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INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (Of UNESCO)

JOINT IOC/UNIDO WORKSHOP ON MARINE DEBRIS/WASTE MANAGEMENT FOR THE GULF OF GUINEA Abidjan, Côte d'Ivoire, 19-21 April 1999

SUMMARY REPORT

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TABLE OF CONTENTS

SUMMARY REPORT

		Page
1.	INTRODUCTION	1
2.	ADMINISTRATIVE ARRANGEMENTS	1
2.1	INTRODUCTION TO THE WORKSHOP BY THE REGIONAL CO-ORDINATOR, J. FOLACK	1
2.2	ADOPTION OF THE AGENDA	2
2.3	DESIGNATION OF RAPPORTEURS AND CHAIRPERSON	2
3.	SUMMARY OF FINDINGS IN THE DEBRIS MONITORING	2
3.1	COUNTRY PRESENTATIONS	2
3.2	PRESENTATION OF MARINE DEBRIS/SOLID WASTE MANAGEMENT SURVEY	2
3.3	ADOPTION OF SURVEY	5
4.	STRATEGIES FOR COMBATING MARINE DEBRIS POLLUTION THROUGH AWARENESS AND OUTREACH CAMPAIGNS	5
4. 1 4. 2	EXPERIENCES FROM THE CARIBBEAN OUTREACH CAMPAIGN NATIONAL NGOs PRESENTATION ON THEIR	5
7. 2	AWARENESS ACTIVITIES	6
5.	REVIEW OF ACTION PLAN AND DISCUSSION ON RECOMMENDATIONS AND NEW STRATEGIES FOR OUTREACH MARINE DEBRIS CAMPAIGN IN THE	
	PARTICIPATING COUNTRIES	7
5.1	REVIEW OF THE LAGOS ACTION PLAN AND FOLLOW-UP OF COTONOU RECOMMENDATIONS	7
5.2.	ACTION PLAN FOR THE MARINE DEBRIS OUTREACH	,
	CAMPAIGN IN THE GULF OF GUINEA (2000-2005)	9

IOC/INF-1125 page (ii)

5.2.1Report of the Education Group: Establishment of a Region-Wide
Public Education Campaign and Incorporation of Marine Debris
Information in Schools' curricula in the Gulf of Guinea countries105.2.2Report of the Coastal Clean-up Group115.2.3Report of the Communication Group125.2.4Report from the NGOs13PRESENTATION IN PLENARY OF THE RECOMMENDATIONS AND
ADOPTION BY THE WORKSHOP14

Page

14

7	•	CL	OS	URE

ANNEXES

6.

I.	AGENDA
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- II. SPEECHES
- III. LIST OF PARTICIPANTS
- IV. WORKSHOP INVITATION LETTER

IOC/INF-1125

1. INTRODUCTION

The Fifth Joint IOC/UNIDO Workshop on Marine Debris/Waste Management for the Gulf of Guinea was opened at 9.00 a.m. on Monday 19 April 1999, at the "Centre de Recherches Océanologiques (CRO)" of Abidjan, Côte d'Ivoire. Dr J. Konan, Deputy Director of the CRO, opened the meeting. In his speech, he expressed his satisfaction in having this Workshop in the new conference room of the CRO. He mentioned the important role of the GOG-LME Project in research pollution, and conservation for the Large Marine Ecosystem of the Gulf of Guinea for the last three years. He wished, on behalf of the CRO Director, a fruitful meeting to the participants. Mr J. Barbière, IOC representative, welcomed the participants on behalf of the Executive Secretary IOC, Dr Bernal, and thanked the authorities of Côte d'Ivoire for hosting the Workshop. He stressed the need to define a new strategy for the joint marine debris programme, which could include the initiation of a public awareness campaign in the region. Dr J. Abe, on behalf of the Regional Co-ordinator of the LME-GOG, stressed the interest that the project is giving to the waste management/marine debris issue. He suggested to the participants the adoption of an amendment to the Abidjan Convention (1981) which would highlight the need to address marine debris issue by Member States.

2. ADMINISTRATIVE ARRANGEMENTS

2.1 INTRODUCTION TO THE WORKSHOP BY THE REGIONAL CO-ORDINATOR, J. FOLACK

Dr Jean Folack, the Regional Co-ordinator for the programme presented the objectives of the Workshop. He recalled the Workshop that the programme was launched in December 1994 in Lagos, followed by the second and third Workshops in Abidjan in December 1995 and 1996 respectively, the 4th was held in Cotonou, Benin in December 1997.

Since the previous Workshop the monitoring phase has continued. Two regional experts Dr Folack and Mr Owusu Mensah have produced a regional survey on socio economics, following a mission to participating countries last year.

