry of Agriculture. The purpose of the fund was to contribute to the construction and modernization of fishing ports in the country. During the Ninth Five-year Plan (1996-2000), on average, USD \$43.75 million were provided by the Central government to support the construction of key fishing ports in the country. Local governments were required by the central government to provide parallel funding for the construction of fishing ports in	Interview with officials at the Fisheries Bureau in China, January 5, 2000.	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>PRC 10.0</b>	<p><b>PEOPLE'S REPUBLIC OF CHINA</b></p> <p>Fisheries Disease Prevention Program Financed by the Central Government</p> <p>Year of Establishment: Unknown</p>	<p>China.</p> <p>The information was also provided by the officials at the Fisheries Bureau in the Ministry of Agriculture during the interview. On average, USD \$100,000 were provided annually by the Central government to support the above program.</p>	<p>Interview with officials at the Fisheries Bureau in China, January 5, 2000.</p>	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul> <p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>
<b>HKC 1.0</b>	<p><b>HONG KONG, CHINA</b></p> <p>Name of Program: Kadoorie Agricultural Aid Loan Fund</p> <p>Year Established: 1955</p>	<p>Intended Program Recipients: Fish farmers (and farmers)</p> <p>Geographic Scope: Regional</p> <p>Estimated annual cost of the program: USD \$500,000</p> <p>Department responsible for the program: Agriculture and Fisheries Department</p> <p>Name of Legislation or Mandate Establishing the Program: Kadoorie Agricultural Aid Loan Fund Ordinance, Cap. 1080</p> <p>Policy Objectives of the Program: loans from the Fund are granted to individual fish farmers for development and working capital purposes.</p>	<p>Agriculture and Fisheries Department</p>	<p><b>Aquaculture</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description: any bona-fide fish farmers or persons intending to become fish farmers may apply for the loans which can be used for purchase of fry, feed and farm equipment, and the construction and maintenance of fish ponds.</p> <p>Major Fish Stocks Affected by the Program: spotted grouper, gold-lined seabream, mangrove snapper, grey mullet, big head, grass carp, silver carp and common carp.</p>		
HKC 2.0	<p><b>HONG KONG, CHINA</b></p> <p>Artificial Reef Project</p> <p>Year Established: 1996</p>	<p>Estimated annual cost of the program (in local currency): USD \$12.82 million Year: 1996 - 2001</p> <p>Department responsible for the program: Agriculture and Fisheries Department</p> <p>Name of Legislation or Mandate Establishing the Program: Finance Committee [FCR(95-96)87]</p> <p>Policy Objectives of the Program: The main objectives of the project are to : enhance marine resources, enhance habitat quality over flat seabed;</p> <ul style="list-style-type: none"> <li>• rehabilitate degraded habitats, and</li> <li>• protect spawning and nursery grounds.</li> </ul> <p>Program Description: The project involves the deployment of 148 artificial reefs constructed from 93,000 cubic metres of prefabricated concrete blocks,</p>	Agriculture and Fisheries Department	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Other capital support programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>used car tires, old boats and quarry rocks in Hong Kong waters. The project is comprises of:</p> <p>The identifying suitable sites in marine parks for deployment of 30 artificial reefs and monitoring their condition and performance;</p> <p>Commissioning consultancy studies to identify suitable sites outside marine parks for deployment of artificial reefs and to formulate an implementation programme, including a fisheries resources management strategy; and</p> <p>Deploying 118 artificial reefs around the coast of Hong Kong, outside marine parks, at sites of special importance to local fisheries, particularly the spawning and nursery grounds of commercial species</p> <p>Major Fish Stocks Affected by the Program: Reef and rocky shore associated fish such as snappers, seabreams, sweetlips and groupers.</p>		
INA 1.0	<p><b>INDONESIA</b></p> <p>Research Institute for Marine Fisheries</p> <p>Year Established: 1961</p>	<p>Intended Program Recipients: Directorate General of Fisheries, scientific community, fishers, fisheries companies</p> <p>Geographic Scope: national</p> <p>Estimated annual cost of the program (in local currency): USD \$46.5 million (down 40% pre-crisis) for projects only. Staff and recurring costs from</p>	Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D- to develop new fisheries technologies</li> <li>• Programs to assess fish stocks</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Government general expenditures.</p> <p>Department responsible for the program: Ministry of Agriculture, Agency of Agricultural R &amp; D</p> <p>Name of Legislation or Mandate Establishing the Program: Ministry of Agriculture Decrees No.861/Kpts/Org/12/1980 and No.613/Kpts/OT.210/1984</p> <p>Policy Objectives of the Program: “Support and strengthen fisheries development and the fisheries industry”.</p> <p>Program Description:</p> <ol style="list-style-type: none"> <li>1. Research on marine fisheries and post harvest technology, including: <ol style="list-style-type: none"> <li>(i) fisheries biology: resource maps for stock density and yields</li> <li>(ii) data gathering: exploitation levels, sustainable yield</li> <li>(iii) technology: design and engineering of gear and vessels</li> <li>(iv) post harvest: aquaculture, quality, diversification</li> <li>(v) environment: coastal and coral reef</li> <li>(vi) socio-economic: marketing, income and welfare</li> </ol> </li> </ol>		<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>2. Ten projects underway. Five for resource levels, five for post harvest technology.</p> <p>3. Staff : 200 persons (135 scientists, BSc and above).</p> <p>4. Facilities: Office, laboratory, library total 7000 m2 on 5 sites</p> <p>5. Vessels: Two research vessels, budget for 20 days sea time each/year</p> <p>Major Fish Stocks affected by the Program: Shrimp, demersal, small and large pelagic, tuna/skipjack_</p>		
INA 2.0	<p><b>INDONESIA</b></p> <p>Coral Reef Rehabilitation and Management Project</p> <p>Year Established: 1998</p>	<p>Intended Program Recipients: Fishers and fishing communities</p> <p>Geographic Scope: national</p> <p>Estimated annual cost of the program (in local currency): unavailable</p> <p>Department responsible for the program: Government of Indonesia and multilateral donors</p> <p>Name of Legislation or Mandate Establishing the Program: World Bank Adaptable Program Loan (covered under March 31/98 USD 360.7 million multi-project loan)</p> <p>Policy Objectives of the Program: Better management of marine resources</p>	Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries management programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description:</p> <ul style="list-style-type: none"> <li>(i) Funding: World Bank, also Asian Development Bank and Global Environment Fund</li> <li>(ii) Timeline: 15years 1998 – 2013</li> <li>(iii) Coverage: 10 provinces, primarily Sulewesi, Moluccus, Irian Jaya</li> <li>(iv) Activities: Community based management, and national marine parks</li> </ul>		
INA 3.0	<p><b>INDONESIA</b></p> <p>Integrated Small Scale Fisheries Development</p> <p>Year Established: 1994</p>	<p>Intended Program Recipients: Small scale fisheries</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost: USD \$18.5 million</p> <p>Department Responsible: Directorate General Fisheries, Department of Agriculture</p> <p>Policy Objective:</p> <ul style="list-style-type: none"> <li>a) Better utilize fisheries resources through development of capture and aquaculture fisheries businesses</li> <li>b) Increase fisheries productivity through application of technology</li> <li>c) Increase fishers income levels</li> <li>d) Create improved employment and business opportunities</li> <li>e) Improve regional economies</li> </ul>	Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations	<p><b>Capture Fisheries and Aquaculture</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants- for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>f) Develop fisheries infrastructure</p> <p>Program Description:</p> <p>a) Increase caloric intake of fishers to more than 320 kg rice equivalent person\year</p> <p>b) Provide business ‘how-to’ packages to fishers</p> <p>c) Train fishers to operate more intensively and cooperatively</p> <p>d) Form cooperatives that are more capable and develop contacts with large scale fishery business partners</p> <p>e) Foster ‘areas’ (villages) that are centers of new economic growth</p> <p>f) Improve quality and quantity of landed catch</p> <p>g) Increase use of storage and handling facilities, and machinery and equipment</p>		
INA 4.0	<p><b>INDONESIA</b></p> <p>Farming Business Development Program</p> <p>Year Established: 1994</p>	<p>Recipient: Public and private Cooperatives</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost: USD \$92.4 million</p> <p>Responsible: Directorate General Fisheries, Department of Agriculture</p> <p>Policy Objective: Create a climate conducive for the growth of fisheries businesses</p>	Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations	<p><b>Capture Fisheries Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Fish Product Promotion</li> <li>• Market Price Support</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description:</p> <ul style="list-style-type: none"> <li>a) Increase sectoral coordination to improve the investment climate for management and marketing of fish products</li> <li>b) Improve coordination between private and cooperative fisheries businesses</li> <li>c) Create mechanism for pricing to ensure suitable profits for fishers and reasonable price to consumers</li> <li>d) Develop systems for information exchange including pricing and other data</li> <li>e) Standardized fish quality programs</li> <li>f) Institute credit scheme for distribution and remittance</li> <li>g) Increase investment in the fisheries sector</li> </ul>		
<b>INA 5.0</b>	<p><b>INDONESIA</b></p> <p>Food diversification and nutrition</p> <p>Year Established: 1994</p>	<p>Recipients: Undernourished</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost: USD \$5.8 million</p> <p>Responsible: Directorate General Fisheries, Department of Agriculture</p> <p>Policy Objective: To increase consumption of food and improve nutrition by increasing and broadening fish consumption</p> <p>Program Description:</p>	<p>Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations</p>	<p><b>Capture Fisheries Market and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		a) Increase nutrition levels and food derived from quality fish products b) Build public awareness and consumption of fish products c) Broaden fish consumption across geographical and socio-economic strata d) Organize education programs in schools, hotels, etc, on cooking and eating fish e) Prepare and distribute starter packages for home based fresh water rearing ponds.		
<b>INA 6.0</b>	<b>INDONESIA</b>  Program for Development of Resources, Equipment and Machinery  Year Established: 1994	Recipients: Fisheries businesses, Fishers, and those working in related businesses and science  Geographic Scope: National  Estimated Annual Cost: USD \$91.2 million  Responsible: Directorate General Fisheries, Department of Agriculture  Policy Objective: To act in support of the above noted three programs  Program Description: a) Develop, rehabilitate, and better optimize infrastructure, equipment and machinery (ports, landing facilities, etc.) b) Develop and manage fish rearing (fry) yields and facilities	Interviews with Indonesian Fisheries Officials, and review of Indonesian regulations	<b>Capture Fisheries</b> Fisheries Management and conservation Programs <ul style="list-style-type: none"> <li>• Other Fisheries Management and Conservation Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>c) Improve effectiveness of local government and related bodies (UPPI, UPNB, UPBAP, UPBAT)</p> <p>d) Control fish quality standards and disease</p> <p>e) Prepare materials and facilities for marketing</p> <p>f) Build warehouses and related handling facilities</p> <p>g) Disseminate technology information packages</p> <p>h) Improve quality of human resources via training</p>		
JPN 1.0	JAPAN Government financial support	In 1997, total transfers associated with Japan's marine fishery policies were USD \$3.2 billion for the fisheries sector. The bulk of these transfers (68 per cent) were used to improve fisheries facilities and infrastructure, and to enhance the environment of fishing communities.	OECD, subsidy document, 1997	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Other capital and infrastructure support programs</li> </ul>
JPN 2.0	JAPAN Additional depreciation of fishing boats	"Additional depreciation of fishing boats": tax deferral can be provided to SMEs which meet the following conditions: (i) membership of fishing cooperatives whose plans for structural improvement of small-and medium-sized fishing enterprises are approved by the Minister of Agriculture, Forestry and Fisheries and (ii) engaging in certain fishing business. The policy objective is "structural improvement of fishing industry." (G/SCM/N/38/JAP)	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs <ul style="list-style-type: none"> <li>• Accelerated Depreciation-for taxation of fishing vessels and gear</li> </ul>
JPN 3.0	JAPAN Resource propagation programme for salmon	"Resource propagation programme for salmon": governmental assistance is granted to "develop hatching and breeding facilities of the Fisheries Cooperatives and the Fishery Production Cooperatives and to promote public activities for preventing illegal fishing, etc ..." The purpose of the programme is to achieve a stable maintenance of salmon resources.	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		(G/SCM/N/38/JAP)		
<b>JPN 4.0</b>	<b>JAPAN</b> Fisheries modernization fund interest subsidy	"Fisheries modernization fund interest subsidy": interest subsidy is allocated in order to facilitate fishermen to make investment for advanced fishery management. The purpose is to "contribute to modernization of fisheries' management." (G/SCM/N/38/JAP)	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>Subsidized Loans</li> </ul> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>Fisheries Management Programs</li> </ul>
<b>JPN 5.0</b>	<b>JAPAN</b> Fisheries trust fund subsidy	"Fisheries trust fund subsidy": the purpose is to "contribute to the management of natural disaster compensation system for fisheries" by covering "part of expenses borne by the Agriculture, Forestry and Fisheries Trust Fund which is necessary for activities of fisheries mutual release associations." (G/SCM/N/38/JAP)	WTO, WT/CTE/W/80/Add.1, 21 September 1999  WTO, G/SCM/38/JPN 17 August 1998	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers <ul style="list-style-type: none"> <li>Other Direct Payments to Fishers</li> </ul>
<b>JPN 6.0</b>	<b>JAPAN</b> Agriculture, Forestry and Fisheries Finance Corporation Subsidy	The purpose of the programme is to contribute to improvement of agriculture structure.	WTO, G/SCM/38/JPN 17 August 1998	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> <li>Other capital support programs</li> </ul>
<b>ROK 1.0</b>	<b>KOREA</b> Support for the Development of Deep-	"Support for the Development of Deep-Sea Fishery": loans are granted to "support the management of deep-sea fishery business" and to provide financial assistance for fishery negotiations such as technical	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> <b>Lending Support Programs</b> <ul style="list-style-type: none"> <li>Loan Guarantees</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Sea Fishery	cooperation with foreign countries." Beneficiaries of the support are deep-sea fishermen and the loan is provided "for fishing in foreign territorial waters." (G/SCM/N/48/KOR; see also G/SCM/N/38/KOR)		Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>Fisheries Management Programs</li> </ul>
<b>ROK 2.0</b>	<b>KOREA</b>  Fund for Supporting Fishing Activities	"Fund for Supporting Fishing Activities": loans, covering between 20 to 100 per cent of the business operation costs according to the business scale, are granted to coastal and off-shore fishermen, inland and deep-sea business owners. The purpose of the assistance is to "support stable fishing business operation by providing loans at low interest rates as the financial need arises." (G/SCM/N/48/KOR; see also G/SCM/N/38/KOR)	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees</li> <li>Subsidized Loans</li> </ul>
<b>ROK 3.0</b>	<b>KOREA</b>  Support for Fish Products Processing Development	Grants or loans are allocated to companies engaged in constructing facilities for handling, storing and processing fish. Develop new fishery products, increase the production of fishery products and modernize the storage and processing facilities	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Fish Processing</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Other capital support programs</li> </ul>
<b>ROK 4.0</b>	<b>KOREA</b>  Support for the developing Aquaculture Fishery	Loans are granted to fishermen engaged in aquaculture. (i) Promote the development of aquaculture fishing to ensure stable supply of fishery products and develop income sources of fishermen in response to changes in fishing environment, such as the fishery agreement between Japan and Korea. (ii) to develop near-sea fisheries into aquafarms of high productivity and thus increase fishermen's income. Fishermen who raise and cultivate fish	WTO, WT/CTE/W/80/Add.1, 21 September 1999  World Trade Organization G/SCM/N/38/KOR 16 July 1998 (98-2824) Committee on Subsidies and Countervailing	<b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
			Measures Original: English	
ROK 5.0	<p><b>KOREA</b></p> <p>Structural Reforms of Distribution System</p>	<p>Improvements in the fishery marketing system centred around expansion of market facilities, improvement of the consignment system for landing sites, and improved distribution capacity at large consumption areas. The expansion of consignment facilities at landing sites and wholesale fish markets, the establishment of distribution and processing complex at Kamcheon port, as well as expansion of waste and discharge treatment facilities was accomplished.</p> <p>In October 1997 the Government completely liberalised the consignment system at landing sites. The system had been a part of the two-stage free market system that was introduced in 1996. To strengthen distribution and handling capacity at consumption sites, five direct-sale market facilities have been established at large urban areas at which mass fish consumption takes place. These facilities will assist in reducing the number of distributing and handling steps, reducing marketing margins, and promoting direct shipping to consumers by fishermen's co-operatives.</p>	OECD, Subsidy Document, 1997	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Harbour Facilities and Moorage-provide free or at low rates for fishing fleets</li> </ul> <p><b>Aquaculture</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Harbour Facilities and Moorage-provide free or at low rates for fishing fleets</li> <li>• Other capital support programs</li> </ul> <p><b>Fish Processing</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product</li> </ul>
ROK 6.0	<p><b>KOREA</b></p> <p>Price Stabilisation Fund</p>	<p>The scheduling or planning of production of fish and fisheries products is difficult due to the nature of fisheries. The nature of fish products and production process, e.g., quick spoilage, dependence on season, and one-time mass catch, can make market prices</p>	OECD, Subsidy Document, 1997	<p><b>Capture Fisheries</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Market Price Support-government support to</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		unstable. To ensure stable market prices, the Government has established a Price Stabilisation Fund for agricultural and fishery products. The fund is intended to cover ten items, including seaweed, frozen squid and frozen hairtail. In 1997, in response to a market glut, the Government purchased 27 417 tones worth USD \$34 million — almost seven times more than the amount it purchased in 1996.		<p>ensure minimum prices or to keep domestic prices above world prices</p> <p><b>Aquaculture</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Market Price Support-government support to ensure minimum prices or to keep domestic prices above world prices</li> </ul>
<b>ROK 7.0</b>	<b>KOREA</b>  Government Financial Support	<p>In 1997, total government financial transfers associated with Korea’s fishery policies were KRW 334 billion (USD 351 million) — 10 per cent more than in 1996. Table 2 provides information on these transfers.</p> <p>Financial support is normally provided as low-interest loans to encourage and to ensure the stability of fishing operations. To prevent preference being given to any particular part of the fisheries sector, the amount of financial support is determined by the size of fishing operation.</p>	OECD, Subsidy Document, 1997	<p><b>Capture Fisheries</b> Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul>
<b>ROK 8.0</b>	<b>KOREA</b>  Structural Adjustment	Government efforts to encourage structural adjustment of the fishery sector, which began in 1990, has been carried out according to the findings of a study on structural adjustment of off-shore and coastal fisheries.	OECD, Subsidy Document, 1997	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Vessel Buybacks-payments for the permanent</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Since 1994, reducing fishing capacity has been the central part of the government policy for structural adjustment. The total number of fishing vessels removed in 1997 was 135 (48 vessels for coastal fishing and 87 vessels for offshore fishing). Capacity reduction was aimed mainly at those fishing industries that became non-viable due to loss of fishing grounds following the declarations of EEZs by other coastal states. Eight fishing industries, including large purse seiners, offshore stow net, offshore long-liners and trawlers, are included in this program.</p>		<p>withdrawal of fishing vessels</p>
<b>ROK 9.0</b>	<p><b>KOREA</b></p> <p>Reduction in Local Taxation on Building and Acquisition of Vessels for Deep-Sea Fishery</p>	<p>The purpose of the subsidy is to decrease transportation costs and to lower prices of importing and exporting goods.</p> <p>The subsidy is provided in the following manner</p> <p>(a) Built or imported ships: 50 per cent reduction in acquisition tax</p> <p>(b) Acquired ships: 50 per cent reduction in property tax</p> <p>The subsidy is provided to builders or importer of the following ships:</p> <p>(a) International line vessels run by maritime transportation or ship lease corporation.</p> <p>Licensed ocean fishery vessels</p>	<p>WTO, G/SCM/N/38/KOR 16 July 1998 (98-2824) Committee on Subsidies and Countervailing Measures Original: English</p>	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Aid to Shipyards-to support fishing boat construction</li> </ul>
<b>MAS 1.0</b>	<b>MALAYSIA</b>	Intended Program Recipients: Local Fisher Folks and	Department of Fisheries,	<b>Capture Fisheries</b>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Marine Park or Marine Protected Areas</p> <p>Year Established: 1985</p>	<p>Local Tourist Industries</p> <p>Geographic Scope: national</p> <p>Estimated annual cost of the program : RM2.8 Million (USD \$735,000)</p> <p>Department responsible for the program: Department of Fisheries, Malaysia</p> <p>Name of Legislation or Mandate Establishing the Program: Malaysian Fisheries Act 1985</p> <p>Policy Objectives of the Program: The overall goal of marine parks and protected areas is to protect, conserve and manage in perpetuity, representative marine environments of significance in order that they remain undamaged for future generation.</p> <p>Program Description: Through this program 40 islands in Malaysia have been gazetted as Marine Parks with detailed regulations for their management. Marine parks program are to afford special protection to the aquatic flora and fauna and to protect , preserve and manage the natural breeding grounds and habitat of aquatic life, allowing for the natural generation of aquatic life and lastly to preserve and enhance the productivity of the environment.</p>	Malaysia	<p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Programs- including fish habitat improvements, release or juveniles, etc</li> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		Major Fish Stocks affected by the Program: Coral fish, grouper and snapper		
<b>MAS 2.0</b>	<b>MALAYSIA</b>  Name of Program: Fisheries Management And Development  Year Established: 1985	Intended Program Recipients: Local Fisher Folks  Geographic Scope: national  Estimated Annual Cost of the Program (in local currency): RM1.7 million, (USD \$448,000) Year: 1998  Department responsible for the program: Department of Fisheries, Malaysia  Name of Legislation or Mandate Establishing the Program: Malaysian Fisheries Act 1985 and Malaysian Economic Exclusive Act 1984  Policy Objectives of the Program: The main objectives of this program is to managing, monitoring, controlling and surveillance of the inshore and deep sea resources  Program Description: a) Administering and enforcing the Fisheries Act 1985 and Economic Exclusive Act 1984 for the proper management and conservation of the inshore and deep-sea resources. b. Rehabilitating inshore fishery resources by artificial reef construction	Department of Fisheries, Malaysia	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Stock Enhancement Programs- including fish habitat improvements, release or juveniles, etc</li> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>c. Regulating, managing and conserving aquaculture areas to areas to ensure its rational development</p> <p>d. Coordinating the monitoring, controlling and the surveillance activities in the Territorial waters and Economic Exclusive Zone</p> <p>e. Enforcing the use of suitable gears in order to have a sustainable fisheries</p> <p>Major Fish Stocks affected by the Program: Fisheries stocks in Malaysian Territorial waters and Malaysian Economic Exclusive Zone</p>		
MAS 3.0	<p><b>MALAYSIA</b></p> <p>Research And Planning</p> <p>Year Established: 1985</p>	<p>Intended Program Recipients: Local Fisher Folks</p> <p>Geographic Scope: national</p> <p>Estimated annual cost of the program (in local currency):</p> <p>RM1.91 million, (USD \$500,000) Year: 1998</p> <p>Department responsible for the program: Department of Fisheries, Malaysia</p> <p>Name of Legislation or Mandate Establishing the Program: Malaysian Fisheries Act 1985</p> <p>Policy Objectives of the Program: The main objectives of this program is to formulate policy, strategy and development plan for the Malaysian</p>	Department of Fisheries, Malaysia	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul> <p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>fisheries sector</p> <p>Program Description: Preparing policy and strategy for the development of the sector. In drawing up the policy and strategy, guidelines drawn up by the New Economic Policy and National Agriculture Policy are taken into consideration. Research in aquaculture in specific areas such as artificial propagation of prawn and fish fry for pond culture, formulation of fish feeds and the improvement of pond culture techniques. Collecting, compiling and processing fisheries data and information on a regular basis. Formulating management and conservation measures of fish stocks recommended by research findings and also to regulate commercial fishing activities. To undertake specific research activities on aquatic, resource rehabilitation, marine park, turtle rehabilitation.</p> <p>Major Fish Stocks affected by the Program: Fisheries stocks in Malaysian Territorial waters and Malaysian Economic Exclusive Zone</p>		
MAS 4.0	<p><b>MALAYSIA</b></p> <p>Fund For Food</p> <p>Year Established:1998</p>	<p>Intended Program Recipients: Investors\Operators in “primary food production” or processing.</p> <p>Geographic Scope: national</p> <p>Estimated Annual Cost of the Program (in local currency): RM 300 million (USD \$79 million) total</p>	Interviews with Malaysian Fisheries Officials, 2000	<p><b>Fish Processing</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>Subsidized Loans-loans at below market rates (calculated as the difference between market interest rates and low</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>budget allocation for all sectors (RM 71 million disbursed to Jan.2000). RM 11 million (USD \$2.9 million) disbursed to Jan.2000 for fisheries sector, primarily to aquaculture</p> <p>Department responsible for the program: Bank Negara (Central Bank)</p> <p>Name of Legislation or Mandate Establishing the Program: Pencetus Penhasilan Pemakanan Negara</p> <p>Policy Objectives of the Program: Increase national food production, improve processing, market development, export.</p> <p>Program Description:</p> <ul style="list-style-type: none"> <li>(i) Interest rate = 4% (30-50% of market rates)</li> <li>(ii) Maximum loan = RM 3 million (USD \$790,000); minimum = RM10,000, (USD \$2,630)</li> <li>(iii) Loan term = 8 years (seasonal principle forgiveness)</li> <li>(iv) Contribution: 90% of project cost (investors 10% contribution can be in-kind)</li> <li>(v) Exclusions: Deep-sea</li> <li>(vi) Disbursement Channel: primarily Bank Pertanian Malaysia (Malaysian Agriculture Bank), (government owned) and also commercial banks</li> </ul>		<p>interest rates, applied to the total value of the outstanding loans)</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		(vii) Other activities: BPM provides some business counseling		
MAS 5.0	<p><b>MALAYSIA</b></p> <p>Lembaga Kemajuan Ikan Malaysia (LKIM) - Fisheries Development Authority of Malaysia</p> <p>Year Established: 1971</p>	<p>Intended Program Recipients: Fishers through associations and communities Geographic Scope: national</p> <p>Estimated Annual Cost of the Program (in local currency): RM 31 million (USD \$ 8.16 million) staff and overhead; plus RM 51 million project budget (USD \$6.4 million)</p> <p>Department responsible for the program: Ministry of Agriculture</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. Upgrade the socio-economic status of fishermen</li> <li>2. Develop and improve the fishing industry</li> </ol> <p>Program Description: Activities include:</p> <ol style="list-style-type: none"> <li>(i) “To promote and develop an efficient and effective management systems for fisheries enterprises and fish marketing”: construction and management of 26 fish landing centres, charging 1 sen/kg for fish landed</li> <li>(ii) “To provide and supervise credit facilities for fish production”: RM 145 million loans, (USD \$38.2 million) (0% interest rate) disbursed to 61 fishers associations over past 5-6 years. RM 4 million loans disbursed to 471 fisher households</li> </ol>	Interviews with Malaysian Fisheries Officials, 2000	<p><b>Capture Fisheries</b> Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Subsidized Loans-loans at below market rates (calculated as the difference between market interest rates and low interest rates, applied to the total value of the outstanding loans)</li> </ul> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Fleet Renewal and Modernization</li> <li>• Fishing Port Infrastructure Enhancement-to provide port improvements for fishing fleets</li> </ul> <p><b>Aquaculture</b> Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Subsidized Loans-loans at below market rates (calculated as the difference between market interest rates and low</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>(iii) “To participate in fisheries enterprises, such as boat building, production, and supply of fishing gear”: Own and manage aquaculture feedmill through wholly owned subsidiary Majuikan Sdn Bhd (50 staff), as well as manage boats and forwarding facilities.</p> <p>(iv) (iv) “To encourage the formation of Fishermen’s Associations and to facilitate and strive for their economic and social development” and “To register, control and supervise Fishermen’s Associations and to provide allocations for matters related thereto”: provide grants, office space, and staff (224 persons) to 70 small scale associations</p> <p>(v) Building of artificial reefs: RM 80million (USD \$21.05 million) spent to contract associations to build 208 artificial reefs.</p> <p>Major Fish Stocks Affected by the Program: Grouper, seabass, mackerel, red snapper, pomfret</p>		interest rates, applied to the total value of the outstanding loans)
MEX 1.0	<p><b>MEXICO</b></p> <p>The Fishing Fleet Modernisation Programme</p>	<p>The Fishing Fleet Modernisation Programme continued in 1997. This program addresses the replacement and rehabilitation of the fleet. The funds are made available as loans with commercial interest rates.</p> <p>When decisions are made on funding projects, consideration is given to the biological capacity of fishery resources in order to prevent increases in</p>	OECD, Subsidy Document, 1997	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Fleet Renewal and Modernisation</li> </ul> <p><b>Fish Processing</b> Marketing and Price Support Programs</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>fishing effort and to guarantee the sustainability of fishing activities. Furthermore, consideration is given to financial and economic criteria that demonstrate the feasibility and profitability of projects and guarantee the recovery of the funds. In 1997 the Programme spent USD 6.9 million on the rehabilitation of 102 vessels and the introduction of 20 new units.</p> <p>The Inter-Secretariat Commission for Port and Maritime Safety and Surveillance prepared the national inventory of vessels and continued with the training program on safety for human life at sea, aimed at fishers, service providers, and operators of small craft.</p> <p>In conjunction with the Secretariat for Communications and Transport (SCT) and within the framework of the National Consultative Committee on Maritime Transport and Port Standardisation, Official Mexican Standards were drafted and published in the Official Journal of the Federation. These standards are intended to increase safety for human life at sea and deal with the technical specifications of lifesavers, life-vests, and vessels' propellers. In addition, work is currently taking place on a standard that will stipulate the minimum safety equipment to be carried by vessels.</p> <p>During 1997, the Inter-Secretariat Commission for the</p>		<ul style="list-style-type: none"> <li>• Other Marketing and Price Support Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Safety of Human Life at Sea, through the National Statistics, Geography, and Informatics Institute (INEGI), took an inventory of all the vessels operating in the country. The results show that the national fishing fleet comprises approximately 106 000 vessels, of which about 3 000 are large vessels and 103 000 are in the coastal fleet.</p> <p>The National Consultative Committee on Standardising Responsible Fisheries began drafting the first version of the Official Mexican Standard that will lay down guidelines for preventing maritime pollution caused by operations of the fishing fleet. This document is expected to be finished during 1998.</p>		
MEX 2.0	<p><b>MEXICO</b></p> <p>Rural Aquaculture Program</p>	<p>The Rural Aquaculture Program helps to combat extreme poverty and to assist food production in rural communities. In 1997, it promoted the development of aquaculture in 31 states; serving 1 981 communities in 513 municipalities and benefiting 34 216 families. Rural aquaculture output totalled 5 459 tones. These products were primarily used for subsistence consumption, with the surpluses being sold in the local markets. Among the species farmed in rural aquaculture there are native species such as: <i>catan</i>, <i>acocil</i>, <i>charal</i>, <i>gusano de fango</i>, <i>poecillidos</i>, <i>ejolote</i>, and <i>mojarra castarica</i>.</p> <p>Fishers are required to pay a fee to harvest these resources, and the farming activity is financed by the</p>	OECD, Subsidy Document, 1997	<p><b>Aquaculture</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Other capital support programs</li> </ul> <p>Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>producers' own capital.</p> <p>Production facilities At the end of 1996 there were 6 730 aquacultural production units in operation. Of these:</p> <ul style="list-style-type: none"> <li>• 1.2 million hectares (90 per cent) are inland bodies of water (reservoirs, lakes, coastal lagoons, etc.) where fishing is carried out after organisms are (i.e., aquacultural fisheries).</li> <li>• 110 000 hectares (8 per cent) are small production units dedicated to production for subsistence consumption (development aquaculture).</li> <li>• 20 000 hectares (2 per cent) are fish farms (controlled systems).</li> </ul> <p>Of the surface turned over to controlled system aquaculture, 92 per cent is accounted for by the operations of 284 shrimp farms, with the remaining 8 per cent being units dedicated to the commercial production of trout, catalina clams, oyster, catfish, carp, tilapia, crawfish, abalone, frogs, mussels, bass, and other species.</p> <p>Authorisation was given for the harvesting of more than 3 billion post-larvae shrimp in Sinaloa, Nayarit, and Chiapas. More than 900 000 were used for pre-fattening, and around 2 million for fattening, at 89 farms. Of these, 75 per cent are located in Sinaloa, with the remainder in Nayarit and Sonora.</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
MEX 3.0	<b>MEXICO</b>  <b>Organisation and Capacitating</b>	61 workshops were organised in the 17 coastal states to advise on the fishing law and the co-operatives.	Interviews with Mexican Fisheries Officials	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Other Fisheries Management and Conservation Programs</li> </ul> <b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Other capital support programs</li> </ul> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Other fisheries management and conservation programs</li> </ul>
MEX 4.0	<b>MEXICO</b>  <b>Infrastructure</b>	Rehabilitation of Coastal Lagoon's systems- Support employment in fisher's communities- Aquaculture infrastructure. USD \$5,600  Program objectives: Construction and repairing of "escolleras" on benefit of 1,740 fishers who obtained an increase in production of about 1,400 tones/year and a market values of USD \$1.5 million.  USD \$212,000 aimed to restoration and conservation	Interviews with Mexican Fisheries Officials	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>of wetlands in Yucatan</p> <p>For aquaculture infrastructure USD \$383,000 used for conservation and maintenance</p>		
<b>MEX 5.0</b>	<p><b>MEXICO</b></p> <p>Financing</p> <p>(Financing of the business' productive cycle, supporting financial consolidations, and developing investment projects)</p>	<p>USD \$61.6 million through FIRA-FOPESCA (USD \$41.6 million for “avio” credits and \$187.8 million pesos for equipment improvement credits) to promote industrial development.</p> <p>The program supported 4,910 fish related producers. FIRA-FOPESCA provided 41% of the credits to catch-related activities, 33% to fishing industry, 26% for aquaculture.</p> <p>BANCOMEXT provided credits for an amount of \$11.8 million US supporting 184 small and medium businesses (enterprises) for exports of shrimp, lobster, tuna, octopus, squid, fish and seafood (fresh and frozen). Of this amount, 69.7% was aimed to finance work capital and 30.3% to expand and modernize the industrial plants. The funds are loans at commercial rates.</p>	Interviews with Mexican Fisheries Officials	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Fleet Renewal and Modernisation</li> </ul> <p><b>Fish Processing</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul>
<b>MEX 6.0</b>	<p><b>MEXICO</b></p> <p>Fishing Fleet Moderization program</p>	<p>220.6 million pesos (USD \$25 million) for the modernization of 139 vessels (116 were rehabilitated and 23 were substituted)</p> <p>Approximately 923 fishers benefited</p> <p>The program also reinforces the organizations of</p>	Interviews with Mexican Fisheries Officials	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Fleet Renewal and Modernization</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>vessel owners, and enhances safety conditions for fishers.</p> <p>Since the beginning of the program in 1996 and until December 1998, 568 vessels have been modernized (44% of the target). 520 were rehabilitated and 48 were substituted. The funding is in the form of loans with commercial interest rates.</p>		
<b>MEX 7.0</b>	<p><b>MEXICO</b></p> <p>Shrimp Culture Development</p>	<p>By means of this project the government authorized the recollection of 2654 million post larvae shrimp in 4 states, and the catch of 14,700 reproducers (mature shrimp) for two states.</p> <p>Also, it promotes the participation of risk capital funds for 77.8 million pesos in 7 commercial aquaculture projects, which helped promoting “granjas de engorda” (fattening farms) of shrimp, barge, crocodile, and abalone; and 9 farms for shrimp and tilapia culture. Producers have to pay fees to participate, and to provide the capital for the venture.</p>	Interviews with Mexican Fisheries Officials	<p><b>Aquaculture</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>
<b>MEX 8.0</b>	<p><b>MEXICO</b></p> <p>Rural Aquaculture National Program</p>	<p>Aimed to support feeding, employment, and rural support. It takes place in the 31 states and the Federal District, in 2,080 communities of 534 municipalities.</p> <p>It conducts activities such as consultations, working groups with local authorities and interest groups</p> <p>The program assisted in the production of 8,307 tonnes of fish, benefiting some 43,000 families of low</p>	Interviews with Mexican Fisheries Officials	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		income. The fishers have to provide their own capital to the production.		
<b>MEX 9.0</b>	<b>MEXICO</b> Aquaculture Development in Mexico	4,086 millions of pesos (SD \$434.680 million ) used for 5 studies aimed to expand the diagnosis network and regulate the proper development of aquaculture in two Mexican states.	Interviews with Mexican Fisheries Officials	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>
<b>MEX 10.0</b>	<b>MEXICO</b> “Cuaresma” Program Prices, Mexico 1998	Help with the distribution (delivery) and installation of additional selling points for fish.  Fishers and retailers offer special sales and lower prices in public and social sector stores; the program also promoted the creation of “3 centros de abasto” (collected and distribution centres) in 3 Mexican states  The Government co-operated with FIRA Barcelona in the organisation of the food fair “Mexico 1998” in November	Interviews with Mexican Fisheries Officials	<b>Capture Fisheries</b> Marketing and Price Support Programs <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul>
<b>NZ 1.0</b>	<b>NEW ZEALAND</b> Regulatory Fisheries Management Programmes  Year Established: Have existed for a number of years	Intended Program Recipients: Minister responsible for Fisheries Geographic Scope: national  Estimated Annual Cost of the Program (in local currency): NZ\$3,939,477 (USD \$1,969,739) (NZ\$2,926,830 Crown funded; NZ\$1,012,647 industry funded). New Zealand has a cost recovery policy where the Crown recovers from the commercial fishing industry costs incurred by the Crown to manage New Zealand’s fisheries resources as a result	New Zealand Department of Fisheries	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>of the existence or activities of the commercial fishing industry. Year: 1999/2000</p> <p>Department Responsible for the Program: Ministry of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act 1996</p> <p>Policy Objectives of the Program: Provide the Ministry responsible for Fisheries with advice to develop guidelines, regulations and processes which support sustainable fisheries.</p> <p>Program Description: There are a number of components to the fisheries management programme, including:</p> <ol style="list-style-type: none"> <li>1) sustainability and utilization measures: prepare advice papers and consult with stakeholders on proposed changes to sustainability measures and controls</li> <li>2) management of impacts of fishing: undertake projects aimed at avoiding, mitigating and remedying the impacts of fishing on protected and other species</li> <li>3) assessment of management proposals: assess specific fisheries management proposals under the existing fisheries legislation, including proposals to manage local customary fisheries, and</li> </ol>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>proposals to implement dispute resolution outcomes</p> <p>4) legislative implementation: develop policy guidelines and definitions</p> <p>Major Fish Stocks Affected by the Program: All major stocks in New Zealand that are harvested commercially, recreationally or as customary take.</p>		
NZ 2.0	<p><b>NEW ZEALAND</b></p> <p>Administration of fisheries management programmes</p> <p>Year Established: Have existed for a number of years</p>	<p>Intended Program Recipients: Minister responsible for fisheries</p> <p>Geographic Scope: national</p> <p>Estimated Annual Cost of the Program (in local currency): NZ\$11,913,620 (USD \$5,956,810) (NZ\$1,913,371 Crown funded; NZ\$10,000,249 industry funded). New Zealand has a cost recovery policy where the Crown recovers from the commercial fishing industry costs incurred by the Crown to manage New Zealand's fisheries resources as a result of the existence or activities of the commercial fishing industry. Year: 1999/2000</p> <p>Department Responsible for the Program: Ministry of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act 1996</p>	New Zealand Department of Fisheries	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Policy Objectives of the Program: Contribute to fisheries management programmes through the administration of the fisheries property rights and the devolution of registry and related services.</p> <p>Program Description:</p> <p>There are a number of components to the fisheries administration programmes, including:</p> <ol style="list-style-type: none"> <li>1) issue permits, licenses and leases for access to New Zealand's fisheries</li> <li>2) maintain the quota register (to register any transactions related to the individual transferable quota holdings)</li> </ol> <p>Major Fish Stocks Affected by the Program: All major stocks in New Zealand that are harvested commercially, recreationally or as customary take.</p>		
NZ 3.0	<p><b>NEW ZEALAND</b></p> <p>Monitoring and enforcement detection programmes</p> <p>Year Established: Have existed for a number of years</p>	<p>Intended Program Recipients: Minister responsible for fisheries</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): NZ\$16,434,403 (USD \$8,217,202) (NZ\$7,365,869 Crown funded; NZ\$9,068,534 industry funded). New Zealand has a cost recovery policy where the Crown recovers from the commercial</p>	New Zealand Department of Fisheries	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>fishing industry costs incurred by the Crown to manage New Zealand's fisheries resources as a result of the existence or activities of the commercial fishing industry. Year: 1999/2000</p> <p>Department Responsible for the Program: Ministry of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act 1996</p> <p>Policy Objectives of the Program: Provide the Minister responsible for fisheries with advice to promote compliance with fisheries laws and lead to detection of those involved in illegal fisheries activities.</p> <p>Program Description: There are a number of components to the fisheries enforcement and monitoring programmes:</p> <ol style="list-style-type: none"> <li>1) Monitoring: conduct monitoring programmes to confirm compliance with fisheries laws or detecting offences.</li> <li>2) Offence detection: Investigation of individuals and organisations where there is sufficient reason to believe an illegal activity has taken place.</li> <li>3) Enforcement processes and systems: Develop enforcement processes and systems to support the Fisheries Act 1996.</li> </ol>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>4) Education and information services: Manage enquiries and information relating to New Zealand fisheries.</p> <p>Major Fish Stocks Affected by the Program: All major stocks in New Zealand that are harvested commercially, recreationally or as customary take.</p>		
<p><b>NZ 4.0</b></p>	<p><b>NEW ZEALAND</b></p> <p><b>Fisheries Resource Research Programmes</b></p> <p><b>Year Established: Have existed for a number of years</b></p>	<p>Intended Program Recipients: Minister responsible for fisheries</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): NZ\$15,211,285 (USD \$7,605,643) (NZ\$2,344,072 Crown funded; NZ\$12,867,213 industry funded). New Zealand has a cost recovery policy where the Crown recovers from the commercial fishing industry costs incurred by the Crown to manage New Zealand's fisheries resources as a result of the existence or activities of the commercial fishing industry. Year: 1999/2000</p> <p>Department Responsible for the Program: Ministry of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act 199</p> <p>Policy Objectives of the Program: Provide scientific</p>	<p>New Zealand Department of Fisheries</p>	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul> <p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>evaluation of sustainable yield from fisheries resources, the effect of fishing on the aquatic environment, the effects of fishing on the biological diversity of the aquatic environment and alternative strategies for achieving desirable yield levels.</p> <p>Program Description: There are a number of components to the fisheries resources research programmes, including:</p> <ol style="list-style-type: none"> <li>1) Deepwater fisheries research</li> <li>2) Middle depth fisheries research</li> <li>3) Inshore fisheries research</li> <li>4) Shellfish research</li> <li>5) Pelagic fish research</li> </ol> <p>Major Fish Stocks Affected by the Program: All major stocks in New Zealand that are harvested commercially, recreationally or as customary take.</p>		
NZ 5.0	<p><b>NEW ZEALAND</b></p> <p>Aquaculture research programmes</p> <p>Year Established: Have existed for a number of years</p>	<p>Intended Program Recipients: Publicly funded research to encourage innovation in the aquaculture sector</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): \$NZ7,489,800 (USD \$3,744,900) Year: 1998</p>	New Zealand Department of Fisheries	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Department Responsible for the Program: Foundation for research, Science and Technology</p> <p>Policy Objectives of the Program: Encourage innovation in the aquaculture sector</p> <p>Program Description: Publicly funded research programmes in the aquaculture area include:</p> <ol style="list-style-type: none"> <li>1) chinook salmon population structure</li> <li>2) genetic improvement of New Zealand salmon</li> <li>3) Sustainability of coastal ecosystems</li> <li>4) developing new industries based on indigenous organisms</li> <li>5) shellfish productivity and aquaculture sustainability</li> </ol> <p>Major Fish Stocks Affected by the Program: aquaculture stocks</p>		
PNG 1.0	<p><b>PAPUA NEW GUINEA</b></p> <p>Policy Initiatives from the Papua New Guinea 1999 Federal Budget</p>	<p>Various policy initiatives will be instituted during the course of 1999. The more salient initiatives are noted below:</p> <ul style="list-style-type: none"> <li>• a National Tuna Management Plan, now nearing completion, will ensure the sustainable exploitation of PNG's Tuna and other fisheries resources;</li> <li>• Enhanced fisheries surveillance capability by</li> </ul>	<p>1999 Papua New Guinea 1999 Federal Budget Volume 1.</p> <p><a href="http://www.treasury.gov.pg/treasury/treasury.nsf">http://www.treasury.gov.pg/treasury/treasury.nsf</a></p>	<p><b>Capture Fisheries</b></p> <p>Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Fuel Tax Exemption-for Fishing vessels</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>improvements in technology, enforcement of port call and presence of PNG Fishery Surveillance Officers on vessels;</p> <ul style="list-style-type: none"> <li>• Introduce new training programs and facilities under the auspices of AusAID funded project to enhance the ability and competence of PNG crews;</li> <li>• Implement an Asian Development Bank loan program aimed at addressing deficiencies at the National Fisheries Authority (NFA) and in providing infrastructure;</li> <li>• The following fiscal measures will enhance competitiveness within the fisheries sector: (I) continued allowance of accelerated depreciation on most fisheries infrastructure; (ii) zero-rating of imported fishing vessels under the tariff reform program; (iii) introduction of a fuel excise rebate where approved licensed vessels will be refunded excise tax payments for fuel; and (iv) the imposition of a levy of K3.0 on barracuta imports as an anti-dumping measure.</li> <li>• Introduce a new Fisheries Management Act addressing deficiencies at the NFA opening the way for self-financing and a stronger fisheries judicial system</li> </ul>		<p>Fisheries Enforcement Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>
<b>PE 1.0</b>	<p><b>PERU</b></p> <p>Scientific Research to identify and develop</p>	<p>Name of Legislation or Mandate Establishing the Program: D.S. #7/March 20<sup>th</sup>, 1964/Law of Creation</p> <p>9 Research and evaluation cruises (for pelagic,</p>	<p>Interviews with Peruvian Fisheries Officials</p>	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D-to develop new</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	new fisheries	<p>demersal, and alternative species) for mass determination, distribution, composition, and allowable catches (cost not provided)</p> <p>Peru received the donation of a modern research vessel (valued at \$14 million US dollars) by Japan, to increase the research potential of IMARPE (Instituto del Mar Del Peru-Sea Institute of Peru)</p> <p>Other projects undertaken by IMARPE are those related to: ecotoxicology, technology and fishing techniques, and a cruise to the Antarctica for the study of krill (cost not provided)</p> <p>Policy Objectives of the Program: To develop scientific and technological researches in order to get:</p> <ul style="list-style-type: none"> <li>i) new job opportunities ii) value-added products iii) rational</li> <li>j) utilization of fish resources iv) contribution to national food security.</li> </ul> <p>Program Description: The program promotes the direct human consumption of fish products through technological research, training and technological transfers of the unexploited or underexploited resources.</p>		fisheries technologies

