

The World Bank Contribution to the Report of the Secretary General on Oceans and the Law of the Sea

1. The World Bank has assisted its client countries in a wide range of activities directly related to the implementation of UNGA resolutions on oceans and the law of the sea. These include the following activities described in greater detail below:

- A. Sustainable fisheries
- B. Climate change
- C. Marine pollution, biodiversity and ecosystem conservation
- D. Coastal zone management
- E. Science-based management of coral reefs
- F. Addressing the food crisis

A. Sustainable fisheries

2. Many of the World Bank's activities with respect to fisheries are undertaken through the PROFISH partnership. PROFISH facilitates close cooperation with other leading international entities such as FAO, WorldFish Center and the GEF. PROFISH brings donors and stakeholders together in support of a common vision for sustainable fisheries development planning and management at the national, regional and global levels. The sustainable fisheries work falls into three main categories: development of global goods; activities at the regional level (such as studies and cooperation among countries) and activities at country level (such as World Bank loans or grants, and studies or technical advice).

A.1. Global goods

3. A study titled *The Sunken Billions. The Economic Justification for Fisheries Reform* shows that the difference between the potential and actual net economic benefits from marine fisheries is in the order of \$50 billion per year – equivalent to more than half the value of the global seafood trade. The cumulative economic loss to the global economy over the last three decades is estimated to be in the order of two trillion dollars. In many countries the catching operations are buoyed up by subsidies, so that the global fishery economy to the point of landing (the harvest sub-sector), operates at a net loss.

4. The study emphasized that the declining biological health of the world's fisheries has tended to obscure the even more critical economic health of the fisheries. Economically, healthy fisheries are seen as fundamental to achieving not only the restoration of fish stocks but other accepted objectives for the fisheries sector, such as improved livelihoods, exports, fish food security and economic growth. When fish stocks are fully exploited in the biological sense, the associated fisheries are almost invariably performing below their economic optimum. In some cases, fisheries may be biologically sustainable but still operate at an economic loss. The depletion in fish capital resulting from overexploitation is rarely reflected in the reckoning of a nation's overall capital and GDP growth. A number of fishery-specific estimates of the losses of economic benefits were also undertaken, including for the world's largest 'single species' fishery - Peru's anchoveta fishery, and on fisheries in Bangladesh (hilsa) Gulf of Thailand, South Africa, Lake Victoria (Nile perch), Mauritania and Morocco (octopus) and several Japanese and Northeast Atlantic fisheries.

5. The study shows that if fish stocks were rebuilt, the current marine catch could be achieved with approximately half of the current global fishing effort. This illustrates the massive overcapacity in the global fleet resulting in stagnant productivity and economic inefficiency. While overcapacity is seen as a major driver of fishery resource depletion, it is recognized that loss of habitats and pollution also play important roles.

6. The *Sunken Billions* recognizes that crisis in the world's marine fisheries is not only a fisheries problem, but one of the political economy of reform, both in the developed and developing world. Fisheries reform requires broad-based political will founded on a common vision and social consensus on the steps towards reform. The World Bank is following up on a number of the actions suggested in the study. These include:

- (i) effectively removing the open access condition and strengthening rights for fishers and fishing communities to provide incentives for sustainability and good stewardship;
- (ii) creating social safety nets and alternative livelihoods opportunities for fishing communities and linking fisheries reforms to poverty reduction programs and other instruments of economic and social reform;
- (iii) phasing out subsidies that increase fishing effort and fishing capacity and redirect public support to strengthen fisheries management capability; and
- (iv) Improving public accountability for the health of a nation's fisheries resources and with respect to the distribution of benefits from harvesting these resources.

7. PROFISH initiated a study on the global footprints of fishing, highlighting the importance of fisheries as a whole, and small-scale fisheries in particular (*Small-scale Capture Fisheries. A global overview with emphasis on developing countries*. Prepared by FAO, World Bank and WorldFish Center). The study shows that the major part of the small-scale production is destined for local human consumption. Approximately 100 million people are employed in fisheries including in post harvest activities (processing and marketing), but excluding subsistent fishers. Discards are generally insignificant and, overall, the small-scale sector is more fuel efficient. At the global level between one and ten (metric) tons of fish are harvested per ton of fuel. Small-scale fisheries catch 2-12 tons per ton of fuel, while large-scale fisheries tend to have a higher carbon footprint harvesting 1-5 tons of fish per ton of fuel. Some 50 percent of these fisherworkers are women.

