

PARTNERSHIP INITIATIVES INFORMATION SHEET

Name of the Partnership/Initiative

Application of Nuclear and non Nuclear Techniques for the Monitoring and Management of Harmful Algal Blooms in the Benguela Coastal Region

Expected date of initiation: 1 January 2003

Expected date of completion: 31 December 2005

Partners Involved:

Governments: (by means of IAEA/AFRA Technical Co-operation Project)

Angola
Namibia
South Africa

Intergovernmental organizations:

International Atomic Energy Agency (IAEA)

Intergovernmental Oceanographic Commission of UNESCO (IOC)

AFRA

Major groups:

Other:

Leading Partner:

Name of the contact person/focal point:

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Main objectives of the Partnership/Initiative

Please provide a brief description:

Harmful micro-algal toxins represent a major threat to public health and marine living resources in the Benguela region. The main objective of this Partnership/initiative is to develop an integrated monitoring program to address the adverse effects of harmful algal blooms through the application of isotopic and classic techniques, in order to

contribute to the sustainable development and management of the Benguela marine coastal environment. More specifically:

1. To transfer to Angola, Namibia, and South Africa, the identification/quantification method for toxic phytoplankton and the receptor binding assay (RBA) and related assays technologies for algal toxins.
2. To establish the capability to monitor toxic phytoplankton and to perform receptor assay methods for algal toxins in the Member States laboratories.

Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration:

The partnership addresses Agenda 21 's Cluster 13: Oceans and Seas, whose goal is "protection of the oceans, all kinds of seas, and coastal areas as well as the protection, rational use and development of their living resources." Losses from individual harmful algal bloom events are significant, often reaching US\$ 5 - 10 million per event in areas with extensive wild or cultured fish or shellfish industries. These events have occurred over an expanding range in the last few decades, with increasing impact on human health and trade. Virtually every coastal country is now affected.

Expected results:

Please provide a brief description:

- 1- Equipped laboratory facilities and trained personnel in toxic phytoplankton identification/quantification & Receptor Binding Assay and related assays in participating Member States.
- 2- Incorporation of the toxic phytoplankton quantification method and the Receptor Binding Assay technology in national monitoring programs.
- 3- Harmonized approach among national HAB monitoring programs in the Benguela region.

Specific targets of the Partnership/Initiative and timeframe for their achievement:

1. Establish adequate facilities for carrying out phytoplankton identification/quantification and Receptor Binding Assays and related assays on phytoplankton and shellfish (Jan-Sept 2003).
2. Harmonize approaches for monitoring protocols for phytoplankton and shellfish between Member States through regional workshops (Mar 2003, Jul 2004, Oct 2005).
3. Establish phytoplankton identification/quantification methods and RBA related assays technologies, and algal and shellfish toxin extraction procedures at Member State laboratories, including: PSP, ASP, NSP, DSP. This will be achieved through training and experts visit (Mar-Dec 2003).

Coordination and Implementation mechanism

Please provide a brief description of expected coordination/implementation mechanism of the Partnership/Initiative.

- Coordination will be achieved through communication between the IOC focal point, the IAEA Technical Officer for the HABs project in the Benguela region, and national

focal points.

- Implementation will be undertaken according to the workplan established for the IAEA project on HABs in the Benguela region and endorsed by Member States.

Arrangements for funding

Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.)

IAEA available resources: US \$ 366,000 for laboratory equipment, training and expert services
IOC: training materials, manuals and guides, lecturers, and technical backstopping.

Arrangements for capacity building and technology transfer

Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures:

The Partnership/Initiative will ensure part of the technology transfer through a regional training workshop on identification, regulations and design of monitoring and management systems for HABs.

Please also provide here a brief description of expected arrangements for technology transfer (if applicable).

IAEA will provide technical/administrative backstopping and lecturers recruitment for nuclear techniques and fellows travel arrangements.

IOC Science and Communication Centres in Copenhagen and Vigo would provide technical backstopping and lecturers for non-nuclear techniques and the corresponding training materials.

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)

Please provide a brief description:

The Partnership/Initiative will be linked to an existing IAEA project on HABs in the region. It will contribute directly to existing regional programs, including the Benguela Current Large Marine Ecosystem Program (BCLME) funded by the Global Environmental Facility and the Benguela Environment Fisheries Interaction and Training Program (BENEFIT), primarily funded by NORAD and GTZ, which currently incorporate aquaculture and HAB components.

Monitoring Arrangements

Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD:

(e.g. frequency/modalities of preparation of progress reports; electronic updates, news-letters, etc)

- 1- Prepare protocols for incorporating phytoplankton identification/quantification methods (IOC), RBA techniques (IAEA) and monitoring systems (IAEA&IOC) in HAB national screening programs.

2- Write joint report following regional workshops.

Other relevant information:

Web-site (if available):

The Partnership/project will be hosted on the IOC/HABs site (<http://ioc.unesco.org/hab/default.htm>), where it will be possible for IAEA and IOC and national partners to edit the site on-line.

Name and contact information of the person filling in this table:

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