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
PE 2.0	PERU Marketing Campaign “Pescado para todos” (fish for all)	The aim of this program is to increase fish demand. This program resulted in better income for artisanal fishers by revaluing the fish products and increasing demand of other species (the information does not provide and estimated value)	Interviews with Peruvian Fisheries Officials	<b>Fish Processing</b> Marketing and Price Support Programs <ul style="list-style-type: none"> <li>Other Marketing and Price Support Programs</li> </ul>
PE 3.0	PERU Support and Promotion	To understand why this program is important, there is a need to say that there are approximately 52,000 artisanal fishers and processors in Peru, and that their activities provide some 80% of the fresh fish (domestic demand), which is some 240,000 tons/year  FONDEPES (Fondo Nacional de Desarrollo Pesquero-National Fund for Fisheries Development) helped supporting the construction of 3 unloading docks for artisanal fishers and also helped on complementary in 14 fishing infrastructures, with a total investment of some \$ 6 million dollar US.  FONDEPES also gave 136 credits under “promotional conditions” (couldn’t find what this means) for construction and re-equipment of vessels, to get nets and fishing tools, engines and navigation, and fish school detection devices, and isothermal and refrigeration equipment for fish transport. The amount of it is \$856,000 US	Interviews with Peruvian Fisheries Officials	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets.</li> </ul> Marketing and Price Support Programs <ul style="list-style-type: none"> <li>Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets.</li> </ul>
PE 4.0	PERU Centro de	Since its creation (could not find when) it has trained 11,500 fishers	Interviews with Peruvian Fisheries Officials	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Entrenamiento Pesquero de Paita (Paita's Fisheries Training Centre)  Year Established: Periodically	In '97-'98 2,969 fishers were trained with different skills (motors, fishing techniques, etc.), and during the season known as "El Niño" it helped training fishers for the catch of alternative species (costs of the program not provided).		<ul style="list-style-type: none"> <li>R &amp; D-to develop new fisheries technologies</li> </ul>
PE 5.0	PERU  FONDEPES	In the period of '92-'98 FONDEPES has been able to finance a great number of infrastructure and equipment projects with a total value of \$32,904,973 dls (USD \$9.15 million).  1. Regarding artisanal fisheries, the total amount spent was \$ 31,938,137 in the following projects: 2. Building of 17 docks and artisanal unloading areas, with an investment of \$ 16,269,809 US dollars. 3. Complementing works for the expansion and improvement of artisanal unloading areas in 21 docks and fishing, with a total cost of \$3,080,718 US dollars. 4. Civil works and installation of cooling warehouses in 6 artisanal unloading areas with a cost of \$300,152 US dollars. 5. Building of two fishing ports in Chimbote and Morro Sama with a total investment of \$9,134,242 US dollars.	Interviews with Peruvian Fisheries Officials	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> </ul> <b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants-for fisheries enterprises</li> </ul> <b>Fish Processing</b>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ol style="list-style-type: none"> <li>6. Building of six marketing modules in the interior, with a total cost of \$631,365 US dollars.</li> <li>7. Works to support the artisanal processing activities with an investment of \$2,521,851</li> <li>8. Regarding aquaculture, the total amount spent was \$966,836 US dollars for the following project:</li> <li>9. Building of seven pilot centres and aquaculture production units.</li> </ol>		<p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>
<b>PE 6.0</b>	<p><b>PERU</b></p> <p>Investment in equipment, installation, and cooling warehouses</p>	<p>A total amount of 7,586,723 dlls (USD \$2.15 million) was spent in this project with the objective of facilitating the preservation of the hidrobiological resources by keeping them refrigerated during the stocking, transporting, and marketing processes.</p>	<p>Interviews with Peruvian Fisheries Officials</p>	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>
<b>PE 7.0</b>	<p><b>PERU</b></p> <p>Credits (loans) for the development of artisanal fishery and aquaculture</p>	<p>Between 1992 and 1998 FONDEPES gave 1,798 credits (loans) for a total amount of \$ 19,849,036 dlls (USD 5.6 million).</p> <ol style="list-style-type: none"> <li>1. \$ 1,677,910 (USD \$ 457,000) on 764 loans for the equipment of artisanal fishing vessels (motors and nets).</li> <li>2. \$ 3,982,534 (USD \$ 1.11 million) on 342 loans for the construction and equipment of artisanal fishing vessels.</li> <li>3. \$ 4,687,783 (USD \$ 1.34 million) on 371 loans for the re-floating (put in the water again) of</li> </ol>	<p>Interviews with Peruvian Fisheries Officials</p>	<p><b>Capture Fisheries</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Loan Guarantees</li> </ul> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> <li>• Enhancement- to provide port improvements for fishing fleets</li> <li>• Other capital support programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>artisanal fishing vessels.</p> <p>4. \$ 5,163,270 (USD \$ 1.47 million) on 81 loans for iso-thermal vehicles.</p> <p>5. \$ 660,251 (USD \$188,000) on 115 loans for the diversification of artisanal fisheries.</p> <p>6. \$ 112,499 (USD \$ 32,000) on 67 emergency loans.</p> <p>7. \$ 1,708,636 (USD \$ 485,000) on 28 loans for aquaculture.</p> <p>8. \$ 1,856,153 ( USD \$ 514,000) on 30 loans for other programs.</p>		<p><b>Aquaculture</b> Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Loan Guarantees- including loans provided by private lenders and guaranteed by government</li> </ul> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Other capital support programs</li> </ul>
<b>PE 8.0</b>	<p><b>PERU</b></p> <p>Support to artisanal fishery and small and medium aquaculture</p>	<p>The fisheries sector, through FONDEPES, is planning on continue the support to artisanal fishing activities and small and medium-scale aquaculture in order to strengthen its action in the development of national fisheries. A total amount of \$30,501,400 dlls is planned to be spent between July 1998 and the year 2000, for the following projects:</p> <p>1. \$ 18,726,500 (USD \$5.4 million) for artisanal fishery and aquaculture infrastructure</p> <p>2. \$ 3,943,200 (USD \$1.1 million) in equipment for</p>	Interviews with Peruvian Fisheries Officials	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul> <p><b>Aquaculture</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>the fisheries infrastructure</p> <p>3. \$ 3,975,900 (USD \$ 1.1 million) for operation of aquaculture projects</p> <p>4. \$ 2,435,600 (USD \$ 685,000) in loan programs</p> <p>5. \$ 1,420,200 (USD \$ 400,000) for rehabilitation and/or reconstruction after "El Niño" year 5. \$ 1,420,200 (USD \$ 400,000) for rehabilitation and/or reconstruction after "El Niño" year</p>		
<b>PE 9.0</b>	<p><b>PERU</b></p> <p>Fleet Renewal and Modernisation</p> <p>Year Established: 1999</p>	<p>Intended Program Recipients: To reduce catch capacity</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): US \$ 200 millions - (1999)</p> <p>Department responsible for the program: Ministry of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Not fixed</p> <p>Policy Objectives of the Program: Reduce the daily catch capacity of fishing boats. Improve conservation on board, in order to bring raw materials in better conditions.</p>	The Peruvian Institute of Fisheries Technology (ITP)	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs:</p> <ul style="list-style-type: none"> <li>• Fleet Renewal and Modernisation</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description: Each fishing boat is going to pay US \$ 10.00 / ton of fish.</p> <p>Government will get money. To buy old fishing boats to take them out of fleet. Until reduce at least 30 % of capacity, this money will be refundable with the above payment by all fishermen.</p>		
<b>PE 10.0</b>	<p><b>PERU</b></p> <p>Export Marketing Programs</p>	<p>Intended Program Recipients: Private companies</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): Not indicated</p> <p>Department Responsible for the Program: PROMPEX</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program: To promote all possible opportunities for export to any place in the world.</p> <p>Program Description: Find new opportunities to export. Find new markets to introduce products. Make a formal and continuous offer, and interesting</p>	<p>The Peruvian Institute of Fisheries Technology (ITP)</p>	<p><b>Capture Fisheries</b> Marketing and Price support Programs</p> <ul style="list-style-type: none"> <li>• Export Marketing Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		volumes for export.		
RP 1.0	<p><b>REPUBLIC OF THE PHILIPPINES</b></p> <p>Direct Assistance to Fishers and fishworkers to find alternative employment</p>	<p>Intended Recipient: small-scale fishers, particularly those operating in overfished areas</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: USD \$75,000, PhP 3,000,000 in 1998.</p> <p>Department Responsible for the Program: Department of Agriculture/Bureau of Fisheries and Aquatic Resources (DA-BFAR).</p> <p>Name of Legislation or Mandate Establishing the Program; Presidential Decree No. 704; Republic Act No. 8550.</p> <p>Policy Objective of the Program: To reduce fishing effort in overfished nearshore areas and traditional fishing grounds.</p> <p>To contribute to poverty alleviation and the provision of supplementary livelihood</p> <p>Program Description: The retraining of fishers and fishworkers to assist them to find alternative employment is part of the regular training and extension activities of BFAR</p>	Interviews with Philippine Officials and review of Philippine Regulations	<p><b>Capture Fisheries</b></p> <p>Direct Assistance to Fishers and Fisheries Workers:</p> <ul style="list-style-type: none"> <li>• Worker Adjustment Programs</li> <li>• Fisher Retraining</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
RP 2.0	<p><b>REPUBLIC OF THE PHILIPPINES</b></p> <p>Capital and Infrastructure Support Program</p> <p>Year Established: 1976</p>	<p>Intended Recipient: Commercial and municipal capture fisheries, aquaculture and fish processing sectors</p> <p>b</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: PhP 87,200,000 (USD \$2.18 million) in 1998.</p> <p>Department Responsible for the Program: Department of Agriculture/Philippine Fisheries Development Authority</p> <p>Name of Legislation or Mandate Establishing the Program; Presidential Decree No. 997- Creating the Philippine Fisheries Marketing Authority (PFMA), as amended by Executive Order 772, renaming PFMA as Philippine Fisheries Development Authority (PFDA)</p> <p>Policy Objective of the Program: To promote the development of the fishing industry and improve the handling, preserving, marketing and distribution of fishes and fishery products</p> <p>Program Description: Including the establishment and operation of fish ports, fish markets, ice plants and cold storage's and other marketing facilities</p>	Interviews with Philippine Officials and review of Philippine Regulations	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> <li>Other capital support programs</li> </ul> <p>Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>RP 3.0</b>	<p><b>REPUBLIC OF THE PHILIPPINES</b></p> <p>Fisheries Management and Conservation Programs</p> <p>Year Established: Continuing program of DF-BFAR</p>	<p>Intended Recipient: All stakeholders in the Fishing industry</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: PhP 6,000,000 (USD \$150,000) in 1998</p> <p>Policy Objective of the Program: To enhance the fish stocks in inland communal bodies of water such as lakes, rivers, reservoirs, etc.</p> <p>Program Description: Includes the production of tilapia and carp fingerlings in BFAR fishery centers/stations and local government hatcheries for stocking in communal waters to enhance the fish stock.</p> <p>Major Fish Stocks Affected by the Program: tilapia and carp</p>	Interviews with Philippine Officials and review of Philippine Regulations	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries Management and Conservation Programs</li> </ul> <p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Programs- including fish habitat improvements, release or juveniles, etc</li> </ul>
<b>RUS 1.0</b>	<p><b>Ryba</b></p> <p><b>RUSSIA</b></p>	A governmental fisheries development program approved in October 1995, called "Ryba," proposed major scrapping of vessels and replacement of the fleet with new factory trawlers. By the year 2001, 77% of the Russian fishing and 60% of the support fleet that was in service in 1992 is to be scrapped or completely rebuilt. These vessels are being replaced by new factory trawlers from Norway, Germany, and	Produced by the North Pacific Fishery Management Council-NOAA Coop. Agreement #97-NA77FC006  North Pacific Fishery	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Fleet Renewal and Modernisation</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Spain. Kaczynski estimated that the total cost of the renewal of the Russian fleet in domestic shipyards would be on the order of \$1 billion, and maintenance and repairs of existing vessels would cost USD \$2.8 billion until those vessels could be scrapped. Financing would be secured by government guarantees of foreign commercial credits.</p> <p>These national programs are placing tremendous pressure on Russian companies to obtain foreign currency and increase their quota share. The situation is ripe for overrunning quotas and underreporting catches, as long as the hard currency keeps flowing in. The goal of Ryba is to maintain a catch level of 4.2 million metric tons by the year 2000, with 71-76% of the total catch coming from the Russian Exclusive Economic Zone (Zilanov 1996; Pacific Rim Fisheries Update: 2/1996). An even more ambitious program was announced by the Federal Fisheries Committee in January 1997. It aims to raise fish catches by 50% to 6 million metric tons by the year 2010 (Shuster 1997). The program will entail major investments by fishing companies and foreign investors to overhaul old and build new catcher and factory trawler vessels and to modernize shore-processing plants.</p>	<p>Management Council Report to Congress</p> <p>Russian Far East Fisheries Management, by Clarence G. Pautke, Ph.D. Executive Director</p> <p>North Pacific Fishery Management Council 605 West 4<sup>th</sup> Avenue, Suite 306 Anchorage, Alaska 99501</p> <p><a href="http://russia.shaps.hawaii.edu/fishing/country/russia/fish-rfe-all.html">http://russia.shaps.hawaii.edu/fishing/country/russia/fish-rfe-all.html</a></p>	
<b>SIN 1.0</b>	<b>SINGAPORE</b>  Provision of fish	Intended Program Recipients: Fish importers, fish retailers	Singapore Department of Fisheries	<b>Capture Fisheries</b> Marketing and Price Support Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>auctions or other sales facilities and services. - for Capture Fisheries</p> <p>Year Established: 1969 (Jurong Fishing Port), 1997 (Senoko Fishing Port)</p>	<p>Geographic Scope: National</p> <p>Estimated annual cost of the program): \$3,420,640 (USD \$2 million)</p> <p>Year: FY1998 (Apr 97 - Mar 98)</p> <p>Department responsible for the program: Primary Production Department</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act and Wholesome Meat and Fish Act.</p> <p>Policy Objectives of the Program: To provide centralized, hygienic wholesale markets for the auction and distribution of fish in accordance to the Fisheries Act and Wholesome Meat and Fish Act. It is also to enable the quantity and price of fish auctioned to be monitored, to ensure that there is a stable supply of fresh fish for local consumption. The program allows a fresh fish inspection system to be implemented to ensure that fish and fishery products sold at the fishing ports are safe and wholesome for human consumption.</p> <p>Program Description: The auction market at Jurong Fishing Port (JFP) has an area of 9,000 sq meters and comprises 110 market lots. The one at Senoko</p>		<ul style="list-style-type: none"> <li>Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		Fishing Port (SFP) has an area of 2,607 sq meters and 36 market lots. Market users have to pay the prevailing market rates for rental of facilities and fees for services.		
<b>SIN 2.0</b>	<p><b>SINGAPORE</b></p> <p>Name of Program: Harbour Facilities and Moorage - provided free or at low rates for fishing fleets. - for Capture Fisheries.</p> <p>Year Established: 1969 (Jurong Fishing Port), 1997 (Senoko Fishing Port)</p>	<p>Intended Program Recipients: Local and foreign fishing vessels</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): \$3,420,640 (USD \$2 million) Year: FY1998 (Apr 97 - Mar 98)</p> <p>Department Responsible for the Program: Primary Production Department</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Act</p> <p>Policy Objectives of the Program: To provide designated areas for fishing vessels to load and unload fish and fishery products, and to provide facilities for berthing and/or mooring of vessels.</p> <p>Program Description: Jurong Fishing Port (JFP) has a wharf 400 meters in length, and caters to foreign vessels for the landing of fresh fish. Senoko Fishing Port (SFP) is equipped with a jetty 180 meter long. Both fishing ports offer bunkering services such as</p>	Singapore Department of Fisheries	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>Fishing Port Infrastructure Enhancement- to provide port improvements for fishing fleets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>crane service and the sale of fuel and fresh water to fishing vessels. In addition, the ports provide documentation services such as the issuance of port clearance and arrival reports.</p> <p>Berthing charges are levied on both local and foreign fishing vessels according to length of vessel and duration of stay. These charges are gazetted in the Fisheries Act under the Fisheries (Fishing Harbour) Rules. Charges are based on full recovery of cost for the management and operation of the ports.</p>		
CT 1.0	<p><b>CHINESE TAIPEI</b></p> <p>Improvement and Promotion of Fisheries Technologies</p> <p>Fish Product and Promotion</p>	<p>Under thoughtful planning, we have run heavy promotional blitzes through TV and radio channels right before huge seasonable fish catch so that consumers will timely buy up high quality fish products while fresh. We also run heavy publicity to Promote native fish products and set minimum price level for milkfish and some Other major species.</p> <p>Under the policy, such native fish products are purchased by the fishermen's association under government subsidies for processing and freezing and this Bureau subsidizes the variances and warehouse rental and freight whenever the prices go down below the specified minimum. This effort virtually helps safeguard reasonable income to fishermen. The Executive Yuan promulgated "Regulations Governing Revenue, Expenditure, Custody and Disbursement of Fish Product Balance Fund" in April 1994. Under the Regulations, whenever prices of mackerel, sardine, squid, sawry, oceanic shrimps (excluding lobsters),</p>	<p>Taiwan Fisheries Bureau (TFB)</p> <p><a href="http://www.tfb.gov.tw/tfb3/tfb3g3.htm">http://www.tfb.gov.tw/tfb3/tfb3g3.htm</a></p>	<p><b>Capture Fisheries</b></p> <p>Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		hair-tail fish, gunard, milkfish and such officially promulgated species come down in a row, the government would provide subsidies with the balance fund. Taiwan Fisheries Bureau has faithfully implemented the Cabinet policy.		
CT 2.0	<p><b>CHINESE TAIPEI</b></p> <p>Improvement and Promotion of Fisheries Technologies</p> <p>Establishment of Omnidirectional Marketing Channels and Promotion</p>	<p>Fish product marketing systems should be timely updated to live up to the transformed consumption type. Under intensive assistance of Taiwan Fisheries Bureau, the organizations involved in production, manufacture and marketing of fish products have held lots of promotions at home and abroad. We have further assisted fishermen's associations in direct selling of fish products, building up brand names, in small pack aging of sashimi, hard clamps, shells, shrimps and crabs, for instance. We have, besides, also helped fishermen's associations to carry out joint marketing, with wound 25% of the total trade in consumer markets, marketed through the joint efforts. This has proven to be a very successful effort to cut short marketing channels and bring added gains to fishermen. We also established Fish Product Exhibition &amp; Marketing Center in Taipei, through which regional fishermen's associations display and sell their fish products. We have, as well, set up direct selling centers at Wuchi, Fuchi and Keelung, and with some others under construction to better perform the function to balance production and marketing. We have helped regional fishermen's associations to</p>	<p>Taiwan Fisheries Bureau (TFB)</p> <p><a href="http://www.tfb.gov.tw/tfb3/tfb3g2.htm">http://www.tfb.gov.tw/tfb3/tfb3g2.htm</a></p>	<p><b>Capture Fisheries</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul> <p><b>Fish Processing</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Market Price Support- government support to ensure minimum prices or to keep domestic prices above world prices</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		supply fish products directly to the armed forces. To have the efforts of fisheries development well known to public, we had produced "The Fishery Melodies" publicity TV program as a very successful mean, of social education.		
CT 3.0	<p><b>CHINESE TAIPEI</b></p> <p>Improvement and Promotion of Fisheries Technologies</p> <p>Management of Fish Markets and Markets Products</p>	<p>Except fish catch yielded in foreign fishing bases which is directly marketed locally abroad, and some fish catch which is put under direct selling or storage, all fish products are marketed through fish markets. Currently there are 35 origin markets and 22 consumer markets, a total of some 230,000 M.T. of fish products valued at some NT\$13.2 billion (USD \$430,000 million) of the former and some 120,000 M.T. valued at some NT\$8.4 billion (USD \$274 million) of the other. To further boost fish market efficiency, we have tried extremely hard to help fish markets strengthen personnel, financial and business management and help them install added equipment, relocate or expand small sized markets. Those origin markets have been continuously built and expanded in line with establishments of new fishing ports. In consumer markets, we have completed relocation of four markets at Chiayi, Hsinchu, Puhsin and Taichung. and carried out other projects in line with local financial standings. Meanwhile, we have helped setup freezing and refrigerating storage to keep fish products fresh and flexible adjust production and marketing performance. Fish sanitary examination centers have been set up in major fish markets to safeguard</p>	<p>Taiwan Fisheries Bureau (TFB)</p> <p><a href="http://www.tfb.gov.tw/tfb3/tfb3g1.htm">http://www.tfb.gov.tw/tfb3/tfb3g1.htm</a></p>	<p><b>Capture Fisheries</b></p> <p>Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		consumers' health. To further help elevate quality of services in fish markets, we have subsidized fish markets in computerized accounting, sound recording for auction, close TV facilities. In fact, more than a half of fish markets have been computerized for their accounting. All the efforts keep fishermen closely informed of market updates to sell fish in the most favorable possible terms. Through the systems established with videotex, fishprices in 9 origin spots, 8 consumer spots and 20 wholesale markets are instantly reported. Voice inquiry systems are also available through telephone at the same time.		
CT 4.0	<b>CHINESE TAIPEI</b>  Improvement and Promotion of Fisheries Technologies  Planning of Fishery Related Information	We have built online operation and developed office automation (OA) software systems in an effort to set up overall information systems promote fisheries administration in order to better serve the public. So far we have completed nation wide fishing management network frameworks and information system through online operation. BBS and internet to computerize the administrative systems and make fishing information popular. In line with national economic construction plans, we have worked out short-term mid-term and long-term development plans as well as annual production and marketing projects.	Taiwan Fisheries Bureau (TFB)  <a href="http://www.tfb.gov.tw/tfb3/tfb3h1.htm">http://www.tfb.gov.tw/tfb3/tfb3h1.htm</a>	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Other fisheries management and conservation programs</li> </ul>
CT 5.0	<b>CHINESE TAIPEI</b>  Improvement and	In the wake of advancement of technologies and betterment of skills, a variety of scientific, mechanized, effort-saving and Up-to-date fisheries instruments and	Taiwan Fisheries Bureau (TFB)	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Promotion of Fisheries Technologies  Promotion of Fisheries Techniques	<p>methods have come into being. In response, we have held seminars, workshops, technique demonstration forums and presentation of hands-on experiences along with heavy promotion of up-to-date fishing instruments, equipment, gears, methods and know-how. In appropriate intervals, we have printed and handed out fishing extension in weekly or monthly, Complimentary to fishermen to help them keep abreast of the advancing times. Further by means of subsidies or soft loans, we have helped them purchase modern fishing gears, instrument, and build energy-saving fishing beats. These efforts have significantly benefited in better yields and fishing production. We have meanwhile tried hard to establish disaster forecasting and alarm systems to help fishermen minimize their losses in an event of typhoon and other natural disasters. The alarm system, include notably fisheries forecasting system and the alarming systems. In the former, we have published "Fisheries Weekly" reporting and forecasting major fishery information to advise fishermen to take right measures before disasters. In the latter, our Emergency Countermeasure Panel informs all mass media through telephones or fax before major disasters so that other agencies concerned as well as fishermen will take right countermeasures beforehand.</p>	<a href="http://www.tfb.gov.tw/tfb3/tfb3e1.htm">http://www.tfb.gov.tw/tfb3/tfb3e1.htm</a>	
<b>CT 6.0</b>	<b>CHINESE TAIPEI</b>	Through our promotion of aquacultural fisheries in an attempt to guide aquacultural fishermen into well-	Taiwan Fisheries Bureau (TFB)	<b>Aquaculture</b> Capital and Infrastructure

