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Attention: IOI
Cables: INTEROCEAN

Prof. Elisabeth Mann Borgese
International Ocean Institute
Dalhousie University
1226 Le Marchant Street
Halifax, Nova Scotia
CANADA B3H 3P7

RECEIVED AUG 15 1994

26 July, 1994

Re: Report to CIDA

Dear Prof. Mann Borgese,

I have just received a fax from Ms. Madeleine Coffen-Smout requesting me to send a full copy of the last CIDA report I sent you on 13 July, that's including the Annexes as you already have the actual report and attachment A.

Should you need any further information, please do not hesitate to contact me.

With regards,

Yours sincerely,

Natasha RALSTON
Secretary and Administrative Asst.

Enc.

ANNEX 1

Project Performance Evaluation Report (PPER)

**INTERNATIONAL OCEAN INSTITUTE
UNDP Project Reference GLO/91/G33**

Support for Regional Oceans Training Programme

**PROJECT PERFORMANCE EVALUATION REPORT
28 January 1992 - 31 March, 1994**

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INTRODUCTION

The International Ocean Institute (IOI) submitted a project brief to the Global Environmental Facility providing an abbreviated description of a global project conceived in response to the need to train increasing numbers of mid-level civil servants from developing countries in marine resources management consistent with long-term sustainability. This was followed by a full blown project submitted to UNDP/OPS. The project proposed to extend and deepen the training programmes through the establishment of self-sufficient operational centres in Colombia, Fiji, India and Senegal.

The first and essential step in the development programme being to establish formal working relationships with the governments/institutions concerned, UNDP/OPS entered into a contract with IOI in the form of preparatory assistance for \$ 110,000 to secure these agreements and to refine further aspects of the project, such as region-specific training programmes (contract at Annex 1).

The obligations of IOI under the Contract included but were not limited to the following:

- Explore candidate sites for operational centres, discuss with governments, local authorities, regional and local institutions and centres for advanced learning and experts living in the region to confirm that the necessary conditions are present to establish a centre.
- Develop, negotiate, and formalize the agreements with the four host countries on the status, policy, strategy, and funding of each operational centres. These were to be a prerequisite for continuation of funding and activities.
- Develop a strategic plan for the establishment of a new operational centre for each of the planned sites.
- Develop agreements of cooperation and support with regional universities and other institutions of training and research.
- Appoint an operational centre director for each of the four operational centres. The directors to be executive and operating officers of the respective centres.
- Prepare the strategic plan for the establishment of the four new operational centres including (a) appointment of the regional advisory committee, and (b) development of a five-year plan of detailed activities for each centre.
- Finalize the project document, based on the draft dated 6 December 1991.

The outputs were expected to be:

- "agreements with governments of Fiji, India, Senegal and Colombia.
- agreements with a collaborating / cooperative scientific / educational institution in each of these countries.
- composition of centre-specific strategic and operating plans for each proposed operational centre.
- appointment of a centre director in each such operational centre in consultation with the host institution.
- appointment of the initial voluntary members of the operational centre advisory council, involving alumni in the region.
- composition of a global identity / communications strategy focused on funding sources and governments.
- a full and definitive version of the project document based on the draft dated 6 December 1991."

The contract for preparatory assistance was amended on 23 April 1993 (amended contract at Annex 2) in order to achieve a more equitable distribution of funds between the four centres and to redraft the Project document as under:

"a) Consultancy fees	
Travel	
Office and Meeting Expenses	
Miscellaneous Expenses	60,000
b) Project Formulation Mission	27,506
c) Consultative Meeting/Activities	
i) India IOI Alumni Meeting	12,000
ii) Meeting of Directors & Rectors	25,000
iii) Quarterly Newsletter	5,000
d) Policy Research - Survey of Policy Research Methods	10,000
e) Submission Research Proposal	5,000

<u>TOTAL</u>	144,506"

On 21 June, 1993 the contract was again amended to provide \$ 20,000 for the Sardinia workshop by deleting c(iii), d, and e above (amending letter at Annex 3).

During the preparatory period, the IOI had finalised agreements with the governments of Fiji, India and Colombia on the status, policy, strategy and funding of operational centres to be located in Suva, Madras and Bogota. An MOU had also been entered into with IDEP, an institute of UNECA, for establishing an operational centre at Dakar.

Centre directors were appointed for all the four centres and strategic plans developed for their establishment. Plans detailing multi-year activities for each of the four centres were also developed. Agreements with the collaborating institutions, viz., University of South Pacific, Indian Institute of Technology, Tadeo Lozano University and IDEP were also entered into. CVs of all professional people involved with the project were also collected for the Operational centres at Fiji, Madras and Bogota. A meeting of operational centre directors was also held at Malta from 17-18 May, 1993 along with representatives of UNOALOS and UNDP/OPS to refine the final plan (Minutes of the meeting at Annex 4).

On the basis of the above, IOI submitted a revised project document in June 1993. This was finalised after discussions with UNDP/OPS and UNDP/DGIP. A contract for the project for \$2,583,347 was entered into by UNDP/OPS with IOI with effect from 1 September, 1993. Flow of funds to the operational centres in India and the South Pacific started with the signing of the contract while funds for centres in Colombia and Senegal were dependent on approval by UNDP/OPS of their final operating plans (contract at Annex 5).

Project Implementation up to March 1994

The main objectives of the Project Document are to:

- set up four new self-sustaining operational centres in South Pacific, Asia, Africa and Latin America;
- revise and update the existing programmes of IOI, as well as develop new ones, to bring them in line with the latest developments in instruction technologies and for entering into niche areas like courses for planners, policy makers, leaders etc.

To this end the project has two components: Institutional Networking and Training Programmes.

Networking

Institutional Networking is dependent on regular meetings of directors/vice chancellors, information dissemination and programme development. The directors/vice chancellors meetings are attended by representatives of UNDP and have recently been extended to include meetings of the courses development committee (which are to be held back to back with the directors/vice chancellors meeting) so as to cut down on costs.

In the field of information dissemination an alumni directory, a quarterly newsletter and some PR brochures have been issued. The directors meetings have been very useful to the development of the project as would be evident from the minutes appended at Annex 6.

These meetings have helped in activating both formal and informal networks linking the different centres and the headquarters in a synergistic manner. There has been division of work in the network so as to build on the differing strengths of the centres and also to link the IOI system with the broader UN and non-UN systems.

Links have been established by USP with IIT Madras in the sphere of technical training so that a combined B Tech programme would be conducted by the two Universities. This was made possible through the links that IOI Fiji had with IOI India.

Programme Development

In the area of programme development there has been significant advance in attracting new sources of funding: from Japan, Australia, Colombia, India and the South Pacific. Sasakawa Foundation has agreed to fund one programme in Fiji and another in Madras; it will also consider an endowment of \$ 2.5 million; United Nations University has budgeted \$ 50,000 for joint projects with IOI and is considering budgeting \$ 50,000 for scholarships; Australian International Development Assistance Bureau (AIDAB) will fund a joint programme taken up by IOI South Pacific and the Australian Maritime College, Tasmania; the IOI Colombia is raising funds for IOI Colombia thereby releasing UNDP funds for another centre in Latin America (to be located in Costa Rica); the Government of India has decided to fund two courses - one for policy makers and another for coastal managers - for Indian participants; in the South Pacific WPFCC, a regional organisation, is giving \$ 33,000 to IOI South Pacific for a workshop on customary tenure (reports of programme development missions at Annex 7 and 8).

Training Programmes

Training Programmes account for the major funding in the Project Document (over 80%). The main instrumentalities to keep the programme on course are:

- the meetings of the courses development committee
- the provision of adequate course materials
- training of trainers
- proper evaluation to ensure the quality of the courses.

The courses development committee, which includes UNDP representatives, has been doing a good job of keeping the courses on track (minutes at Annex 9). 9 course developers were trained at a workshop held in Geneva from 22-26 November (list of participants at Annex 10). The workshop was conducted by Mr. Michel Couroux of UNCTAD and was attended by Mr. Philip Reynolds of UNDP and Ms. Stella Maris Vallejo of UN. The Executive Director and the Honorary Chairman have also evaluated the two new courses held in Madras and China (reports at Annexes 11 & 12).

During 1993, two trainers (IOI India) and nine course developers (Honorary Chairman, Executive Director, Vice Chancellor IIT Madras, Directors of IOI India and South Pacific, Head of Training IDEP, Senegal and 3 others from Fiji) went through the training of trainers programme. This would provide a very good base for expanding the trainers network of IOI and developing more course developers.

During 1993 the following training programmes were conducted:

Name of Course	Conducted by whom and when		Revised/New
1. Alumni Refresher	IOI Madras	4-7 March	New
2. Leaders Sensitising workshop	IOI Madras	10 December	New
3. Coastal Zone Management as a Sustainable Process	IOI Madras	11 Oct-17 Dec.	Revised C
4. For Managers and Planners of the Enterprise	IOI HQ	04 Oct-05 Nov.	Revised A
5. Leaders Sensitising Workshop	IOI South Pac.	17 Nov.	New

Work plans for Costa Rica and Senegal/Africa

As already mentioned, IOI Colombia has decided to raise its own money so that UNDP funds can be applied to another Latin American operational centre. The first three months of 1994 have been utilised to establish a workplan acceptable to UNDP. A draft workplan has been worked out and is under discussion with the Costa Rican authorities. In the initial stages IOI Costa Rica will conduct programmes developed by the IOI network. From 1995 it should be in a position to conduct programmes in Spanish.

The Work Plan for Senegal has already been submitted to UNDP. IDEP, Dakar, will take some time to organise itself and get equipped with appropriate personnel. In the first instance, therefore, a programme on law of the sea was conducted by IOI Headquarters at Addis Ababa in association with UNECA from 28 March to 2 April, 1994. Soon IDEP, or if not IDEP some other African Institution, should be ready to take over the full responsibility.

The details of work done, along with budget lines, is as under:

Vice Chancellors/Directors/Courses Development Meetings

1.1.2. a. It is necessary to closely monitor the project as it develops and evolves through the life of the project since changes are inevitable with the project covering areas not yet fully developed. So two meetings of the President, Executive Director, and representatives of the operational centres, and of UNDP, were held to monitor the implementation of the centre operational plans, to guide future development, to approve courses and lay down guidelines for the preparation of training modules during 1994 (Annexes 6 and 9).

The main decisions/guidelines emerging from these meetings related, inter alia, to:

- the establishment of mechanisms for proper reporting, monitoring and evaluation of the project
- the manner in which workplans and budgets are to be prepared by each centre
- the laying down of relevant physical targets
- the manner in which IOI was to be projected to donors and the general public
- the raising of non-UNDP funds both globally and locally
- the procedure for approving courses/modules.

Administrative Support - South Pacific

1.1.2. b. The operational centres in the South Pacific and Latin America need administrative support. In South Pacific a coordinator was appointed to assist the Director in day to day work. His CV is at Annex 13.

Library Networking

1.1.2. c. To integrate the knowledge base of the IOI system it was decided to develop software so as to link all the libraries of the collaborating institutions through E-mail. IOI Madras was responsible for the project and they have come up with an interim system which is being tested by the other centres. The project is expected to be completed and in place by July, 1994. Details at Annex 14.

Information Dissemination

1.1.3.a For implementation of the IOI institutional identity program per the strategy already developed, and as per regional programs developed by the operational centres, a number of brochures were brought out in 1993.

1.1.3.b Information was also disseminated by establishing regular links with IOI alumni in India and Malaysia.

The alumni data base was also consolidated and verified while a survey has been made of the IOI alumni's perceptions of the usefulness of IOI programmes.

An "alumni directory" has been prepared and disseminated to all alumni.

A single, dedicated and periodic (quarterly) alumni newsletter, following Issue #1 in November 1992, has been developed and issued in December, 1993.

Programme Development

1.1.4. Development of non-UNDP financial support for operational centres was considered very necessary. A lot of progress was made in 1993 as already described (Annexes 7 and 8).

Output 1.2 - Institutional Links with Associated Institutions

A key element in the IOI strategy is to reinforce existing institutional capabilities through providing active networks for ocean affairs. To this end MOUs have been signed with the United Nations University, Tokyo, with IOC/UNESCO, Paris and the International Centre for Public Enterprises, Ljubljana. More such MOUs are expected to be signed in 1994.

Output 2.1 - Current, Revised and New Programmes.**Development of Research Programme**

2.1.1.a. Policy research on a regional basis is essential if IOI regional centres are to be relevant to the perceived needs of the region. A preliminary survey of research possibilities has been made but more work needs to be done to link them with ongoing regional research. It was decided, therefore that the operational Centres should discuss this matter with other institutions in the region and come up with detailed proposals.

Curriculum Development

2.1.2. Current course programmes need to be adapted and translated for mid-level civil servants, private sector employees and persons from NGOs. The programmes need to take note of the new instructional technologies, especially distance learning, as well as develop instruction material in new concepts like sustainable development, and the impacts of the third industrial revolution, the growing service economy etc. IOI is in the process of developing some new courses for entering into niche areas like courses for planners, advanced courses for those with a fundamental marine knowledge base, coastal management as a sustainable process, special focus on islands and so on.

Course Development

2.1.2.a. In regional and international training programmes a major expense is the cost of bringing trainees to the course. This generally precludes short courses, especially in a regional context, since the costs of travel tend to make the course cost ineffective. The development of self-contained modules which could be used to run the course in sub-regions, would be cost effective. Besides the modules could also be used to configure different types of courses. It has been decided, therefore to develop training modules region-wise in such a manner as to also have global relevance. The development of these modules would in the very process of development also produce regional resource personnel. The selection of modules and approval of courses has been done by a Committee headed by the Honorary President. The modules/courses being developed are as below:

NAME OF COURSE	EXECUTING PARTY
Course for leaders in Africa	IOI Headquarters
Course for decision makers on ocean policy (1 week)	IOI Madras - Prof. V.S.Raju (Centre Dir.)

NAME OF COURSE	EXECUTING PARTY
Course on coastal zone management (5 weeks)	IOI Madras - Prof. V.S.Raju (Centre Dir.)
Management and Development of fisheries	IOI South Pacific - Prof. Robin South (Centre Dir.)
Management Issues in Environmental and Resource Economics	IOI South Pacific - Prof. Robin South (Centre Dir.)