8. The Bank's *Gender in Agriculture Sourcebook* dedicates a special chapter to women in fisheries offering guidance on the particular challenges encountered by women in the sector. An *Evaluation of the Impact of Development Assistance* in the fisheries sector recommended that significant improvements in the evaluation of the impact of development assistance to the sector were desirable. A further study is examining the linkages between and policy dimensions of poverty and fisheries while related work.

9. The Bank's PROFISH program has continued to build awareness on sustainable fisheries issues including through a Technical Briefing on fisheries to the World Bank's Board of Directors, holding a workshop on corruption in fisheries, co-sponsoring a Global Conference on Small-scale Fisheries, sponsoring developing country participation in international conferences, workshops and think tanks and engagement in dialogues on sustainable fisheries. PROFISH also contributed to several World Bank, FAO and other publications including on climate change and fisheries.

10. A new private sector partnership, the Alliance for Responsible Fisheries (ALLFISH) has been established. The objective of ALLFISH is to build a global public-private alliance for sustainable fisheries which will effectively engage the private sector in good governance of fisheries and aquaculture. The Alliance plans to foster private sector engagement in good governance through private sector initiatives to combat corruption and to eliminate illicit fish from value chains, including through industry codes of conduct and fair and sustainable trade.

11. Efforts to establish a global list of irresponsible fishing vessels have encountered procedural and legal difficulties. The World Bank has provided inputs to the 6th Informal Consultation of State Parties to the 1995 UN Fish Stock Agreement and through PROFISH has supported the work of IUCN in this respect.

12. The WSSD Plan of Implementation calls for the restoration of fish stocks by 2015, but the lack of a robust country-by-country benchmark on the health of fish stocks constrains country ownership and monitoring of progress on this key indicator. In consultation with its partners, PROFISH is developing an approach to establish such a baseline indicator. Progress on restoration of fish stocks can benefit from renewed calls by UN agencies for member countries to provide timely information on stewardship of their fisheries resources. Such reporting could be made in a standardized manner to FAO as part of member's reports on the implementation of the Code of Conduct for Responsible Fisheries.

A.2. Regional and Country-level activities

13. In close collaboration with donors and other financial institutions, the World Bank supports regional initiatives in Africa, the Caspian basin and in the Pacific islands. Projects under preparation or implementation include the Lake Victoria Environmental Management Project No. 2 and the West African Regional Fisheries Project. Grant assistance has been provided to West Africa's Sub Regional Fisheries Commission to implement the FAO port state model scheme with particular emphasis on the legal framework and capacity building. This allowed selected developing countries to test the practical application of the model scheme in key regional fishing ports.

14. The World Bank is preparing a regional project which in several stages is planned to embrace the countries from Mauritania to Sierra Leone, members of the Sub Regional Fisheries Commission. This project may extend to Liberia and Ghana. The objective of the project is to sustainably increase the economic benefits generated by the exploitation of the marine fisheries resources of West Africa, and the proportion of those benefits captured by the West African countries. The project will focus in particular on (i) reducing illegal fishing, (ii) strengthening client country capacity to responsibly govern and manage their fisheries, and (iii) increasing the value of the fish wealth and the proportion of the returns captured by the coastal states.

15. Based on request submitted by the Secretariat of the Fisheries Committee for the West and Central Gulf of Guinea (FCWCGG) PROFISH has supported the preparation of the legal instruments pertinent to the establishment of the new Committee. These legal instruments are: (i) the Convention for establishment of the FCWCGG; (ii) the Rules of Procedure; and (iii) the draft Headquarters Agreement.

16. At the country level, the World Bank is supporting projects and studies with substantial fisheries components in various stages of implementation or preparation, including in Yemen, Cape Verde, Mauritania Senegal, Gambia, Guinea Bissau, Sierra Leone, Liberia, Ghana, and Gabon; and in Kenya, Tanzania, Madagascar, the Seychelles, India, Vietnam, Nicaragua and

Peru. The Peru environmental development policy loan (\$330 million in preparation) includes components which target reform of the anchoveta fishery and marine environmental protection.

B. Climate change

17. A Strategic Framework for Development and Climate Change was adopted during the October 2008 Annual Meetings. The Framework will guide the specific strategies and business plans of the World Bank particularly in climate sensitive sectors, such as fisheries. Under the Framework major business lines include mitigation measures and adaptation strategies. In the natural resources sectors such as fisheries, the World Bank continues to advocate best practices and sustainable use to build resilience and restore the health of degraded ecosystems. The Bank will step-up efforts to build awareness in client countries and undertake policy research, knowledge and capacity building to develop national and local means to adapt to climate change.