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Improvement and Promotion of Fisheries Technologies</p> <p>Planning and Management of Aquaculture</p>	<p>ordered development within the projected regions, a total of 10,472 hectares of fisheries in forty zones have been set up, at a NT\$1.89 billion (USD \$59.8 million) investment, total 40 country-cities. In the efforts, we establish water supply, drainage, road systems, power supply, marks and signs for production zones, peripheral works, landscaping, fishing processing and packaging yards, exhibition halls, management offices, etc. We also provide preferential subsidies of circulatory water facilities and automation equipment to improve hardware facilities and help bring down costs. Our efforts to help production and marketing inside the zones include: Winning over preferential rates for electricity bills during non-peak hours, purchases of fry, supplies and feeds in package, assistance in promoting circulatory water aquacultural techniques in order to build overall production functions. To effectively convey production information, the government authorities have further subsidized the establishment of videotex, computerized receiving facilities available for joint use. We also keep them closely informed of fishing market updates to help them take firm command of the optimal timing of deliveries to combine production and marketing into a whole.</p>	<p><a href="http://www.tfb.gov.tw/tfb3/tfb3e2.htm">http://www.tfb.gov.tw/tfb3/tfb3e2.htm</a></p>	<p>Support Programs</p> <ul style="list-style-type: none"> <li>• Development Grants-for fisheries enterprises</li> <li>• Other capital support programs</li> </ul> <p>Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>
<b>CT 7.0</b>	<p><b>CHINESE TAIPEI</b></p> <p>Improvement and</p>	<p>To help all fisheries Products spruce up quality and image and safeguard consumers' health, we have Created "Hai Yen" as the brand name of refined fish</p>	<p>Taiwan Fisheries Bureau (TFB)</p>	<p><b>Capture Fisheries</b></p> <p>Marketing and Price Support Programs</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Promotion of Fisheries Technologies  Establishment of Marine Processing Brand Name	products to verify the fine quality, to be commonly used for marine products. With the help of Food Industry Development & Research Institution, we have established "Hai Yen," manual and invited business, academic and official leaders to team up with experts for joint deliberation. All products having passed the joint screening process are accredited for "Hai Yen" brand name. In the initial phase, the products granted to use it include prepared marine products, dried, canned and fresh fisheries products and others. Certainly we have enforced harsh follow-up tracing of the accredited products to assure safe and sanitary quality. As a result of our efforts in this regard, consumers, manufacturers and sellers have fostered strong confidence in the created brand name of "Hai Yen" the fine quality, sanitation and safety.	<a href="http://www.tfb.gov.tw/tfb3/tfb3e3.htm">http://www.tfb.gov.tw/tfb3/tfb3e3.htm</a>	<ul style="list-style-type: none"> <li>• Fish Product Promotion Programs- including seafood product promotion, labeling and quality enhancement for either domestic or external markets</li> </ul>
<b>CT 8.0</b>	<b>CHINESE TAIPEI</b>  Improvement and Promotion of Fisheries Technologies  Refurbishment of Public Facilities	To better afford provision to fishing boats and upgrade investment environment, the Taiwan Fisheries Bureau has since 1974 vigorously implemented "Phase I and 11 Fishing Port Construction Projects" in coordination with the construction projects of the Central Government and provincial government counterpart funds. With the efforts, we have set up fisherman activity centers, welfare centers, nursery schools, fishery promotion centers, fish marts and wholesale markets, freezing and refrigerating plants, ice crushers, fish unloading machines, fish processing yards, parking lots, fishing	Taiwan Fisheries Bureau (TFB)  <a href="http://www.tfb.gov.tw/tfb3/tfb3f2.htm">http://www.tfb.gov.tw/tfb3/tfb3f2.htm</a>	<b>Capture Fisheries Capital and Infrastructure Support Programs</b> <ul style="list-style-type: none"> <li>• Harbour Facilities and Moorage-provide free or at low rates for fishing fleets</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		gear warehouses, docks, hinges, boat towing channels, fishing gear depots, net-drying yards, signal lamps, paging stations, water supply stations, air-conditioning facilities, service roads and bridges. During 1976-1979 period, a total of 108 projects of public facilities were set up with some NT\$186 million (USD \$6 million) fund. Since 1979, NT\$221 million (USD 7.2 million) fund was invested for Phase I. Project to build 169 projects of public facilities. In Phase II, some NT\$ 1. 148 billion (USD 37.0 million) was invested to build public facilities in 463 cases. For Phase III that starts up in 1997, a total of NT\$1.95 billion (USD 62.8 million) fund will be invested in 240 cases continuously. These efforts have considerably benefited fishermen in their living and fishery development.		
CT 9.0	<p><b>CHINESE TAIPEI</b></p> <p>Improvement and Promotion of Fisheries Technologies</p> <p>Fishing Port Establishment and Management</p>	Fishing Ports, the base home of fishing boats, is vitally important to oceanic fisheries. For the purpose of offering optimal operating environments, the Taiwan Fisheries Bureau is in charge of construction and management of fishing ports in Chinese Taipei. With long coastal lines on this seas locked island, residents in coastal areas take seas as their farms. They are 227 fishing ports throughout the nation according to figures promulgated by the government (215 of Chinese Taipei province). All these fishing ports have been built under this Bureau's supervision and guidance by the Central Government. Meanwhile,	<p>Taiwan Fisheries Bureau (TFB)</p> <p><a href="http://www.tfb.gov.tw/tfb3/tfb3f1.htm">http://www.tfb.gov.tw/tfb3/tfb3f1.htm</a></p>	<p><b>Capture Fisheries</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Harbour Facilities and Moorage-provide free or at low rates for fishing fleets</li> </ul> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> <li>• Fisheries Enforcement</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>we have endeavored to upgrade the ports into added stability, dredged deposit, additional areas and depth, as well as the omnidirectional objectives of fishery production, fishing safety, fishermen living upgraded, improvement of fishery communities and recreations. The Bureau began enforcing "Phase I Fishery Port Construction" in 1980. During the eight years period as of 1987, a total of NT\$5.351billion (USD \$174 million) was invested to build 68 fishing ports. During 1988-1996, "Phase II Fishery Port Construction" was implemented with NT\$16.3981 billion (USD \$527.0 million) investment to build 94 fishing ports. To further resolve the shortcomings and cope with transformation of fishing environments, "Phase III Fishery port Construction" will be continuously carried out, with NT\$13.684 billion (USD \$446 million) invested during seven years 1997-2003, The Fishing Port Law and its Enforcement Rule, were promulgated for enforcement on January 31, 1992 and November 30, 1992. The fishing port classification rules were promulgation by the Council of Agriculture as well. According to Article 14 of Fishing Port Law, Class I and II fishing ports are under management by the Provincial Fishing Port Administration; Class III and IV ones under county and city governments. Currently, there are nine fishing ports of Class I and II under provincial jurisdiction to safeguard sound functions of fishing ports, order, cleanness of the fishing ports in line with the policy crackdown upon</p>		Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		smuggling. This Bureau is proposing that the nine provincial fishing administration offices be set up as early as possible.		
<b>CT 10.0</b>	<b>CHINESE TAIPEI</b>  Name of Program: Training fishermen for second professional skills Year Established: 1996	Intended Program Recipients: Fishermen  Geographic Scope: Regional  Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries law  Policy Objectives of the Program:  1. To equip fishermen with second professional skills and to help them transfer to other industrial sectors 2.To relieve the pressure of over-fishing by guiding fishermen to transfer to other industrial sectors.  Program Description: To equip fishermen who are below 55 years old with industrial skills and to help them transfer to other industrial sectors.  Major Fish Stocks Affected by the Program: There is no data available.	Chinese Taipei Fisheries Administration	<b>Capture Fisheries</b> Direct Assistance to Fishers <ul style="list-style-type: none"> <li>• Fisher Retraining</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
CTP 11.0	<p><b>CHINSES TAIPEI</b></p> <p>Name of Program: Aqua-cultural Facilities Loan</p> <p>Year Established: 1990</p>	<p>Intended Program Recipients: Aqua-cultural fishers</p> <p>Geographic Scope: regional</p> <p>Estimated annual cost of the program (in local currency): NTD 10 million (\$321,000 USD) Year: average of 1996 to 1998</p> <p>Department responsible for the program: Fisheries Administration, Council of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries Law</p> <p>Policy Objectives of the Program: To assist fishermen in improving aqua-cultural facilities.</p> <p>Program Description: Banks and Fisherman Associations offer low interest loans to fishermen based on the sizes of their farms. The Agricultural Development Foundation subsidizes the gap between the guaranteed loan rate and the bank interest rate.</p> <p>Major Fish Stocks Affected by the Program: There is no data available.</p>	Chinese Taipei Fisheries Administration	<p><b>Aquaculture</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>Subsidized Loans</li> </ul>
CT 12.0	<b>CHINESE TAIPEI</b>	Intended Program Recipients: Fishers	Chinese Taipei Fisheries Administration	<p><b>Capture Fisheries</b></p> <p>Direct Assistance to Fishers</p>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Name of Program: The marine insurance on fishing vessels and fishermen Year Established: 1996</p>	<p>Geographic Scope: regional Estimated annual cost of the program (in local currency): NTD 149million (\$4.8 million USD) Year: average of 1996-1998 Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries law Policy Objectives of the Program: 1. To protect fishing vessels and fishermen from marine disasters 2. To take care of the living of fishermen's families when marine disasters occur.</p> <p>Program Description: 1.To provide marine insurance for fishermen in case of death or wound on the sea. 2.To provide marine insurance for owners of fishing vessels which are damaged on the ocean Major Fish Stocks affected by the Program: There is no data available.</p>		<p>and Fisheries Workers</p> <ul style="list-style-type: none"> <li>Other direct payments to Fishers</li> </ul>
<b>CT 13.0</b>	<p><b>CHINESE TAIPEI</b></p> <p>Name of Program: (Other Capital and Infrastructure Support Programs)</p>	<p>Intended Program Recipients: Fishermen</p> <p>Geographic Scope: National Estimated annual cost of the program (in local currency): NTD2.466 billion (\$79.4 million USD) Year Average 1996-1998</p>	Chinese Taipei Fisheries Administration	<p><b>Capture Fisheries</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>State Investments</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1996-1998	<p>Department responsible for the program: Fisheries Administration, Council of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: Fishing Harbor Law</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1.To protect the properties of coastal fishermen by improving fishing harbor facilities.</li> <li>2.To execute multi-functions of fishing harbors.</li> <li>3.To reduce water consumption in the aqua-cultural sector.</li> <li>4. To minimize the impact of the aqua-cultural industry to environment.</li> <li>5.To facilitate the auction of fisheries products and other service in the wholesale market</li> </ol> <p>Program Description:</p> <ol style="list-style-type: none"> <li>1.To construct and repair fishing harbors.</li> <li>2. To strengthen the construction of public shore facilities for fishing villages and fishing harbors.</li> <li>3. To promote transforming pond lands into non-aqua-cultural purposes.</li> <li>4. To facilitate the infrastructure of aqua-cultural industry.</li> <li>5. To promote water reuse technology and facilities.</li> <li>6. To enhance breeding technology of grouper</li> </ol>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>and other marine fish to promote the marine cage-culture and pond sea-water culture. 7. To construct facilities of fish-auction markets.</p> <p>Major Fish Stocks Affected by the Program</p> <ol style="list-style-type: none"> <li>1. To protect lives and properties of fishermen.</li> <li>2. To promote development of sport-fishing.</li> </ol>		
CT 14.0	<p><b>CHINESE TAIPEI</b></p> <p>Name of Program: Developing Domestic Markets for Fisheries Products (Fish Product Promotion Programs)</p> <p>Year Established: 1996</p>	<p>Intended Program Recipients: fishermen and fishermen's association</p> <p>Geographic Scope: Regional</p> <p>Estimated annual cost of the program (in local currency):NTD 194.4 million (\$6.3 million USD)</p> <p>Year: average of 1996-1998</p> <p>Department responsible for the program: Fisheries Administration, Council of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries law</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To increase domestic consumption of fish products.</li> <li>2. To promote the hygienic condition of the fisheries products</li> <li>3. To promote high-quality fisheries products</li> </ol> <p>Program Description:</p> <ol style="list-style-type: none"> <li>1.To improve infrastructure for distributive systems of</li> </ol>	Chinese Taipei Fisheries Administration	<p><b>Fish Processing</b></p> <p>Marketing and Price Support:</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Program</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		fisheries products 2. To enhance labeling and quality of fisheries products for domestic markets 3. To survey consumer behaviours for fisheries products  Major Fish Stocks affected by the Program: There is no data available.		
CT 15.0	<b>CHINESE TAIPEI</b>  Name of Program: Stock Enhancement Programs Year Established: 1986	Intended Program Recipients: Fishermen  Geographic Scope: Regional Estimated annual cost of the program (in local currency): NTD150 million Year: Average 1996-1998 Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries law Policy Objectives of the Program: <ol style="list-style-type: none"> <li>1. To improve fish habitats</li> <li>2. To increase fisheries resources</li> </ol> Program Description: <ol style="list-style-type: none"> <li>1. To lay artificial reefs</li> <li>2. To release juveniles</li> </ol> Major Fish Stocks affected by the Program <ol style="list-style-type: none"> <li>1. Black Sea bream</li> <li>2. Mullet</li> <li>3. Hard clam</li> </ol>	Chinese Taipei Fisheries Administration	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ol style="list-style-type: none"> <li>4. Snappers</li> <li>5. Small abalone</li> <li>6. Pelagic crab</li> <li>7. Japanese sea perch</li> <li>8. Red porgy</li> </ol>		
CT 16.0	<p><b>CHINESE TAIPEI</b></p> <p>Name of Program: Fisheries management Year Established: 1996</p>	<p>Intended Program Recipients: fishermen Geographic Scope: National Estimated annual cost of the program (in local currency): NTD 410 million, (\$13.2 USD) Year: average of 1996~1998 Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries law Policy Objectives of the Program:  <ol style="list-style-type: none"> <li>1. To maintain fishing order</li> <li>2. To improve fishermen's living</li> <li>3. To regulate fishing activities</li> </ol> Program Description:  This program is enclosed as follows;  <ol style="list-style-type: none"> <li>1. To guide and strengthen fishermen's associations</li> <li>2. To provide fishermen with fishing culture and knowledge.</li> <li>3. To direct fishing activities.</li> </ol> Major Fish Stocks affected by the Program:  This program is aimed to help restore inshore fisheries resources.</p>	Chinese Taipei Fisheries Administration	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>CT 17.0</b>	<b>CHINESE TAIPEI</b>  Name of Program: Enhance fisheries Business by Fishermen's association Year Established: 1996	Geographic Scope: regional Estimated annual cost of the program (in local currency): NTD 302.6 million (\$9.7 million USD), Year: average of 1996-1998 Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries law Policy Objectives of the Program: 1. To improve quality and quantity of fishing products to stabilize fishermen incomes 2. To disseminate environment-friendly fishing knowledge to fishermen for sustainability of marine resources 3. To encourage fishermen's associations to transform into industrial organizations in order to better serve fishermen.  Program Description: 1. To help fishermen upgrade their fishing skills by means of workshop 2. To provide more recreational activities in fishermen community 3. To assist fishermen's associations in establishing more effective and systematical operation.  Major Fish Stocks Affected by the Program: There is no data available.	Chinese Taipei Fisheries Administration	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers <ul style="list-style-type: none"> <li>• Fisher Training</li> </ul>
<b>CT 18.0</b>	<b>CHINESE TAIPEI</b>	Intended Program Recipients: Scientific researchers	Chinese Taipei Fisheries	<b>Capture Fisheries</b>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Name of Program: Stock Assessment for Fisheries Resources</p> <p>Year Established: 1996</p>	<p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): NTD88 million (\$2.8 USD million), Year: Average of 1996~1998</p> <p>Department responsible for the program: Fisheries Administration, Council of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: Fisheries law</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To collect accurate fisheries information.</li> <li>2. To establish biological and fishery data bases.</li> <li>3. To improve the assessment of fishery stocks.</li> <li>4. To understand geographical distribution of fishery resources.</li> <li>5. To preserve target species and bycatch species.</li> </ol> <p>Program Description:</p> <ol style="list-style-type: none"> <li>1. This program included scientific researches covering the fishing grounds of Chinese Taipei fishing vessels on the high seas, Chinese Taipei offshore and coastal areas.</li> <li>2. The major methods used before were collecting and compiling catch and effort data, conducting laboratory experiments for better estimation of biological parameters, investigating better methodology of stock assessment, analyzing relationships between population structure and environment.</li> <li>3. To exchange technology and experience for stock assessment, international workshops and symposia</li> </ol>	Administration	<p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Assessment</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>were also convened. Major officials from international fisheries organizations were invited to Chinese Taipei for information and experience exchange.</p> <p>Major Fish Stocks affected by the Program: Tuna, squid, tuna-like species, shrimp, shark, mullet, anchovy.</p>		
CT 19.0	<p><b>CHINESE TAIPEI</b></p> <p>Name of Program: The promotion and management of recreational fisheries(Developing new fisheries ) Year Established: 1996</p>	<p>Intended Program Recipients: County government</p> <p>Geographic Scope: Regional Estimated annual cost of the program (in local currency): NTD30 million (\$965,000 USD), Year:1996-1998 Department responsible for the program: Fisheries Administration, Council of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: The century-across agriculture policy Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To reduce over exploitation of fishery resources.</li> <li>2. To relieve the pressure of fishery-labor shortage.</li> <li>3. To create more job opportunities in fishing villages.</li> </ol> <p>Program Description:</p>	Chinese Taipei Fisheries Administration	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries Management Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ol style="list-style-type: none"> <li>1. To hold activities in which consumers can experience fishery-culture and gourmet sea-food.</li> <li>2. To build public facilities to benefit recreational fisheries.</li> <li>3. To provide professional training on recreational fisheries.</li> </ol> <p>Major Fish Stocks affected by the Program: All Fishery Resources</p>		
CT 20.0	<p><b>CHINESE TAIPEI</b></p> <p>Name of Program: Developing new fisheries technologies Year Established: 1996</p>	<p>Intended Program Recipients: Fishermen Geographic Scope: regional Estimated annual cost of the program (in local currency): NTD 164 million (\$5.3 million USD), Year: average of 1996 to 1998 Department responsible for the program: Fisheries Administration, Council of Agriculture Name of Legislation or Mandate Establishing the Program: Fisheries Law Policy Objectives of the Program: This program aims to improve standards of living of fishermen and increase quantity of fish by developing new fisheries technology Program Description: This program includes very wide scope of research. The subjects of the project are enclosed as follows:</p> <ol style="list-style-type: none"> <li>1. To improve quality of seafood.</li> <li>2. To enhance amenities of fisheries harbors.</li> <li>3. To increase inhabitants of inshore fisheries.</li> </ol>	Chinese Taipei Fisheries Administration	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D-to develop new fisheries technologies</li> </ul> <p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D-to develop new fisheries technologies</li> </ul> <p><b>Fish Processing</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D-to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>4. To improve diagnosis and treatment of fish diseases.</p> <p>5. To develop technologies of aqua-culture</p> <p>Major Fish Stocks affected by the Program: The program helps to restore the stock of offshore fish.</p>		
<b>THA 1.0</b>	<p><b>THAILAND</b></p> <p>Livestock Raising and Aqua-culture Credit</p>	<p>Under the Royal Decree Regulating the Affairs of the Bank of Thailand, B.E. 2485, Section 12(4), the Bank of Thailand is authorize to provide financial assistance to priority sectors and through refinancing schemes. This scheme is aimed at providing low-cost funds for commercial livestock raising and aquaculture. The Bank of Thailand (BOT) may purchase from commercial banks, the IFCT, Bank for Agriculture and Agriculture Cooperatives (“BAAC”), SIFC, finance companies or finance and securities companies promissory notes drawn by farm owners to finance their operating costs. The amount of refinancing is 50 per cent of the face value of the P/N. Although the maturity of the P/N depends on the type and product of the farm, it may not exceed over five years. The BOT charges commercial banks, IFCT, BAAC, SIFC, finance companies or finance and securities companies 5 per cent p.a. for the refinanced amount while permitting them to charge their customers not more than 10 per cent p.a. for the full amount of P/N</p>	<p>WTO, G/SCM/N/38/THA</p>	<p><b>Aquaculture</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul>
<b>THA 2.0</b>	<b>THAILAND</b>	<p>August 1996-August 2000 Fisheries Department has set up a baht 420 million (USD \$11 million) to</p>	<p>Interviews with Thailand Department of Fisheries</p>	<p><b>Capture Fisheries</b></p> <p>Direct Assistance to Fishers</p>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Diesel Fuel Price Reduction Programme	<p>subsidize the sale of Petrol to fishermen at below-market prices (vessels length not exceed 18 meters to alleviate the immediate socioeconomic problems due to high cost of fisheries operations.</p> <p>The government allocated the funds to subsidize the diesel in the form of discounted coupon and has exerted the condition for fishermen who registered in the programme to change their fishing gear to more selective ones with less fuel consumption in the near future. The programme compensated diesel price in excess of 7.95/litre, but compensation would not go over 0.97 baht/litre. It was initially set for only 1996 but it was extended until August 21, 2000 by Cabinet</p> <p>(Government offering subsidy of bt 0.97 per litre of diesel fuel to August 31 2000, but Fisheries Association of Thailand are demanding bt2 subsidy due to high oil prices)</p> <p>Thai Overseas Fishery Organization urging government to provide 250 million baht (USD \$6.6 million) to shore up the price of trash fish, using in making feed as well as guarantee the price of fish feed at 8 baht per kg</p>	Officials	<p>and Fisheries Workers</p> <ul style="list-style-type: none"> <li>Other Direct Payments to Fishers</li> </ul>
<b>THA 3.0</b>	<b>THAILAND</b> Tuna Price Support Program	Established in 1999 for Tuna Seine Fishermen to stabilize tuna prices for tuna seine fishermen. It supported 2 baht/kg for longtail tuna and 3 baht/kg for “Eastern little tuna” to stabilize longtail tuna price at	Interviews with Thailand Department of Fisheries Officials	<p><b>Capture Fisheries</b> Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>Market Prices Support</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>20 baht/kg and 10 baht/kg respectively</p> <p>The support quota was 8,000 tones for 3 months of support period.</p> <p>Estimated annual cost 20 million baht (USD \$529,100 million)</p>		
<b>THA 4.0</b>	<p><b>THAILAND</b></p> <p>Subsidized Loan</p>	<p>Established in 1999 for deep Sea Tuna Fishery Cooperative by the Cooperative Promotion Department</p> <p>50 million baht (loan) (USD \$1.3 million)</p> <p>12 million baht (subsidized value)</p> <ol style="list-style-type: none"> <li>1. to restructure fishing fleet which operated in the Thai territorial waters to be deep sea tuna</li> <li>2. to provide raw materials for canned tuna industries</li> </ol> <p>The government subsidized a loan of 50 million baht (USD \$1.3 million) at below market rate 4% (market rate 12%)</p> <p>The Deep Sea Tuna Fishery Co-Operative has to pay back 10 million baht every year</p> <p>Subsidized period is 5 years</p> <p>The exact value of the subsidy is only 12 million baht</p>	Interviews with Thailand Department of Fisheries Officials	<p><b>Capture Fisheries Lending Support Programs</b></p> <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		(USD \$317,460), calculated as the difference between market interest rate		
<b>THA 5.0</b>	<b>THAILAND</b>  Agricultural Sector Program Loan	<p>June 10, 1999 the Thai government and the Asian Development Bank reached an agreement to proceed with a US\$600 million loan to finance ambitious agricultural reform to improve management of natural resources, production, development and marketing including: rationalize the use of water resources, improve irrigation delivery improve access of poor and marginal farmers to credit, including credit for non farming activities, reduce the government's intervention in areas of direct input, procurement, price controls, and subsidies. The funds will be jointly financed by ADB and Japan's Overseas Economic Cooperation Fund, which have pledged to contribute \$300 million (USD \$7.9 million) each</p> <p>100 million to develop farm product quality and improve logistics to deliver to local and foreign markets more quickly and effectively. Almost 800 distribution centers operated by Farmers cooperatives or private companies will be set up. Improved credit lines, marketing and management advice and technology to improve productivity</p> <p>85 million (USD \$2.25 million) in credit lines and technology to promote opportunities for short-term income in cultivation, livestock, fishery, and farm product processing</p>	Bangkok Bank, Research Department, June 1999	<b>Fish Processing</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>THA 6.0</b>	<b>THAILAND</b>  Agriculture Ministry	<p>A new master plan drafted by Agricultural Ministry and approved by council of Economic Ministers (June 7, 1999) to improve 12 major farm exports including black tiger prawns. Key elements of the plan include production, processing, credit and marketing aspects.</p> <p>The private sector will be asked to play a bigger role in price support schemes instead of asking government for subsidies.</p> <p>Agriculture Launch 5-year plan starting in 2000 to strengthen long term export competitiveness. The plan will focus on three aspects of development: curbing oversupplies, reducing production costs, and improving production efficiency</p>	Bangkok Post	<p><b>Fish Processing Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Export Marketing Programs</li> <li>• Market Price Support Programs</li> </ul>
<b>THA 6.0</b>	<b>THAILAND</b>  Farmers Assistance Policy Committee	<p>Continue</p> <p>FAP providing 9.98 billion baht (USD 264 million) for production (2.52) and marketing (7.46) of farm products. More than 2 billion baht (USD \$53 million) has been provided to intervene in support of domestic prices of several farm goods including black prawn shrimp.</p>	Bangkok Post	<p><b>Fish Processing Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Export Marketing Programs</li> <li>• Market Price Support Programs</li> </ul>
<b>THA 7.0</b>	<b>THAILAND</b>  Commerce Ministry	<p>Financial support from 1999 through 2003 to small and medium size exporters who want to expand into new markets such as the Middle East, Latin America, Africa</p>	Enterprise Thailand Canada	<p><b>Fish Processing Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Export Marketing Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
THA 8.0	<b>THAILAND</b>  Agro-Estate Plan	<p>Committee on industrial development approved bt 6 billion (USD \$158 million) to establish 5 integrated agro-industrial estates nationwide offering a wide range of investment privileges for estate developers, investors including fisheries. The industrial estates for the fisheries projects would be located in Samul Songkram, Samut Sakorn and Samut Prakam</p> <p>The privileges provided in these projects would be divided between these offered by the industrial Estate and the Thai Board of Investment</p> <p>Industrial estate operators will benefit in terms of lower rate loans and tax exemptions for imported machinery and raw materials. The incentives also include tax reductions for specific businesses. For investors in the estates, incentives would be in terms of soft loans, tax exemptions, common utilities and central markets. The investors would be facilitated in terms of seeking accreditation of industrial standards and other certificates and procurement of raw materials.</p> <p>Apart from the support of common utilities and tax exemptions soft loans and technology transfers will be accessible.</p>	Enterprise Thailand Canada	<b>Aquaculture</b> Lending support Programs <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul> Tax Preferences <ul style="list-style-type: none"> <li>• Income Tax Deferral</li> </ul>
THA 9.0	<b>THAILAND</b>  Kung Krabean Fisheries	Intended Program Recipients: Chantaburi province resident and the surrounding area.	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and conservation Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Research and Development Center Chantaburi Province	<p>Estimated annual cost of the program: \$2Million US.</p> <p>Department responsible for the program: Department of Fisheries</p> <p>Name of Legislation or Mandate Establishing the program: His Majesty the King Initiated Project</p> <p>Policy objectives of the program:</p> <ul style="list-style-type: none"> <li>• To promote sustainable shrimp culture</li> <li>• To conduct research on environmental impact from shrimp culture</li> </ul> <p>Program Description: there are different conditions of agricultural practice in each five regions of Thailand. Some specific fish cultural techniques that can be done very well in one region may not be found quite success in another region. His Majesty the King, therefore, has established Agricultural Research and Development Centers in many regions throughout the country responsible for doing research using advance technologies that are suitable for specific area. The centers will provide suitable agricultural program for demonstrating and promoting to the local people. Dept. of Fisheries involve in the Kung Krabaen Research and Development Center by providing technical support to the project such as producing of brackish-water fish culture, training farmers and students, monitoring of environmental condition in</p>		<ul style="list-style-type: none"> <li>• Stock Enhancement Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		Kung Krabaen bay. Major fish stocks affected: Penius and Seabass		
<b>THA 10.0</b>	<b>THAILAND</b>  Pasak Basin Development Project  Year Established: 1998	Intended Program Recipients: People living in irrigated area and Lop Buri and Saraburi resident  Estimated annual cost of the program: Approx. \$750,000 US per year and approx. \$3 Million US in total.  Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiated the Project: The Cabinet Approval  Policy Objectives of the Program: 1. To help farmers and the villager in the project area to gain more income from fish culture 2. To promote responsible fishery practice among fish mongers in the project area  Program Description:  Pasak River Basin locates in the boundary of Lop Buri and Saraburi province. During the monsoon season every year, over supply of runoff water cause damage to the people living in the area and also the people living downstream. His Majesty the King gave the idea of constructing of the large reservoir to the Royal Irrigation Department in 1998. With highly concern	Enterprise Thailand Canada	<b>Capture Fisheries</b> Fisheries Management and conservation Programs • Other Fisheries Management and Conservation Programs <b>Aquaculture</b> Fisheries Management and conservation Programs • Other Fisheries Management and Conservation Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>on the impact resulting from the large project, the king also ask the concerning department to provide suitable mitigation for those who suffer from inundating. The development plans also include resource allocation and the introduction of new careers. Fishing is one of the careers that can help people increase their income. The Department of Fisheries are involved in the project by promoting and developing fishing careers to people in the Pasak River Basin, establishing fishery station for supporting restocking program, establishing Fishery Patrol Unit for Resource Conservation Program and surveying aquatic ecosystem and water quality for environmental protection.</p>		
<b>THA 11.0</b>	<p><b>THAILAND</b></p> <p>Pak Panang River Basin Development Project</p> <p>Year Established: 1997-2001</p>	<p>Intended Program Recipients: Pak Panang District Nokom Sri Thamrat Province Resident.</p> <p>Estimated annual cost of the program: \$300,000 U.S.</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiated the Project, The Cabinet Approval</p> <p>Policy Objectives of the Program:</p> <p>1. To allocate the resource utilization by separating</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries Management and Conservation Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>users into two groups bases on the types of water used.</p> <ol style="list-style-type: none"> <li>2. To uplift the standard of living of people in the project area by promoting sustainable agricultural practice such as environmental friendly fish and shrimp</li> <li>3. To restore fishery resource in the Pak Panang River Basin</li> </ol> <p>Program Description: The problem of Pak Panang River Basin is the penetration of saline water into fresh water agricultural area. Rice field and other freshwater plants affect from saline water by reducing their production. In addition, salt water is also drained out from shrimp farms located inland far from the sea which cause more damage to the freshwater agricultural products. His Majesty the King has tried to solve the problem by constructing the dam to protect seawater penetration. Beside the dam construction, the King has planned for relocating agricultural activities based on the types of water used. Shrimp farms must be located near shore and provided with Seawater Irrigation system, which can help reduce environmental problems. On contrary, freshwater agriculture activities must be located inland and supported with advance agricultural techniques.</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
THA 12.0	<p><b>THAILAND</b></p> <p>Fish Culture Demonstration in the KAO Sorn Research and Development Center, Chachoeng Sao Province</p> <p>Year Established: 1997-2001</p>	<p>Intended Program Recipients: Chachoeng Sao Province Resident and Surrounding Area</p> <p>Estimated Annual Cost of the Program: \$150,000 US</p> <p>Department Responsible for the Program: Department of Fisheries</p> <p>Name or Legislation or Mandate Establishing the Program: His Majesty the King Initiated Project.</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To develop and promote aquatic animal culture as well as to increase protein consumption to the people in the project area</li> <li>2. To educate people, student and farmers on aquatic resource conservation and the sustainable use of resources.</li> </ol> <p>Program Description: There are different conditions of agricultural practice in each of the five regions of Thailand. Some specific fish cultural techniques that can be done very well in one region, may not be find the same success in another region. His Majesty the King, therefore, has established Agricultural Research and Development Centers in many regions throughout the country responsible for doing research using advance technologies that are suitable for a specific area. The centers will provide suitable agricultural</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs:</p> <ul style="list-style-type: none"> <li>• Stock enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		program for demonstrating and promoting to the local people. Dept. of Fisheries involve in the Kao Hin Sorn Research and Development Center by providing technical support to the project such as fish production, fish distribution, fish culture techniques training, fish culture demonstration		
<b>THA 13.0</b>	<p><b>THAILAND</b></p> <p>Pikuntong Research and Development Center, Naratiwas Province</p> <p>Year Established: 1982</p>	<p>Intended Program Recipients: People in the Pikuntong Center as well as Naratiwas people and surrounding area</p> <p>Estimated annual cost of the program: \$150,000 U.S.</p> <p>Department Responsible for the Program: His Majesty the King Initiated Project.</p> <p>Policy Objectives:</p> <ol style="list-style-type: none"> <li>1. To do research and development on peat bogs in order to change them to be the productive agricultural land.</li> <li>2. To do research on various forms of fish culture in the highly acidic water condition resulting from peat bog</li> <li>3. To establish the Agricultural Know how Distributing Center for the villagers</li> <li>4. To provide socio-economic development to the people from 8 villages living in the peat bog</li> </ol> <p>Program Description: There are different conditions of agricultural practice</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs:</p> <ul style="list-style-type: none"> <li>• Stock enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>in each five regions of Thailand. Some specific fish cultural techniques that can be done very well in one region may not be found quite as successful in another region. His Majesty the King, Therefore, has established Agricultural Research and Development Centers in many regions throughout the country responsible for doing research using advanced technologies that are suitable for the specific area. The centers will provide suitable agricultural programs for demonstrating and promoting to the local people. Dept. of fisheries involved the Pikuntong Research Center by providing variety of fish culture techniques such as the research on the culture of Scapsiam and other freshwater in the peat bogs with highly acidic water and earth pond as well as the research on the culture of Seabass, Ophicephalus, Prawn and Crab.</p>		
<b>THA 14.0</b>	<p><b>THAILAND</b></p> <p>Demonstrating Fish Producing Farm at Taksin Rajaniwes Frontgate, Naratiwas Province</p> <p>Year Established: 1990</p>	<p>Intended Program Recipients: Naratiwas resident and the surrounding area.</p> <p>Estimated annual cost of the program: \$75,000 US</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty Project</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To produce fish seed for distributing to fish farmer and also fish stocking program</li> </ol>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs:</p> <ul style="list-style-type: none"> <li>• Stock enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>2. To promote and demonstrate earthen fish culture  3. To increase number of fish farmers in Naratiwas province.</p> <p>Program Description: The best source of protein is protein from fish. His Majesty the King has tried to promote fish culture to the farmers to increase fish consumption. However, fish seed in Naratiwas province is hard to find. In order to get enough fish seed. His Majesty supported the Department of Fisheries by setting up a fish producing unit in front of his palace that produced fish seed, and is a setting to train fish farmers.</p> <p>Major Fish Stocks Affected by the Program: Puntius, Tilapia, Carp</p>		
<b>THA 15.0</b>	<p><b>THAILAND</b></p> <p>Demonstrating Fish Farm Establishing Under His Majesty the King</p> <p>Year Established: 1998-2002</p>	<p>Intended Program Recipients: Sameung and Jomtong district Mai province</p> <p>Estimated annual cost of the program: \$15,000 US</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Policy Objectives of the Program: To develop and promote aquatic animal culture as well as to increase protein consumption and generating income to the people in the project area.</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b>  Marketing and Price Support Programs</p> <ul style="list-style-type: none"> <li>• Fish Product Promotion Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description:</p> <p>The best source of protein is protein from fish. His Majesty the King has tried to promote fish culture to the farmers to increase fish consumption. The Department of Fisheries Responsible for producing fish seed, demonstrating and promoting fish culture and training farmers in fish culture techniques</p>		
<p><b>THA 16.0</b></p>	<p><b>THAILAND</b></p> <p>The Aow River Basin Development Project, Lampon Province</p> <p>Year Established: 1993</p>	<p>Intended Program Recipients: Lampon resident and surrounding area.</p> <p>Estimated annual cost of the program: \$35,000 US</p> <p>Department responsible for the program: DOF, RID, RFD, DLD, ALRO</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiated Project</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To increase fish production in order to provide a protein source for the rural people.</li> <li>2. To generate income for the rural people by supporting either their main or supplementary occupation</li> </ol> <p>Program Description: On March 11, 1992 His Majesty the King visited Mae Aow Noi reservoir construction site and gave the idea</p>	<p>Enterprise Thailand Canada</p>	<p><b>Aquaculture</b> Fisheries Management and Conservation Programs:</p> <ul style="list-style-type: none"> <li>• Stock enhancement Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>to help people who suffered from the construction. The villagers will be moved to suitable agricultural land, which was provided by RFD, RID, DLD, and ALRO. In 1993, DoF has involved in the project by providing several programs such as fish Restocking Program and Pond Fish Culture Promotion Program, and in 1994, DoF, also promote Cage Culture Program in the Mac Wang Lam reservoir.</p> <p>Major Fish Stocks Affected by the Program: Tilipia, Carp, and Catfish</p>		
<b>THA 17.0</b>	<p><b>THAILAND</b></p> <p>The Ping river Basin Development Project Chiangmai Province.</p> <p>Year Established: 1992-2001</p>	<p>Intended Program Recipients: The residents of Lamphoon and Chiangmai Provinces</p> <p>Estimated Annual Cost of the Program: \$150,000 US</p> <p>Department responsible for the program: DOF, DLD, RID, DAE</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiated Project</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To ensure the most efficient use of all water resources in the project area.</li> <li>2. To advice and promote responsible fisheries or acceptable fish cultural techniques to all villagers</li> </ol> <p>Program Description: His Majesty the King has</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b> Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Other Capital and Infrastructure Support Programs.</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>concerned on the resource used in Thailand, especially the impact from irrigation system to the villagers living in the Ping River Basin (Hod and Jomtong District, Chiangmai province and Banhong district Lamphoon province). He advised the government agencies e.g. DOF, DLD, RID, DAE in the year 1995 to develop agricultural projects using water resource in the most efficient way uplifting the standard of living of the poor people.</p>		
<p><b>THA 18.0</b></p>	<p><b>THAILAND</b></p> <p>Aquatic Animal Conservation Program (Conversation)</p> <p>Year Established: Not Available</p>	<p>Intended Program Recipients: All Thai people</p> <p>Estimated Annual Cost of the Program (in local currency): B 180,211,000 (USD \$4.8 million)</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program: To control all fish harvesting activities operating under the Thai Fisheries Conservation Regulation including:</p> <ol style="list-style-type: none"> <li>1. Regulation on fish harvesting during the close season.</li> <li>2. Regulation on fish harvesting within the protected area.</li> </ol>	<p>Enterprise Thailand Canada</p>	<p><b>Capture Fisheries</b> Fisheries Management and conservation Program</p> <ul style="list-style-type: none"> <li>• Fisheries Management Program</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>3. Regulation on fish harvesting equipment.</p> <p>Program Description: Fish harvesting in Thailand has been operated over sustainable yield since German high efficient trawler has been introduced into Thailand long time ago. In addition of trawler, Thai fishers also developed illegal fishing equipment, which have more killing power and cause some fish species extinct or almost extinct. The Department of Fisheries established Thai Fisheries Act in 1947, in order to control all illegal fishing as well as develop Fishery Conservation Program such as establishment of Fishery Patrol Unit, doing research on data of fish conservation in order to improve and develop fishery conservation plans doing public relations on Fish Conservation program, training volunteers for Fishery Resource Conservation Program, and promoting Fish Stocking Program.</p>		
<b>THA 19.0</b>	<b>THAILAND</b>  The Brackish Water Fishery Research program (Direct assistance to fishers)  Year Established: Not Available	Intended Program Recipients: All Thai people  Estimated annual cost of the program (in local currency): B 82,867,000 (USD \$2.16 million)  Department Responsible for the Program: Dept. of Fisheries  Name of Legislation or Mandate Establishing the	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• R&amp;D</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To obtain technical data on brackish water fish culture including fish disease, fish food as well as the suitable environment for fish culture.</li> <li>2. To improve brackish water fish culture techniques to obtain highest farm production and distribute such techniques to the farmers.</li> </ol> <p>Program Description: Coastal aquaculture in Thailand is more popular than freshwater aquaculture because of its higher value product. However, brackish water fish farmers still practice by using conventional techniques, which cause low productivity and impact on environment. The Department of Fisheries can help improving these inefficient farm techniques by promoting advance technologies, which obtained from the department research works. The Department of Fisheries also introduced variety of new brackish water species that can be cultured and sold at high price.</p>		
<b>THA 20.0</b>	<b>THAILAND</b>  Chulaborn Development Project	<p>Intended Program Recipients: Southern Thai people particularly people in Patani province</p> <p>Geographic Scope: Not available</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>No. 6 (Direct assistance to fishers)</p> <p>Year Established: 1997 - 2001</p>	<p>Estimated Annual Cost of the Program (in local currency): B 594,400 (USD \$15,800)</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: her Royal Highness Princess Chulaborn Project</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. Study on feasibility of freshwater fish culture in the peat bogs.</li> <li>2. To promote fish farming to be a supplementary occupation.</li> <li>3. To conserve aquatic resources in the peat bogs.</li> </ol> <p>Program Description: In Nongic district Patani province, there was a deserted forest land where Royal Forestry Department gave to H.R.H. Princess Chulaborn for developing to be productive agricultural land by using advance technologies. At the beginning, the princess wanted to help poor people living in the surrounding area by constructing the large well water management shrimp farm equipped with Seawater Irrigation System. However, at that time not even the Dept. of Fisheries could guarantee the success of the project because, beside the lack of</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		reliable technologies, there are plenty of unknown factors that cannot be controlled. Therefore, the project changed to support the suitable fish culture in the peat bog area such as the culture of Sepat siam, which can tolerate and growing well in highly acid water.		
<b>THA 21.0</b>	<b>THAILAND</b> Coral Management Program (Conservation)  Year Established: 1995-2004	Intended Program Recipients: People in the 13 coastal provinces of Thailand namely Chonburi, Rayong, Chantaburi, Trad, Prachuab, Chumporn, Surat Thani, Krabi, Pang Nga, Sarul, Ranong  Geographic Scope: Not available  Estimated Annual Cost of the Program (in local currency): B 10,669,100 (USD \$282,251)  Department responsible for the program: Dept. of Fisheries  Name of Legislation or Mandate Establishing the Program: Cabinet approval  Policy Objectives of the Program: To restore coral reef in Thailand returning to its original conditions.  Program Description: Fishing activities has destroyed Coral reef in Thailand and other substances discharged from industrial activities. The Department	Enterprise Thailand Canada	<b>Capture Fisheries</b> Fisheries management and Conservation <ul style="list-style-type: none"> <li>• Stock enhancement programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		of Fisheries realize that coral reef is important for aquatic habitat, therefore, research programs have been introduced for coral reef restoration including coral reef mapping program, coral reef restoration and management program, training fishery conservation officers, public participation for coral reef conservation program etc.		
<b>THA 22.0</b>	<b>THAILAND</b>  Fisheries Development in the Southern Five Provinces (Direct assistance to fishers)  Year Established: 1993-2001	Intended Program Recipients: The resident of Yala Naratiwas, Patani, Satul and Songkbla  Geographic Scope: Not available  Estimated annual cost of the program (in local currency): B 6,757,400 (USD \$178,767)  Department Responsible for the Program: Dept. of Fisheries  Policy Objectives of the Program: 1. To increase fishery products in the project area for protein consumption of the villagers. 2. To promote fish culture in school in order to get fish for student's lunch and also to educate student on fish cultural techniques. 3. To promote backyard fishponds in the villages for the household fish consumption.  Program Description: In the Southern Five Provinces	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Stock enhancement programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>of Thailand namely Yala, Naratiwas, Patani, Satul and Songkhla, there are Thai people who believe that these provinces should be separated from Thailand because of differences such as religious and language. However, the Thai government has considered these separatists as Thai citizen and has taken a number of measures to change their believe. One of the measures is to develop their standard of living, to ensure that they will not be hungry. Having that policy, the Department of Fisheries provide these people with the Natural Water Fish Stocking Program, the School Fish Pond Program, the Promoting Program on Freshwater Fish Culture Development and the Promoting Program on Brackish water Fish Culture Development.</p>		
<b>THA 23.0</b>	<p><b>THAILAND</b> The Freshwater Fishery Research Program (Direct assistance to fishers)  Year Established: Not available</p>	<p>Intended Program Recipients: All Thai people  Geographic Scope: National  Estimated annual cost of the program (in local currency): B 168,956,900 ( USD \$4,469,735 )  Department Responsible for the Program: Dept. of Fisheries  Name of Legislation or Mandate Establishing the Program:</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To study on freshwater aquacultural techniques and freshwater resources management.</li> <li>2. To increase fishery product in freshwater resources.</li> <li>3. To distribute the results of aquacultural technique studies to the public in order to promote fish culture.</li> </ol> <p>Program Description: The rural households in Thailand are still highly dependent on fishery resources. The average annual per capita consumption of fish and other aquatic animals is between 20-35 kg. The country, with a population of some 62 million, needs at least 2 million metric tons of fish for consumption annually. Most of the fish in the market are marine product and transportation cost of distributing marine fish to the remote inland areas is too high. Therefore, freshwater fish produced right in the remote rural areas will be the best way to support fish consumption in the rural Thai population. The Department of Fisheries involved in the program by providing variety of study concerning freshwater fish producing, fish food, fish disease, fish biology and their habitat etc. Natural freshwater fish restocking program is also support by the Department of Fisheries in order to increase fish production in freshwater resources.</p>		
<b>THA 24.0</b>	<b>THAILAND</b>	Intended Program Recipients: Northern Highland	Enterprise Thailand	<b>Aquaculture</b>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>The Highland Agriculture Development Project (Direct assistance to fishers)</p> <p>Year Established: Not Available</p>	<p>People</p> <p>Geographic Scope: Regional</p> <p>Estimated Annual Cost of the Program (in local currency): B 2,644,000 ( USD \$70,000 )</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To maintain diversity of fish species in the highland area in order to enrich fishery resource and eco-system in the highland area.</li> <li>2. To increase source of protein as well as additional income for the people in the highland area.</li> <li>3. To utilize the suitable unused highland area for fishery purposes.</li> </ol> <p>Program Description: There are many ethnic groups living in the upland areas of Thailand. These people always grown unstable upland cropping and move to the new land (shifting agriculture), which normally encroach into national forest. The government has tried to change their way of life and stopped their</p>	Canada	<p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock enhancement programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		illegal activities by promoting new crop and new animal culture techniques. The Department of Fisheries also support the project by introducing highland fish culture techniques, and producing fish for releasing into natural water.		
<b>THA 25.0</b>	<p><b>THAILAND</b></p> <p>The Huay Lan Development Area, Sankanipang district, Chiangmai province</p> <p>Year Established: 1992-2001</p>	<p>Intended Program Recipients: Chiangmai resident</p> <p>Geographic Scope: Regional</p> <p>Estimated Annual Cost of the Program (in local currency): B 617,760 (USD \$16,343)</p> <p>Department Responsible for the Program: Dept. of Fisheries, Royal Forestry Department</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiation Project</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To manage fishery activities in the Huay Lan reservoir for the most efficient use of fishery resources.</li> <li>2. To produce fish for distributing to the farmers and releasing in the water resource.</li> <li>3. To promote fish culture in the project area for income generating.</li> <li>4. To train the farmers in fish cultural techniques as</li> </ol>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Capital Infrastructure and Support Programs</p> <ul style="list-style-type: none"> <li>• Other Capital and Infrastructure Support Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>well as reservoir fishery management.</p> <p>Program Description: In the year 1987, His Majesty the King asked the Dept. of Fisheries restocking fish in the Huay Lan reservoir to increase fish production in the village's water resource and establishing fish cultural group to manage fishery resource utilization. This activity will hopefully turn into the main occupation of the villagers. To support the King's idea, the Department of Fisheries established fishery station to produce fish and provided fishery information for distributing to the villagers.</p>		
<b>THA 26.0</b>	<p><b>THAILAND</b></p> <p>The Fisheries Development in the Kula Ronghai Development Area</p> <p>Year Established: 1987 (Phase I) 1998-2001 (Phase II)</p>	<p>Intended Program Recipients: The people in the Kula Ronghai Development Area comprising of five provinces namely: Roi-et, Yasotorn, Sri saket, Surin, and Mahasarakam</p> <p>Geographic Scope: Regional</p> <p>Estimated Annual Cost of the Program (in local currency): B 2,903,860 (USD \$76,000)</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>To promote fish culture to the people living in the area in order to be their main or supplementary</li> </ol>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>Stock enhancement programs</li> <li>Fishery Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>occupation as well as to use for household consumption.</p> <ol style="list-style-type: none"> <li>2. To increase fishery production in water resources.</li> <li>3. To educate people on the need for fishery conservation.</li> </ol> <p>Program Description: The Kula Ronghai area used to be the most arid and unproductive land because of the underground salt pan. To develop this land to be productive agricultural land, the Australian government supported the Thai Ministry of Agriculture and Cooperatives during 1987-1992 emphasizing on land development. The Department of Land Development was the main agency along with other department in the Ministry of Agriculture and Cooperatives such as the Department of Fisheries, the Royal Forestry Department, the Department of Agricultural Promotion etc. developing the land for agricultural use. The Department of Fisheries purchased heavy equipment using Australian Fund to construct small fish ponds in the farmer's land and supported them with training on fish cultural techniques. The project successfully ended in 1992 and the villagers have had better choice of career to support their living. In 1998-2001, the Ministry of Agriculture and Cooperatives has planned to turn the Kula Ronghai Development Area to be the intensive agricultural area, which will produce the commercial product. This plan will fit well with the Eighth</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		National Five Years Development Plan and will emphasize on only three provinces namely Roj-et, Surin and Sri Saker.		
<b>THA 27.0</b>	<b>THAILAND</b>  The Fish Culture Demonstration and Promotion Project in the Labansai district Buri Ram province  Year Established: 1995-2000	Intended Program Recipients: The resident of Lahansai district Buri Ram provinces  Geographic Scope: Regional  Estimated Annual Cost of the Program (in local currency): B844,500 (USD \$22,341)  Department Responsible for the Program: Dept. of Fisheries  Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiation  Policy Objectives of the Program:  1. To increase freshwater fish product in the project area.  2. To demonstrate and promote on various fish culture techniques.  3. To distribute fish produced from the project facilities to the villagers and release into natural water.	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Stock enhancement programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Program Description: The best source of protein is protein from fish. His Majesty the King has tried to promote fish culture to the farmers to increase fish consumption. However, fish seed in Buri Ram province is hard to find. In order to get enough fish seed and grown fish for consumption, His Majesty support s the Department of Fisheries to set up Fish Producing and Demonstration Unit in the None Dindang Development Center to promote various fish culture techniques in the Lahansai district Buri Ram province.</p>		
<b>THA 28.0</b>	<p><b>THAILAND</b></p> <p>The Marine Fishery Research Program (Direct assistance to fishers)</p> <p>Year Established: Not Available</p>	<p>Intended Program Recipients: All Thai People</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): B 142,190,700 ( USD \$3.7 million )</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program: To obtain biological data on fishery as well as socio-economic</p>	Enterprise Thailand Canada	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Programs to Assess fish Stocks</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>data of fishermen, which can be used for the Thai fishery resource management planning.</p> <p>Program Description: Fish harvesting in Thailand has been operated over sustainable yield since German high efficient trawler has been introduced into Thailand long time ago. There are several ways to manage fishery resources in Thailand. The best way is to find out sustainable yield in the Gulf of Thailand and make suggestion on optimum utilization levels. The Department of Fisheries by the Marine Division also studies on fishing equipment and other fishery research programs to obtain relevant data, which will be used for planning of sustainable resource utilization.</p>		
<b>THA 29.0</b>	<p><b>THAILAND</b></p> <p>The Phu Sing Agricultural Development Center, Sri Saket province</p> <p>Year Established: 1998-2001</p>	<p>Intended Program Recipients: The resident of Sri Saket Province</p> <p>Geographic Scope: Regional</p> <p>Estimated annual cost of the program (in local currency): B 653,430 ( USD \$17,287 )</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Her Majesty the Queen Initiation Project</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries and Conservation Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To establish the center for training and demonstrating on aquacultural techniques to the people in the project area and the surrounding area.</li> <li>2. To promote fisheries career by giving services on aquacultural related activities to the farmers.</li> <li>3. To increase fish consumption as well as increase farmers' income by selling fish remaining from household consumption.</li> </ol> <p>Program Description: The Phu Sing Agricultural Development area has been evaluated on socio-economic potential and found the area has most potential to establish freshwater aquacultural promoting center for several reason which are:</p> <ol style="list-style-type: none"> <li>1. The area is on the Thai-Cambodia border, which is far away from the sea and sensitive from security problem</li> <li>2. The area completed with irrigation system that full of water supply throughout the year. Therefore, fisheries career is the most suitable to promote to the people living in the area.</li> <li>3. Sri Saket province has been one of the lowest income per capita provinces in Thailand for many years. The province is suffering from high rate of labor migration. Although the province has plenty</li> </ol>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>of suitable lands for agricultural use, it highly requires people who willing to develop the land to reach its producing capacity. Highly trained personnel and agricultural techniques are also required to help villagers making profit out of their lands.</p>		
<b>THA 30.0</b>	<p><b>THAILAND</b></p> <p>Research and Development on Fishery Post Harvest Industry Program (Assistance to fisheries industry)</p> <p>Year Established: Not Available</p>	<p>Intended Program Recipients: All Thai People</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): B 18,851,100 ( USD \$498,706 )</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To study and give services on post harvest industry technologies.</li> <li>2. To increase value of fishery resources after harvested.</li> </ol> <p>Program Description: One of the most important</p>	Enterprise Thailand Canada	<p><b>Fish Processing</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>losses of fishery resources is the lost of raw material after harvested. This loss can be reduced by using post harvest technologies and the new technologies which can be obtained by doing research such as the research on fish preservation can be obtained by doing research such as the research on fish preservation and fish transportation, the research on processing of fishery products, the research and development of local fishery product etc. All of these activities are responsibility of the Department of Fisheries.</p>		
<b>THA 31.0</b>	<p><b>THAILAND</b></p> <p>The Fisheries Product Exporting Development Project (Marketing)</p> <p>Year Established: 1996-2001</p>	<p>Intended Program Recipients: Thai people, The consumers of fishery products in the importing countries.</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): B 13,897,500 (USD \$367,659)</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Cabinet Approval</p> <p>Policy Objectives of the Program:</p> <p>1. To keep the quality of fishery product higher than</p>	Enterprise Thailand Canada	<p><b>Fish Processing</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R&amp;D</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>standard.</p> <ol style="list-style-type: none"> <li>2. To maintain the level of Thailand fishery products exporting to the international market.</li> <li>3. To develop fishery resources for sustainable use of fishery product exporting.</li> </ol> <p>Program Description: Thailand used to be in the top rank of the world highest fishery products exporting countries. In order to hold the first place, Thailand must maintain the amount of purchasing order by providing high grade of fishery products and guaranteeing its quality. The Department of Fisheries, on behalf of the Thai government, responsible for issuing the certificates guaranteeing the quality of the Thai fishery product as well as providing research on the development of fishery product quality, establishing Fishery Product Quality Inspection Center, training of fishery product inspection personnel and also arrange the meeting and workshop between private sector and the government to promote fishery products exporting to international market.</p>		
<b>THA 32.0</b>	<b>THAILAND</b>  Fishery Products Inspection and Quality Control (Marketing)	Intended Program Recipients: All Thai people  Geographic Scope: National  Estimated Annual Cost of the Program (in local	Enterprise Thailand Canada	<b>Capture Fisheries</b> Fisheries management and Conservation Programs <ul style="list-style-type: none"> <li>• Other Fisheries Management and</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: Not Available	<p>currency): B 12,580,700 ( USD \$332,823 )</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To monitor the changing of environmental quality.</li> <li>2. To improve environmental quality including water quality and fishery resources.</li> </ol> <p>Program Description: Fishery development in Thailand depending on environmental quality. One factor that fish grow well and give highest production is to live in the water resource that has suitable water conditions. Since the Department of Fisheries responsible for increasing of fish production in natural water, water quality monitoring has to be done to ensure that water conditions is suitable for aquatic organisms. Moreover, environmental impact resulting from anthropogenic sources, which affect aquatic animal, must be controlled in order to guarantee top quality of food for human consumption.</p>		Conservation Programs

