GEF

UNDP

Yellow Sea

UNDP/GEF PROJECT ENTITLED "REDUCING ENVIRONMENTAL STRESS IN THE YELLOW SEA LARGE MARINE ECOSYSTEM"

**First Meeting of the Regional Scientific and Technical Panel
for the UNDP/GEF Yellow Sea Project**
Dalian, China, 4-6 July 2005

Project Cross-Component Issues

BACKGROUND

Following the approval of the Project Implementation Plan by the Project Steering Committee (PSC) at its First Meeting (Seoul, Korea, 7-8 March 2005), the Project started its implementation with the first round of the meetings of the five Regional Working Groups (Ecosystem, Biodiversity, Fisheries, Investment and Pollution), with the aim of identifying the major data and information requirements for preparing a Transboundary Diagnostic Analysis (TDA) for the Yellow Sea.

A total of five meetings, one for each of the project components, were held in China and Korea from the 6th April – 20th May 2005. The meetings discussed the methods required to identify Yellow Sea problems related to each of the project components, and the types of data and information to support the identified problems, the format of the data and information to collect, and proposed activities to gather additional required data.

This document summarises the major issues relating to the collection of data and information that arose during each of these meetings, many of which are cross-component in nature, and need to be discussed and addressed by the Regional Scientific & Technical Panel (RSTP).

1.1   Fisheries and Biodiversity Component Issue

1.1.1   First Meeting of the Regional Working Group for Fisheries

The following are the issues that arose from the First Meeting of the Regional Working Group for the Fisheries Component (RWG-F), Qingdao, China, 11 - 14 April 2005:

   a.   There was discussion over the use of Carrying Capacity as an appropriate, contemporary and feasible method of assessing fisheries and as a tool for management, and that this method may have been superseded by newer techniques which should be examined. The RWG-F agreed to focus on the data and information of a select (to be determined) number of fish species (indicator species) which may possibly total 5 in number. The group decided to leave the

meeting with the agreement to assess the feasibility of undertaking this type of research, to explore potentially newer techniques, methods and mechanisms for ecosystem-based fisheries management.

The feasibility of undertaking a carrying capacity assessment needs to be discussed along with an agreement of an appropriate definition and mechanisms to assess this subject, with consideration of the concomitant carrying capacity needs of the Ecosystem group (see 1.2b).

1.1.2   First Meeting of the Regional Working Group for Biodiversity

The following are the issues that emerged from the First Meeting of the Regional Working Group for the Biodiversity Component (RWG-B), Qingdao, China, 19 -22 April 2005:

a. 'Gene pool analysis' was suggested to be deleted from the list of activities for Biodiversity due to current lack of budgetary allocation. It was recommended by the PMO that this sub-component remain in the documentation due to the perceived importance of this subject and its inclusion in the final TDA, and in the anticipation that future budget re-allocations and/or new funding sources may allow 'gene pool analysis' activities to occur.

The short-term fate of this sub-component (Gene Pool Analysis) should be discussed in the context of the entire project, with consideration of its relative importance and given a current deficiency in budget.

b. The Biodiversity Component requests data and information from other working groups of the extent of Yellow Sea saltpan and mariculture activities in relation to this component's assessment of habitat use and conversion. Biodiversity is not collecting this data and it is therefore required of other components.

The potential source of this data needs to be identified, and the mechanism and timing of collection developed and agreed upon.

c. The Biodiversity Component has identified the need for information to help measure relative 'condition of habitats' and requires a coordinated effort with the Regional Working Group for the Ecosystem with regard to the collection of physico-chemical data and other 'habitat quality' data to allow them to assess this subject.

The source of data and information required for determining the physico-chemical 'condition of habitats' need to be identified, and the mechanism and timing of collection developed and agreed upon.

d. The Biodiversity Group also identified a need for coastal zoning information which it will not collect and requires from other components. This information will be used to determine the extent of habitat conversion and land use over time.

The RWG responsible for this data and information needs to be assigned, and the mechanism and timing of collection developed and agreed upon.