Training of Trainers

2.1.2.b. The participants in IOI training programmes are generally middle level executives involved with ocean policy and organisation of ocean development programmes, environmental issues etc., ocean scientists and engineers and representatives of non-governmental organisations. Their academic background, and professional experience, is varied while the subjects covered in the training programmes are very extensive in scope.

Lecturing in IOI training programmes, is very different from normal sectorally oriented courses and there exists the possibility of a mis-match between the expertise available and the training situation.

The training of trainers scheme was used to orient subject matter/sectoral specialists in how to lecture to a multi-cultural, multi-disciplinary group. Also for developing resource persons in pedagogy and course development techniques based on the TRAIN-X system.

Courses

2.1.3.a. The project provides the seed funding for testing, evaluating and revising the existing training programmes of IOI. It also provides the seed funding for testing, evaluating and revising four new courses, of which the syllabus for two, namely, the islands course and a course for policy makers have already been developed and will be tested in 1994. Two other courses/workshops for decision makers (a 1-week course and 1-day workshop) would also be tested in 1994. Courses relevant to Africa, the Caribbean and Latin America would be developed in 1994 and tested in 1994/1995.

Courses for Alumni

2.1.3.b. The importance of IOI alumni has been highlighted (para 1.1.3.b). Special courses were run for them so as to update their knowledge bases and reinforce their links with IOI. One such programme was run by IOI Madras in March 1993. This would form the base for future programmes.

Workshops for Decision Makers

2.1.3.c. Sensitising of leaders and decision makers is a necessary pre-requisite for the success of the training efforts aimed at mid-level public servants. Workshops to this end were organised in India and Fiji.

Evaluation of Courses and Workshops

2.1.4. Evaluation of the training programmes and workshops is most essential. In any globalisation scheme the programmes have to meet two criteria: they have to have a global applicability while being capable of being adapted to the regional and sub-regional contexts. Flexibility is being introduced through the development of course modules which would enable variety through different course configurations. The courses should also, however, have applicability outside the IOI system. The Courses Development Committee consisting of representatives from the IOI as well as the non-IOI systems would approve, evaluate and test new courses. One such meeting was held in 1993. The Executive Director and Honorary President carried out spot evaluations of two new courses in 1993.

Implementation by IOI's India and South Pacific

The achievements of the two IOI Centres have been given above by budget line. Details may be seen at Annexes 15 and 16.

Evaluation of Performance

The project can be conceived as being in two phases: the preparatory phase from January, 1992 - June, 1993 and the implementation phase from September, 1993 - March, 1994.

The preparatory phase was initially programmed to be completed in a period of six months, that is, by July, 1992. In the event this proved to be based on somewhat optimistic assumptions. Also the project document as submitted in December, 1992 was found to need adjustment as between the centres and this coupled with the fact that a new Executive Director had taken over meant a further delay. This delay was, however, put to good use. During the extended preparatory phase syllabi were developed for courses on:

- coastal zone management as a sustainable process
- coastal zone management with focus on small islands

Also an alumni refresher course was held in Madras, India and this gave opportunity for generating ideas through interaction with IOI alumni, who had not only intimate knowledge of IOI courses but also their relevance to the broader outside world.

The extended preparatory phase, therefore, meant that in the implementation phase the two centres of IOI, viz. India and South Pacific were off and running leading to considerable progress being achieved by these centres in the last seven months in:

- conducting programmes
- training trainers in pedagogy and the methodology of lecturing to a multi-disciplinary multi-cultural group
- initiating the process of developing course modules of relevance to both the IOI and non-IOI systems.

There were delays, however, in establishing the centres in Latin America and Africa from the project funds (IOI Colombia is going to raise its own funds). In Africa, IDEP needed time to organise itself so that it could initiate the process towards attaining sustainability. IOI Costa Rica, however, is well on the way to being established so that ultimately IOI will have two centres in Latin America - one in Colombia and one in Costa Rica. The delay in setting up these centres may, therefore, ultimately prove to be a blessing in disguise.

Project No. : GLO/91/G33/A/1G/31
Project Title : Support for Regional Oceans Training
Programme
Contract no. : C-92017 A
Account no. :

27 January 1992

Dear Sir,

Ref: GLO/91/G33 - Support for Regional Oceans Training Programmes

The United Nations Development Programme, acting through the Office for Project Services, (hereinafter referred to as "UNDP/OPS") wishes to engage the services of your organization, (hereinafter referred to as the "Contractor") in order to establish a formal working relationship with the Government and an educational/scientific institution in Colombia, Fiji, India and Senegal and to this end, UNDP/OPS proposes for your acceptance the following contract.

1.0 Terms of Reference, General Conditions, Appendices

- 1.1 The Contractor and the UNDP/OPS agree to be bound by the provisions herein set forth, in pages 1 to 4, Terms of Reference (Annex 1), Preparatory Assistance Project Document (Annex II). General Conditions for UNDP/OPS Contract Professional Services (Annex III) as well as the rules of UNCITRAL (Annex IV).

2.0 Additional Responsibilities of Contractor

- 2.1 The services to be rendered by the Contractor in the performance of this Contract shall mean all services necessary for the carrying out of the attached Terms and Conditions necessary in respect of the project referred to above, as well as all necessary technical and administrative backstopping support as required and authorized in writing by the Director, Office for Project Services.

Dr. Gerard W. Ackers
Interim Executive Director
International Ocean Institute
P.O. Box 524
Valletta, Malta

2.2 The Contractor shall deliver to UNDP/OPS progress reports every six weeks and a final report which shall set forth in detail all the services performed under the Contract. All reports shall be made in the English language. All the reports shall be transmitted by the Contractor by airmail. The report shall be forwarded to the address as indicated in paragraph 4.2.

3.0 Remuneration and Payments

3.1 As full compensation for the services performed under this contract by the Contractor, the UNDP/OPS shall pay the Contractor a total amount not to exceed US\$ 110,000 broken down as follows:

a)	Consultant (4 Person/Months)		\$ 40,000
b)	International Travel *		
	1. Consultant		20,000**
	2. Chairman, Planning Council		15,000**
	3. President, Board		15,000**
c)	Total Meeting expenses in the four countries *	up to	10,000
d)	Miscellaneous (Telephone, Fax, Communications, Reporting Costs)*	up to	10,000
	Total		\$ 110,000

(ONE HUNDRED AND TEN THOUSAND U.S. DOLLARS)

3.2 The Contractor shall not do any work, provide equipment, materials or supplies, or perform any other services which may result in any charges in excess of the above mentioned amounts without the prior written agreement of the Director of UNDP/OPS. In case that the agreements with the governments and the local institutions are concluded and other outputs realized in less than six months, actual expenses incurred will be charged.

To be reimbursed at cost. Invoiced amounts for these items must be accompanied by original receipts.

Travel costs include return air fare (most direct route, economy class) between Halifax, Canada; Paris, France; Valletta, Malta and Cartagena, Colombia; Suva, Fiji; Madras, India and Dakar, Senegal.

3.3 The Contract amount referred to in Section 3.1 above shall be paid in accordance with the following schedule:

a)	Upon signature of the Contract by the Contractor	\$ 30,000
b)	Mid-Term (April 1992)	\$ 30,000
c)	Upon receipt and approval by the UNDP/OPS of the final version of the project document, the final report and expenditure statement (up to)	\$ 50,000
	Total	\$ 110,000

3.4 Invoices shall be paid within thirty (30) days of the date of their receipt and acceptance by UNDP/OPS. All payments shall be made to the Contractor's bank account No. 85 504 1243 at the Mid Med Bank Ltd, Msida Branch, 52 Msida Sea Front, Msida, Malta. The final payment shall be made after submission by the Contractor and following acceptance by UNDP/OPS of a final report and of a detailed final statement of expenditures. Such payment by UNDP/OPS shall not be deemed to relieve the Contractor of its responsibility under this contract.

4.0 Special Provisions

4.1 The Contractor shall take the necessary steps to commence the services not later than the 29 January 1992 and shall complete the services not later than the 28 July 1992.

4.2 Any notice, request or approval required or permitted to be given or made under this contract shall be in writing in the English language. Such notice, request or approved shall be deemed to be duly given or made when it shall have been delivered by hand, mail, telex or cable to the party, which it is required to be given or made at such party's address specified below, or at such other address as the party shall have specified in writing to the party giving such notice, or making such request.

For the UNDP/OPS:

Director
United Nations Development Programme
Office for Project Services
220 East 42nd Street, 14th Floor
New York, N.Y. 10017
United States of America

Ref: GLO/91/G33

Telex No.: 662293 OPS UNDP
Fax No.: (212) 906-6501

For the Contractor:

Elisabeth Mann Borgese
Chairman, Planning Council
International Ocean Institute
Pearson Institute
1321 Edward Street
Halifax, Nova Scotia
Canada B3H 3H5

Tel.: (902) 494-2034
Fax.: (902) 494-1216

- 4.3 If the above terms and conditions meet with your approval please signify your acceptance by returning one copy of this Contract and attachments, duly signed and dated.

Yours sincerely,

Dean Everts
Assistant Administrator and Director

Agreed and Accepted:

Signature : _____

Name : _____

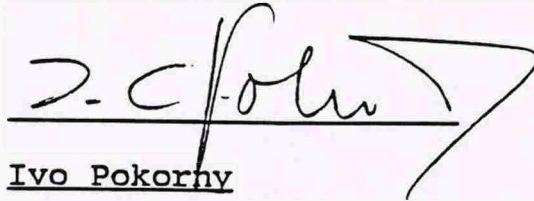
Title : _____

Date : _____

8

IN WITNESS WHEREOF, the representatives of the Parties have signed this Contract.

SIGNATURE:

NAME : Ivo PokornyTITLE : Officer-in-Charge, UNDP/OPS

DATE :

Sept 3, 93Krishan SaigalExecutive DirectorSept 3, 93

Minutes of the Meeting of the Representatives
of
The Operational Centres of IOI
on
5 September 1993
at
United Nations University, Tokyo

Present:

Prof. Elisabeth Mann Borgese, IOI Halifax
Dr. Anton Vratsusa, Vice-President, IOI
Mr. Maxwell Bruce, Vice-Chairman, Planning Council IOI
Prof. N.V.C. Swamy, IOI India
Prof. V.S. Raju, IOI India
Dr. Kevin Aquilina, IOI Malta
Dr. Jeggan Senghor, IOI Senegal
Prof. Vijay Naidu, IOI South Pacific
Prof. E. Robin South, IOI South Pacific
Mr. Philip Reynolds, UNDP/DGIP
Ms. Chinwe Dike, UNDP/OPS
Dr. Krishan Saigal, Executive Director IOI

Prof. Elisabeth Mann Borgese presided over the meeting.

Item 1: UNDP Project: General

The meeting considered the documents before it. After discussions the Meeting came to the following conclusions:

- (a) the efficient execution of the UNDP Project required proper reporting, monitoring and evaluation so that mid-course corrections, if any, could be made. This would also help in timely and adequate flow of funds;
- (b) for successful implementation of the project it was necessary to:
 - carefully draw up workplans and the related budgets centre-wise (including CVs of key personnel);
 - lay down the relevant milestones and physical targets to be achieved;
 - provide details of equipment required to UNDP/OPS with latest price quotations.
- (c) a tripartite review of the project be done at the next Meeting of Representatives to be held in Malta in the last week of April, 1994. This review would be based on the first Project Progress Report due in April 1994 and which will cover all activities starting with the preparatory phase.

Item 2: UNDP Project: Library Networking

The Meeting noted the progress made by IOI India in this regard. Mr. Reynolds offered to make available details of UNDP's Sustainable Development Network to IOI so that the same could be used by the IOI System for global networking.

Item 3: UNDP Project: Information Dissemination

The matter was generally discussed. The Meeting was of the view that IOI needed to be projected as a network of operational centres collaborating with other international institutions on ocean management and other ocean matters. Salient features to be stressed could include:

- . the global reach of the IOI System
- . the wealth of expertise available in the IOI System
- . IOI's ability to provide non-profit making consultancy services.

Mr. Reynolds offered to ask UNDP/DOI to advise on or prepare a final version of a folder in which information sheets on the mandate and activities of all Centres and the Headquarters could be appropriately disseminated.

Alumni directories and newsletters needed to be published and disseminated on a regional basis so that the valuable resource represented by IOI alumni could be suitably tapped.

Item 4: UNDP Project: Training Programmes

The Meeting noted the courses which are organised, namely, the small islands course, the managers of the Enterprise course and the coastal zone management course in the context of sustainable development. The Meeting decided that the courses for which outline curricula had been submitted should be taken up by the Courses Development Committee.

Item 5: Research Agenda Centre-wise

After extensively discussing the subject the Meeting came to the following conclusions:

- (i) the research activities to be undertaken by the IOI System should be secondary policy research driven by the requirements of the different regions - as indicated by the trainees and others;
- (ii) the IOI Centres should act as foci for information dissemination on research undertaken in the region as well as globally in the domain of marine technology - a Technology Watch system on the lines of what is at present being done in IOI India.

Item 6: Accounting System and Budget Calendar

The Meeting approved the system as suggested as well as the budget calendar.

Item 7: Consultancy System on a Cooperative Basis

It was noted by the Meeting that the IOI Board was cautious about commercial consultancy services being provided by the IOI System but would consider consultancy where the IOI System and the concerned developing country could work together on a cooperative basis. The Centres were directed to give more thought to the matter and come up with concrete proposals.

Item 8: Non-UNDP Funding

The importance of local funds being raised was emphasised while the Meeting was also informed about the efforts of the Headquarters in this regard. All the Centres agreed to explore the possibility of getting UNDP Res Reps on their Advisory Committees to help with non-UNDP Fund Raising on the patterns of what had been done by IOI South Pacific. The Committee was informed by Mr. Philip Reynolds of the possibility of utilising Mr. Ziad Shekadeh, SIFR Executive Secretary to help in bilateral funding.

