



GLOBAL INTERNATIONAL WATERS ASSESSMENT

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Overexploitation of fisheries – a global problem

Scaling and Scoping assessments have been received from 30 different sub-regions distributed around the world. Most of these sub-regions have been assessed as single hydrological entities. However, seven sub-regions have been divided into either two or more sub-systems, yielding a total of 38 discrete assessments of the environmental and socio-economic impacts of water related issues around the world.

The most significant result that these sub-regional assessments show, the worldwide overexploitation of fisheries and other living resources. Recently, the United Nations Food and Agriculture Organisation (FAO) estimated that 75% of the world's commercial fish stocks were currently being fished at, or above mean sustainable yields. The results of the GIWA Scaling and Scoping corroborate this statement by the FAO. In 76% of sub-regions or sub-systems, the overexploitation of fisheries was considered severe by sub-regional experts indicating that the decline of fish stocks and the associated disruption of food security and economic wellbeing it brings is a global problem that requires immediate attention. Unfortunately, in many sub-regions, particularly in South-east Asia, Africa and South America, the decline in fish stocks has pushed many fishers to resort to using increasingly destructive and indiscriminate forms of fishing. Furthermore, sub-regional Task Teams highlighted the fact that the use of destructive fishing techniques had severe impacts on many habitats. For example, in south-east Asian

sub-regions, where the use of dynamite and cyanide to catch fish is prevalent, the condition of coral reefs is declining rapidly.

Freshwater

In other sub-regions of the world, particularly those in Africa, central Asia and China, freshwater shortage caused by the construction of so-called "mega-dams", the overabstraction of water for irrigation and the diversion of water from their natural courses into other systems, has caused severe environmental and socio-economic impacts. For example, in the Aral Sea sub-region, the diversion of the rivers Amu Darya and Syr Darya for irrigation has changed the hydrological cycles of the entire region. Water evaporating from the Aral Sea was once the primary source of precipitation for central Asia but now the Aral Sea supplies very little of the water to this area.

Sub-regional Task Teams indicated that the impacts of pollution, particularly eutrophication, chemical, suspended solids and solid waste, were moderate to severe in many sub-regions, while thermal and radionuclide pollution rarely had a significant impact on sub-regional water resources. Eutrophication was particularly severe in central and east Asian sub-regions that have large terrestrial catchments that can accumulate nutrients and excess fertiliser from agriculture and drain into reservoirs with limited water exchange such as the Baltic, Black and Caspian Seas. The impacts of pollution on the economy, human health and other social aspects of the sub-regions, tended to be moderate.



The overexploitation of fisheries is considered severe by most sub-regional experts.

Only in the Oyashio Current and Coral Sea sub-regions did pollution have no impact on any of the socio-economic indicators.

Global change

Global change is considered to be a major concern in the future. Almost all task teams reported that there were inadequate data to determine confidently that global change had had a significant impact on their sub-regions, particularly in the GEF-eligible sub-regions. Now sub-regional task teams generally assessed the impacts of global change as only slight or none at all. Several sub-regions along the coast of Africa indicated that the large oceanic currents had altered their velocity or direction in the recent past which had moderate impacts on these sub-regions. In addition, many of the coral reef bearing sub-regions had indicated that recent anomalous increases in sea temperatures had caused a severe coral bleaching event which had moderate impacts on the condition of those reefs.

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ETT members discuss at the Kalmar meeting, from left John Dixon, USA, Susanna Stymne-Airey, Sweden, Ronaldo Seroa da Motta, Brasil, Edith Mussukuya, Sweden, Chan Huan Chiang, Malaysia, and Paul P. Appasamy, India

Meeting with focus on environmental economics

The first meeting of the Economics Task Team took place in Kalmar on September 17. The ETT members were appointed taking into account their internationally recognized expertise as well as the team balance both between the Northern and Southern Hemispheres and between genders. The overall objective of the Economics Task Team is to oversee the soundness of the socio-economic components of the GIWA project. The meeting focused on the Causal Chain and Policy Option Analyses. The GIWA approach, i.e. to focus on the variables that influence and constraint human behavior, was considered in line with current thinking in the field of Environmental Economics.

The ETT recommended that guiding questions should be formulated to better analyze the role of the root causes in the processes that lead to environmental and socio-economic deterioration. These guiding questions will soon be posted on the GIWA website. The next meeting of the ETT will focus on the socio-economic aspects of the regional and global reports.

The GIWA Co-ordination office in Kalmar is preparing a background paper on the Regional Seas of the New Independent States (NIS) of former Soviet Union including the Aral, Baltic, Barents, Black and Caspian Sea. The background paper will be used to prepare the NIS Environment Strategy to be endorsed at the "Environment for Europe" meeting in Kiev, May 2003. The objective of the paper is to identify challenges and recommend actions to resolve the environmental degradation in the concerned seas.

Four system teams in the Gulf of Guinea

A very successful Casual Chain and Policy Options Analyses Training workshop for focal points and selected experts from sub-regions 41, 42 43 and 45b took place in Abidjan, Cote d' Ivoire, 8-13 September, 2002. Juan Carlos Belausteguigoitia and Edith Mussukuya from the GIWA Core Team conducted the training, supported by UCC experts. Following this training each of the sub-regions shall now train their task teams and carry out the exercise.

Read more about how the sub-regional work was organized in the Gulf of Guinea on our website: www.giwa.net under "News and highlights".



In memory of Manuel Alepuz



Manuel Alepuz, GIWA's focal point in the Caribbean Islands, died in La Habana, Cuba, on September 16.

Manuel had an outstanding career both as a civil servant and as a researcher. He was the General Manager of Cuba's railroads (1960) and Deputy-Minister for Transport (1963-1980). From 1980 onwards he dedicated his professional life to the creation and strengthening of research institutions, like the Center for Coastal Environmental Management. He was appreciated and respected by his colleagues both in Cuba and abroad. Manuel will be greatly missed.

Water agreement in Johannesburg

Commitment to halve the proportion of people without access to sanitation by 2015: this matches the goal of halving the proportion of people without access to safe drinking water by 2015.

This agreement announced during the Johannesburg Summit underlines the importance of the GIWA assessment. GIWA was present at the huge world summit in Johannesburg, invited by both UNEP and the Swedish government. Information on GIWA was posted in the Water Dome, where also Olof Lindén, scientific advisor, gave a presentation.

Upcoming events.....

3-4 October in Copenhagen, Denmark: Joint GIWA-WWF CCA and POA workshop for SR 17, the Baltic.

3-5 October in Helsinki, Finland: UN Economic and Social Council meeting on the protection and use of transboundary watercourses and international lakes.

8-9 October in Kalmar, Sweden: 5th GIWA Steering Group Meeting.

15-18 October in Greenville, NC, USA: GTOS Conference (Global Terrestrial Observation System).

28 October in the Hague, Netherlands: 4th Conference of Monitoring Tailor made.

18-20 November in Mexico: 1st International Congress of Transboundary Waters.

16-23 March, 2003, in Kyoto, Japan: 3rd World Water Forum

11-14 August, 2003: Stockholm Water Symposium

18-20 August, 2003, in Kalmar, Sweden: Joint GIWA-University of Kalmar Conference on Transboundary Waters.