



Dear GIWA Friends,

Environmental issues have been given much attention by the public lately, with focus on the ongoing discussion about the Kyoto Protocol and the recent signing of the Stockholm Convention on Persistent Organic Pollutants. This renewed public awareness may lead to benefits and increased human welfare if linked with the socio-economic issues prevailing in today's society. Water is one of the earth's most important life sustainable elements, and the environmental status of the aquatic ecosystems are heavily influenced directly and indirectly by human activities. Part of the GIWA mission is to highlight the impact of environmental problems on the economy, human health, and other aspects of society, and to include these links in our assessment program. This is an important part of the GIWA Scaling and Scoping results that are starting to come in, and in this newsletter some of the first GIWA results from sub-regional scoping activities are reported. I encourage you all to follow the development of GIWA on our web site: www.giwa.net.

Dag Daler, Project Manager

Sub-Saharan African Progress

The GIWA activities in Sub-Saharan Africa have moved forward significantly during the last months. The Benguela Current sub-region has produced the first assessment results, and the other sub-regions are moving ahead.

Network developments

Agreements have now been reached with Prof. Niang-Diop, Université C.A. Diop, Dakar-Fann, Senegal, who will be the focal point for the **Canary Current** (GIWA sub-region 41), and with Mr. Wellens-Mensah, Hydrological Service Unit, Accra, Ghana, for the **Gulf of Guinea** (42). Active negotiations are being held with candidate focal points in the remaining sub-regions (i.e. 43, 45, 46 and 47), and agreements are expected to be reached within the next few weeks. All the Sub-Saharan African sub-regional focal points will gather for an assessment methods training workshop in **Mombasa, 18-21 July**. The focal points will be intensively trained in the Scaling and Scoping method, and a wide range of experts and other regional stakeholders will build the foundation for the coming GIWA activities in Sub-Saharan Africa.

Modification of stream flow - a priority issue

The Scaling and Scoping has been conducted for the **Benguela Current** (GIWA sub-region 44). The assembled expert group met in April, and was led by Dr. Kim Prochazka at the International Ocean Institute, University of the Western Cape. The group concluded that **Modification of stream flow** was one of the most important issues in the area. Every

river in the sub-region is modified by impoundments, resulting in a significant decrease in river flow. This has a major socio-economic impact, causing both severe human health losses and economic costs. The over-abstraction of rivers is connected to modification and losses of ecosystems. Many permanent rivers have become intermittent, some intermittent rivers have ceased to flow at all, and floodplain areas have been lost. These are changes that have resulted in loss of biodiversity and ecosystem functions. After the Modification of stream flow, the following four issues were selected as priority issues, in order of importance:

- Impact on biological and genetic diversity
- Changes in ocean CO₂ source/sink function
- Over-exploitation
- Eutrophication



Over-exploitation was one of the five issues prioritised by the Benguela Current expert group. Almost every marine resource in the sub-region is over-exploited.

These preliminary results will be completed by strengthening the socio-economic part according to the new version of the Scoping and Scaling Methodology, a process that may result in small revisions. The complete results for the Benguela Current will be presented at the GIWA General Assembly in October, together with results from the other GIWA sub-regions.

Methods Task Team Endorses the New Scaling and Scoping

In line with the decisions made at the last GIWA Steering Group meeting, the Methods Task Team (MTT) has been convened to give recommendations on how the GIWA Methodology can be improved. During this meeting, which was held in Kalmar on June 14, the method for Scaling and Scoping was in focus. The MTT included representatives from countries in transition,

developing countries and developed countries, with expertise from the fields of environmental economy, public health, environmental assessment, and other environmental sciences. The MTT emphasized that the preparations are crucial for a Scaling and Scoping workshop to be successful, for example, the experts must receive the Methodology well in advance, and they should conduct parts of the Scaling and Scoping individually before the meeting. It was also stressed by the MTT that the justification for each score is a very important tool, both to provide information for later stages of the Methodology, and to inform about the validity of each score. Further, it was pointed out that the collaboration with other programmes, such as the Large Marine Ecosystems and the Millennium Ecosystem Assessment, should be strengthened; and that existing scenarios, primarily GEO 3, but also national and regional scenarios, should be used as background material when conducting the future scenarios of the Scaling and Scoping exercise.



Ms. Caisa Oskarsson and Ms. Edith Mussukuya, both from the GIWA co-ordination office, and MTT member Prof. Jacquie McGlade from University College, London, after the MTT meeting.

GIWA Office Staff Update

We are welcoming Ms. Edith Mussukuya, M.Sc., fresh water resources scientist from the University of Minnesota, who will work at the GIWA co-ordination office full-time. She will act as regional co-ordinator for Sub-Saharan Africa. Mr. David Souter, B.Sc., marine biologist from the University of Kalmar is working part-time at the GIWA project since March, i.a. with the General Assembly preparations. Ms. Susanna Stymne Airey, Ph.D., environmental economist from the Baltic Business School, will also work at the GIWA project part-time. She will work with socio-economic issues, i.a. related to the Methodology. The staff developments are continuously presented at the GIWA web site.

Recent Focal Point Agreements

Additional to the agreements for Sub-Saharan Africa reported above, several focal points have recently been contracted in other regions. In the two sub-regions covering the western coast of Latin America, the **Humboldt Current** (64) and the

Eastern Equatorial Pacific (65), the GIWA assessment work will be co-ordinated by Prof. Eguiguren and Prof. Alarcón, the Comisión Permanente del Pacífico Sur (CPPS), Quito, Ecuador. The assessment for the **Patagonian Shelf** (38) will be co-ordinated by Pres. Calcagno, the Instituto Argentino de Recursos Hídricos, Buenos Aires, Argentina. For the **Small Island States** (62) in the South Pacific, Mr. Tutangata at the South Pacific Regional Environment Programme (SPREP), Apia, Samoa, will be the focal point. For a map over the GIWA sub-regions, please visit www.giwa.net.

GIWA Events and Milestones

Some Recent Focal Point Agreements

- **Patagonian Shelf** (38)
- **Canary Current** (41)
- **Gulf of Guinea** (42)
- **Small Island States** (62)
- **Humboldt Current** (64)
- **Eastern Equatorial Pacific** (65)

See the main text for details.

World Environment Day, Seminar, Kalmar, 5 June

Scaling and Scoping workshops have been held for

- **Benguela Current** (44), Cape Town, 4-6 April
- **Aral Sea** (24), jointly with UNESCO SABAS, Tashkent, 19-21 May
- **Black Sea** (22) and **Caspian Sea** (23) (May-June)
- **Baltic Sea** (17), Tallinn, 18-19 June

Assessment Training workshops will be held for

- the **Sub-Saharan African** sub-regions, Mombasa, 18-21 July
- **Antarctic** (66), the **Small Island States** (62), and the remaining sub-regions in **Eastern Asia**, (a total of 11 sub-regions will be represented), Bangkok, 26-28 July

Scaling and Scoping workshops will be held for

- **Coral Sea Basin** (59) and **Great Barrier Reef** (60), Townsville, 23-27 July
- **Brazil Current** (39), Rio de Janeiro, 2-4 August
- **Patagonian Shelf** (38), Buenos Aires, 16-18 August
- **Humboldt Current** (64) and **Eastern Equatorial Pacific** (65), Quito, 27-30 August
- **Amazon** (40b), Belém, Brazil, 13-15 September
- **Brazilian Northeast** (40a), Fortaleza, Brazil, 19-21 September

Note: Many more Scaling and Scoping workshops will be held. Only those with fixed dates are presented here.

The first GIWA General Assembly, Kalmar, 9-11 October