Item 9: Private Sector, NGO's and others

The Meeting noted the steps taken by IOI India to hold a Seminar/Workshop for leaders in the private and public sectors and the manner in which they had managed to enlist the support of private industry in its endeavours. The Centres were requested to explore modalities of involving the private sector with the IOI System.

Item 10: Annual Workplans and Budgets 1993 and 1994

The Centres were requested to send their workplans for the remaining part of 1993 and for 1994, along with the international travel proposed, so that the same could be submitted to UNDP/OPS.

**Dr. Krishan Saigal
Executive Director**

Summarised Account of the Fund Raising Activities
of
Ms. Elisabeth Mann Borgese, Founder and Hony. Chairman
Dr. K. Saigal, Executive Director
and
Prof. R. South, Director, IOI South Pacific

The Founder, the Executive Director and Director, IOI South Pacific spent four days in Japan meeting various people for raising an endowment fund for IOI. A brief description of what happened is as follows:

The activities started with a meeting with MR. ATSUSHI SHIMOKOBE, President, North Pacific Region, Advanced Research Centre, NORPAC who is also the Chairman and Chief Executive Officer of Tokyo Marine Life Insurance which is the largest Insurance Company in Japan with a turn over of over US Dollars 12 billion. Mr. Shimokobe was very much impressed with the work being done by IOI and promised all help in raising the endowment fund. A paper was prepared on the background of IOI and the need for an endowment fund of US Dollars 16 million and the same was sent to him.

The delegation then met MR. YOSHITARO FUWA, Director, The Overseas Economic Cooperation (OECF). Mr. Fuwa informed us that the OECF funded loans to developing countries to an amount equivalent to one third of the amount given by the World Bank and IDA put together and greater than what was being advanced by the combined efforts of the Asian Development Bank, the African Development Bank and the Inter American Bank. For least developed countries loans were at 1% Interest with 28 years repayment period. OECF gave loans socio-economic infra-structure projects which led to economic development. OECF also helped self help efforts for environmental conservation in the developing world including alleviation of poverty.

Mr. Fuwa informed the Delegation that Japan was providing US Dollars 9 to 10 billion in the 5 year period from 1992 to 1997 for environment related assistance for both low income and middle income countries. It includes funds made available for transfer of technology in the field of pollution abatement like water pollution control and waste disposal. Further OECF also provided funds for human resource development for training personnel in environmental assessment, monitoring and research.

OECF did not sanction projects of less than 40 million dollars and that also after being approached by the Governments of the countries concerned. IOI could perhaps in association with some countries develop programmes in:

- i) Wave energy systems
- ii) Training in environmental assessment, monitoring and research.

The delegation met MR. TAKESHI KOBAYAKAWA, Manager, Sasakawa Foundation and discussed with him the question of providing US 100 thousand dollars to IOI South Pacific for running a training programme in 1994. He promised to consider favourably if the full details were sent to him. He also informed the Delegation that US 90,000 were likely to be sanctioned for the China Course.

The Delegation also raised the question of the endowment fund. Mr. Kobayakawa asked for a more detailed account of IOI's activities including the financial status of IOI to be sent to him. He also mentioned that since the Founder of IOI has won the UN Sasakawa Environment prize, the request of IOI would be looked at sympathetically by Mr. Sasakawa.

The Delegation met MR. KOZO TSUKADA AND TAKESHI KAGAMI of Japan International Cooperation Agency (JICA) which is the technical agency of the Official Development Agency (ODA) of Japan and gives aid in the form of training of personnel, capital grants and technical assistance. They also give help by running training programmes for persons from developing countries in Japan.

The Delegation raised with Mr. Kagami the question of grant of money for building up hostels in Fiji and Senegal. He advised that the request for this should come from the concerned government or, as a special case, from UNECA. He also informed that the local Ambassador of Japan would give grants up to US 50 thousand dollars for such purposes.

Prof. Robin South will be looking into the question of sending such a request for the IOI South Pacific.

The Delegation met MS. AKIKO DOMOTO who is a Member of the House of the Representatives of Japan and a member of the House Committees on the environment and foreign affairs. She has considerable influence on ODA. This was on the recommendation of Ms. Alicia Barcena, Member of the Board who had mentioned IOI to her.

The Delegation briefed Ms. Domoto about the activities of IOI. Ms. Domoto advised that the best thing would be for IOI to set up an NGO in Japan and she would give all help in ensuring that funds were transferred to the Japanese Branch of IOI. She acutioned, however, that the Japan Government had not so far funded NGOs but she would help IOI to the maximum.

The Delegation met MR. SHIRO HORI, Director, Promotion Division of Department of the Japan Fund for Global Environment. This was also on the recommendation of Ms. Barcena. The Japan Fund for Global Environment is meant for funding NGOs for environmental

activities in developing countries. They have a fund of US 10 million dollars for the purpose but preferred to give money by and large to Japan NGOs.

A meeting took place with MR. FUKUDA, former Prime Minister of Japan.

Mr. Fukuda is mainly interested in population control but on hearing about the activities of IOI, he promised all help. He advised that a preparatory committee for the setting up of IOI Japan may be established of which he could act as a Hony. Adviser.

The Delegation could not meet Mr. Hironaga Hirano of the Asahi Glass Foundation due to a sudden bereavement in Mr. Hiramono's family. During telephonic talks, however, it transpired that the Asahi Glass Foundation gave an annual award of US\$ 500,000 and for which IOI qualified. It was decided to get IOI nominated for the award.

The Delegation decided tentatively to set up an Organising Committee for IOI, Japan as follows:

- 1) Chairmanship .. HIH Prince Tomohito of Mikasa (if possible)
- 2) .. Mr. Shimokobe
- 3) .. Ms. Akiko Domoto
- 4) .. Ms. Fuliko
- 5) .. Prof. Fuse
- 6) .. Ms. Otsuka Masako
- 7) .. Mr. Ota, Hony. Consul General of Malta in Japan

It was also decided that the Founder and Executive Director would visit Japan again between 25 October - 4 November to consolidate the position and hold the first meeting of the Organising Committee for IOI Japan. This would be an extension of the visits that both were making to China.

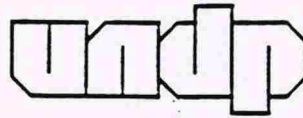
MOU with UNU

During the visit to Japan a memorandum of understanding was signed by the Founder on behalf of IOI with the Rector of United Nations University for mutual cooperation and collaboration.

RECEIVED APR 26 1993

United Nations
Development Programme

Office for Project Services



World Development

Amendment to Contract No. C-92017-A

23 April 1993

Dear Sirs,

Ref: GLO/91/G33/ - Support For Regional Oceans Training Programmes

In order to achieve a more equitable distribution of funds between the four centers (the beneficiaries of the project), and to finalize arrangements/agreements with such centers, more time will be required to effect these changes and to redraft the Project Document accordingly. Therefore, the Contract of 27 January 1992 between the International Ocean Institute (the "Consultant") and UNDP/OPS for Consulting services for the above referenced project is hereby amended as follows:

1. Section 3.1

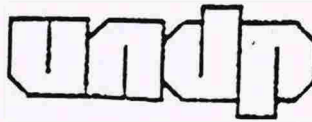
As full compensation for the services performed under this contract by the Contractor, the UNDP/OPS shall pay the Contractor a total amount not to exceed US \$144,000 broken down as follows:

a)	Consultancy fees	
	Travel	
	Office and Meeting Expenses	
	Miscellaneous Expenses	60,000
b)	Project Formulation Mission	27,506
c)	Consultative Meeting/Activities	
	i) India IOI Alumni Meeting	12,000
	ii) Meeting of Directors & Rectors	25,000
	iii) Quarterly Newsletter	5,000
d)	Policy Research - Survey of Policy Research Methods	10,000
e)	Submission Research Proposals	5,000
	<u>TOTAL</u>	144,506

Dr. Krishan Saigal
Executive Director
International Ocean Institute
P.O. Box 524
Valletta CMR 01, MALTA



United Nations
Development Programme
Office for Project Services



World Development

21 June 1993

Dear Dr. Saigal,

Subject: GLO/91/G33 - Project Budget.

Thank you for your fax of 18 June, which indicated to us that your must have misunderstood our 17 June communication. Please find below the corrected budget taking into consideration the adjustments described in our 17 June fax:

BL	Description	US \$
1600	Mission costs	50,494
2101	Prep. Assist. Subcontract (No.1)	124,506.1
2102	Full Subcontract (No. 2)	2,122,120*
3200	Workshop (Sardinia)	20,000
4600	Equipment	120,000
9300	OPS Support cost (6%)	146,227
9900	GRAND TOTAL	2,583,347

As mentioned earlier, we have reduced the Preparatory Assistance Subcontract by US \$20,000 (three items which are either covered under the new full contract or have been deleted), and have used these funds for the Sardinia Workshop which has been administered directly by OPS. Any unspent amount of this Workshop will be added to BL 1600.

I trust this clarifies this issue.

* Incl. IOI overheads.

Yours Sincerely,

Ingolf Schuetz-Mueller
Chief, Division for
Special/Interregional Programmes
and Europe

Dr. Krishan Saigal
Executive Director, IOI
Presently on Mission in Sardinia



Minutes of the Representatives of the
Operational Centres of IOI
held at the University of Malta
on the 17 and 18 May, 1993

Annex 4
Page 18

Present: Dr. Kevin Aquilina
Prof. David Attard
Prof. Salvino Busuttil
Mr. A. F. Hoque
Prof. Philip K. Quarcoo
Prof. V.S. Raju
Dr. Krishan Saigal
Ambassador Nicolas Salom
Mr. I. Schuetz-Mueller
Fr. Peter Serracino Inglott
Prof. E. Robin South
Prof. N.V.C. Swamy
Dr. Stella Vallejo

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Work plan of IOI - future role of IOI

The agenda note was discussed in the context of:

- defining the future of IOI so that it could still be relevant 20 years from now
- the workplan of IOI

There was a wide ranging discussion on this issue. The consensus view was that:

- IOI needed to work as a think tank and a generator of policy and implementational ideas flowing from the emerging international consensus in marine affairs e.g. UNLOS, UNCED, et. al.
- IOI should remain a lean networking organisation so as to have a cost-effective and competitive delivery system
- IOI may, subject to ratification by the Planning Council and the Board, consider providing packaged consultancy services to developing countries as a natural outgrowth of its research and training activities
- IOI may go into the hitherto neglected areas including, inter alia, small islands, ocean-air interface, sensitising top decision makers, regional and sub-regional networks, integrating the oceans into African development processes
- the Board of Editors of the Ocean Year Book to be enlarged to include representatives of operational centres

Regards the workplan of IOI for the next five years (1993-97) it was the view of the meeting that this could most appropriately be taken up after revising the UNDP document (Item 3) and along with the budget for IOI (Item 7).

Item 2. Management System of IOI

The agenda note was discussed. The broad view that emerged from the discussions was that while greatest possible autonomy should be given to the operational centres, the role of headquarters was also important for ensuring quality of outputs, ensuring maintenance of accounts in a uniform manner, and for avoiding duplication of effort thereby keeping administrative and overhead expenses to the minimum. Most fund-raising activities should also be centrally coordinated so that the same funders were not approached by different operational centres. It was the view of the meeting that within these parameters the management system of IOI should be allowed to evolve over time in a flexible and organic manner.

The meeting also approved the system of financial accounting, namely, the accounting format, the mode of releasing funds and the addition of a small (20%) surcharge on all activities so as to meet administrative expenses (13% to the centre and 7% to headquarters).

Item 3. Revision of UNDP Document.

The agenda note referred to the UNDP document which needs to be discussed and then revised in the aggregate and then revised centre-wise and year-wise.

In the discussions that ensued, it was agreed that:

- (i) more stress should be laid on modular course development
- (ii) syllabi should be produced in-house through collegial functioning and then subject to expert external scrutiny
- (iii) trainers should be trained in how to lecture to a multi-cultural, multi-speciality audience with uneven educational backgrounds
- (iv) libraries should be linked by E-mail

On the basis of the above parameters, the budgetary parameters were finalised

- in the aggregate (Annexure I)
- centre-wise (Annexure II)
- year-wise (Annexure III)

Item 4. Modular Curriculum Development.
Item 6. Research Agenda.

The concept of a module was discussed. It was agreed that a module was not a unit but was:

- a discrete piece of information
- something that could be removed from the syllabus without affecting its structure

It was also the view of the meeting that modules and applied research were interlinked with two-way interactions between them. The two should therefore be considered together.

The applied research agenda was very thoroughly discussed. It was ultimately agreed that the centres should specialise i.e. IIT-M (engineering and technology), USP (fisheries), Senegal (economics), Halifax (law of the sea), Malta (islands) and Colombia (spanish case studies). They should finalise their research agenda so that the matter could be discussed in September, 1993.

Regarding the course modules, it was agreed that the centres would work within their areas of specialisation and draw up a list of modules, subject them to regional peer review and then discuss them with the other centres (through fax/E-mail). The final product would be cleared by a Central Committee consisting of the Honorary President, the Executive Director, a representative of UNDP, a representative of the regional centre concerned and two outside, and recognised experts in the field.

Item 5. Training.

The meeting had before it the following papers:

- (i) Advanced Course on the Integrated Management of Coastal and Ocean Areas - Stella Vallejo
- (ii) Syllabi of three new courses:
 - . coastal zone management as a sustainable process - IOI India
 - . coastal zone management with the focus on small islands - IOI Malta
 - . sustainable development and implementation of chapter 17 of agenda 21 in the exclusive economic zone - IOI Halifax
- (iii) A proposal from the University of Malta of a new M.A. degree course as a joint venture between the University and IOI.

On presenting her paper Ms. Vallejo stressed on the integrate nature of the course, that it would require a regional case study and 3-4 national case-studies. It could serve as a advanced course by itself or form a module in a larger course.

In the discussions that ensued on the paper the following views emerged:

- . it may be better to first ask for national case studies and to let the regional/subregional study flow from then
- . to use the ideas set forth in the document in three ways:
 - * in a 2 week course for trainers and for those with some marine knowledge (alumni as well as others)
 - * in an expanded 4 week course
 - * in a 1 week module in every IOI course

The other syllabi were approved to be tested and evaluated. It was suggested that the islands course be modified to include the following units:

- . customary marine tenure (2 sessions)
- . economy of distance water fleets
- . women in artisanal fisheries
- . environmental impact legislation

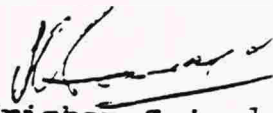
The meeting was of the view that the M.A. degree course for Malta was an idea that needed to be further explored.