1.2   Fisheries, Biodiversity, Pollution and Ecosystem Component Issues

A number of overlaps exist in the data and information required for collection by the various Component Working Groups. These overlaps are identifiable and the responsibilities for collection of this data need to be assigned.

a.   The Regional Working Group for the Ecosystem (RWG-E) discussed and agreed on the data and information requirements for the group, and that there is data and information that should be obtained from other Regional Working Groups (RWGs), particularly with regard to the collection of trophic information. RWG-E agreed to focus data and information collection on the lower trophic levels and therefore requires data and information from the higher trophic levels from other RWGs.

b.   The RWG-E defines 'carrying capacity' as 'productivity potential', largely focusing on the lower trophic levels such as phytoplankton and zooplankton (including fish larvae), and require carrying capacity analysis at the higher trophic levels (fish, birds, mammals, etc) to have a better picture of Yellow Sea Carrying Capacity as a system.

c.   RWG-E also recommended that their component's carrying capacity activities be carried out at the same time as carrying capacity activities undertaken by the RWG-F component.

RSTP members should agree on the definition of "carrying capacity," delegate responsibilities for relevant activities, and agree on timing to carry out these activities.

d.   RWG-E requests that data and information on habitat modification and change in ecosystem structure be jointly collected by the working groups. Chemical characteristics should be provided by RWG-Pollution; RWG-B should collect data on habitat type and coverage; higher trophic level species information should be provided by other groups while RWG-E focuses on lower trophic levels.

The sources of these data need to be identified, and the mechanism and timing of collection developed and agreed upon.

1.3   Investment and other Components Issues

During the First Meeting of the Regional Working Group for the Investment Component (RWG-I), Yantai, China, 17 – 20 May 2005, the group identified the socio-economic, legal and policy issues overlapping between Investment and the other Components.

a.   During this meeting there were extensive discussions on how the socio-economic and Governance aspects of the causal chain analysis required for the TDA would be carried out by each of the project components. It was understood that although it would be more effective for the socio-economic and governance analyses to be carried out by the Investment Group, given the current situation, it was agreed that the Investment group would provide necessary assistance to the other RWGs in carrying-out their socio-economic and governance analysis. The RWG-I agreed to submit a proposed plan for cross component socio-economic and governance analysis to the RSTP.

The RSTP needs to evaluate the proposed cross component socio-economic and governance analysis plan proposed by RWG-I (refer to RWG-I Chairperson Report

UNDP/GEF/YS/RSP.1/6e) and agree on its use in performing the socio-economic analyses.

b.   It was recognised by all the regional working groups that the public awareness and communications campaigns need to be designed and implemented in a coordinated way within the project components, in order to avoid duplication of efforts and maximise the benefits. In addition to co-ordinating among the RWGs, the public awareness campaigns should be co-ordinated with regional partners. The PMO presented a public awareness strategy to the RWG-I which was accepted by the RWG-I (Annex 1). The PMO has also prepared a communication strategy that is related to the public awareness campaigns (Annex 2).

The RSTP may wish to evaluate the two strategies and agree on how the strategies should be implemented across all components.

1.4   Data and Information Management Issues

a.   A major activity of the YSLME Project Implementation Plan is to establish a Meta- and GIS database in order to manage and archive the vast amount of data that will be generated by the project activities (and that will come from other pre-existing data centres and databases) and facilitate future access to data by interested parties. Questions were raised during RWG meetings regarding the proposed venue for the database(s). During the First Meeting of the Regional Working Group for the Investment Component, the group recommended that "*the meta database and GIS database could be hosted at the PMO or another institute".* The meeting however agreed that the long-term existence of the system and the maximization of the benefits obtained from the Project should be the guiding principals for choosing the appropriate host for the database(s). Currently, the First Institute of Oceanography, China, has expressed their desire to host the databases.