These past years of beach debris monitoring are providing us with a pretty good vision of the state of marine debris pollution in the region. It is now time to reflect on the achievements made, experience gained and lessons learned from the two phases of the monitoring exercise. This review Workshop will have the task to adopt a status report including recommendations on solid waste management in the Gulf of Guinea. Once adopted, the marine debris survey in the Gulf of Guinea will be published and circulated widely.

The Workshop will also have the task to develop strategies for the implementation of its follow-up phase, "Marine Debris Public Outreach Campaign in the Gulf of Guinea" which should be planified for the next five years.

Relevant documents to assist the task of the Workshop were distributed. They included IOC Workshop Report N° 118, IOC Workshop Report N° 149, NOAA Technical Report NMFS 108, Final Report on the Marine Debris Outreach Programme in the Wider Caribbean and the Report on the Marine Debris /Solid Waste Management Survey of the Gulf of Guinea Large

IOC/INF-1125 Page 2

Marine Ecosystem.

2.2 ADOPTION OF THE AGENDA

The Agenda was adopted without amendments.

2.3 DESIGNATION OF RAPPORTEURS AND CHAIRPERSON

Dr Jean Folack was elected Chairperson for the Workshop, and Drs Djiman (Benin) and Oyewo (Nigeria) were designated as co-rapporteurs.

3. SUMMARY OF FINDINGS IN THE DEBRIS MONITORING

3.1 COUNTRY PRESENTATION

All six countries, except Côte d'Ivoire, presented a short report of the monitoring phase covering the period December 1997-December 1998. The presentations covered the geographical, oceanographic, and geological characteristics of the sampling sites, as well as the method used and the results collected.

Participants made some recommendations for the improvement of waste management in their countries. They also stressed the need to increase support for marine debris monitoring so as to cover more sites.

The result of the monitoring exercise will be published in the Marine Debris/Waste Management Survey for the Gulf of Guinea, compiled by Dr Folack and Mr Ben Owusu Mensah.

3.2 PRESENTATION OF MARINE DEBRIS/SOLID WASTE MANAGEMENT SURVEY

Authors presented the document on the survey and the summary is as follow:

In December 1994, the Intergovernmental Oceanographic Commission (IOC) and the Nigerian Institute of Oceanography and Marine Research (NIOMR) co-sponsored the first Regional Workshop in Lagos, Nigeria on Marine Debris/Solid Waste Management for the Gulf of Guinea large Marine Ecosystem (GOG-LME) countries namely: Benin, Cameroon, Côte d'Ivoire, Ghana, Nigeria and later Togo. These countries recognized the need to start monitoring marine debris on selected beaches of their respective countries so as to compile scientific data for use in other actions to combat marine debris/solid wastes in their coastal and marine areas. The Lagos Workshop defined actions to be undertaken (IOC Workshop Report No. 113, 1994) to reduce the amount of debris through scientific investigation, outreach campaigns and other activities in order to respond adequately to the actions identified in Chapter 17 of Agenda 21, of the United Nations Conference on Environment and Development (UNCED), with programmes related to marine debris. Following this Workshop, participating countries received financial support from the IOC to start the beach monitoring exercise (end of 1995). With the starting of the UNIDO/GEF/GOG project, the marine debris project became a joint activity between IOC and UNIDO/GEF/GOG-LME project. Several workshops have been held in this framework and with

the aim to present field results and harmonize the methodology used.

In the last Workshop held in Cotonou in December 1997, we were mandated to use available data and knowledge to prepare a working document on marine debris/waste management for the Gulf of Guinea. This report, therefore, presents basic information on marine debris/solid waste management in the Gulf of Guinea and contains 6 main chapters. Chapter 1 is an introduction which gives information on the source of marine pollution/marine debris, problems associated with dumping and control of marine pollution from dumping, response to marine pollution and the competence of the International Maritime Organization (IMO) for marine pollution prevention. Other chapters develop and analyze information on:

- Marine Debris Beach Monitoring Results and Socio-Economic Impacts Studies;
- Assessment of Existing Legislation in Combating Marine Debris Pollution;
- Introducing Co-management as a Capacity Building Strategy;
- Recommendations/Action Plan.