18. More specifically the PROFISH Program will take steps to integrate adaptation to climate change into fisheries reform efforts in selected developing countries, in particular in sub-Saharan Africa. PROFISH will also dialogue with partners such as FAO and WorldFish to help identify key knowledge gaps, such as the impact of climate change on tropical and sub-tropical marine ecosystems and the potential adaptation strategies open to the affected fisheries and coastal communities.

19. The *World Development Report 2010* will focus on climate change and will capture key oceans and climate change issues, the particular threats to coastal peoples and the range of adaptation strategies available. Further World Bank studies – in particular on the ‘Economics of Adaptation to Climate Change’ - will also address coastal and oceans issues and the results will inform the next rounds of the global climate change negotiations.

C. Coastal zone management

20. The Bank has a growing portfolio of Integrated Coastal Management and Marine Protected Area projects, which are designed to rationalize use of the coastal zone, reduce pollution from point and non-point sources, build capacity for sustainable fisheries management, conserve marine biodiversity, and reduce hazards in the coastal zone, many of which are increasingly linked to climate change.

21. An integrated watershed - coastal area management approach is being taken in some of the smaller countries where the coastal zone includes much of the area of the country, or is heavily influenced by rivers emptying into the coastal zone. Watershed management and the introduction of good agricultural practices to control erosion and nutrient runoff are part of this approach; sustainable fisheries management is supported at the local level through the use of closed seasons, fishery reserves and bans on destructive fishing methods.

22. Efforts to conserve marine biodiversity include establishment and strengthening Marine Protected Area networks at scales large enough to preserve habitat, protect species and vital ecosystem processes and services on which surrounding communities depend. Support is increasing for the protection of wetlands in the Bank’s Latin America and South Asia Regions,

conscious of the multiple ecosystem services they provide, including carbon sequestration and coastline stabilization.

23. Examples of ongoing projects in sub-Saharan Africa include: Tanzania Marine and Coastal Environmental Management Project (MACEMP); Namibia Coastal Management Project (NACOMA); the Senegal Integrated Coastal and Marine Resources Management Project (GIRMaC); and the Guinea Bissau Coastal and Biodiversity Management Project. (CBMP). Investments in these projects total more than \$90 million.

24. Proposed coastal zone management projects in Kenya and the Adriatic are also under discussion and include support for improved fisheries management, alternative livelihoods including pro-poor sustainable tourism and protection of critical marine habitats in Kenya and pollution control and biodiversity conservation in the Adriatic. In India, the Bank has been asked to assist the government at the federal and state levels for the design and implementation of an Integrated Coastal Zone Management Project that will (a) map and delineate a hazard line and ecologically sensitive areas as a basis for preparing integrated management plans for all coastal zones in the country; (b) help build capacity in integrated coastal zone management at the state and national levels, including setting up a national coastal zone management institute; and (c) invest in promoting state-level approaches to integrated coastal zone management.

25. The Sundarbans, located in the Ganges Delta between India and Bangladesh, is the world's largest contiguous stretch of mangroves. Continued ecosystem integrity of the Sundarbans mangrove forest is of critical importance to the entire marine fishery in the Bay of Bengal and the livelihoods in the region. The Bank will be supporting efforts to effectively assess and manage the Sundarbans marine assets through several initiatives. These include: (a) the above mentioned India Integrated Coastal Zone Management Project; (b) nonlending technical assistance for preparation of a strategic action plan for the biodiversity conservation and socioeconomic development of the Sundarbans area of India; and (c) through the ongoing transboundary review of priority environmental issues that need to be addressed in a strategic action plan for the Bay of Bengal. This action plan is being facilitated through the Bank, the Global Environment Facility and FAO.

D. Pollution and marine biodiversity and ecosystem conservation

26. The World Bank is assisting its client countries to conserve marine biodiversity and to control marine pollution. Conscious of the urgent need to address marine pollution from land-based sources the Bank's current lending portfolio for improved wastewater treatment (including secondary treatment) is approaching \$1 billion. Investments in nutrient reduction from both point and non-point sources, such as agricultural run-off, include support for pollution control in regional seas.