The RSTP needs to agree upon the venue and mechanism for database hosting, data and information management and archiving. RSTP needs also to consider how the co-ordination and co-operation of the project database with other existing databases and data and information exchange system.
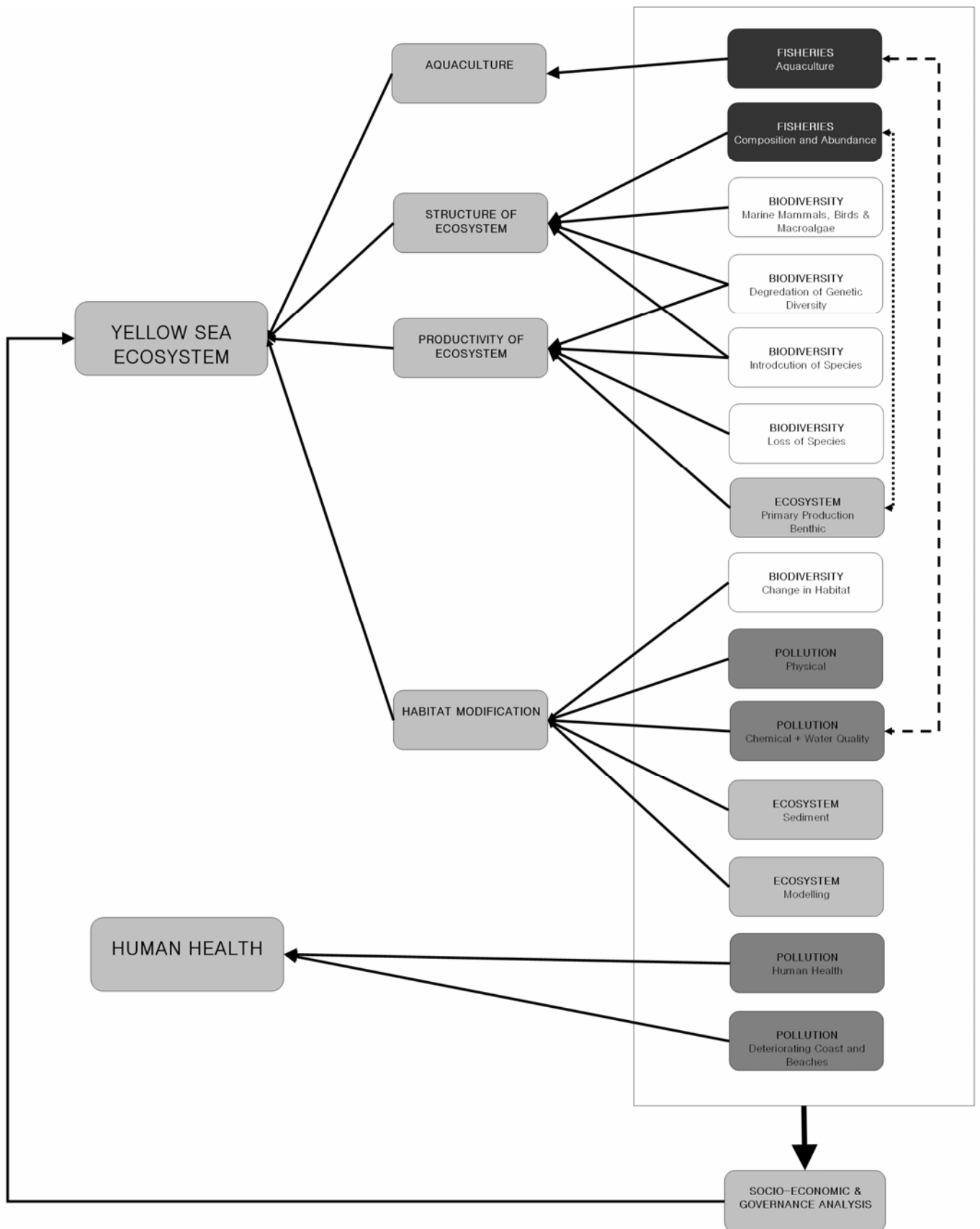
1.5   Joint-Cruise Issues

Another major group of activities of the YSLME Project Implementation Plan are the plans (budgeted) for a set of oceanic surveys (also known as 'ship surveys' or 'cruises') to collect baseline data specifically for the Fisheries Component. The surveys will cover the entire Yellow Sea with the exclusion of the 12-mile territorial areas. There were originally SIX cruises planned in the early stages of the Implementation Plan but due to rising operating costs of ships, the budget can now only accommodate two cruises for the duration of the project. The Chinese research vessel 'Bei Dou', from the Yellow Sea Fisheries Research Institute in China, was recommended by the RWG-F project partners as a suitable vessel to undertake the surveys. The RWG-F has established the tentative dates for the first survey as being the 4th to 25th January 2006, with the second cruise proposed for the April – May period 2006 (during the fish spawning season).

a.   The RWG-E recommends that the Fisheries' and Ecosystem's Carrying Capacity surveys coincide so that they may share the same cruise events.

b.   The RWG-E has also recommended that Joint cruises (covering the entire sea areas of the Yellow Sea) be developed to cater for all components with the understanding that there may be compromises to be made.

The RSTP needs to agree on the nature of collaboration, finalize the joint-cruise plan, the schedule, survey stations and observation lines, and discuss logistical issues for submission to the respective governments of the participating countries. This will be addressed during the agenda item on Joint Cruises.