The country profile gives information on country background (political setting, geography, demography, industrial statistics), waste generation and management, treatment and disposal methods, waste minimization, legislation and enforcement, and priority problems. For the six participating countries, wastes are generated mostly by industrial and domestic activities. Most of the countries have adopted an Environment Code, which, in most cases, defines the term "waste". The definition varies from one country to another. Priority problems faced by countries of the Gulf of Guinea with regard to marine debris/solid waste management include notably:

- Low rate of garbage collection in main coastal towns;
- Rapid population growth and high rate of urbanization in coastal areas leading to increase in quantities of wastes;
- Limited financial resources available to coastal municipalities for proper waste handling;
- Poor treatment facilities, blockage of drainage systems by wastes, and poor sanitation conditions due to waste dumped in the immediate surrounding of living quarters;
- The implementation and enforcement of existing regulations are virtually absent in most of the countries;
- Non-availability of relevant data on quantity and quality of garbage generated by coastal municipalities and industries.

The results of one year beach monitoring (1997/1998) of marine debris in three beaches of each participating country and of a socio-economic impact assessment of those debris are

discussed in Chapter 3. In each country, three beaches consisting of a populated beach, a tourist beach and one of low activity (used as a reference beach) were monitored. A sampling area of 500 m was considered for each beach. The methodology from the National Oceanic and Atmospheric Administration (NOAA) on marine debris for beach surveys is used. The data collection sheet used by the World-wide Marine Debris Programme was modified to fit into the Gulf of Guinea situation. For the socio-economic impact assessment, interviews were conducted through a questionnaire adopted during the Cotonou Workshop in December 1997. All the three types of beaches were found to be polluted by debris items and plastics were the dominant items for most of the studied beaches. During the study, it was difficult to classify those debris items following their origin. There is evidence that a lot of debris was introduced as a result of shorebased anthropogenic activities. Results of the socio-economic impact assessment clearly indicated the negative impact of debris items on coastal activities, notably, fishing and tourism. Impacts vary from damages to fishing nets and canoes, to body injury, loss of fishing catch and revenue, etc. Expenditure incurred to make well those damages or injuries ranged from 5 to more than 400 United States dollars. Improvement of those beaches can only be achieved through a concerted effort initiated from point source to disposal sites and involving all concerned. All this will only be possible if there is an adequate legal and institutional framework for solid waste management and full commitment of government in each country.

All the six countries have the institutions required to control land-based waste pollution and, for that much, marine debris pollution, and have either designed legislation or are in the process of putting some in place. However, the adequacy of these legislation and regulation, and the capacity to implement them, poses a problem. None of the participating countries is implementing the MARPOL Convention. (MARPOL is the main international convention relating to the prevention of pollution by substances including garbage from ships). In this direction, the countries of the Gulf of Guinea coast can tackle some aspects of their marine debris/solid wastes and other pollution problems by:

- adopting regional co-operation as a strategy when putting in place requirements of international conventions; and
- seeking assistance from the International Maritime Organization (IMO) to strengthen their regional capacity in preventing, controlling, combating and mitigating pollution through technical co-operation.

To combat marine debris, the introduction of co-management as a capacity building strategy is a necessity for the countries of the Gulf of Guinea. Co-management is defined as a joint management arrangement, an institutional arrangement in which responsibility for resource management, conservation and/or economic development is shared between governments and user groups. Co-management provides opportunity for government to refocus from micro management to macro frameworks. Stakeholders can assume responsibilities for management decisions while government sets overall objectives, facilitates the management process and audits the results. The challenge is to create a competent and trusted institution to foster a successful, long-term stewardship process. The economic, environmental and social values, as well as the concerns and aspirations of stakeholders, must be part of the co-management system. This issue can be best addressed through open and transparent public participation that supports the co-management process.

Countries of the Gulf of Guinea should implement the Lagos Plan of Action, which was reviewed, and adopted during the Cotonou meeting in December 1997, in order to combat and reduce marine debris/solid wastes items in their coastal and marine areas. The main priority actions identified focus on: the awareness programme on hazardous wastes including their inventory and their transboundary movements, training, technology transfer and other opportunities for capacity building and human resource development, integration of solid waste management issues into the implementation of local integrated coastal management plans, development of approaches and mechanisms for financing research programmes on hazardous wastes, reinforcement and implementation of existing legislation and promotion of the implementation of MARPOL Convention, formulation of a national waste classification system, creation of a solid waste regional network and co-operation with international organizations, etc.

3.3 ADOPTION OF SURVEY

The chairman, Dr Jean Folack requested participants to submit written comments on the country profiles, which were circulated on the first day. In addition, those with any comments, observations or suggestions on any of the first day's presentations were also asked to do so.

Following relevant comments and observations from various participants, it was resolved that the documents should be adopted with the necessary amendments. In addition, those who have information on references which should have been included in the report on the region's Marine Debris Survey Report were asked to forward such information to Dr Jean Folack as soon as possible.