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
THA 33.0	<p><b>THAILAND</b></p> <p>The Research and Development of Aquatic Plant and Ornamental Fish Culture (Marketing and Support Program)</p> <p>Year Established: 1995-2000</p>	<p>Intended Program Recipients: People who interested in aquatic plant and ornamental fish</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (in local currency): B 30,899,000 (USD \$817,000)</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To study on rare aquatic plant and ornamental fish biology that almost extinct and conduct research on artificial breeding.</li> <li>2. To promote Thai aquatic plant and ornamental fish culture among Thai farmers in order to get good products for exporting.</li> </ol> <p>Program Description: Ornamental fish and aquatic plant marketing are quite large in the world market. There are many Thai indigenous fish and plant species that are popular as aquatic plant and ornamental fish, but almost extinct because they were collected from</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other Fisheries and Conservation Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>the wild. The Department of Fisheries has conducted research on artificial fish or plant breeding in order to help those species from extinction. The Aquatic Plant and Ornamental Fish Research and Development Center has been established to study on fish and plant biology, and also promote cultural techniques by training farmers and distributing technical papers on fish and plant artificial breeding.</p>		
<p><b>THA 34.0</b></p>	<p><b>THAILAND</b></p> <p>The Research and Survey of the Thai Fishing Ground (Management)</p> <p>Year Established: Not Available</p>	<p>Intended Program Recipients: All Thai People, Thai Fishermen</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): B 71,030,300 (USD 1.9 million)</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. Survey and study of fishing ground for the promotion of fishing activities in Thailand.</li> <li>2. Promotion of joint venture fishing activities with</li> </ol>	<p>Enterprise Thailand Canada</p>	<p><b>Capture Fisheries</b> Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Fisheries Management Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>neighboring countries.</p> <p>Program Description: Fish harvesting in Thailand has been operated over sustainable yield since German high efficient trawler has been introduced into Thailand long time ago. There are several ways to manage fishery resources in Thailand. The best way is to find out sustainable yield in the Gulf of Thailand and make suggestion on optimum utilization levels. The other way is to make agreement with neighboring countries in order to exploit their resources on the sustainable level basis. Fish stocking data in the neighboring countries as well as the Thai Sea can be obtained from Fishery Research Vessel. It is the responsibility of the Department of Fisheries to do the task not only to survey on available fishing resources but also doing research on oceanographic and fishing equipment.</p>		
<b>THA 35.0</b>	<p><b>THAILAND</b></p> <p>Master Plan of Scawater Irrigation System for Shrimp Culture (Infrastructure)</p> <p>Year Established: 1992-2001</p>	<p>Intended Program Recipients: Thai shrimp farmers, Song Khla, Chantaburi, Surat Thani and Nakom Sri Thamrat province resident</p> <p>Geographic Scope: Regional</p> <p>Estimated annual cost of the program (in local currency): B 413,169,900 (USD \$10.9 million)</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Other fisheries Management Programs</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Cabinet Approval</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To solve the problem of inter mixing of water (intake and drainage water) by reconstructing seawater system in the coastal shrimp cultural area which incorporate of three types of land use namely: the area adjacent to natural canal, the mangrove area and the private own coastal area.</li> <li>2. To reduce water pollution resulting from shrimp farm effluent by providing water treatment system to the project area.</li> </ol> <p>Program Description: Most of shrimp production comes from intensive shrimp culture, which use highly nutrient and antibiotic artificial food. Therefore, the wide spreading of intensive shrimp culture in Thailand cause severely water pollution in the coastal shrimp culture area which has led to the outbreak of disease and high mortality. The Thai government aware of environmental problems related to shrimp culture and has taken a number of measures to confront the problems. One of the measures is the construction of the Seawater Irrigation System, which</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		is not only provide high quality water for intake facility of shrimp farm estate but also provide high quality of effluent before releasing into natural water. This Seawater Irrigation System, therefore, is able to reduce water pollution and also increase shrimp production from environmentally sound shrimp culture practice.		
<b>THA 36.0</b>	<b>THAILAND</b>  Thailand Aquatic Resources Restoration Program (Conversation)  Year Established: 1997-2001	Intended Program Recipients: All Thai people  Geographic Scope: National  Estimated annual cost of the program (in local currency): B 8,421,930 (USD \$222,800)  Department Responsible for the Program: Dept. of Fisheries  Name of Legislation or Mandate Establishing the Program: Her Majesty the Queen Initiated Project  Policy Objectives of the Program:  1. To reproduce the Thai endanger freshwater fish species.  2. To do research on reproducing endangered fish species and their biology.	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Stock Enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>3. To increase the number of endangered fish species in the Thai natural water resource.</p> <p>Program Description: Thailand aquatic resources have been overused for a long time resulting of disappearing of some species. Moreover, some exotic species have been introduced. Her Majesty the Queen, therefore, concerned on the situation that causes indigenous Thai fish vulnerable to extinction. The Department of Fisheries react to that concern by providing research on reproducing of endanger Thai fish in order to restock in the natural water.</p>		
<b>THA 37.0</b>	<p><b>THAILAND</b></p> <p>The Upper Huay Bangsai River Basin Development Project Mukdahan province</p> <p>Year Established: 1998-2001</p>	<p>Intended Program Recipients: The resident of Donghuang district Mukdahan province</p> <p>Geographic Scope: Regional</p> <p>Estimated annual cost of the program (in local currency): Not Available</p> <p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: His Majesty the King Initiation Project</p> <p>Policy Objectives of the Program:</p>	Enterprise Thailand Canada	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<ol style="list-style-type: none"> <li>1. To increase fish product in the natural water.</li> <li>2. To promote school fish culture, paddy field fish culture, and integrated fish culture.</li> <li>3. To train villagers on fish culture techniques.</li> </ol> <p>Program Description: His Majesty the King has concerned on the standard of living of the people in the remote rural area, especially the people in the Upper Huay Bangsai River Basin Mukdahan province. He advised the government agencies e.g. DOF, RID, DAE in the year 1994, concerning agricultural development and cooperatives establishment as same as the former successful Hoop Krapong project in Petchaburi province. His majesty also suggested on the using of water resource in the most efficient way for uplifting the standard of living of the poor people. Having said that, he recommended integrated farming system that use various agricultural techniques supporting from various government agencies.</p>		
<b>THA 38.0</b>	<b>THAILAND</b>  The Village Fish pond Program (Direct assistance to fishers)  Year Established: 1982	Intended Program Recipients: All Thai Farmers  Geographic Scope: National  Estimated Annual Cost of the Program (in local currency): B 383,091,800 (USD \$10 million)	Enterprise Thailand Canada	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Stock Enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Department responsible for the program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program: Cabinet Approval</p> <p>Policy Objectives of the Program:</p> <ol style="list-style-type: none"> <li>1. To increase fish production in the rural area for the consumption of rural poor people.</li> <li>2. To promote fish culture in schools and villages in order to enable people producing fish and taking care of them until harvesting.</li> </ol> <p>Program Description: Fish and fish products are the main food for the rural Thai people. In the past they normally caught fish from the wild by spending only few minutes. However, when more and more people harvest fish, which is a common property, less and less fish are available to be caught. People have to spend an hour or a day to catch fish that enough for only one meal. Since the rural people are poor, they cannot buy high price fish from the market and they do not have enough money to dig their own ponds for their own fish culture. The best solution to provide fish for the whole village consumption is to provide them with the common fishpond (The Village FishPond). The pond will be stocked with fish seed from local fishery station and the fish will be taken care by village committee until they reach the</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>harvestable size. The fish will be caught from time to time and sold to the villagers at low price. The money from selling fish will be used for purchasing fish seed in the next crop and also used for pond maintenance.</p>		
<p><b>THA 39.0</b></p>	<p><b>THAILAND</b></p> <p>The Water Resources Improvement Program (Fisheries Management)</p> <p>Year Established: 1988</p>	<p>Intended Program Recipients: Villagers living around water resources through out the country.</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program (in local currency): B 51,095,400 (USD \$1.34 million)</p> <p>Department Responsible for the Program: Dept. of Fisheries</p> <p>Name of Legislation or Mandate Establishing the Program:</p> <p>Policy Objectives of the Program: To increase fishery production by rehabilitating water resources and maintaining water conditions at suitable levels for aquatic organisms.</p> <p>Program Description: Water resources are changing all the time in terms of their topography and water area. One of the Department of Fisheries objectives is to maintain suitable condition of water resources for aquatic organisms living. Therefore, unusual</p>	<p>Enterprise Thailand Canada</p>	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• Stock Enhancement Programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		sedimentation will not allow and sometimes dredging is needed to maintain water depth. Moreover, vegetation must be controlled in order to limit its growth at suitable amount, which cannot harm aquatic organisms.		
USA 1.0	<b>USA</b>  Commercial fishing exemption from deficits reduction rate component of excise tax on motor fuels	<p>"Commercial fishing exemption from deficits reduction rate component of excise tax on motor fuels": the aid takes the form of an exemption from otherwise applicable deficit reduction excise tax rate on motor fuels. It is paid to commercial fishermen, who can purchase untaxed diesel fuel or can receive a refund or any taxes paid on gasoline used in commercial fishing boats. The purpose is to "treat fishermen comparably to farmers in the provision of a partial exemption from the motor fuel excise tax for fuel consumed in the course of business."</p> <p>Name of program: No formal designation, but it may be called the Diesel and Gasoline Excise Tax Exemption.</p> <p>Year Established: 1951</p> <p>Intended Program Recipients: Non-highway users of diesel and gasoline fuel</p> <p>Geographic scope: National  Estimated Annual Cost of the Program (\$US):</p>	WTO, WT/CTE/W/80/Add.1, 21 September 1999  United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	<b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs <ul style="list-style-type: none"> <li>Fuel Tax Exemption-for Fishing vessels</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Approximately \$150 million per year in uncollected excise taxes</p> <p>Department responsible for the program: U.S. Department of Treasury. Internal Revenue Service</p> <p>Name of legislation or mandate establishing the program: The excise tax exemption was instituted by the legislation establishing the U.S. highway trust fund.</p> <p>Policy Objectives of the Program: To exempt non-highway users of diesel and gasoline from federal excise taxes.</p> <p>Program Description: Diesel and gasoline fuel is provided at special retail outlets to fishermen free of nominal excise taxes.</p> <p>Major Fish Stocks Affected by the Program: All domestic fisheries</p>		
USA 2.0	USA Commercial Fishing Vessels Fuels	State-level measure (Hawaii) which is an income tax credit paid to operators of commercial fishing vessels.	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> Tax Preferences and Insurance Support Programs <ul style="list-style-type: none"> <li>Income Tax Deferral-for fishers</li> </ul>
USA 3.0	USA	State-level measure (North Carolina) taking the form of a tax exemption (state sales and use taxes) for	WTO, WT/CTE/W/80/Add.1,	<b>Capture Fisheries</b> Tax Preferences and Insurance