DIAGRAM OF CROSS-COMPONENT ISSUES

ANNEX 1

Proposal for Public Awareness Campaign

A significant factor toward long-term ecosystem management effectiveness is the ability to increase public awareness of and participation in activities designed to protect the Yellow Sea. Educating the residents around the Yellow Sea coast and watershed, resource managers, and policy makers and increasing the number of people that take an active interest in protecting and restoring the Sea, helps to nurture long-term stewardship ideals in local communities.

A. Indicators

An inherent goal of any environmental education and public outreach programme is to assess environmental indicators such as changed human behaviour to improve the environment. While it is difficult, at best, to estimate the direct effects of these programmes on the population, several indirect indicators can be used. Demand for information from students, educators, researchers, managers, and the public on the health of the Yellow Sea can be one indicator. The Project's website installed a counter in March 2005. Visitors to the site are not limited to those from the region, but also include those from Europe and the Americas.

Projects that implement a "Small Grants Public Participation Programme" may produce another indicator based on the number of received applications. These education and outreach programmes cannot all be funded, but the seed money may provide support for important environmental work valued far in excess of their cost.

The transfer of initiated activities to the supervision by local governments, agencies, communities, or NGOs is one indicator of long-term sustainability of the Project and the success in enhancing public awareness and participation.

B. Strategy

The Yellow Sea public awareness and outreach strategy should include major elements such as:

- increasing community awareness and stewardship;
- promoting understanding;
- facilitating all levels of stakeholder and public participation;
- increasing communication and cooperation;
- enhancing education at all levels; and
- securing funding.

1. Increasing community awareness and stewardship

The development of informational materials for specific audiences may include printed materials, public exhibits, educational curricula, and research programmes to serve as primary outreach and education mechanisms. Through a Memorandum of Understanding signed between this Project and WWF's Yellow Sea Eco-Region Planning Programme, one of the agreements is to share WWF's public awareness materials with the Project, in

particular, materials relevant to the RWG-Biodiversity. Additional materials will need to be produced. "The Yellow Sea and Youth" newsletter is one example.

2. Promoting understanding

An important means to promote public involvement is to keep partner agencies, municipalities, and all other stakeholders informed and abreast of Yellow Sea issues. Participating countries could incorporate Yellow Sea information into all related programmes wherever possible. All coastal municipalities should be provided with information on Yellow Sea Project implementation and how it would affect their cities and towns. Additionally, the partners are to provide briefings to stakeholder groups and assess and support opportunities for training and educating the environmental decision making community on Yellow Sea actions.

3. Facilitating all levels of stakeholder and public participation

The Project should consider that public participation should be involved in setting policy for the Yellow Sea, as well as participating in the cleanup of the Sea through hands-on activities. The Project partners (Regional Working Groups, National Project Co-ordinators, National Focal Points, Inter-ministerial Committees (IMCF), Regional Science and Technical Panel, PMO) are to provide financial and technical support for such activities as beach cleanups, habitat restoration projects, youth art competitions, volunteer monitoring programmes, "Small Grants Programme," producing information kits.

4. Increasing communication and co-operation

Public awareness training workshops and annual stakeholder conferences may help co-ordinate on-going governmental and non-governmental public outreach efforts. During the Project implementation phase, and thereafter, the partners are to encourage private and non-profit groups to continue to develop and implement Yellow Sea educational and outreach programmes.

5. Enhancing education at all levels

A key objective for enhancing public awareness and participation is to develop, among the citizens of Korea and China, a long-term sense of environmental appreciation for and understanding of the Yellow Sea by enhancing educational opportunities at all age levels. The NPCs, RWG-I, and IMCFs should work with appropriate school districts to develop educational materials to integrate into existing primary and secondary school curricula. The partners are to encourage natural history museums and nature centres to promote Yellow Sea issues within their programmes and provide support for teacher training and workshops integrating Yellow Sea issues.

6. Securing funding

The PMO is to publicise grant opportunities whenever possible and to encourage all organisations associated with the public involvement and education effort, both governmental and non-governmental, to take advantage of the various grant programmes available that provide funding for educational activities and products. Private sector funding should also be sought when and wherever possible and identify other grant programmes for which Yellow Sea activities would be eligible.

ANNEX 2

**Yellow Sea Large Marine Ecosystem Project
Communications Strategy**

BACKGROUND

The main objective of this project is to develop a mechanism for ecosystem-based, environmentally-sustainable management and use of the Yellow Sea Large Marine Ecosystem and it's water-shed by reducing development stress and promoting sustainable development of the ecosystem from a densely populated, heavily urbanized, and industrialized semi-enclosed shelf sea.