4. STRATEGIES FOR COMBATING MARINE DEBRIS POLLUTION THROUGH AWARENESS AND OUTREACH CAMPAIGNS

While introducing this subject, Mr Julian Barbière remarked that activities in the GOG-LME region can benefit from the Caribbean experience. Consequently the importance of education and the need to identify appropriate target groups were stresses. Dr Jean Folack observed that the IOC Marine Debris Monitoring initiative started in the Caribbean, which explains why there is so much to be learnt from the Caribbean experience.

4.1 EXPERIENCES FROM THE CARIBBEAN OUTREACH CAMPAIGN

Mr J. Barbière presented the IOC experience in the Wider Caribbean, which has been initiated since 1991, when a Marine Debris Action plan was drafted. Education and public awareness activities were recognized as being crucial for the successful development of a marine debris programme in the region. Consequently IOC, through the Centre developed a strategy for Marine Conservation, an international NGO, for the implementation of a marine debris outreach campaign in the Wider Caribbean. The target group was identified as being the public in general, and the cruise line industry which is seen as source of pollution. Three main lines of action were identified as follows:

(i) Conduct a series of "Train the Trainer" workshops;

- (ii) Organize a unified Wider Caribbean Clean-up Campaign; and
- (iii) Initiate marine debris education efforts targeting the cruise line industry.

The aim of the presentation was to provide the Workshop with some examples of successful public awareness and education activities.

4.2 NATIONAL NGOs PRESENTATION ON THEIR AWARENESS ACTIVITIES

NGOs from all participating countries gave presentations as follows:

Benin - LITTORAL-BENIN (Félix Elegbede):

Since the last meeting, a NGO named *Littoral* has carried out three beach clean-up exercises and a number of sensitization programmes. Future actions include confirmation of the beach clean-up exercise, participation in various environmental issues and in particular the identification of the sources of marine debris as a prelude to this effective management.

Côte d'Ivoire -

1. GROUPE ESSOR (Boka Kouadio/ Thomas Bonébo)

Essor has a policy of using the sea to forge regional and global co-operation since the sea extends to all countries. In the course of its activities however *Essor* has recognized the need to induce members of the public as a means of encouraging them to participate in their activities. Such inducement may include insurance for those working in hazardous environment and the provision of snacks where the public has to be engaged for long period.

2. CLIPAD-ENVIRONNEMENT (Koffi Jules Loukou)

Methods employed by *Clipad-E* include effective use of the media, personal contacts and door-to-door campaigns.

3. LAMECI (Damaze OBI)

One of the reasons for *Lameci*'s formation is the need to have an NGO which focuses on Lagoons. *Lameci* has successfully sensitized people on the danger of eating seafoods from areas contaminated by anthropogenic activities and for example this has led to the construction of toilets in certain places.

<u>Cameroon</u> - ENVI-REP (James Kwanywo)

Envi-Rep comprises a multi-disciplinary group of professionals to address various environmental problems, which are related to urbanization. The group has, in the past, given free advisory services and participated in various awareness campaigns/workshops. The group has also

sponsored youth clubs to clean up beaches and has organized competitions like the "Cleanest House Campaign" to promote environmental sanitation.

Ghana - COAST WATCH GHANA (Ben Owusu-Mensah,)

Coast Watch Ghana focuses on areas of Integrated Coastal Zone Management (ICZM). Potential problems have been identified and appropriate action plans formulated. The first part of the plan includes advisory services to community leaders on measures to prevent beach dumping and erosion and the observance of beach clean-up days and seminars. In the second phase of the plans, attempts will be made to reach grassroots communities directly.

Nigeria-FEDERAL ENVIRONMENT PROTECTION AGENCY (FEPA)
(Dr U. Onyekwelu)

Dr Onyekwelu of *Fepa* stood in for Nigerian NGOs. Marine Debris related activities, which have been carried out on solid waste in Nigeria, include three beach clean-up activities. Furthermore, a three dimensional environmental education strategy was used as follows:

- manufacturing industry awareness;
- citizen awareness; and
- school children awareness.

They have identified ineffective collection and inadequacy of funds as two major problems, and stressed the need to find ways and means of making all projects sustainable especially when initial financial assistance, which usually comes from governmental and private sources, are exhausted.

Togo - AVOTODE (Mr Anani Wilson)

Avotode has embarked on a number of sensitization projects targeting the public and school pupils in particular. Demonstration sites and toilets have been constructed at Aneho beach while there is a regular weekly radio programme on environmental education.