Item 7. Budget.

The meeting was of the view that the UNDP allocations having been decided, it was necessary to firm up the likely non-UNDP income before drawing up the budget. It was agreed that likely funding sources would be tapped and the budgets drawn up by the centres and submitted by 31.7.93.

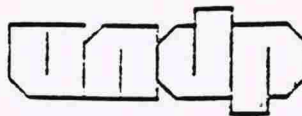
A five year plan would have got ready by all centres by September, 1993.

The meeting ended with a note of thanks to the chair.


Dr. Krishan Saigal
Executive Director

United Nations
Development Programme

Office for Project Services



World Development

UNDP (OPS) CONTRACT NO.: C-~~93617~~
AMOUNT OF CONTRACT: US\$ 2,583,347

UNITED NATIONS DEVELOPMENT PROGRAMME

CONTRACT FOR:

The development of an institutional infrastructure through the establishment of four operational centres for the support of regional oceans training involving implementation of training programmes to further policy research in marine affairs.

PROJECT REFERENCE:

GLO/91/G33
Support for Regional Oceans Training Programs

CONTRACT BETWEEN

UNITED NATIONS DEVELOPMENT PROGRAMME
OFFICE FOR PROJECT SERVICES
220 East 42nd Street, 14th floor
New York, N.Y. 10017
United State of America

and

INTERNATIONAL OCEAN
INSTITUTE (IOI) A BODY
CORPORATE CONSTITUTED IN
ACCORDANCE WITH THE CODE
OF THE LAW OF THE
NETHERLANDS 501 (C) (3) IS
A NOT FOR PROFIT
CORPORATION WITH
HEADQUARTERS LOCATED IN
GZIRA, MALTA,
P.O. Box 3, GZIRA GZR 01,
MALTA

The Undersigned duly authorized representatives of the parties hereby agree to the following terms and conditions and all attachments as indicated in Section 1.01.

Starting Date: 01 September 1993 Completion Date: 29 February 1996



THE DULY AUTHORIZED REPRESENTATIVES OF THE PARTIES HEREBY AGREE TO THE FOLLOWING TERMS AND CONDITIONS:

WHEREAS the United Nations Development Programme (UNDP) has accepted to provide, through its Office for Project Services (UNDP/OPS), its cooperation in the implementation of the Project entitled " Support for Regional Oceans Training Programs " (Project No. GLO/91/G33, hereinafter referred to as the "Project");

WHEREAS UNDP/OPS desires to obtain the services of the International Ocean Institute (IOI), headquartered in Malta, (hereinafter referred to as the "Contractor") to carry out the activities required for the implementation of the Project as described hereafter.

WHEREAS the Contractor represents that it is qualified, willing and able to provide such services on the terms and conditions set forth herein;

NOW THEREFORE, UNDP/OPS and the Contractor (hereinafter referred to collectively as the "Parties") hereby agree as follows:

1.00 General

1.01 Scope of Contract

The Parties agree to be bound by the provisions herein set forth in the Contract as well as in the General Conditions for UNDP/OPS Contracts for Professional Services (Annex I), the UNCITRAL Arbitration Rules (Annex II), the Project Document and its appendices (Annex III), and the Budget for Project Services (Annex IV and Annex IV-A), all of which are hereinafter referred to as the "Contract". In the event of any conflict or inconsistencies between the above referenced documents, they shall be interpreted and will prevail in their respective order.

1.02 General Objective

The immediate objectives of this programme are first, for IOI to develop an institutional infrastructure by establishing four operational centers to be located in India, the South Pacific (Fiji), Colombia and Senegal; and second, through these centers, IOI will implement training programmes in furtherance of policy research and development in marine affairs. The centers will serve as vehicles for providing training and management of exclusive economic zones and will initiate research programmes to handle local and regional concerns.

The strategic approach of IOI is to improve the ability of developing countries to manage their own ocean resources.

2.00 Contrator's Services

2.01 Services

- a) The Contractor shall perform, in accordance with the Contract, all services necessary for the implementation of the Project as described and presented in both the Project Document and its appendices, Annex III and the Budget for Project Services, Annex IV and Annex IV-A (such services are hereinafter referred to as "Services"), and all other obligations of the Contractor hereunder.
- b) The Contractor, in performing Services, will comply in particular, with Parts C, D, E, G, H, I and J and appendices A, B and C of the Project Document, Annex III. All subsequent changes and revisions to the workplans and budgets for Project Services will be subject to the prior approval of UNDP/OPS.
- c) The Contractor shall provide personnel, materials and supplies, and the appropriate administrative and technical support necessary for the full and complete performance of Services. The Contractor shall be obligated to ensure that the prerequisites for the implementation of this Project are met which require cash and in kind contributions by host governments and associated institutions, of the physical location, facilities and support required to establish the four operational centers described in the Project Document. Such inputs are as set forth in Part E, Sections 2 and 3, of the Project Document, Annex III, in the amounts of US\$1,000,000 and US\$875,000 or more, respectively. The Contractor shall also coordinate the implementation of Project activities with participating research institutions and universities.
- d) Upon signing of the Contract, the operational centres in India and the South Pacific (Fiji) will receive funding to begin training programmes as per the Project Document, Annex III. The Contractor will keep UNDP/OPS apprised of progress in the development of realistic operating plans for centers in Colombia and Senegal the funding of which may begin upon UNDP/OPS receipt and approval of such final operating plans. Until such approval by UNDP/OPS, the Colombia and Senegal centers will receive partial funding as set forth in Annex IV-A.

2.02 Contractor's Personnel

- a) The Contractor shall provide, to the satisfaction of UNDP/OPS, suitably qualified and experienced expert personnel to perform Services. The list and resumes of the Contractor's key personnel proposed for assignment to the Project shall be submitted to UNDP/OPS for review and approval before

recruitment by the Contractor.

- b) All contracts and agreements to be entered into between the Contractor and third parties such as institutes, universities or other entities, for the purpose of this Project, shall be submitted to UNDP/OPS for prior approval and shall not include terms and provisions which are not in accordance with this agreement.

2.03 Training and Research

The Contractor shall organize and ensure the delivery of in-house and overseas research and training programmes as described in Part D of the Project Document, Annex III entitled "Immediate Objective 2 - Training Programmes".

2.04 Equipment

- a) The Contractor shall not purchase any equipment on account of the project. Any equipment required shall be directly procured by UNDP/OPS. However, it shall be the Contractor's responsibility to provide UNDP/OPS with specifications of all equipment to be used for the Project together with the estimated costs of such equipment.
- b) The Contractor shall use all equipment for the purposes intended in the Project Document and workplans, and the disposition of all equipment at the end of the Project will be decided by UNDP/OPS in accordance with the UNDP financial rules and regulations.

2.05 Time Table

The Contractor shall adhere to the timetable set forth in the workplans in Appendix B of the Project Document, Annex III, or as subsequently amended and agreed upon by UNDP/OPS and the Contractor.

3.00 Reviews, Required Information and Reports

3.01 Reviews and Required Information

- a) This Project will be subject to annual joint review by the IOI, the centers' directors and UNDP/DGIP and OPS, to assess and evaluate the progress of research, policy and training objectives, networking and achievement of Project objectives and outputs. The IOI Executive Director shall prepare and submit for each review a Project Performance Evaluation Report (PPER). Additional PPERs may be requested by UNDP/DGIP and OPS during the Project.

- b) UNDP/DGIP and OPS, will undertake an evaluation mission during the second year of the Project, independent of the joint Project reviews described above. To facilitate such evaluation, progress on the work will be reported in accordance with Section 3.01 a) above.
- c) In addition, the Contractor shall be required to submit to UNDP/OPS the following information which will assist in the implementation of the Project:
- CVs of all professional personnel financed under the Project;
 - semi-annual international travel schedules (for meetings, consultations, research collaboration and similar activities);
 - annually revised workplans accompanied by supporting budgets with appropriate budget explanations. (These should include descriptions and budgets for workshops, conferences and seminars anticipated for each year and in-kind and cash contributions to be made by the Contractor, by the operational centres and by host governments).

3.02 Reports

- a) The Contractor shall ensure that the Project is coordinated and reported in a manner which will allow for proper and effective review and evaluation by UNDP/DGIP and OPS.
- b) The Contractor shall submit to UNDP/OPS, within 30 days of the end of each twelve month period, an annual report in three parts, as follows:
- i) Part One shall consist of a PPER.
 - ii) Part Two shall consist of a financial report providing information on all expenditures made by the Contractor under the Contract, including a detailed statement of the cash and in-kind contributions made by the Contractor, by the operational centres and by host governments. Annually, UNDP/OPS shall require a certificate from the Contractor's external auditors certifying the propriety of such financial reports after annual audits have been performed by the Contractor's auditors. The Contractor's files shall be made accessible to UNDP/OPS or its representatives for audit at any time. Where appropriate, each financial report shall include an updated equipment inventory list.
 - iii) Part Three will provide complete information, for the upcoming 12 months, on an updated annual work plan, annual travel schedule, including information on any

workshops and conferences planned, as well as budgets with appropriate explanations.

- c) The Contractor shall submit to UNDP/OPS, not later than 30 days after the completion of Services, a Final Report (combined with the terminal report referred to in the Project Document, Annex III) in two parts. Part One, the PPER, shall describe all Services performed, discussing whether the Services have been completed in accordance with the Contract and the Contractor's conclusions and recommendations regarding the Project. Part Two shall be prepared in accordance with sub-paragraph (b) (ii) above.
- d) All PPERs and annual reports, from the Contractor as described in paragraphs a), b) and c) of this section are subject to the approval and acceptance of UNDP/OPS who shall communicate its acceptance, or otherwise, of a submission to the Contractor within 30 days of receipt. In the event that UNDP/OPS shall find any submission unsatisfactory for the purposes intended, the Contractor shall be required to correct the unsatisfactory condition or matter within 30 days of notification by UNDP/OPS.
- e) All submissions shall be made in the English language and shall be transmitted to UNDP/OPS by the Contractor by airmail, addressed to:

Director
UNDP - Office for Project Services
220 East 42nd Street, 14th floor
New York, N.Y. 10017
U.S.A.
Ref. GLO/91/G33

4.00 PAYMENT FOR CONTRACTOR'S SERVICES

4.01 Contract Price

- a) As compensation for the full and complete performance of Services and all other obligations of the Contractor hereunder, UNDP/OPS shall pay to the Contractor a contract price of up to two million five hundred eighty three thousand three hundred forty-seven US dollars (US\$ 2,583,347) the breakdown of which is given in the Budget for Project Services attached hereto, Annex II and Annex II-A. In any event, payments to the Contractor shall not exceed the amount set forth in the budgets of any annual workplans submitted by the Contractor and approved by UNDP/OPS.
- b) The Contractor shall not provide any additional services, equipment, materials or supplies which may result in costs in excess of the Contract price specified in paragraph 4.01 a)

without the prior written agreement of the Director of UNDP/OPS expressed through an amendment to the Contract in accordance with Article 18 of the General Conditions, Annex III.

4.02 Payments

a) The Contract price referred to in section 4.01 above shall be paid by UNDP/OPS as follows:

i) Upon signature of the Contract by both parties, UNDP/OPS shall make an advance payment of Ninety Thousand US dollars (US\$90,000) to the Contractor to cover all headquarter and operational centres expenditures for the month of September.

ii) Beginning with the first quarter, starting 1 October to 31 December 1993, and for each quarter thereafter, the Contractor shall submit to UNDP/OPS an invoice detailing:

- actual expenditures incurred during the previous quarter (by budget lines) and supported by economy class ticket stubs for all travel plus other documentary evidence, as appropriate;

- plus an estimate of expenditures (by budget line) to be incurred during the upcoming quarter and to be advanced by UNDP/OPS;

- minus the amount advanced by UNDP/OPS in the previous quarter.

Upon examination and acceptance, UNDP/OPS shall effect the appropriate payment which shall not exceed one quarter of the budget programme approved by UNDP/OPS for the relevant annual budget set forth in Annex IV, the Budget for Project Services.

b) In addition to the provisions set forth in subsection a, ii, above, UNDP/OPS shall retain 20% of the final quarter estimated expenditures, the amount thus retained will be released subject to:

i) certification by the Contractor's external auditors that all contracted services have been rendered, and that all contributions, in cash and in-kind, have been made by the Contractor, by the operational centres and by host governments, as per Part E, Sections 2 and 3 of the Project Document, Annex III; and

ii) receipt and acceptance by UNDP/OPS of the Final Report referenced in Section 3.02 c) above.

In the course of Project implementation, UNDP/OPS may engage firms or individuals to independently confirm that the Contractor has professionally and reasonably accomplished all

required Services.

- c) Such payments by UNDP/OPS shall not be deemed to relieve the Contractor of its responsibilities under this Contract. All payments by UNDP/OPS shall be made in U.S. Dollars to the following bank account of the Contractor:

Bank : Bank of Valleta International

Address : _____

Account No.:

5.00 MISCELLANEOUS

- 5.01 The Contractor shall commence the Services on 1 September 1993 and shall complete Services not later than 29 February 1996.
- 5.02 Any notice, request or approval required or permitted to be given or made under this Contract shall be in writing in the English language. Such notice, request or approval shall be deemed to be duly given or made when it shall have been delivered by hand, mail, telex or cable to the party to which it is required to be given or made at such party's address specified below, or at such other address as the party shall have specified in writing to the party giving such notice, or making such request.

For the UNDP/OPS:

Director
 UNDP - Office for Project Services
 220 East 42nd Street, 14th floor
 New York, New York 10017
 U.S.A.
 Ref. GLO/91/G33
 Telex No. 662293 OPS UNDP
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Report on the visit of the Honorary Chairman
and the Executive Director to Japan
in October-November, 1993

The Honorary Chairman of IOI and the Executive Director visited Japan from 25 October - 3 November 1993. The purpose of the visit was to:

- build on the results of PIM XXI;
- explore the possibility of setting up IOI Japan;
- establish contacts to raise money for IOI including the Endowment Fund.