This project will prepare a Transboundary Diagnostic Analysis (TDA), a Regional Strategic Action Programme (SAP) and National Action Plans (NAPs), for the Yellow Sea and facilitate the implementation of demonstration and/or pilot activities identified in the SAP. The SAP will consist of a series of legal, policy and institutional reforms and investments to address the priority transboundary issues identified in the TDA/SAP/NAPs formulation process.

The TDA will be used as a basis for focusing on the threats, their root causes and the sectoral activities that endanger the critical ecosystem of the YSLME to implement selected components of the SAP, as appropriate. The SAP will identify priority actions to be taken by the participating countries to restore and preserve the YSLME. The SAP will adopt a comprehensive approach and will address land and sea-based sources of marine pollution, degradation of critical habitats and ecosystem, and over-fishing.

The medium-term objectives of the project are:

(i) Enhancing national capacities in protection of marine environment and sustainable use of marine and coastal resources, through preparation and development of the Transboundary Diagnostic Analysis (TDA), Strategic Action Programmes (SAP), and Implementation of SAP;

(ii) Strengthening regional co-operation in marine environment protection and management through establishment of regional mechanisms established during the implementation of the project activities in the Yellow Sea, and co-operative spirit enhanced by the project, and

(iii) Facilitating cross-sector co-operation and co-ordination of relevant national institutions dealing with marine environmental management, through the Inter-ministry Committee established by the project for the Yellow Sea large marine ecosystem.

WHY

Communications are a vital tool in problem-solving and management strategies. Effective communication strategies allow project managers to:

- Inform all stakeholders of the nature of a particular project or activities, its focuses and rationale.
- Inform all stakeholders and funding agencies of the status of the project and the level of success achieved so far.
- Inform all stakeholders of the perceived benefits from the project and its outcomes to both the stakeholders and environment.
- Strengthen stakeholder capacities and encourage greater contribution to environmental management and decision-making process
- Publicize the roles of the GEF, UNOPS, UNDP and UN organizations and the impact of their activities, particularly in developing areas.
- Teach stakeholders about the GEF, UNOPS, UNDP and the UN organizations, and their systems.

And,

- Engage and involve more stakeholders for the ultimate goal of reducing human-related stress on the Yellow Sea.

WHAT

What are the specific messages that the YSLME Communications and Public Awareness Strategy hopes to convey?

The Strategy aims to convey the following messages:

- A diagnosis of the Yellow Sea Large Marine Ecosystem – an assessment of perceived problems, priorities, environmental impacts, and causes.
- The status of what is currently being done to remediate the perceived problems
- How perceived problems affect the local communities, regional and national institutions, the global community and global marine systems.
- How remediation of perceived problems can benefit stakeholders.
- How the UN system operates.

WHO

Who is implementing this strategy?

The implementation of the strategy will be spear-headed by:

The UNDP/GEF/UNOPS Project Management Office in partnership with other partner organisations such as:

- UNDP Korea
- WWF(Japan/China)/KORDI/KEI Yellow Sea Eco-Region Planning Project
- NOWPAP
- PEMSEA
- PICES
- Wetlands International

- FAO
- Marine Stewardship Council

Partnering with other organisations and institutions allows for a greater engagement and involvement of stakeholders, capacity building through the different groups and a higher level of project achievement.

Who is the strategy aimed at?

- Coastal Populations & Local Communities Schools & Universities, Fisher-folk.
- Regional Institutions, Scientific Institutions, Environmental NGO's, Media Centres, Local Authorities.
- National Institutions, Ministries, Central Government.
- The Global Community

WHEN

See attached Project organizational chart for activity initiation dates, frequencies and durations

WHERE AND HOW

The YSLME Communications and Public Awareness Strategy and its activities:

The YSLME Communications and Public Awareness strategies targets the General Public (Local Communities & Coastal Populations), Regional Institutions, National Institutions and; also develops the mechanisms, financial Instruments and data and information management systems to allow self-sustainability of these activities in perpetuity.

It achieves this with a strategic set of sub-strategies and activities that provide sound information, key-messages and calls-to-action.