5. REVIEW OF ACTION PLAN AND DISCUSSION ON RECOMMENDATIONS AND NEW STRATEGIES FOR OUTREACH MARINE DEBRIS CAMPAIGN IN THE PARTICIPATING COUNTRIES

5.1 REVIEW OF THE LAGOS ACTION PLAN AND FOLLOW-UP OF COTONOU RECOMMENDATIONS

The extent of implementation of the Lagos Action Plan *vis-a-vis* the Cotonou Action Plan was reviewed:

Action 1: Initiation of the GOG-LME Marine Debris Programme

The Workshop noted that this action has been implemented.

Action 2: Integrated and Ecosystem Compatible Marine Debris Management Demonstration Project

The Workshop noted that the Cotonou Plan recommended the integration of this action into the Coastal Zone Management Plans of the different countries. However, the Workshop observed that the plan has only been partially implemented and recommended a repetition with emphasis on local source of funds.

Action 3: Participation of GOG-LME Countries and Agencies in the Marine Debris Management Programme

The Workshop noted that this action plan has been implemented.

Action 4: Marine Debris Socio-Economic Impact Studies

The Workshop noted that this plan was started but not fully implemented. The Workshop recommended its review as well as the use of properly stratified questionnaire.

Action 5: Promotion of Effective Waste Management Practices through Education

The Workshop recognized the important role that NGOs have to play in this plan and noted that many have started the implementation of the plan at the individual country level. However, awareness for appropriate operational networking and funding still has to be worked out. Consequently, the Workshop recommended the creation of a NGO network and the subsequent organization of a workshop to adopt a common strategy.

In a related issue, the Workshop made a sub-recommendation that institutions, which already have programmes with similar goals, should be encouraged to continue.

Action 6: Creation of an Effective Marine Debris Communication Network and Comprehensive Database in Co-operation with International Organizations, NGOs and the Industry.

The Workshop recognized the existence of RECOSCIX-CEA but noted that it is not specific to marine debris.

The Workshop recommended the creation of a specific communication network for marine debris in the sub-region.

Action 7: Utilization of shipboard capabilities for marine debris monitoring

The Workshop observed that this action has not been implemented, and recommended that at the national level, efforts should be made to use fishing vessels as "Ships-of-Opportunity" for

the collection of marine debris data.

Action 8: Initiate coastal clean-up campaigns in the Gulf of Guinea

The Workshop noted that this action has not been implemented and recommended its execution.

FURTHER RECOMMENDATIONS

The Workshop recognized the significance of marine debris pollution studies in the subregion and recommended that:

- (i) An annex on marine debris pollution should be added to the Abidjan Convention (1981) on co-operation and development of the marine and coastal environment for the West and Central African region.
- (ii) The marine debris monitoring programme should be extended to countries to which the LME programme has recently been extended.

5.2 ACTION PLAN FOR THE MARINE DEBRIS OUTREACH CAMPAIGN IN THE GULF OF GUINEA (2000-2005)

In order to work out strategies for the commencement of the outreach programme in the region, the Workshop set up three working groups.

The groups, which were given guidelines, were as follows:

- (i) Education and awareness activities (B. Owusu Mensah, Coastwatch Ghana);
- (ii) Communication and information mechanisms (Boka Kouadio, Groupe Essor, Côte d'Ivoire);
- (iii) Clean-up campaigns (Dr Onyekwelu, FEPA, Nigeria).

The Terms of Reference were to define the following points:

- a) Background information
- b) Objectives
- c) Action items
- d) Implementation
- e) Lead agency/Organization
- f) Cost
- g) Funding (potential partners)

5.2.1 Report of Education Group: Establishment of a Region-wide Public Education Campaign and Incorporation of Marine Debris information in Schools' Curricula in the Gulf of Guinea Countries

Background:

Lack of awareness has led to improper disposal of solid wastes, and associated problems such as non-aesthetic beaches, coastal degradation, and marine flora and fauna impoverishment.

An outreach campaign and educational programme has become a *sine qua non* condition. This campaign will have the objective of informing stakeholders and local communities on environmental issues generally and about marine debris more specifically, educating them on proper waste management practices and discouraging dumping of debris items indiscriminately.

Objectives:

Develop a strategy for conducting a marine debris outreach campaign in the Gulf of Guinea that will create awareness of the marine debris problems associated with the sub-region and specifically to:

- (i) Develop a strategy for the NGOs in all the countries;
- (ii) Encourage existing boards of education and teachers to distribute marine debris education materials; and
- (iii) Support extension services in the research institutes which already have functional schools' educational programmes.