Strategy sessions were held with Mr. Shimokobe, President NORPAC, Prof. Fuse, Coordinator of PIM XXI, Ms. Fujiko Hara, President Diplomatt Transcultural Training, Ms. Masako Otsuka, President INTERCOM, and Mr. Hitoshi Kondoh, Executive Director of the Institute of Better Public Relations. After prolonged discussions the strategy that was considered optimal for IOI was:

- to respond to the request of the Mayor of Takaoka City to take up a programme for establishing contact between the cities and communities located on the Sea of Japan in China, the two Koreas, Russia and Japan. This programme, which was at the moment very topical due to the dumping of nuclear wastes by Russia in the Sea of Japan, would be wholly funded by the City of Takaoka and could act as a trigger to generate momentum for IOI Japan in particular and IOI in general.
- to study the feasibility of incorporating IOI Japan at the Prefecture and National levels after studying the various laws and procedures. Discussions should also be initiated with Universities and Research Organisations so that IOI Japan could be located suitably. In any case a Preparatory Committee needed to be established so that IOI Japan could start functioning de facto while steps for making it a de jure entity could run in parallel.
- to actively pursue the nomination of IOI for the Asahi Blue Planet Prize (worth \$ 500,000) as that would give credibility to IOIs fund raising activities.
- to have a well articulated and developed Public Relations exercise so that would help in getting IOI 'recognition' as an active international NGO.
- to establish contact with key Government and Private Sector sources as that was a precondition for any fund raising exercise to succeed.

Programme for Sea of Japan

A proposal for a four phase programme for a Project to Promote Regional Cooperation in the Management and Conservation of the Sea of Japan, with particular emphasis on the participation of municipalities, fishing communities and port authorities was prepared and submitted to the Mayor of Takaoka. The project has been estimated to cost US\$ 1 million over a three year period. The proposal is attached as Annex 1.

IOI Japan - feasibility of establishing

Discussions with the authorities of Takaoka, Yokohama University and various other persons including the Japanese Minister for the Environment, Mrs. Wakako Hironaka and members of the ruling Social Democratic Party of Japan (Mr. Yuzuri Shimazaki, Mr. Yoshikazu Ishida and Mr. Nukui Hiroshi) gave the impression that the time was ripe for an IOI Japan especially in view of nuclear dumping by the Russians in the Sea of Japan and the recent stress of the Government of Japan on NGOs. Takaoka and Yokohama both were offered as sites for hosting IOI Japan and the final decision was left to Japanese colleagues. A core group of Prof. Fuse, Ms. Fujiko Hara and Ms. Masako Otsuka was formed and they were to coopt more members including, if possible, HIH Prince Tomohito, who was related to Ms. Fujiko Hara.

IOI Japan could come on stream early in 1994 and would be a good pipeline for raising funds for IOI.

Asahi Blue Planet Prize

Due to the efforts of the Honorary Chairman IOI was nominated for the Asahi Prize (worth US\$ 500,000 approx.) by:

- the Government of Malta (through the good offices of the Treasurer);
- Senator Pell of USA;
- Mr. Maurice Strong, former S.G. UNCED;
- Lord Clinton-Davis of ACOPS;
- Mr. Shimokobe, President NORPAC;
- Mr. Gurgulino de Souza, Rector UNU,

and some others. The Minister for Environment of Japan was very helpful and her officer Mr. Kazou Matsushita, Director of Control and Cooperation Division promised to follow up. The competition, according to Mr. Matsushita, was keen but we are hopeful.

Public Relations

Discussions were held with Mr. Takao Shimizu, Mr. Hiromichi Kubota (Universal Public Relations Inc.), Mr. Tetsuro Nishizaki (International Public Relations Co. Ltd.), Mr. Hitoshi Kondoh (Institute for Better International Relations) and Mr. Katsura Kuno (Editor in Chief Japan Update).

As a result of all these discussions:

- an article was written by Mr. Kondoh after interviewing Prof. Fuse as to the future IOI Japan;
- the Honorary Chairman was interviewed by Japanese TV as well as by Kyodo News Service, a premier news agency of Japan.

Contacts established in Japan

The delegation established contacts with the following:

- Mr. Shigetsugu Tateyama, Director Mitsubishi Public Affairs Committee who looks after the funds given by the Mitsubishi Group to further their PR image. Environment is an area of interest to the Group as well as shipping (Mitsubishi Heavy Industry). Prof. Fuse was to follow up.
- Mr. Takeshi Kodama of Suntory who is the Senior General Manager and performs a similar function for Suntory that Mr. Tateyama performs for Mitsubishi.
- Keidenren (the Japan Federation of Industry) through Mr. Toshimitsu Shinohara (Science and Technology) and Mr. Michio Sasaki (dealing with Ocean Industry). The response was positive but at the moment due to recession Keidenren has very little money. Japanese colleagues would be following up.
- Dr. Sachio Semmoto, Senior Vice President of DDI Corporation who was very positive and helpful. Knows many people and would be most helpful in future.
- Mr. Mariko Nishizaki, Manager Japan International Development Organisation Ltd. This is a Government Organisation which would be able in future to help IOI Japan.
- Mr. Kazo Kato, Director General, Department of the Japan Fund for Global Environment. This is a special fund created by the Government of Japan for NGOs, especially Japanese NGO's. Both IOI and IOI Japan would be applying to it for the year 1994. Their fund for 1993 was exhausted.

- Mr. Seizo Ota, President Toho Mutual Life Insurance Co. and Consul General of Malta. The Treasurer suggested we meet him. Mr. Ota is very rich and influential and we are hopeful that he will be of considerable help to IOI and IOI Japan. He will most probably be on the Governing Board of IOI Japan. He promised to establish contact with Mr. Matsumai who funded Tokai University.
- Mr. Yuzura Shimizaki, Mr. Yoshikazu Ishida and Mr. Nukui Hiroshi of the ruling Social Democratic Party of Japan (SDPJ). The SDPJ is very interested in ocean matters and Prof. Fuse is their legal adviser in ocean matters. They were very supportive of IOI and we expect political support from them.
- In the Government of Japan we met Mrs. Wakako Hironaka, Minister of Environment. She was very supportive, is an ardent ecologist and will be a tower of strength for IOI Japan. We also met Mr. Ito, Head Ocean Affairs in the Foreign Ministry. He is a good friend of Prof. Fuse and meets the Honorary Chairman regularly at Prepcom Meetings. Will support IOI Japan.

Funds promised

Sasakawa Foundation: Promised \$ 100,000 for IOI Fiji and \$ 90,000 for IOI India for two courses. Also promised to consider favourably US\$ 2.5 million for the endowment fund for PIM if we could get US\$ 2.5 million from some other source. Our Japanese colleagues are confident of raising this money.

UNU: They have included US\$ 50,000 for joint programmes with IOI and promised to consider including US\$ 50,000 for training programme scholarships.

Minutes of the Courses Development Committee
held on
5 & 7th September, 1993
at
Tokyo and Takaoka, Japan.

Present (Tokyo on 5th September):

Prof. Elisabeth Mann Borgese, IOI Halifax
Dr. Anton Vratusa, Vice-President, IOI
Mr. Maxwell Bruce, Vice-Chairman, Planning Council IOI
Prof. N.V.C. Swamy, IOI India
Prof. V.S. Raju, IOI India
Dr. Kevin Aquilina, IOI Malta
Dr. Jeggan Senghor, IOI Senegal
Prof. Vijay Naidu, IOI South Pacific
Prof. E. Robin South, IOI South Pacific
Mr. Philip Reynolds, UNDP/DGIP
Ms. Chinwe Dike, UNDP/OPS
Dr. Krishan Saigal, Executive Director IOI

Present (Takaoka on 7th September):

Prof. Elisabeth Mann Borgese, IOI Halifax
Dr. Anton Vratusa, Vice-President, IOI
Mr. Maxwell Bruce, Vice-Chairman, Planning Council IOI
Prof. N.V.C. Swamy, IOI India
Prof. V.S. Raju, IOI India
Dr. Kevin Aquilina, IOI Malta
Dr. Jeggan Senghor, IOI Senegal
Prof. Vijay Naidu, IOI South Pacific
Prof. E. Robin South, IOI South Pacific
Mr. Philip Reynolds, UNDP/DGIP
Ms. Chinwe Dike, UNDP/OPS
Amb. Nicolas Salom, IOI Colombia
Dr. Garcia, IOI Colombia
Dr. Krishan Saigal, Executive Director IOI

Prof. Elisabeth Mann Borgese presided in both the meetings.

Item 1: Laying down the procedure by which courses and modules are approved.

The Meeting considered the documents circulated, including Appendix L of the UNDP Project Document and after discussion came to the following conclusions:

- (i) while the IOI courses conducted so far had proved their worth, with the expansion of its activities the IOI System had now to shift IOI courses from:
 - . centrally prepared to regionally prepared courses;
 - . instructor dependent to material dependent course;

- . from ad hoc to systematically prepared courses;
 - . from unique courses to exchangeable course modules;
- (ii) while the systems approach to decentralise course development as exemplified by the TRAIN-X system was good, the IOI lacked the time and money to develop courses through a formal TRAIN-X Programme. The meeting came to the view that a good way would be for UNDP and IOI to organise a Workshop in Geneva from 22-26 November, 1993 where participants can be briefed on TRAIN-X and give their reactions (2 days) and receive preliminary training on accepted elements of TRAIN-X.

Item 2: Selecting Pedagogical Experts from Each Centre

It was decided that the following will attend the Geneva Workshop:

IOI Colombia	:	Dr. Garcia
IOI India	:	Prof. Swamy Prof. Raju
IOI Senegal	:	Dr. Philip Quarco
IOI South Pacific:		Prof. Robin South + 2 to 3 others
IOI Halifax	:	Prof. Elisabeth Mann Borgese
IOI Headquarters:		Dr. Krishan Saigal
UN DOALOS	:	Ms. Stella Vallego (to be funded by IOI)
UNDP/DGIP	:	Mr. Philip Reynolds.

Item 3: Consideration of Course Structures (Takaoka 7th September)

IOI Fiji presented 10 course proposals. Two were in collaboration with the Australian Maritime College, Tasmania and would go ahead with or without IOI. All were considered to be acceptable but priority might be set on the basis of the following criteria:

- perceived need in the IOI network and beyond;
- transferability;
- complementarity with existing IOI courses.

On this basis priority was given to the following Fiji proposals:

Course 4: Fisheries Economics and Management

5: Resource and Environmental Economics

7: Management of Coastal Fisheries

Number 5 was top priority. For numbers 4 and 7 there could be consultation with Mr. Rolf Willmann (FAO) and Chua Thia Eng (ICLARM). Mr. Philip Reynolds promised to establish contacts.

IOI Madras presented only one course (modified 10 week) for which they will use modules of 90 minutes presented through workshops, case studies, site visits and lectures.

IOI Senegal will send their training officer to Geneva in November and will develop a leadership workshop or alumni course within 6 months. In terms of organization, they will limit their core staff and will engage outside personnel for each course as is done for the Arusha, Tanzania based Eastern and Southern African Management Institute (ESAMI).

IOI Colombia has recently obtained collaboration with a well respected academic, Dr. Garcia, who will help Ambassador Salom choose and develop a course over the next 6 months.

Dr. Saigal agreed to pay special visits to the Senegal and Colombia Centres, if necessary.

Dr. Krishan Saigal
Executive Director

MEETING ON TRAINING FOR OCEAN AND COASTAL MANAGEMENT
22-26 NOVEMBER, GENEVA

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Evaluation of the Training Programme for
Managers, Policy and Project Planners
for
the Enterprise of the International Sea-bed
Authority

Hangzhou, China 4 October - 6 November, 1993

During the 12th Session of the Preparatory Commission in Kingston, Jamaica, 1993, the International Ocean Institute submitted a proposal to the Commission for a training programme for managers, policy and project planners for the Enterprise of the International Sea-bed Authority, upon the coming into force of the United Nations Convention on the Law of the Sea. A Memorandum of Understanding of Joint Sponsorship of Training Courses for this programme was reached between the China Ocean Mineral Resources Research and Development Association and the International Ocean Institute. The two sides agreed that, as part of the training programme, training courses on deep sea-bed mining would be held in China once every other year and further agreed that, the first training course would be held from October 4th to November 6th, 1993 in China.

The purpose of the course was to provide opportunity for individuals from the developing countries to obtain the basic knowledge concerning the legal, technical, economic and environmental aspects of deep sea-bed mining and to increase the possibilities of selecting qualified personnel for managers, policy and project planners from the developing countries for the Enterprise of the International Sea-bed Authority, upon the entry into force of the LOS Convention, so as to reflect the principle of the international sea-bed and its resources as a **Common Heritage of Mankind**.

The course was designed to cover the following:

- Legal background for international sea-bed activities;
- Progress in the Preparatory Commission for the International Sea-bed Authority and for the International Tribunal for the Law of the Sea;
- Technical development on deep sea-bed mining; and
- Economic evaluation for exploration, exploitation, transportation, processing and metal market of sea-bed resources.

Dr. Joseph Warioba, the former Chairman of the Preparatory Commission and former Prime Minister of Tanzania, was the Course Director. His experience and knowledge on the Law of the Sea Convention, as well as his understanding and patience made a great contribution to the course. There were also two lecturers from the Group of Technical Experts of the PrepCom, Dr. Luis Preval from Cuba and Dr. J.P. Lenoble from France.

There were fourteen participants in the course with seven being from China and the rest from India, Kenya, Korea, Oman, Saudi Arabia, Seychelles and Thailand. The disciplines represented related to Geology and Geophysics, Meteorology and Environment, Industrial Engineering and Management, Mining Engineering, Marine Chemistry, International Law, Cybernetics and Automation and Foreign Affairs.

The Course Syllabus was designed to provide the background to the functioning of the Enterprise by going into the Law of the Sea Convention and further developments in the Preparatory Commission. The selection of the first mine site of the Enterprise, development of the deep-sea mining technology, technology options for the Enterprise, underwater technology and submersibles development were part of the technology section. The management section comprised economics, funding strategies, capital budgeting, modern organisation methods, joint ventures and environmental considerations. Case studies of China, France and India rounded off the course (the course syllabus is at Attachment A).