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Industrial Machinery and Equipment	commercial fishing.	21 September 1999	Support Programs <ul style="list-style-type: none"> <li>Accelerated Depreciation- for taxation of fishing vessels and gear</li> </ul>
USA 4.0	USA Business Retention Service	State-level measure which takes the form of technical assistance and grants (for feasibility studies) and which is granted by preference to firms in forestry and fishing.	WTO, WT/CTE/W/80/Add.1, 21 September 1999	<b>Capture Fisheries</b> <ul style="list-style-type: none"> <li>Other fisheries management and conservation programs</li> </ul>
USA 5.0	USA Fisheries Finance Program Year established: 1996	The Fisheries Finance Program (FFP) is a direct loan program for financing or refinancing the construction, reconstruction, reconditioning, and in some cases, the purchasing of fishing vessels, shoreside processing, aquaculture, and mariculture facilities. The FFP lending practices are guided by NOAA's sustainable fisheries policies and the practical credit considerations of this program, which has been self sustaining throughout its history. The FFP is authorized to finance halibut and sablefish Individual Fishing Quotas (IFQ) under certain credit circumstances and to assist qualified applicants under the Community Development Quota (CDQ) Program in acquiring capital assets in the pollock fishery. Additionally, the FFP was recently authorized to finance the fishing capacity reduction loans to reduce overcapitalization of some fisheries.	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstsummary.htm">http://www.nmfs.gov/sf/web/sf/finasstsummary.htm</a>  United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees</li> </ul> <b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees</li> </ul> <b>Fish Processing</b> Lending Support Programs <ul style="list-style-type: none"> <li>Loan Guarantees</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category																		
		<p><b>Table 1.</b> Fisheries Finance Program (FFP)/Fisheries Obligation Guarant</p> <table border="1"> <thead> <tr> <th><i>Category</i></th> <th><i>Number of loans</i></th> <th><i>Original Amou (USD million)</i></th> </tr> </thead> <tbody> <tr> <td>FOG loans pre-1992</td> <td>131</td> <td>137.9</td> </tr> <tr> <td>FOG loans 1992 and after</td> <td>43</td> <td>80.1</td> </tr> <tr> <td>FOG Northeast Program (with 5 percent subsidy)</td> <td>31</td> <td>16.2</td> </tr> <tr> <td>FFP — Direct Loan Program</td> <td>16</td> <td>10.6</td> </tr> <tr> <td><b>Total</b></td> <td><b>221</b></td> <td><b>244.7</b></td> </tr> </tbody> </table> <p>Intended Program Recipients: Owner of fishing vessels, owners of certain shore-side activities such as aquaculture and fish processing operations, participants in fishing vessel buybacks programs, and crew members and small boat operators who wish to purchase quota shares in the halibut and sablefish Individual Fishery Quota fisheries</p> <p>Geographic Scope: National</p>	<i>Category</i>	<i>Number of loans</i>	<i>Original Amou (USD million)</i>	FOG loans pre-1992	131	137.9	FOG loans 1992 and after	43	80.1	FOG Northeast Program (with 5 percent subsidy)	31	16.2	FFP — Direct Loan Program	16	10.6	<b>Total</b>	<b>221</b>	<b>244.7</b>		
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<b>USA 5.0</b>  <b>Continued</b>	<b>USA</b>  Fisheries Finance Program  Year established: 1996	Intended Program Recipients: Owner of fishing vessels, owners of certain shore-side activities such as aquaculture and fish processing operations, participants in fishing vessel buybacks programs, and crew members and small boat operators who wish to purchase quota shares in the halibut and sablefish Individual Fishery Quota fisheries	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a>	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees</li> </ul> <b>Aquaculture</b> Lending Support Programs <ul style="list-style-type: none"> <li>• Loan Guarantees</li> </ul> <b>Fish Processing</b>																		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Geographic Scope: National</p> <p>Estimated annual cost of the program (\$US): The annual costs of this program are difficult to estimate because the program includes several components that are funded on a case-by-case basis by Congress.</p> <p>Department responsible for the program: U.S Department of Commerce. National Marine Fisheries Service</p> <p>Name of Legislation or Mandate Establishing the Program: Sustainable Fisheries Act Amendments to the Magunson-Stevens Fishery Conservation and Management Act (1996)</p> <p>Policy Objectives of the Program: To provide assistance in the form of direct government loans to the four groups of recipients noted above.</p> <p>Program Description: Unlike the FOG program which provided government backed loan guarantees, the Fisheries Finance Program provided direct loans from the U.S. Treasury at concessional rates.</p> <p>Major Fish Stocks affected by the Program: Any federally managed fishery that the Congress believes should benefit from one of the FFP components. Thus</p>	<p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Loan Guarantees</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		far, most FFP direct lending activity has benefited the fisheries of the North Pacific.		
USA 6.0	<p>USA</p> <p>CFDA Number: 11.415, Fisheries Finance Program.</p> <p>Saltonstall-Kennedy Grant Program</p> <p>Year Established: 1954</p>	<p>Provides that a fund (known as the S-K fund) be used to provide grants or cooperative agreements for fisheries research and development projects that address any aspect of U.S. commercial and recreational fisheries. These aspects include, but are not limited to, harvesting, processing, marketing, and associated infrastructures. The funding priorities are developed in consultation with the public, and are consistent with the goals and objectives of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and the NOAA Strategic Plan. Proposals must address one of the funding priorities published in the solicitation. Successful applicants will be those whose projects demonstrate direct benefits to fishing communities.</p> <p>Intended Program Recipients: Qualifying U.S. citizens and institutions</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (\$US): Total amounts allocated for the competitive and national S-K grants programs have been \$2-3 million in recent years. However, only a very modest share of these costs are awarded to projects that support research and</p>	<p>Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sfweb/sf/finasstsummary.htm">http://www.nmfs.gov/sfweb/sf/finasstsummary.htm</a></p> <p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D- to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>development.</p> <p>Department Responsible for the Program: U.S. Department of Commerce. National Marine Fisheries Service.</p> <p>Name of Legislation or Mandate Establishing the Program: The Saltonstall-Kennedy Act of 1954 and the American Fisheries Promotion Act of 1980.</p> <p>Policy objectives of the Program: To fund research grants that mostly support effective conservation and management of U.S. fisheries by increasing the biological, economic and social information needed for sound management.</p>		
<b>USA 6.0 Continued</b>	<p><b>USA</b></p> <p>CFDA Number: 11.415, Fisheries Finance Program.</p> <p>Saltonstall-Kennedy Grant Program</p> <p>Year Established: 1954</p>	<p>Program Description: S-K grants are provided to individuals and institutions through an annual competitive awards process.</p> <p>Major fish stocks affected by the program: The S-K program has progressively modified over the years such that grants in support of industry apply only to few under utilized domestic fisheries.</p>	<p>Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sfweb/sf/finasstsummary.htm">http://www.nmfs.gov/sfweb/sf/finasstsummary.htm</a></p> <p>United States Department of Commerce, National Oceanic and Atmospheric</p>	<p><b>Capture Fisheries</b></p> <p>Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D- to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
			Administration, National Marine Fisheries Service	
USA 7.0	USA  Fishery Disaster Assistance	Section 308(b) of IFA provides for assistance to States determined by the Secretary of Commerce (Secretary) to have been affected by a commercial fishery failure or serious disruption affecting future production due to a fishery resource disaster arising from natural or undetermined causes. Funds as appropriated may be used either by the States or by the Secretary in cooperation with the States, for any purpose that the Secretary determines appropriate to restore the fishery affected by such a failure or to prevent a similar failure in the future.	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstsummary.htm">http://www.nmfs.gov/sf/web/sf/finasstsummary.htm</a>	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers <ul style="list-style-type: none"> <li>• Other Direct Payments to Fishers</li> </ul>
USA 8.0	USA  Vessel and Permit Buyback Programs  Year Established: 1996	Under section 312(b) of the Magnuson-Stevens Act, NMFS has the authority to conduct a fishing capacity reduction program if funds are provided and it is determined that such a program is necessary to prevent or end overfishing, rebuild stocks of fish, or achieve measurable or significant improvements in the conservation and management of the fishery. Under the authority of this section, the Secretary may buy back vessels and/or fishing permits in order to obtain the maximum sustained reduction in fishing capacity at the least cost and in a minimum period of time. Declaration of a fishery resource disaster is not required to authorize such a program. The capacity reduction program must be consistent with any State and Federal fishery management plans in place for that fishery. Funding for such programs is authorized	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstsummary.htm">http://www.nmfs.gov/sf/web/sf/finasstsummary.htm</a>  United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Vessel Buybacks- payments for the permanent withdrawal of fishing vessels</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>under Section 312(c) of the Magnuson-Stevens Act and allows NMFS to obtain funding under authorization of the Saltonstall-Kennedy Act, through specific appropriations, from industry fee systems, and from public, private, or non-profit sources.</p> <p>Intended Program Recipients: Owners of fishing vessels in fisheries suffering from over-capacity</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: There is no estimated annual cost, because the program is funded by the Congress on a case-by-case basis and therefore, annual costs vary considerably.</p> <p>Department Responsible for the Program: U.S. Department of Commerce. National Fisheries Service</p> <p>Name of Legislation or Mandate Establishing the Program: Section 312 of the Sustainable Fisheries Act Amendments to the Magnuson-Stevens Fishery Conservation and Management Act (1996)</p> <p>Policy Objectives of the Program: To reduce excess harvesting capacity in the fisheries sector.</p> <p>PP</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<b>USA 8.0 Continued</b>	<b>USA</b>  Vessel and Permit Buyback Programs  Year Established: 1996	Program Description: Under this program, the United States may provide subsidies in the form of direct payments and/or government loans to help fund buyback of excess capacity in the harvesting sector.	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a>  United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Vessel Buybacks- payments for the permanent withdrawal of fishing vessels</li> </ul>
<b>USA 9.0</b>	<b>USA</b>  Fishermen's Contingency Fund Program	The Fishermen's Contingency Fund (FCF) was established to compensate fishermen for economic and property losses caused by oil and gas obstructions on the U.S. Outer Continental Shelf. The fund was established in the U.S. Treasury, without fiscal year limitation, as a revolving fund comprised of assessments paid by offshore oil and gas interests. Fishermen who can prove that they suffered losses in income due to inability or reduced capacity to fish as a result of the damage sustained may be eligible for compensation for economic loss and property loss or damage. Compensation for economic loss is based on 50 percent of gross income lost, rather than loss of profits. FCF requires commercial fishermen to file a	Financial Assistance Programs for the U.S. Fishing Industry  <a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a>	<b>Capture Fisheries</b> Direct Assistance to Fishers and Fisheries Workers <ul style="list-style-type: none"> <li>• Other Direct Payments to Fishers</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>report to NMFS within 15 days after the date on which the vessel first returns to port after discovering the damage or loss in order to gain presumption of causation. After this initial report is filed, a claim must be submitted within 90 days of the date the loss or damage was discovered. Claims should include specific vessel and crew information, a full statement of the circumstances concerning the damage or loss, the amount claimed for property damage or loss, a full statement of the type and extent of damage, and the amount claimed, with supporting documentation, for any economic loss.</p>		
USA 10.0	<p>USA</p> <p>Capital Construction Fund Program</p> <p>Year established: 1976</p>	<p>The purpose of the Capital Construction Fund (CCF) Program is to improve the fishing fleet by allowing fishermen to accelerate their accumulation of funds with which to replace or improve their fishing vessels. Created by the Merchant Marine Act of 1936, as amended (46 U.S.C. 1177), the CCF Program enables fishermen to construct, reconstruct, or under limited circumstances, acquire fishing vessels with before-tax, rather than after-tax dollars. The program allows fishermen to defer tax on income from the operation of their fishing vessels. Under the CCF Program, the amount accumulated by deferring tax on fishing income, when used to help pay for a vessel project, is, in effect, an interest free loan from the Government. Any U.S. citizen is eligible who owns or leases an U.S.-built fishing vessel of at least two net tons and has an acceptable program for constructing,</p>	<p>Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a> Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a></p> <p>United States Department of</p>	<p><b>Capture Fisheries</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>• Subsidized Loans</li> </ul> <p>Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>• Income Tax Deferral-for fishers</li> <li>• Accelerated Depreciation-for taxation of fishing vessels and gear</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>reconstructing, or acquiring a fishing vessel of at least two net tons. The term "fishing vessel" includes vessels used commercially in the fisheries of the U.S. for catching, transporting, and processing fish. Also included are commercial passenger-carrying vessels used for fishing parties.</p> <p>Intended Program Recipients: Owners of U.S. documented fishing vessels</p> <p>Geographic Scope: National</p> <p>Estimated Annual Cost of the Program: Currently, there are approximately 3,000 individual Capital construction Fund accounts, with aggregated deposits of roughly \$240 million. The average annual cost to the government of operating the CCF program has been estimated at 2-2.5 million annually.</p> <p>Department responsible for the program: U.S. Department of Commerce. National Marine Fisheries Service.</p> <p>Name of Legislation or Mandate Establishing the Program: The original legislative provisions are contained in 46 U.S.C. 1177 (1976).</p> <p>First to support the U.S. ship building industry and to facilitate investments</p>	<p>Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
<p><b>USA 10.0</b></p> <p><b>Continued</b></p>	<p><b>USA</b></p> <p>Capital Construction Fund Program</p> <p>Year established: 1976</p>	<p>Policy Objectives of the Program: CCF has two major objectives: first to support the U.S. ship building industry and to facilitate investments in the U.S. fishing vessels</p> <p>Program Description: Fishermen participating in CCF program set up special accounts, to which they contribute portion of their operating profits. Taxes on these contributions to the CCF account are deferred until the funds are withdrawn</p> <p>Major Fish Stocks Affected by the Program: All domestic fisheries</p>	<p>Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a> Financial Assistance Programs for the U.S. Fishing Industry</p> <p><a href="http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm">http://www.nmfs.gov/sf/web/sf/finasstssummarty.htm</a></p> <p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p><b>Capture Fisheries</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>Subsidized Loans</li> </ul> <p>Tax Preferences and Insurance Support Programs</p> <ul style="list-style-type: none"> <li>Income Tax Deferral-for fishers</li> <li>Accelerated Depreciation-for taxation of fishing vessels and gear</li> </ul>
<p><b>USA 11.0</b></p>	<p><b>USA</b></p> <p>Fisheries Obligation Guarantee (FOG) Program</p>	<p>Intended Program Recipients: Owners of fishing vessels documented to operate in U.S. fisheries</p> <p>Geographic Scope: National</p> <p>Estimated annual cost of the program (\$ US): During</p>	<p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National</p>	<p><b>Capture Fisheries</b></p> <p>Lending Support Programs</p> <ul style="list-style-type: none"> <li>Loan Guarantees</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1972-1996	<p>the life of the program the FOG administered about 1,300 loans with a total face value of over \$800 million. The annual cost of the program varied from year to year, but was typically at a modest level because very few of these government backed loans failed, and hence the annual costs to government were little more than the costs of administering the program.</p> <p>Department Responsible for the Program: U.S. Department of Commerce, National Marine Fisheries Service</p> <p>Policy Objectives of the Program: To promote, by providing government backed loan guarantees, the modernization and expansion of the of the US fishing sector. It does so by encouraging capital loans with long repayment periods for the construction, replacement and reconstruction of fishing vessels.</p> <p>Program Description: The National Marine Fisheries Service provides a government backed loan guarantee enabling the recipients of such guarantees to obtain loans with lower interest rates and longer repayment schedules.</p> <p>Major Fish Stocks Affected by the Program: Many of the federally managed fisheries of which there are currently forty-one managed under FMPs</p>	Marine Fisheries Service	