Action:

- (i) Establish contact with stake holders/heads of local communities, various trade associations in the communities, local council authorities, boards of education and teachers;
- (ii) List the types and most probable sources of marine debris that constitute the greatest hazards to the community and to living marine resources;
- (iii) Develop pamphlets, posters and stickers in English, French, if possible in local languages for distribution in coastal area communities, marine recreational firms, other auxiliary services and NGOs;
- (iv) Distribute marine debris education materials to educators through presentation to teachers, conferences and seminars, organization of students' excursions to relevant degraded environment for on-spot-appreciation and organization of essay competitions on the environment.

Implementation:

- (i) "Train the trainers" workshop to be held in member countries;
- (ii) Pilot training programmes in selected communities in member countries.

Time Frame: 2000-2005

Lead implementing organizations: IOC/UNESCO, UNIDO

Cost: US\$ 20,000 per country

Possible funding: IOC/UNESCO, OAU (STRC), ADB, NOAA, WWF

5.2.2. Report of the coastal clean-up group

Background:

The Gulf of Guinea region due to urbanization and adoption of new life styles have seen an increase in marine debris items in their coasts. Efforts have been made by countries that make up GOG-LME to clean up the beaches, which in most cases serve the dual purpose of recreation and fishing in these countries. Unfortunately, the most recent clean-ups which were done on voluntary basis did not achieve much in terms of clean-up, either due to lack of awareness or "I don't care attitude" and had a very low turn out. It is intended to start the clean-up exercise all over again targeting the youth and school children who are often zealous in participating in such activities.

Objectives:

- (i) Increase public awareness of marine debris problems;
- (ii) Use youth and school children who would be readily available for data collection and removal of debris items from the beaches;
- (iii) Get national committees, then regional committees to establish networks that will address the marine debris problem;

Action plan:

- (i) Organize youth and school children into groups for clean-ups of debris on beaches;
- (ii) Provide funding, logistics, and advice to the groups;
- (iii) Use of both national/regional network committees to compile information on clean-ups and data findings in form of a report;
- (iv) Wide circulation of clean-up reports to local, regional and international

organizations.

Implementation:

- (i) Beginning intense clean-up activities every third week of September;
- (ii) Include other countries of GOG-LME that are not presently involved;
- (iii) Involve municipalities, NGOs and CBOs in implementation.

Time frame: 2000-2005

Lead agency/organization: IOC/UNESCO, UNIDO, CMC, and NGOs, Media

Cost: US\$ 5000 per country, per year

Possible funding: NOAA, USEPA, IOC, IMO, CMC, WWF, OAU (STRC), ADB

5.2.3 Report of the Communication Group

Background:

Communication is the prospection, handling and dissemination of information. Based on the definition and project results there is indication that more than 40 percent of the population are not aware of the relationship between their activities and the marine debris problem. Hence, there is a need to create the awareness programme.

Objectives:

- (i) To develop an effective strategy for conducting marine debris awareness campaign in the Gulf of Guinea;
- (ii) To promote collaborative efforts among the media network in facilitating marine debris/solid waste management activities press reporting;
- (iii) To establish a network of information exchange between the various NGOs;
- (iv) To Initiate public awareness of the marine debris problem in the Gulf of Guinea region;
- (v) To establish an information data bank on marine debris and solid waste.

Action items:

(i) Creation of a bi-annual newsletter on marine debris issues;

- (ii) Organizing workshops, seminars and training programmes on marine debris problems and management for environmental journalists, which could lead into the West African Environmental Journalist Network;
- (iii) Special events promotion such as beach clean-up campaigns.

Implementation procedures:

- (i) Solicit for and initiate the collection of marine debris related information obtained by institutions, programmes, projects and other Sub-Regional mechanisms;
- (ii) Research the *modus* of, and effect periodic updating.
- (iii) Develop a media campaign designed to increase awareness of the marine debris programmes;
- (iv) Establish Internet or E-mail bulletin board or compatible systems for the NGOs and journalist Network;
- (v) Design the format for collection, and periodic publishing of data on marine debris for the whole region;
- (vi) Create national solid waste database and link-up with INTERNET (for access).

Time Frame: 2000 – 2005

Lead implementing organisations: IOC, UNIDO and CMC

Cost: US\$ 15,000 per country

Potential Funding Agencies: UNESCO, UNDP and local sources such as industries, corporate and private organizations, NOAA, IOC, WWF, IMO and OAU (STRC).

5.2.4. Report from NGOs

Put in place a network of NGOs active in Marine Debris/Solid waste management in the Gulf of Guinea countries.

Introduction:

National active NGOs dealing with coastal/environmental management in the Gulf of Guinea are few today and have little contact among themselves except some few regional workshops where they are invited. Conscious of this situation, these NGOs have expressed their interest to create a network (Cotonou Workshop, December 1998).