Evaluation of the Course

The course was the first one of its kind and was funded by the Sasakawa Foundation. This is a revised IOI A Course and needed to be evaluated. The evaluation was done by the Honorary Chairman and the Executive Director in consultation with the Course Director and the Associate Course Director. There were also discussions with the participants.

The course broadly fulfilled its objectives. The output from the trainees in the form of workshop and individual research reports were of a uniformly high standard with some being of outstanding quality. The interactive type of lecturing was very effective and the discussion mode was very much appreciated by the participants particularly in view of the very high level of expertise that the Course Director and the International Experts (Dr. Preval of Cuba and Dr. Lenoble of France) brought to bear on all issues.

There were, however, some matters which needed to be taken note of for the next course. The time allocated to environmental and managerial concerns needs to be enhanced by reducing the time allocated to the Convention and the work of the PrepCom. Also those weak in English should be put through the language laboratory in Madras for a week so that their lack of ability in spoken English does not inhibit their full participation in the programme.

Evaluation of the Training Course
on
Coastal Zone Management as a Sustainable Process

Madras, India 11 Oct. - 17 Dec., 1993

The training course organised by IOI, Madras is a revised C Course. It was organised round 9 themes and a simulation exercise to integrate the nine themes into an integrated whole. The themes, along with the time spent on each theme, were as follows:

Theme 1: Changing international order and the contemporary concept of development	24 hours
Theme 2: The Law of the Sea Convention, Antarctic treaty system, international organisations	12 hours
Theme 3: Man and the oceans: oceanography, sea-air and land-air interfaces	37.5 hours
Theme 4: Management of living resources	36 hours
Theme 5: Management of nonliving resources	15 hours
Theme 6: Ocean Services: shipping, ports, tourism	31.5 hours
Theme 7: Integrated coastal management: the economics of sustainable development	19.5 hours
Theme 8: Management concepts and principles	22.5 hours
Theme 9: Agenda 21, chapter 17: implementation by Indian Ocean states	16.5 hours
Simulation Exercise	21.5 hours

The programme also include 60 hours of site visits to important oceanographic institutions and projects. The full course syllabus is at Attachment A.

There were eighteen participants in the course with six being from India and the rest from Egypt, Fiji, Kenya, Malaysia, Sri Lanka, Tanzania, University of South Pacific and Vietnam. The Course Director was Prof. V.S. Raju, Director IOI Madras. It was decided to make a mid-term evaluation of the course so that necessary mid-course corrections, if necessary, could be made.

The course had been extensively discussed by the faculty before it was started so it was very well integrated. It was noticed by the evaluators, however, that the themes were not being run consecutively but were being mixed up. The Course Director explained that this had been done deliberately so as to integrate the subject matter from the very beginning. It was decided to await the result of this "experiment" and to await the end of course evaluations by the participants.

The evaluators also noted that the lecturers were all from India. Though this was in some ways advantageous in reducing costs the evaluators advised the Course Director to try and "regionalise", if not "internationalise" the faculty by inviting some faculty from outside India. These could be representatives of FAO, UNEP, UNDP etc. located in India. Also appropriate faculty could be invited from within the region e.g. Malaysia, Sri Lanka, Mauritius, Kenya, Tanzania etc.

CLAM/DOS: Library Automation Package

CLAM/DOS is a comprehensive, easy-to-use Library Information Management System designed by DONLab, I.I.T, Madras to serve the needs of small to medium-sized libraries, documentation centres, etc. With minimal investment in hardware, most functions of the library can be automated. CLAM/DOS tracks circulation of books, receipt of journals, information on members and printing of Catalogue cards and various reports. A sophisticated search facility allows even computer-naive members to rapidly locate books and articles. A password mechanism is provided to control operations such as circulation and acquisition. CLAM/DOS runs under MS-DOS on a standard PC/XT or PC/AT. The hard disk is the only limitation on library size (allow 1 MB per 1000 books). Response time is adequate on a PC/XT with holdings of several thousand books. For larger collections, a PC/AT is recommended.

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. **Enquiries**

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. **Miscellaneous**

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Customization

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Ongoing Development

Development of a networking version of CLAM/DOS is currently on. With this, an institution having several locations can run CLAM/DOS at each location and automatically share data through electronic mail or postal service. Changes to a database at any location are automatically sent to all other locations. Thus members at any location can access the union catalogue of the entire institution. A reliable protocol is used to handle loss of data during transfer.

Installations

Current installations include I.I.T., Madras (Department of Computer Science & Eng.), International Institute of Ocean Technology, Malta (six centres worldwide), and M.S. Swaminathan Research Foundation, Madras.

DALHOUSIE UNIVERSITY ARCHIVES DIGITAL SEPARATION SHEET

Separation Date: August 5, 2016

Fonds Title: Elisabeth Mann Borgese

Fonds #: MS-2-744

Box-Folder Number: Box 295, Folder 1

Series: Administrative records of the International Ocean Institute

Sub-Series: Administrative records

File: Report to the Canadian International Development Agency (CIDA)

Description of item:

File contains a copy of Seremaia Kalokalo Tuqiri's CV.

Reason for separation:

3 pages removed from digital copy due to privacy concerns.

IOI - Madras, India

Achievements in the First Year of Operation - March 1994

INTRODUCTION

The major activities under review are:

- A. I.O.I. Course on Coastal Zone Management as a sustainable process, 11th October - 17th December 1993 at I.I.T., Madras.
- B. Alumni refresher course 4th to 7th March 1993 at I.I.T., Madras.
- C. Course on Coastal Zone Management as a sustainable process 27th June - 29th July, 1994.
- D. Alumni refresher course at Kualalumpur, Malaysia 4th to 8th July, 1994.
- E. Training of Trainers.
- F. One day seminar on oceans - Investment opportunities.

A. I.O.I. Course on Coastal Zone Management as a sustainable process, 11th October - 17th December 1993 at I.I.T., Madras

This 10 Week course was organised for Scientists, Technologists and Administrators of the Indian Ocean Region. The main objective of the course was to disseminate knowledge and provide training on issues related to coastal zone management as a sustainable process. The programme was structured on an interdisciplinary basis and was intended to give an overview of the subject.

The following resource personnel were responsible for course direction: Prof. V.S. Raju, Dr. S.P. Subramanian, Dr. L.S. Ganesh, Dr. J.S. Mani. The faculty for the course was drawn from IIT and other institutions.

The course consisted of lecturers, field visits, group discussions, simulation exercises, presentation of country reports and theme papers by the participants. Out of the total 200 units each of 90 minutes duration for the course, 100 units were devoted for lectures; 25 for group discussions, weekly reviews, summary and discussions; 30 units for presentation by participants; and 45 for 12 field visits in and around Madras and parts of South India.

18 participants from 8 different countries namely Egypt, Fiji, Malaysia, Philippines, Sri Lanka, Tanzania, Vietnam and India attended the Course.

All the participants presented their country reports on specific themes related to coastal zone. During the last 2 weeks of the course each participant chose a topic related to coastal zone management and presented his theme paper. The presentations were followed by useful and lively discussions, contributing to the overall objectives of the course. Some of the presentations were excellent. The important themes covered were: management of living and non-living resources, coastal processes, phenomena and activities. Management of various coastal zone activities and aspects related to law of sea were also discussed.

B. Alumni refresher course 4th to 7th March 1993 at I.I.T., Madras

The above course was conducted to provide information on recent developments with particular reference to India in the fields of (1) Ocean Energy with reference to Wave Energy, (2) Fisheries Development, (3) Mangroves and Ecological System (4) Offshore Oil and Gas and (5) Government plans. Twenty three participants attended the course and took active interest in all the proceedings. There were panel discussions on (a) I.O.I. Training Courses and (b) Course modules.

**C. Course on coastal zone management as a sustainable process
27th June - 29th July 1994**

This will be a condensed version of the 10 week course held in October - December 1993 (refer A) and will cover the same topics. Emphasis has been laid on practical applications of the recent technologies.

The course consists of lectures by experts, weekly reviews, discussions, field visits etc. The participants will be required to present country reports on coastal zone management plans of the respective country. To further the effectiveness, co-ordinators have been identified for each theme. They will interact with the various speakers in their theme and plan the deliberation of each theme.

A course development group has been formed. This group is meeting frequently to discuss on all issues related to the course. The course content has been updated and the course material is under preparation.

**D. Advanced, Alumni refresher course on coastal zone
management at Kuala Lumpur, Malaysia 4th to 8th July, 1994**

The course will be held in Kuala Lumpur. Important issues to be considered are: 1. Oceanography - an overview, 2. Coastal processes, phenomena, 3. Coastal aquaculture & Mariculture, 4. Ocean Energy, 5. Coastal pollution, 6. Coastal Tourism & Management plans, 7. Law of sea. Eminent personalities have been identified and requested to deliver lectures. A site visit to a nearby coastal area is also planned. A panel discussion is being organised to discuss the results of the recently held world coast conference in the Netherlands.

E. Training of Trainers

- (1) Dr. S.P. Subramanian of I.I.T., Madras attended the I.O.I. course at Halifax, Canada for 4 weeks during June/July 1993 and also supported in the organisation of the course.
- (2) Dr. L.S. Ganesh of I.I.T., Madras attended the I.O.I. course on Deep Sea Bed mining in Hangzhou, China for 3 weeks in October 1993 and also supported the course Director in the conduct of the course.
- (3) Dr. J.S. Mani will attend the I.O.I. course at Malta in April-May 1994 and also lecture to the course participants on coastal processes and related aspects.

F. One day seminar on Oceans - Investment opportunities

The above programme was scheduled for 11th December 1993 at Ahmedabad, India. Organisational efforts were undertaken to conduct the seminar and a background paper was prepared by Prof. V.S. Raju. However, the above seminar programme could not be conducted due to certain unforeseen circumstances. However it is likely to be conducted in Bombay. Objective of the seminar is to stress importance of fisheries potential, desalination technology, oil exploration, drugs and chemicals from the sea, energy from the ocean, and aquacultural development.

IOI - South Pacific

Achievements in the First Year of Operation - March 1994

1. June 1992: MOA signed between the University of the South Pacific and IOI (Vice Chancellor, Esekia Solofa and Tom Harris).
2. May 1993: Annex to the MOA signed (VC Solofa and Dr. Krishan Saigal).
3. August: MOU signed between IOI and the Government of the Republic of Fiji.
4. August: First meeting of the IOI-South Pacific Advisory Board under the Chairmanship of Vice Chancellor Solofa.
5. September: VC Solofa, Pro VC Naidu, Joeli Veitayaki and Prof. South attended the meeting of Directors and Vice Chancellors in Tokyo, the Curriculum Development Committee in Tokyo and Takaoka and PIM XXI in Takaoka.

At PIM XXI, Prof. Robin South and Seremaia Tuqiri presented a paper titled "South Pacific Regional Organization in the Marine Sector: An Overview", and Prof. South and Joeli Veitayaki assisted at the meeting as rapporteurs.

6. October: Two participants from Fiji (Fiji Fisheries and USP) were awarded scholarships to attend the 10-week course on Coastal Zone Management run by IOI-Madras at the Indian Institute of Technology, Madras. The two scholarships were provided by IOI-Madras and IOI-South Pacific. The course will end on 18 December.
7. : IOI-South Pacific brochures have been produced and are currently being distributed.
8. : First satellite outreach programme via PEACESAT to IOI alumni and other interested participants from around the South Pacific region. IOI-South Pacific was invited by the Principal Fisheries Extension Officer (an IOI alumnus) to prepare a monthly outreach programme as a service of PEACESAT at Fiji Fisheries. We were able to link up with the Cook Islands, Kiribati, Palau, Solomon Islands, Tonga and Western Samoa. Hopefully the Federated States of Micronesia

(FSM), Vanuatu, Papua New Guinea (PNG), Niue and Nauru will link up to the next teleconference scheduled for mid December.

9. November:

Ran a 1-day Leaders' Seminar for senior officials of the Fiji Government at the Institute of Social Administrative Studies, USP. The main paper was presented by Professor Elisabeth Mann Borgese titled "Regional Seas Governance in the 21st Century". The Seminar focussed specifically on the need for an integrated multi-sectoral approach to ocean management. There was a positive outcome in that the Fiji Government through the Ministry for Foreign Affairs agreed to consider the setting up of a National Maritime Authority within the already existing bureaucracy.

A total of 15 participants attended from the following departments and sections: Foreign Affairs, Solicitor General's Office, Ports Authority, Fisheries, Mineral Resources and Energy, Marine Department, Fiji Navy, Native Lands and Fisheries Commission, Finance and Economic Planning, Office of the Prime Minister and the Pacific Fishing Company Ltd.

10. November:

Four delegates from the USP under IOI-South Pacific sponsorship attended a 1-week training workshop on developing course materials and teaching capabilities under the UNCTAD Train-X system. They were: Professor Robin South, Director, IOI-South Pacific and Professor of Marine Studies; Joeli Veitayaki, Coordinator, Ocean Resource Management Programme (ORMP); Vina Ram, Lecturer, (ORMP) and; Ruby Va'a, Coordinator, Instructional Design and Services, USP Extension.

11. Ongoing:

Course Development

IOI-South Pacific is working in collaboration with USP (Ocean Resources Management Programme and the Department of Economics) in developing courses to be considered as potential IOI courses. It was agreed at the Directors' meeting in Japan that three of the nine courses proposed by IOI-South Pacific would be further developed. These include; Fisheries Economics and Management, Resources and Environmental Economics and, Management and Development of Coastal Fisheries.

An MOA was signed with the Australian Maritime College and IOI-South Pacific in August to collaborate in developing courses promoting maritime transport safely and the operation of ports and shipping in the Pacific region: Three courses were identified for development each running for either one or two weeks. It should be noted that after the UNCTAD TRAIN-X Workshop November, it became evident that our collaboration with AMC would have to be reviewed since UNCTAD already had a number of courses that would serve the training needs of IOI-South Pacific.