27. For example, in the Black Sea, with assistance from the GEF, the Bank has leveraged over \$300 million to control land-based sources of marine pollution. Coastal states in the area of the Patagonian shelf large marine ecosystem benefit from the Bank's Coastal Contamination Prevention and Marine Management Project, which includes support for the implementation of MARPOL. Protection of marine biodiversity is a significant focus and rationale of many of these projects.

28. The threat posed by invasive species resulting from increased maritime traffic is being countered by the Bank's financial support to the Global Invasive Species Programme (GISP). This initiative has been mandated by the Convention on Biological Diversity to raise awareness about invasive species issues, build capacity at the national and regional level, and help implement solutions. In partnership with the Netherlands, the Bank has helped pilot the first training in East Africa on the management and control of marine and coastal invasive species and a scaling up these efforts is envisaged.

29. The Bank, with GEF support, is responding to the risk posed by the deficiencies in basic navigational safety, vessel spill contingency plans and operational spills through support for vessel traffic systems and establishment of Marine Electronic Highways in international waters. Training in oil spill contingency planning for coastal states in Sub-Saharan Africa has also benefited from Bank support.

30. Through PROFISH, the Bank has provided support to IUCN for advocacy on international fisheries issues, including on conservation of deepsea fisheries and marine genetic resources.

E. Science-based management of coral reefs

31. In line with recommendations under the WSSD Plan of Implementation regarding the need for better integration of science into marine resources management, the Bank, in partnership with the GEF, continues to support the global program on Global Coral Reef Targeted Research and Capacity Building for Management. The Program has helped review of the evidence from climate change impacts and local human stressors, which concluded that coral reefs as we know them will likely disappear by 2050 if business as usual continues (i.e., atmospheric CO₂ levels exceed 450 ppm and reefs continue to be overfished, polluted and physically degraded through destructive fishing and coastal development).

32. The overall goal of the program is to address key knowledge gaps in understanding of how coral reef ecosystems are responding to global change (including changes resulting from increased population pressure which puts additional (direct) stress on coral reefs, and climate change), and to put this information in the hands of decision-makers. With over 400 million people in the world dependent on coral reefs for food, livelihoods and coastal protection, in addition to their global biodiversity value, understanding the major drivers of vulnerability and resilience in coral reef ecosystems will be essential to managing them sustainably.

33. The program, which involves over 100 scientists and 40 research institutions from developing and developed countries, is envisioned as a 15 year effort implemented over three phases. The first (5 year) phase of the CRTR Program (at a cost of \$23 M) will be completed in December 2009. To date, major outcomes of the Program have included:

- (i) implanting a robust, comparative research program in four coral reef regions of the world and support for development of Centers of Excellence in each region (Mesoamerica, Southeast Asia, Eastern Africa, and Australasia);
- (ii) over 200 peer reviewed publications, including a major review in *Science* on Coral Reefs and Climate Change (December 2007);
- (iii) development of new tools for managers & decision-makers, including: (a) a coral disease handbook for underwater identification of diseases in the Caribbean and Southeast Asia; (b) coral reef restoration guidelines (in English, French and Tagalog);

- (c) remote sensing tools for habitat mapping and monitoring changes in coral reef health; and modeling and decision support tools;
- (iv) instituting a Future Leaders Network of young coral reef scientists groomed to be the next generation of leaders in the field; and using North-South mentoring and building South-South networks and capacity building for world class science in support of coral reef management.

34. The Program's research results are being translated into messages for coral reef managers, policy makers and the general public through a local government initiative, a communication and outreach component and policy briefs. Information is also being channeled into coral reef management projects supported by the GEF and other donors and partners.

E. Addressing the food crisis

35. About one billion people worldwide rely on fish as a primary source of animal protein. Rising fuel prices constrained fish production during 2008 just as the prices of other foods increased. The Bank's response was directed at the food crisis in general and not specific commodities such as fish. A \$1.2 billion Global Food Response Facility (GFRP) was established to cope with the impact of high food prices on the poor. The GFRP seeks to avoid price subsidies and focus on the vulnerable - shift from food aid to food/ nutrition assistance, for example through food vouchers, school meals and improved maternal health. GFRP projects provide incentives to produce food locally, improve tenure and support essential services. The initiative fosters awareness that food and energy are "interconnected challenges" - that the price of inputs, such as fuel for fishing vessels, impacts on fish prices; and that social safety nets may be required to protect both poor producers and poor consumers against the impact of high fuel and food prices.