IOC/INF-1125 Page 14

Objectives:

- (i) Initiate and reinforce relation between NGOs in the sector;
- (ii) Establish focal points for activities in each country of the Gulf of Guinea and institutional partners (bilateral and international);
- (iii) Collaborate with the implementation of activities related to programmes dealing with Marine Debris/Solid Waste Management and Coastal Management.

Procedure:

- (i) Organize a workshop to examine and make valid the project of the status of the network;
- (ii) Hold a constitutive assembly of the network to adopt the text and put in place organs;
- (iii) Elaborate an action plan for three years.

Partner institutions: IOC/UNESCO, UNEP, CMC, NOAA, UNDP, USAID, GTZ, WORLD BANK and OAU (STRC)

6. PRESENTATION IN PLENARY OF THE RECOMMENDATIONS AND ADOPTION BY THE WORKSHOP

The recommendations mentioned above were amended and adopted by the Workshop.

7. CLOSURE

The closing ceremony was chaired by Dr Jacques Abe, Head of Department of Environment at the CRO Abidjan and Programme Specialist for the GOG-LME project in the Regional Co-ordination Centre, Abidjan, respectively on behalf of the Director of CRO and the Regional Co-ordinator of GOG-LME project.

ANNEX I

AGENDA

1. **OPENING CEREMONY**

- 1.1 Welcome address by the Representative of CRO
- 2.2 Welcome address by IOC representative
- 2.3 Welcome address by the Regional Co-ordinator and Director of GOG LME

2. ADMINISTRATIVE ARRANGEMENTS

- 2.1 Introduction to the Workshop by the Co-ordinator (Dr Jean Folack)
- 2.2 Adoption of the Agenda
- 2.3 Designation of rapporteur and chairperson

3. SUMMARY OF FINDINGS IN THE MARINE DEBRIS MONITORING

- 3.1 Short country presentations of the beach monitoring exercise
- 3.2 Presentation of Marine Debris/Solid Waste Management Survey
- 3.3 Adoption of Survey

4. STRATEGIES FOR COMBATING MARINE DEBRIS POLLUTION THROUGH AWARENESS AND OUTREACH CAMPAIGNS

- 4.1 The Caribbean experience, from the IOC-WB-UNEP-CMC-USEPA Marine Debris Action Programme
- 4.2 Local, national NGOs Presentation on their Awareness Activities
- 5. REVIEW OF ACTION PLAN AND DISCUSSION ON RECOMMENDATIONS AND NEW STRATEGIES FOR LAUNCHING A COHERENT AND JOINT MARINE DEBRIS AWARENESS CAMPAIGN IN THE PARTICIPATING COUNTRIES.
- 5.1 Review and Strategies for Obtaining Further Funding Support from International Organizations, Bi-lateral Funding Agencies, Industrial Community etc.

6. ADOPTION OF RECOMMENDATIONS AND REPORT.

7. CLOSING CEREMONY

ANNEX II

SPEECHES

Welcome address of the IOC Representative

Dear Guests and Participants Dear Hosts Ladies and Gentleman

It is my pleasure to welcome you today on behalf of the Executive Secretary IOC, Dr Bernal for the 5th Session of this IOC-UNESCO/UNIDO/GOG-LME Workshop on Marine Debris and Waste Management for the Gulf of Guinea.

I would like to take this opportunity, to thank the host country, Côte d'Ivoire for providing us with such admirable facilities. I would also like to thank the regional co-ordinator of the LME project in the Gulf of Guinea, Prof IBE for his continuous support for the last five years.

As you may be aware, this programme was launched in December 1994 in Lagos, followed by the second and third workshops in Abidjan in December 1995 and 1996 respectively, the 4th was held in Cotonou, Benin, in December 1997.

In fact since the previous Workshop the monitoring phase has continued and a regional survey on socio economics has been produced, following the mission in participating countries of two regional experts Dr Folack and Mr Owusu Mensah last year.

These past years of beach debris monitoring are providing us with a pretty good vision of the state of marine debris pollution in the region.

It is now time to reflect on the achievement mode, experience gained and lessons learned from the two phases of the monitoring exercise. So this review Workshop will have the task to adopt a status report including recommendations on solid waste management in the Gulf of Guinea.

The Workshop will also have the task to develop strategies for the implementation of its follows-up phase, "Marine Debris Public Outreach Campaign in the Gulf of Guinea" which will go on for the next five years. I am glad to see that the number of NGO representatives sitting at this table is increasing year after years.

Their participation is crucial if we are to develop a public awareness campaign in the region as they provide a direct link to society.