12. February 1994: Professor N.V.C. Swamy visited USP and IOI-South Pacific from 13th-16th February, 1994. He held a number of meetings at USP and included the following:

- . USP Vice Chancellor
- . Pro Vice Chancellor
- . Director of Planning and Development
- . Head of School of Pure and Applied Sciences
- . Head of the Department of Technology
- . Head of the Department of Biology
- . USP Energy Group
- . USP Marine Pollution Group
- . IOI-South Pacific Course Developers

Prof. Swamy also conducted an internal seminar on "Energy from Waves" based on the Trivandrum Project and a public lecture on "Technical Training in India" focussing on the Indian Institute of Technology in Madras.

- : Comments on the Government of Fiji Leaders'; Seminar Draft Report were received from Fiji Foreign Affairs and the Forum Secretariat.
- : Brochures for the Customary Marine Tenure Workshop (4th-8th July, 1994) have been printed and distributed. A total of 40 participants from ASEAN and the South Pacific (including the French speaking territories) will attend. The Workshop will be held at the University of the South Pacific and is being coordinated by the Ocean Resources Management Programme (for the South Pacific) and the Western Pacific Fisheries Consultative Committee (for ASEAN). Funding for the Workshop has been sourced from the IOI-South Pacific, WPFCC and the Government of France.

It should be noted that although CMT courses have been conducted previously, this is the first that is specifically intended to disseminate CMT knowledge to trainers who are expected to incorporate the concepts learned into their training.

- : Commencing February, weekly Action Reports have been issued and distributed to UNDP/OPS, UNDP-Suva and members of the IOI-South Pacific Advisory Board.
- : Development of the IOI-South Pacific course on Resources and Environmental Economics commenced (Dr. R. Grynberg and Prof. D. Forsyth, Department of Economics, USP). The course will be developed using the TRAIN-X system and some transfer of the training received at Geneva was made. Dr. Grynberg visited the UN TRAINMAR office in Geneva.

Arrangements were completed for the visit of Dr. D.W. Keats, University of Western Cape, South Africa who will be assisting with the development of the course on Coastal Fisheries.

13. March:

- The Report of the Government of Fiji Leaders' Seminar has been published and distributed to the participants. Fiji Foreign Affairs requested to have six extra copies for further distribution and records. They also agreed that the Report could be distributed to other IOI centres.
- : The first IOI-South Pacific newsletter, "PASIFIKA" has also been published and distributed.
- : The IOI-South Pacific Advisory Board is scheduled to meet on March 21st. Two new members are expected to join the Board, one representing the private sector and the other from a women's interest group.

ANNEX 2

Minutes of Review Committee

**Third Meeting of Representatives of the
Operational Centres of IOI held at
Barbados
on
28 and 29 April, 1994**

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Prof. E. Robin South, IOI South Pacific
M.Sc Lorena San Roman, UNA Costa Rica
M.Sc Alexandro Cuttiriez, UNA Costa Rica
Ms. Anita Coady, Editor Across the Oceans
Mr. Seremaia Kalokalo Tuqiri, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of Agenda

The circulated agenda was adopted.

**Item 2: Tripartite review of the UNDP Project by IOI/UNDP
(OPS)/UNDP (DGIP) - Project Performance Evaluation
Report or the PPER**

The Committee had before it the Project Performance Evaluation Report (PPER) prepared by the Executive Director, IOI and covering the period 28 January, 1992 to 31 March, 1994. This covered both the Preparatory Phase (28 January, 1992- 31 August, 1993) and the Project Phase (1 September, 1993-31 March, 1994).

The Committee noted that it was required to assess and evaluate the progress of research, policy and training objectives, networking and achievement of Project objectives and outputs.

There was wideranging discussion on all the issues and a number of questions were asked by the UNDP representative especially with regard to the shortfall in courses and outputs compared to what was outlined in the Project Document.

The conclusions and recommendations of the Committee are as below:

Preparatory Phase

It was the view of the Committee that the Preparatory Phase had produced mixed results. While some of the expected outputs like finalising agreements with the host governments and institutions, of appointing centre directors for the four centres etc. had been achieved, the finalised multi-year plans for IOI Latin American

and IOI Africa as finalised had not been to the satisfaction of UNDP. So in the contract entered into between UNDP and IOI, flow of funds to the operational centres in India and South Pacific started from 1 September, 1993 while funds for IOI Latin American and IOI Africa were contingent on UNDP approving their revised work plans.

The Preparatory Phase, which was delayed, however resulted in syllabi being developed for two courses, namely, coastal zone management as a sustainable process and coastal zone management with focus on small islands. These have been thereafter conducted and are in the process of validation.

Workplans for IOI Latin America and IOI Africa

The Committee went into the draft workplan of IOI Costa Rica as presented by the representatives of the Universidad Nacional (UNA) and was of the view that the workplan needed to be firmed up by the Executive Director who was visiting Costa Rica soon especially regarding:

- Spanish course development work, its elements and time scheduling;
- the specific courses proposed to be run by IOI Costa Rica with scheduling year-wise, outputs by trainee-weeks etc.

The Committee also noted that the Executive Director would be visiting Dakar to revise and firm up the Work Plan for IOI Africa so as to lead to sustainability. In case this was not possible, he would explore other candidate sites like Abidjan in the Cote d'Ivoire.

Networking

The Committee noted that the outputs and objectives regarding networking as per the Project Document had, by and large, been achieved. There had been two meetings of directors/vice chancellors, one meeting of the courses development committee, dissemination of an alumni directory, issue of the quarterly newsletter, issue of PR brochures, and the development of software by IOI/IIT Madras by which the libraries of the IOI System can be linked by E-Mail.

The Committee further noted that there had been MOUs/networking arrangements with the University of Rhode Island, ICPE Ljubljana, IOC/UNESCO, Paris and UNU, Tokyo. There had also been twinning between IIT Madras and USP South Pacific regarding grant of B Tech degrees. These outputs are a spin-off of the activities of IOI regarding programme development and were not an expected output as per the Project Document.

Links with UNDP/UNEP

The Committee noted that links with UNDP were both close and interactive. UNDP representatives from headquarters attended the six monthly Directors and VC's meeting while UNDP Res Reps in Fiji, India and Costa Rica were closely involved at the regional level.

The Committee noted the need to link up the Centres with UNEP's Regional Seas Programme and was of the view that steps needed to be taken in this regard.

Non-UNDP financial support

The Committee noted that there had been significant progress in attracting new sources of funding: from Japan, Australia, India, France and some South Pacific organisations. Sasakawa Foundation had funded a programme in China in 1993 and may fund two in 1994 - in Fiji and Madras. The Government of India is funding a course for policy makers and the Government of Malaysia an advanced course for alumni and others. In the South Pacific, WPFCC, a regional organisation and the Government of France are contributing about \$ 50,000 to a customary tenure workshop, while AIDAB is considering funding a course on Ports and Shipping in collaboration with the Australian Maritime College, Tasmania.

The Committee further noted that due to the efforts of the Honorary Chairman of IOI, and UNDP/DGIP the Ocean Resources Programme of the university of South Pacific was likely to get US\$ 10 million from Japan. This would considerably aid IOI South Pacific by augmenting the infrastructure likely to be available to it.

Programme Development

The Committee was informed that there was a growing demand for more IOI Centres. IOI Japan was likely to be in place by the end of 1994 as was the case with IOI China. Both would be locally funded. For the Arabic speaking areas IOI Qatar was in the process of being established with all costs to be met by the Government of Qatar. During the recently concluded leaders workshop in Addis Ababa, there was a demand for three centres for languages other than French, namely, Arabic, Portugese and English. The feasibility for setting up these centres would be explored by IOI in association with UNECA. The initial responses from the Government of Kenya (English centre) and Oporto University (Portugese centre) have been positive.

TRAINING PROGRAMME

The Committee noted that the strategic approach as outlined in the Project Document was to improve the ability of developing countries to manage their ocean resources within the context of

sustainable development. This was to be done by the operational centres serving as vehicles for focusing attention on emerging issues, providing training on the management of the coastal zone and the exclusive economic zone and initiating research programmes to deal with local/regional concerns. This was to be achieved by revising and updating the existing programmes of IOI, as well as developing new ones, to bring them in line with the latest developments in instruction technologies and to developing new courses for planners, policy makers, leaders, IOI alumni and small islands.

The Committee further noted that the main instrumentalities to keep the programme on course are:

- meetings of the courses development committee;
- training of course developers;
- training of trainers;
- evaluation to ensure quality.

Instrumentalities

The Committee noted with satisfaction that the meetings of the courses development committee (which included UNDP representatives) had done a good job of keeping the courses on track. 9 course developers from IOI had been sensitised to the TRAIN-X System in a one week's workshop conducted by Mr. Michel Couroux of UNCTAD and a noted expert on the TRAIN-X System. IOI was also going to be an integral link in the TRAIN SEA COAST System now under development. And during 1993, two trainers (IOI India) went through the training of trainers programme and they along with the 9 course developers would provide a good base for expanding the trainers network of IOI and for linking it with TRAIN SEA COAST.

The Committee was informed by the UNDP representative that a TRAIN-SEA COAST meeting would be held in New York in June and a two-week TRAIN-SEA COAST Workshop for trainers would be held in September. The Committee was of the view that one trainer from each centre should attend the TRAIN-SEA COAST Workshop.

The Committee further noted that the present evaluation system of IOI was composed of three elements, namely,

- feedback from participants;
- feedback from the Course Director and the faculty of the programme;
- internal evaluation by the Honorary Chairman and Executive Director.

The Committee was of the view that the evaluation needed to be supplemented by evaluations by experts external to the IOI System as that would add to the conduct and credibility of the courses. In this context the Committee welcomed the suggestion of the UNDP representative to have an independent evaluation of the Project in early 1995.

Revision of IOI courses and new courses

The Committee noted that the following training programmes were conducted in 1993/1994:

Name of course	Conducted by whom and when	Revised/New	Participants
Alumni Refresher	IOI Madras 4-7 March, 1993	New	23
Coastal Zone Management as a Sustainable Process	IOI Madras 11 Oct-17 Dec., 1993	Revised C	18
For Managers and Planners of the Enterprise	IOI HQ 04 Oct-05 Nov., 1993	Revised A	13
Leaders Sensitising Workshop	IOI South Pac. 17 Nov., 1993	New	18
Leaders Sensitising Seminar	IOI HQ/UNECA 18 Mar-02 April., 1994	New	49

The Committee further noted that the following new courses were to be held in 1994:

- coastal zone management: focus on small islands (IOI Malta) - 18 April-10 June, 1994;
- course for policy makers (IOI Madras) - 1 week

The Committee was informed that the course for planners on EEZ and coastal management would be developed in consultation with IOI Africa and would be conducted in 1994/1995 depending on the scheduling.

Training outputs

The Committee noted that the position regarding projected training outputs and requirements of funds, and actual achievements were as below:

Trainee Outputs and Budgeted Funds - 1993

Centre	Project document (6 mos.)		Actual achievement (4 mos.)	
	Funds budgeted (\$)	Projected Output (trainee weeks)	Funds expended (\$)	Output (trainee weeks)
South Pacific	50,000	25	24,301	13 (1)
Caribbean	50,000	100	-	-
Indian Ocean	76,000	242	71,436	203 (2)
Africa	-	-	-	-

Notes:

- (1) 17 trainees in a one-day seminar (3 t.w.)
1 trainee trained in IOI Madras CZM course for 10 weeks (10 t.w)
- (2) 18 trainees in a 10-week CZM course (180 t.w.)
23 trainees in a 1-week alumni course (23 t.w.)

The Committee noted that the shortfall in trainee output and courses was due to:

- delay of 2 months in starting the project by 2 months;
- cancellation of a leaders programme by IOI Madras due to the untimely death of Chief Minister of Gujrat, a State in India.

The Committee further noted that the funds actually expended were lower than originally budgeted. Also 65 trainee weeks were accounted by the training programme for planners and managers of the Enterprise held in China in October-November, 1993.

Item 3: Workplans, centre-wise for 1995

The Committee had before it the Work Plan for IOI South Pacific for 1995. After considering and reviewing the Work Plan, the Committee recommended that IOI South Pacific augment its course development activity by taking up some more courses for development. The Committee was of the view that all Work Plans for 1995 should be finalised by October 1994 and should give details, inter alia, of name of the course, number of participants, duration of course, where it would be held, percentage overhead, if any, how it made for future self sufficiency and sustainability etc.

The Committee noted that IOI Madras would be submitting its Work Plan for 1995 shortly while the Costa Rica and Africa Work Plans would also be finalised soon.

The Committee also approved the collaboration of IOI South Pacific with the Women and Fisheries Network, an NGO located in Fiji and was of the view that joint research projects with the Women and Fisheries Network could be worked out and submitted for funding to various donors.

Item 4: Development of research programmes

The Committee noted that though a preliminary survey of research possibilities had been made more work needed to be done to link up the IOI research proposals with ongoing regional research so as to avoid duplication. The Committee was of the view that research proposals should be got ready by October, 1994 by all the centres so that they could be considered at its next meeting.

Item 5: Suggestions for consultancies

There was detailed discussion on this issues. The general consensus was that:

- the term "consultancy" was inappropriate and should be replaced by the term "professional services";
- it should be made clear to the host institution that the IOI Centre was not in competition with it.

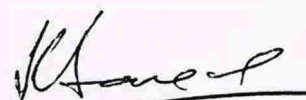
The Committee came to the following conclusions:

- the term "professional services" to be offered by IOI Centres should be confined to the strengths of IOI in the fields of policy research, policy advice, training of multi-disciplinary and heterogenous groups, sensitisation of policy makers etc.;
- the host institution/government should, as far as possible, be associated in the proposed activity;
- the "professional service" should be harmonised with the host institutes activities so as to be complementary and supplemental and not substitutive.

Item 6: World Commission for the Oceans

The Honorary Chairman informed the Committee of the proposal for a World Commission for the Oceans. The IOI Regional Centres would be expected to act as Secretariats for the World Commission for the Oceans for their respective regions.

The meeting ended with a vote of thanks to the Chair.