Sub-Strategy 1: PUBLIC AWARENESS AND PARTICIPATION

1. **Develop a public awareness campaign**
   a. Preparation of public awareness campaign

2. **Demonstrate regional public awareness/participation campaign**
   a. Organise public awareness conferences
   b. Prepare public awareness materials
   c. Produce multi-media, e.g. project pins, mouse pads, posters, etc.
   d. Public awareness training workshops
   e. Provide multi-language information through public media

3. **Encourage ongoing public awareness and participation activities to help achieve the goals of the YSLME**

Sub-Strategy 2: REGIONAL INSITUTIONS AND CAPACIIES

1. **Stakeholders**

    a. Identify stakeholders and assess their capacities for contributing to environmental management and decision-making process.
    b. Produce a regional list

2. **Strengthen stakeholder capacities**
   a. Prepare training materials for all stakeholders
   b. Training for decision makers
   c. Training for community trainers
   d. Training for local governmental officers
   e. Develop and Implement an Intern Programme at the Project Management Office
   f. Develop The 'Yellow Sea and Youth' awareness programme
   g. Plan and execute site visits by government officials

3. **Encourage routine and effective involvement of stakeholders in environmental and resource management and decision-making**
   a. publish newsletters of the project
   b. printing and distribute newsletters
   c. regular stakeholders conference

Sub-Strategy 3: REGIONAL COORDINATION

1. **Prepare TDA**
   a. Gathering data & info from national review reports on the parameters for perceived environmental problems, editing and publishing a 'Transboundary Diagnostic Analysis (TDA) on the Yellow Sea'
   b. Printing distributing the final TDA to all identified stakeholders.

2. **Prepare National Strategic Action Plan (NYSAP) for the Yellow Sea**
   a. Assess all national information & prepare for a framework of NYSAP
   b. Plan and hold one National meeting to describe NYSAP to stakeholders
   c. Revise NYSAP based on stakeholders feedback
   d. Publish and distribute NYSAP to all relevant stakeholders

3. **Prepare Regional Strategic Action Plan (SAP)**
   a. Prepare a draft regional SAPs
   b. Publish regional SAP in major local languages

4. **'Partners of the Yellow Sea' Programme**
   a. Create partnerships with other organisations and use their communications networks to disseminate information

Sub-Strategy 4: NATIONAL INSTITUTIONS

1. **Review and assess national institutions to support YSLME**
   a. Contract to institutions (Contract)
   b. Finalise the review report (WG meeting)

2. **Facilitate national institutions to be effective stewards of the YSLME**
   a. Enhance communications
   b. Provide technical trainings
   c. Scientific Seminars for research community
   d. Study tours for govt officials (local govt)

3. **Establish National Coordination Unit within existing framework to assure intersectoral coordination in TDA/NYSAP/SAP process**
   a. Establish National Coordination Committee (Appoint National Project Coordinators for each region)
   b. Establish National Working Groups

4. **Develop proposals to strengthen national institutions to enhance their ability to contribute to environmental management and decision-making**
   a. Strengthen national institutions to be part of TDA development

Sub-Strategy 5: FINANCIAL INSTRUMENTS

1. **Review status and potential for financial sustainability of YSLME regional institutional framework**
   a. Produce a report outlining a proposal for financial stability of YSLME regional institutional framework.

2. **Provide training in environmental project identification and preparation**
   a. Identify potential environmental projects and the training needs
   b. Training #1 Project document preparation
   c. Training #2 Fund raising

3. **Assist and encourage the continuation of project preparation and feasibility studies for long-term environmental investment to implement the SAP and NYSAPs**
   a. Prepare proposals for funding.

4. **Provide matched fund for small grant project**
   a. Identify the topics of small grant project
   b. Provide matched funds for the approved projects

5. **Provide funding for pre-feasibility studies of promising technologies and industries to help achieve the goals of the YSLME, to create an investment portfolio (Priority Investment Portfolio).**
   a. Undertake pre-feasibility studies of promising technologies
   b. Undertake Demonstration projects

Strategy 6: DATA AND INFORMATION MANAGEMENT

1. **Determine regional data and information management capabilities**
   a. Review current regional data & info systems, i.e. regional data centres, etc.
   b. Prepare a proposal for DIM consultant

2. **Develop an effective regional DIM strategy to help achieve the goals of the YSLME**
   a. Decide where database should be hosted
   b. Discuss and approve DIM proposal, including guidelines
   c. Purchase Equipment (GIS software, hardware)
   d. Undertake Training on DIM and Operate
   e. Public announcements with regard to operation and public access to data and information

3. **Implement the regional DIM strategy, including equipment, facilities, and communications**
   a. Identify sustainable mechanisms for the DIM

b.   Solicit sponsorship and advertising for continued operation