This Workshop marks the completion of the pilot phase of the regional programme and the follow-up phase. We hope to continue a close partnership with agencies and programmes that will be working together with us in addressing marine environmental issues of the region. I will stop here, and once again I welcome you and wish you a fruitful meeting.

Thank you

IOC/INF-1125 Annex II – page 2

Discours du Représentant du Coordonnateur du Projet LME-GOG/ONUDI, Dr J. Abe

Monsieur le Représentant du Directeur du CRO, Monsieur le Représentant de la COI co-organisateur de cet atelier Mesdames et Messieurs,

C'est pour moi, un honneur et un plaisir, de m'adresser à vous, au nom du Coordonnateur du Projet GOG-LME, le Professeur Chidi IBE actuellement à New-York pour des discussions majeures sur l'avenir du projet.

Vous avez eu l'occasion durant les trois dernières années de vous pencher sur les études pratiques liées à la gestion rationnelle des déchets des plages. L'aspect socio-économique que vous y avez adjoint n'a fait que rendre plus réels vos résultats.

Nous nous retrouvons aujourd'hui pour faire la synthèse des acquis et faire des recommandations pour la seconde phase du projet. Je voudrais vous rassurer que le projet "Grand Ecosystème Marin du Golfe de Guinée" fera siennes les recommandations issues de cet atelier, et en fera échos auprès de qui de droit. La mise en œuvre des recommandations et stratégies futures issues du présent atelier devrait être appuyée par un protocole annexé à la Convention d'Abidjan sur la protection de l'environnement marin et côtier. Je vous exhorte vivement à y réfléchir.

La présence massive des ONG est un signe de bonne augure car les applications effectives futures seront faites par elles, dans la mesure où les campagnes de sensibilisation et de proximité ne gagnent en efficacité que par leurs actions.

J'adresse enfin à la Commission Océanographique Intergouvernementale, mes remerciements pour le co-parrainage de ce atelier.

Je souhaite à tous de fructueux travaux ;

Je vous remercie.

ANNEX III

LIST OF PARTICIPANTS

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IOC/INF-1125 Annex III – page 3

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ANNEX IV

WORKSHOP INVITATION LETTER

Dear Sir/Madam,

24 March 1999

On behalf of the IOC-UNESCO/UNIDO/GOG-LME joint programme on Marine Debris and Waste Management, I cordially invite you to attend the Marine Debris review workshop for the Gulf of Guinea. The review workshop is being hosted by the Regional Co-ordination Centre of GEF's LME-GOG in Abidjan, Côte d'Ivoire, 19-21 April 1999.

As you may be aware, this programme was launched in December 1994 in Lagos, followed by the second and third workshops in Abidjan in December 1995 and 1996 respectively, the 4th was held in Cotonou, Benin in December 1997.

This review workshop is to serve as a forum for progress evaluation, to take stock of the achievements made, experience gained and lessons learned from the two phases of the Beach Debris Monitoring Exercise 1994-1998 and adopt a status report including recommendations on solid waste management in the Gulf of Guinea. The workshop will also develop strategies and approach for the implementation of its follow-up phase, "Marine Debris Public Outreach Campaign in the Gulf of Guinea", 1999-2004; and also discuss the proposed work plan for the implementation of the follow-up phase. A copy of the provisional agenda is attached.

This workshop marks the completion of the pilot phase of the regional programme and the initiation of the follow-up phase. We hope to continue a close partnership with agencies and programmes that will be working together with us in addressing marine environmental issues of the region. In this connection, we appreciate your continued support and collaboration with our Regional programme.

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cc: Prof Chidi Ibe, LME/GOG, Abidjan, Côte d'Ivoire -2-

In relation to travel arrangement, tickets and DSA will be provided by UNIDO-GEF's LME Project as in previous years. It would be appreciated if you could confirm your availability to us as well as urgently to:

Dr Jacques Abe Programme Specialist Regional Co-ordination Centre GEF's Large Marine Ecosystem Project for the Gulf of Guinea c/o Centre de Recherches Oceanologiques 29 rue des Pecheurs BP V 18 ABIDJAN Côte d'Ivoire Tel: (225) 25.73.69 or 35.50.14 or 35.00.82 or 08.58.00 Fax: (225) 25.73.69 or 35.11.55 Email: gog-Ime@africaonline.co.ci

Dr Jacques Abe will make the necessary accommodation arrangements and will provide transport to and from the airport. It would therefore be appreciated if you could communicate your flight details to him.

I hope you will all be able to attend and I wish you a successful and fruitful review workshop.

Yours faithfully,

Patricio Bernal