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
USA 12.0	<p>USA</p> <p>National Sea Grant College Program</p> <p>Year Established: 1966</p>	<p>Intended program: National Sea Grant College Program</p> <p>Geographic Scope: Regional, East and West Coast and Great Lakes region</p> <p>Estimated Annual Cost of the Program (\$US): Sea Grant's total operating budget in recent years is over \$90 million annually, but only extremely small share of sea grant projects can be constructed as fisheries support.</p> <p>Department Responsible for the Program: U.S. Department of Commerce. Office of Oceanic and Administrative Research.</p> <p>Name of Legislation or Mandate Establishing the Program: The National Sea Grant College and Program Act of 1966.</p> <p>Policy Objectives of the Program: To provide grants to selected universities to carry out research that addresses the long term economic development, environmental stewardship of marine and inland resources, including fish and shellfish.</p> <p>Program Description: Sea Grant funds are provided to more than 200 individual colleges and universities that belong to twenty-nine State Sea Grant programs to</p>	<p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p><b>Aquaculture</b></p> <p>Fisheries Management and Conservation</p> <ul style="list-style-type: none"> <li>• R &amp; D – to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>conduct specific research projects.</p> <p>Major Fish Stocks Affected by the Program: Like other federal R &amp; D programs, the Sea Grants program has been modified in recent years such that benefits are provided only to a few industry sectors such as aquaculture and seafood technology and marine biotechnology</p> <p>FINANCIAL INFORMATION:  Account Identification: 13-1450-0-1-306.  Obligations: (Grants) FY 98 \$64,356,613; FY 99 est \$54,700,000; and FY 00 est \$48,950,000.  Range and Average of Financial Assistance: \$5,000 to \$3,595,000.  PROGRAM ACCOMPLISHMENTS:  In fiscal year 1998, 802 projects were funded.</p>		
USA 13.0	<p>USA</p> <p>Marine Fisheries Initiative (MARFIN)</p> <p>Year Established: 1986</p>	<p>Intended Program Recipients: To support research by industry, the universities and States in the Gulf of Mexico and south Atlantic.</p> <p>Geographic Scope: Regional</p> <p>Estimated Annual Cost of the Program (\$US): Annual appropriations to MARFIN have averaged about \$3 million in recent years</p> <p>Department Responsible for the Program: U.S.</p>	<p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p><b>Capture Fisheries</b>  Fisheries Management and Conservation Programs</p> <ul style="list-style-type: none"> <li>• R &amp; D – to develop new fisheries technologies</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Department of Commerce. National Marine Fisheries Service.</p> <p>Name of Legislation or Mandate Establishing the Program: The MARFIN program was approved by congress in 1986 and its appropriations are included the National Marine Fisheries Service budget.</p> <p>Policy Objectives of the Program: To support research to enhance, restore, and maintain fishery resources in the Gulf of Mexico and Atlantic waters off Southeastern United States.</p> <p>Program Description: Like other federal R &amp; D programs in fisheries, (S-K and Sea Grant) MAEFIN grants are given to individuals and institutions to conduct predetermined research products.</p> <p>Major Fish Stocks affected by the Program: The MARFIN program grants apply only to a few fish stocks such as species in the grouper complex and estuarine fish resources in particular red drum.</p>		
USA 14.0	<p>USA</p> <p>The Market Access Program (MAP)</p> <p>Year Established: Early 1980's</p>	<p>Intended Program Recipients: U.S. exporters of fisheries products</p> <p>Geographic Scope: National</p> <p>Estimated Annual cost of the Program: In recent years MAP funding spent on fishery promotional activities</p>	<p>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service</p>	<p><b>Fish Processing Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Export Marketing Programs – to enhance seafood exports</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>has been \$3-5 million</p> <p>Department Responsible for the Program: U.S. Department of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: The Agriculture Trade Act of 1978 and was made available to fishery exporters in the early 1980's.</p> <p>Policy and Objectives of the Program: To assist U.S. producers and exporters of fisheries products by financing promotional activities.</p> <p>Program Description: The MAP program uses Commodity Credit Corporation funds to help producers, exporters, private companies and other trade organizations finance promotional activities.</p> <p>Major Fish Stocks Affected by the program: MAP funding has been used primarily export promotional activities of U.S. tuna and salmon producers, and in recent years this assistance has been given almost entirely to salmon producers.</p>		
USA 15.0	USA Surplus Commodity Removal Program	<p>Intended Program Recipients: Domestic Producers of Seafood</p> <p>Geographic Scope: National</p>	United States Department of Commerce, National Oceanic and	<p><b>Fish Processing Marketing and Price Support Programs</b></p> <ul style="list-style-type: none"> <li>• Other Marketing and Price</li> </ul>



Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	<p>Year Established: The Agricultural Adjustment Act of 1935 was amended in 1983 to include fishery products in its surplus removal activities</p>	<p>Estimated Annual Cost of the Program: Annual costs fluctuate, but average funding for purchases of surplus fisheries products has been about \$14 million annually the past decade.</p> <p>Department responsible for the program: U.S. Department of Agriculture</p> <p>Name of Legislation or Mandate Establishing the Program: The Agricultural Adjustment Act of 1935 was amended in 1983 to include fishery products in its surplus removal activities</p> <p>Policy and Objectives of the Program: To maintain stable commodity prices</p> <p>Program Description: The federal government purchases surplus products for distribution for school lunch and other food assistance programs.</p> <p>Major Fish Stocks Affected by the Program: This program has been used to purchase several species of fish, but in recent years most of these funds have been used to purchase salmon and tuna</p>	<p>Atmospheric Administration, National Marine Fisheries Service</p>	<p>Support Programs</p>
<p><b>USA 16.0</b></p>	<p><b>USA</b></p> <p>Columbia River Hatcheries</p>	<p>Intended Program Recipients: Traditional users of Pacific Northwest Salmon, including recreational and commercial fishermen and Columbia River Treaty Indian Tribes</p>	<p>United States Department of Commerce, National Oceanic and</p>	<p><b>Aquaculture</b></p> <p>Capital and Infrastructure Support Programs</p> <ul style="list-style-type: none"> <li>• Other Capital and</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Year Established: 1950	<p>Geographic Scope: Regional</p> <p>Estimated Annual Cost of the Program: In FY 1999 about \$12 million to fund the operations and maintenance of hatcheries in Washington and Oregon</p> <p>Department Responsible for the Program: U.S. Department of the Interior, U.S. Fish and Wildlife Service and States of Washington and Oregon</p> <p>Name of Legislation or Mandate Establishing the Program: The Mitchell Act.</p> <p>Policy and Objectives of the Program: To mitigate the negative effects of lost salmon habitat primarily by the building of dams for hydroelectric power, and also by other factors, such as agricultural run-offs, logging, and urban development</p> <p>Program Description: The United States government provided operating funds to selected federal salmon hatcheries run by the fisheries agencies of Washington and Oregon and the U.S. Fish and wildlife Service</p> <p>Major Fish Stocks Affected by the Program: Pacific Northwest Salmon in particular certain runs of chinook and coho salmon</p>	Atmospheric Administration, National Marine Fisheries Service	Infrastructure Support Programs
<b>USA 17.0</b>	<b>USA</b>	Purpose: To promote enhancement of the State's	Fisheries Enhancement	<b>Aquaculture</b>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
	Alaska Fisheries Enhancement Revolving Loan Fund  Year Established: 1976	fisheries by means of the following: <ul style="list-style-type: none"> <li>• Long-term, low interest loans for hatchery planning, construction, and operation</li> <li>• Grants to Regional Corporations for organizational and planning purposes</li> <li>• Planning and implementation of enhancement and rehabilitation activities; i.e., lake fertilization and habitat improvement</li> </ul> Eligibility: Nonprofit Corporations <ul style="list-style-type: none"> <li>• Regional Aquaculture Corporations, certified by the Commissioner of Alaska Department of Fish and Game (ADF&amp;G) under as 16.10.380</li> </ul> Terms: <ul style="list-style-type: none"> <li>• \$10,000,000 maximum</li> <li>• 30 years maximum</li> <li>• Fixed interest rate at prime + 1 %</li> <li>• Initial period of 6 to 10 years, No interest accrual during initial period, No repayments during initial period</li> </ul>	Revolving Loan Fund, Program Overview. Alaska Division of Investments, Department of Community & Economic Development, November 1999	Lending Support Programs <ul style="list-style-type: none"> <li>• Subsidized loans</li> </ul>
USA 18.0	USA  Anadromous Fish Conservation Act Program  Year Established: 1965	Objectives: To cooperate with the States and other nonfederal interests in the conservation, development, and enhancement of the nation's Anadromous fish stocks and the fish in the Great Lakes and Lake Champlain that ascend streams to spawn, and for the control of sea lamprey. Types of Assistance:	UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration	<b>Aquaculture</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>• Fisheries management programs</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		<p>Project Grants.</p> <p>Uses and Use Restrictions:  Funds can be used for spawning area improvement, installment of fishways, data collection, construction of fish protection devices and hatcheries, and research to improve management and increase Anadromous fish resources. Funds cannot be used for law enforcement, public relations, or construction of facilities and vessels, the primary purpose of which is to commercially harvest, handle, and process fishery products. In addition, funds cannot be used for projects in the Columbia River Basin, with the exception of the state of Idaho.</p> <p>Eligibility Requirements:  Applicant Eligibility: Any interested person or organization may propose a cooperative undertaking. However, all proposals must be coordinated with and submitted through the State fishery agency having responsibility for the resource to be affected by the proposal.</p> <p>Beneficiary Eligibility: General public.</p> <p>Financial Information:  Account Identification: 13-1450-0-1-306.  Obligations: (Grants) FY 98 \$2,000,000; FY 99 est \$2,000,000; and FY 00 est \$2,000,000.  Range and Average of Financial Assistance: \$2,000 to \$400,000; \$40,000.</p> <p>Program Accomplishments:  In fiscal year 1998, 16 projects were conducted; in</p>		

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
		1999, 16 projects were conducted, and an estimated 15 projects will be conducted in fiscal year 2000.		
<b>VTM 1.0</b>	<b>VIETNAM</b> Soft Loan Program	The Vietnam government has implemented a policy to give fishers soft loans to build fishing boats of high capacity and upgrade the small ones. Between the period of 1995 and 1998 the Vietnam government has lent VDN 1,300 bio (USD 92 million) to build 800 new fishing boats. The high capacity fishing fleet has increased by 5000 pieces creating more than 10,000 new jobs for fishermen encouraging people to build high capacity fishing boats to limit the building of fishing boats of small capacity.	Reports on Strategic Orientations and Development Priorities  Ministry of Planning & Investment and Ministry of Fisheries  November 9, 1999	<b>Capture Fisheries</b> Lending Support Programs <ul style="list-style-type: none"> <li>Subsidized Loans</li> </ul>
<b>VN 2.0</b>	<b>VIET NAM</b> Fishery Resource Assessment	Vietnam is assessing the marine fisheries resources in some areas and some species. Total 2 year investment by the Vietnam government is VDN 12,992 million (USD \$924,000).	Reports on Strategic Orientations and Development Priorities  Ministry of Planning & Investment and Ministry of Fisheries  November 9, 1999	<b>Capture Fisheries</b> Fisheries Management and Conservation Programs <ul style="list-style-type: none"> <li>Programs to assess fish stocks</li> </ul>
<b>VN 4.0</b>	<b>VIET NAM</b> Fishery Resource Assessment	Approximately \$1.6 million US invested by the Vietnam government for aquaculture development	Reports on Strategic Orientations and Development Priorities  Ministry of Planning & Investment and Ministry of Fisheries	<b>Aquaculture</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>Development Grants</li> </ul>

Country Subsidy Code	APEC Economy/Subsidy Program Name	Subsidy Description	Source	Subsidy Category
			November 9, 1999	
VN 4.0	<b>VIET NAM</b>  Fishing Port development	Approximately \$55 million US between the period of 1986 and 1998 for fishing port construction.	Reports on Strategic Orientations and Development Priorities  Ministry of Planning & Investment and Ministry of Fisheries  November 9, 1999	<b>Capture Fisheries</b> Capital and Infrastructure Support Programs <ul style="list-style-type: none"> <li>• Fishing Port Infrastructure                Enhancement – to provide                port improvements for                fishing fleets</li> </ul>

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**Appendix ‘B’**  
**Survey Instrument**

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## **Appendix B: Survey Instrument**

### **Asia Pacific Economic Cooperation (APEC) Fisheries Working Group Questionnaire Programs and Policies to Support the Fisheries Sector in APEC Member Economies**

The attached questionnaire is being administered on behalf of the APEC Fisheries Working Group by PricewaterhouseCoopers as part of a study to assist APEC member economies to meet their commitments for Early Voluntary Sectoral Liberalisation (EVSL) for Fish and Fish Products. The aim of this questionnaire is to establish an inventory of policies and programs that support the fisheries sector in APEC member economies. The questionnaire has two parts.

- **Part 1: Checklist of Fisheries Support Programs** – in Part 1 you are asked to complete a checklist to indicate all support programs for the fisheries sector that have been implemented in your economy within the last three years in the following six areas:
  - Direct Assistance to Fishers and Fisheries Workers
  - Lending Support Programs
  - Tax Preference and Insurance Support Programs
  - Capital and Infrastructure Support Programs
  - Marketing and Price Support Programs
  - Fisheries Management and Conservation Programs
- **Part 2: Fisheries Support Program Templates** – in Part 2 you are provided with individual Fisheries Support Program Templates and you are asked to complete one template for each of the programs you have checked off in Part 1.

**The APEC Fisheries Working Group requests that you complete the attached questionnaire and return it by facsimile to 1-613-238-4798 (Attn: Mr. Robert McKinstry) or e-mail to [robert.mckinstry@ca.pwcglobal.com](mailto:robert.mckinstry@ca.pwcglobal.com) by Friday, December 17 1999.**

Any questions regarding the questionnaire should be directed to:

Rob McKinstry or David Egan  
PricewaterhouseCoopers LLP  
180 Elgin Street, Suite 1100  
Ottawa, Ontario CANADA  
**Tel: 1 613 238-8200**  
**Fax: 1 613 238-4798**

We greatly appreciate your cooperation and effort in completing this questionnaire.

Thank you very much.





PROGRAM DEFINITION AND TYPES (cont.)	PLEASE INDICATE ALL PROGRAMS IN THESE AREAS		
	Capture Fisheries	Aquaculture	Fish Processing
<p><b>4. Capital and Infrastructure Support Programs:</b> These include all government-funded capital inputs and infrastructure investments to the fisheries sector</p> <ul style="list-style-type: none"> <li>• Development Grants – for fisheries enterprises <input type="checkbox"/></li> <li>• State Investments – in state-owned enterprises and cooperatives in the fisheries sector <input type="checkbox"/></li> <li>• Fleet Renewal and Modernisation <input type="checkbox"/></li> <li>• Foreign Access Payments – for deep sea fishing fleet access to foreign fishing waters <input type="checkbox"/></li> <li>• Bait Services – provided to fishers <input type="checkbox"/></li> <li>• Provision of fish auctions or other sales facilities and services <input type="checkbox"/></li> <li>• Aid to Shipyards – to support fishing boat construction <input type="checkbox"/></li> <li>• Fishing Port Infrastructure Enhancement – to provide port improvements for fishing fleets <input type="checkbox"/></li> <li>• Harbour Facilities and Moorage – provided free or at low rates for fishing fleets <input type="checkbox"/></li> <li>• Other Capital and Infrastructure Support Programs <input type="checkbox"/> Please specify: _____</li> </ul>			
<p><b>5. Marketing and Price Support Programs:</b> These include all government-funded marketing and price support programs</p> <ul style="list-style-type: none"> <li>• Export Marketing Programs – to enhance seafood exports <input type="checkbox"/></li> <li>• Fish Product Promotion Programs – including seafood product promotion, labeling and quality enhancement for either domestic or external markets <input type="checkbox"/></li> <li>• Market Price Support – government support to ensure minimum prices or to keep domestic prices above world prices <input type="checkbox"/></li> <li>• Other Marketing and Price Support Programs <input type="checkbox"/> Please specify: _____</li> </ul>			
<p><b>6. Fisheries Management and Conservation Programs:</b> These include all government-funded programs that are designed to enhance the fisheries resource base</p> <ul style="list-style-type: none"> <li>• Vessel Buybacks – payments for the permanent withdrawal of fishing vessels <input type="checkbox"/></li> <li>• Permit Buybacks or License Retirement (all types) – payments for the permanent withdrawal of fishing permits or licenses <input type="checkbox"/></li> <li>• Stock Enhancement Programs – including fish habitat improvements, release of juveniles, etc. <input type="checkbox"/></li> <li>• Fisheries Management Programs <input type="checkbox"/></li> <li>• Fisheries Enforcement Programs <input type="checkbox"/></li> <li>• Programs to Assess Fish Stocks <input type="checkbox"/></li> <li>• Programs to Identify and Develop New Fisheries <input type="checkbox"/></li> <li>• R &amp; D – to develop new fisheries technologies <input type="checkbox"/></li> <li>• Other Fisheries Management and Conservation Programs <input type="checkbox"/> Please specify: _____</li> </ul>			

## Part 2: Fisheries Support Program Templates

For each of the fisheries support programs you have indicated in the preceding checklist, please complete the description template below. Three program description templates are provided for this purpose. Please duplicate additional program description templates as required.

### Fisheries Support Program Description Template

**Title of Program:** \_\_\_\_\_

**Year Established:** \_\_\_\_\_

**Intended Program Recipients:** \_\_\_\_\_  
\_\_\_\_\_

**Geographic Scope:** regional  national

**Estimated annual cost of the program (in local currency):** \_\_\_\_\_

**Department responsible for the program:** \_\_\_\_\_

**Name of Legislation or Mandate Establishing the Program:** \_\_\_\_\_  
\_\_\_\_\_

**Policy Objectives of the Program:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Program Description:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Major Fish Stocks affected by the Program:** \_\_\_\_\_  
\_\_\_\_\_

Please make additional program description templates as required.