Dr. Krishan Saigal
Executive Director

ANNEX 3

Report on Programme of Addis Seminar

**Report of a Regional Leadership Seminar
on Marine Ocean Affairs in Africa**

held at

Addis Ababa, Ethiopia

from

28 March - 2 April, 1994

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INTRODUCTION

The Regional Leadership Seminar on Marine and Ocean Affairs in Africa was the first of its kind to be organised by a United Nations Regional Commission. It was held at the Headquarters of the United Nations Economic Commission for Africa, Addis Ababa, Ethiopia from 28 March to 2 April, 1994.

The participants came from 26 countries (1) and 8 international, intergovernmental and non-governmental organisations (2). In addition 44 members of the Secretariat of the Economic Commission for Africa also participated.

The Seminar on marine and ocean affairs was conceived as being composed of 20 issue areas which fell broadly into 5 themes:

1. United Nations Convention on the Law of the Sea:
 - . historical and political contexts
 - . highlights
 - . UNCLOS, UNCED and the future of the United Nations.
2. Economics and Environment: Sustainable Development of Living and Nonliving Resources:
 - . new economic theories and concepts
 - . managerial implications.
3. Science and Technology:
 - . institutional and managerial implications
 - . regional cooperation.
4. Integrated Ocean Policy:
 - . evolution of an institutional framework
 - . manpower and skill requirements.

(1). The seminar was attended by representatives from the following 26 countries: Algeria, Angola, Cameroon, Cape Verde, Cote d'Ivoire, Djibouti, Egypt, Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Libyan Arab Jamahiriya, Mauritius, Mozambique, Namibia, Rwanda, Senegal, Sierra Leone, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.

(2). The following international, intergovernmental and nongovernmental organisations attended the seminar: OAU, League of Arab States, UNESCO, UNDP, UNIDO, UNICEF, IOI and Yokohama City University, Japan.

5. Africa, Law of the Sea and Ocean Development:

- . national, subregional and regional implications
- . future plan of action.

The object of the Seminar was to sensitize African policy makers to the opportunities available to their countries after the coming into force of the United Nations Convention on the Law of the Sea, 1982 with effect from the 16 November, 1994.

The UN Convention on the Law of the Sea extends considerably the area available to African states for surveying and exploiting for natural resources, like food, energy and raw materials. Africa, as a continent, is totally surrounded by seas and oceans. To exploit the vast potential as represented by this huge water body, African states need to build up and/or augment their capacities in the shape of institutions, technology and manpower.

During the seminar discussions it emerged that most African policy makers were aware of the importance, opportunities and challenges posed by the Law of the Sea Convention. However, constraints existed in terms of technology, finance and trained manpower which acted as an inhibiting factor in assessing and exploiting marine resources. The Seminar stressed the need for the development of appropriate scientific and technological infrastructure so as to be able to provide quantitative appraisal of marine resources, forecast future trends and introduce systems for predicting the manner in which the natural and dynamic ocean system behaved.

The Seminar also considered it important to have proper management of the coastal zone, which was an important interface between human uses, land and the sea. The Seminar was of the view that a distinction had to be drawn between "coastal zone management" (CZM) and "coastline management".

The latter, that is, coastline management was only a part of CZM. CZM dealt with the coastal zone the dimensions of which, both parallel and perpendicular to the coastline, needed to be determined site-specifically for each project. Outer landward limits of the coastal zone could be the watershed or climatic boundary while seaward it would extend to the outer limit of the exclusive economic zone (EEZ). In the context of Africa the extension of the land boundary to the watershed would require cooperation between coastal and landlocked states especially in the context of sustainable development and the need to preserve the integrity of the ecosystem. The vast area that such an ecological definition would require may, however, have to be modified on a project by project basis so as to avoid the complexity and problems likely to be posed by multiple systems of governance.

The vast changes that would result in the geopolitical configuration of both coastal and landlocked states due to the coming into force of the Convention on the Law of the Sea had to be matched by appropriate institutional changes at the national, regional and global levels. This would require restructuring not only of the United Nations System, which is under way, but also of the national systems of governance. Besides the restructuring necessary in the United Nations had to be appropriately reflected also at the regional levels - through the appropriate restructuring of the Regional UN Commissions and/or of the Regional Seas Programmes of UNEP.

At the national level, integrated policies needed to be formulated, appropriate legislation adopted and coordinating mechanisms for marine affairs established. This was necessary if the exploration and exploitation of ocean resources, a complex task in the constantly changing, dynamic and three-dimensional marine environment, of ocean resources was to be successfully accomplished.

The question of regional cooperation in resource surveys, technological development, scientific assessment, education and training also merits special attention.

The strategy and programme of action recommended by the Seminar for African States and the manner in which it devoted attention to the above crucial matters is detailed in the following pages.

I. SUMMARY OF OPENING STATEMENTS

The Seminar was opened by Mr. Layashi Yaker, United Nations Under Secretary General and Executive Secretary of ECA. Professor Elizabeth Mann Borgese, Chairman of the International Ocean Institute also made a statement at the opening ceremony which was chaired by Hon. Joseph Warioba, former Prime Minister of Tanzania.

Mr. Layashi Yaker welcomed all participants and pointed out that the UNECA took pride in taking a lead-role in convening and organizing such a seminar in Africa. The organization of this forum, he added, was a testimony to the commitment and determination of the UNECA to assist the African countries to enhance their capacities in the field of ocean affairs for the benefit of their people.

The UNECA Executive Secretary expressed his deep appreciation for the excellent cooperation, collaboration and substantive contribution from the Headquarters of the International Ocean Institute and from its operational centres at Dakar and Halifax. He particularly thanked Professor Elizabeth Mann Borgese, Chairman of IOI, for her special interest, initiative and drive which greatly contributed to the successful organization of the seminar. He also expressed his gratitude to all the UN Agencies, intergovernmental and non-governmental organizations for sending representatives to the seminar. He thanked the invited resource persons who in spite of their busy schedule, had accepted the UNECA invitation to attend the seminar.

Mr. Yaker noted that the timing of the seminar was crucial because of the worldwide recognition of the potential contribution of ocean resources toward poverty alleviation. Besides the United Nations Conference on Environment and Development held in Rio in 1992 had stressed the rational use and development of ocean resources. He further added that the seminar was timely in view of the imminent entry into force of the UN Convention on the Law of the Sea in November this year.

Focusing on Africa, the UNECA Executive Secretary mentioned that the continent was surrounded by oceans and seas, with abundant resources both living and non-living, the development of which required scientific knowledge, technological capacity and management skills. But the African countries, lacking these elements, were not able to exploit these resources which were being exploited by non-African countries.

Speaking about the role of the UNECA in the field of marine affairs, Mr. Yaker indicated that for a period over ten years, the UNECA in collaboration with other UN agencies carried out activities aimed at interpreting the UN Convention on the Law of the Sea, and enhancing the awareness of the opportunities, challenges and benefits of the said Convention.

The UNECA Executive Secretary further noted of the 61 countries, which had so far ratified the Convention, 27 were from Africa.

Finally, the UNECA Executive Secretary cited the objectives of the seminar and pointed out that he expected this seminar to be a spring-board for setting in motion the process of ocean resources development in Africa. The seminar should set clear guidelines for policies and strategies for the development of these resources in Africa and formulate a programme of action for ocean development. He concluded by stating that it was imperative for Africa to develop its capabilities for exploration, optimum exploitation, sustainable development and management of the ocean resources for the benefit of its people. He urged developed countries and the United Nations Agencies to assist the African countries in developing their ocean resources by actively providing them with scientific research, information and other support.

Professor Elizabeth Mann Borgese, Chairman of IOI, thanked Mr. Layashi Yaker for his excellent introduction and for underlining the importance of the issues under consideration. She congratulated the UNECA which according to her, was the first among the United Nations Regional Commissions to seriously consider the development of the potential of ocean resources.

The Chairman of IOI further added that the seminar should be action-oriented and should produce a programme of action for Africa for the development of its ocean resources.

II. STRATEGY AND PROGRAMME OF ACTION

With the sixtieth ratification of the United Nations Convention on the Law of the Sea, in November, 1993, the Convention will enter into force with effect from 16 November, 1994. The Convention enables all coastal states to extend their maritime jurisdiction in the Exclusive Economic Zone up to 200 nautical miles (about 220 miles or 350 kilometres). In this zone, the coastal state has sovereign rights for exploration and exploitation of all resources subject to certain navigational rights and complementary freedoms for other states.

The concept of the Exclusive Economic Zone, which is what the extended jurisdiction is called in the third Law of the Sea, is a concept that was developed by African nations during the preparatory period before the convening of the Third United Nations Conference on the Law of the Sea. The new Law of the Sea also saw significant contributions by African states who, along with other developing countries from Asia and Latin America, negotiated and bargained hard for the compromise package that the new law of the sea represents. But the coming into force of the new law of the sea is only the first step. States have now to organise themselves if the hard-fought advantages achieved are to be converted into benefits for their populations.

As a potentiality, the oceans are vast reservoirs of food, energy, materials and space. To actualise this potential, states need to have a well thought-out and properly articulated strategy, an appropriate legal institutional framework and other infrastructures, the necessary marine science and technology, skilled and well-trained manpower, and the ability to generate adequate financial resources.

In articulating this strategy, states need to keep in view the Abuja Treaty, which was adopted by the Heads of States and governments of the Organization of African Unity in Abuja in 1991, which calls for the economic integration of Africa and the establishment of an African common market. This underlines the need for regional and subregional cooperation in marine affairs and for involving coastal, landlocked, geographically disadvantaged and island states in mutually beneficial and cooperative networks.

Also while the year 1998 is likely to be declared the year of the oceans, in 1996 the Sub-committee on Oceans of the Commission on Sustainable Development will meet. It is necessary at that stage to press for the strengthening of the Regional Commission in integrating and promoting marine matters.

Capacity building has been stressed in the Rio Declaration of 1992 and especially in Chapter 17 of Agenda 21 which stresses the importance to be laid on the Ocean sector. Development of manpower and training is a critical element of capacity building. In this connection the plan of the International Ocean Institute to establish four operational centres for Africa catering to the

English, French, Arabic and Portuguese speaking areas would assist in augmenting the training facilities of African states.

The strategy that African states may like to articulate should include the following essential elements: a properly developed legal infrastructure with its concomitants of establishment of baselines and delimitation of boundaries; a coordinated and integrated institutional system capable of establishing and implementing plans and programmes in the ocean sphere; a well-thought out technology acquisition policy leading within a reasonable period of time to national or regional self-reliance; a human resources development policy which leads to the creation of critical masses of skills at national, subregional and regional levels; a project formulation capacity which enables the states to generate adequate financial resources both domestically and externally.

Legal framework

The new Law of the Sea enables states to extend their national jurisdictions for an exclusive economic zone up to a maximum of 200 nautical miles (350 kilometres). To take advantage of this provision, African states should ratify the Convention and enact legislation to claim maritime zones in accordance with the the Convention. It is therefore recommended that:

All African coastal states, if they have not already done so, should ratify the 1982 Convention and enact laws claiming jurisdiction over maritime zones as provided for in the UN Convention on the Law of the Sea.

African coastal states may need to be helped in drafting such legislation. Worldwide over 100 states have enacted such legislation. This has been collated and published in book form by the UN Office of Ocean Affairs and Law of the Sea. It is recommended that:

The United Nations Economic Commission for Africa (UNECA) should collect all information on existing legislation and thereafter make it available to any African coastal state that requests it. UNECA may also consider setting up working group(s) consisting of legal and other relevant technical experts to draft model legislation based on its data bank of existing national legislation.

In addition to claiming jurisdiction over the extended maritime zones, it is necessary for coastal states to enact suitable legislation/regulations and establish the legal framework in the context of which the extended maritime zones can be explored and exploited by both domestic and foreign entities. Such legislation/regulation should, inter alia, establish user rights and the parameters within which rational exploitation in

the context of sustainable development can take place. It is recommended that:

All African coastal states, if they have not already done so, should establish a legal framework enabling rational utilisation of the extended maritime zones in the context of sustainable development. The United Nations Economic Commission for Africa may also consider collecting all available information on the subject including case studies, if available and dissemination of the information to African states.

African coastal states may need help in developing such legislation/regulations. The UNECA may consider the setting up of working group(s) on a regional/subregional basis and consisting of the relevant experts from the concerned states to draft suitable model legislation/regulations or a set of guidelines. It is recommended that:

The United Nations Economic Commission for Africa consider the setting up of working groups of experts on a regional or subregional basis to draft appropriate model legislation/regulations/guidelines which could be of assistance to the coastal states of the region in establishing the legal framework in which rational exploitation of both living and non-living resources in the context of sustainable development could take place.

The new Law of the Sea provides for the establishment of baselines on the basis of which the coordinates of the extended maritime zones could be determined and deposited with the Secretary General of the United Nations. It is recommended that:

All African coastal states, if they have not already done so, should establish baselines and therefrom establish the coordinates of the extended maritime jurisdictions.

Where states with adjacent or opposite coasts are involved, the coastal state has to establish the boundaries of its maritime zones in consultation and agreement with the concerned coastal and/or island state(s). It was noted in this connection that in the case of disputes arising between states a useful concept that could be applied in solving such disputes would be that of joint development zones and/or joint management zones whereby the area in dispute is jointly developed and/or managed. It is recommended that:

All African coastal states, if they have not already done so, should enter into dialogue with their neighbours so as to establish the boundaries of their maritime zones, keeping in mind the concepts of joint development zones and joint management zones.

It is further recommended that:

The United Nations Economic Commission for Africa collect all material on joint development and management zones, collate it and make it available to all member states.

Institutional System

The exploration and exploitation of resources in the constantly changing, dynamic, and three-dimensional marine environment is a complex task which is made even more difficult by the multiple-use to which ocean space is subjected. The rational and optimum exploitation of marine resources requires therefore a well co-ordinated and integrated institutional system. Studies of such systems around the world suggest that the success of such systems depends crucially on whether the coordinating unit is placed in the highest echelons of government. It is recommended that:

All African states should establish a coordinating mechanism for marine affairs with the coordinating unit being located under either the Prime Minister's office or in the office of the Head of the State.

It is further recommended that:

The United Nations Economic Commission for Africa continue to collect and collate information on existing systems and make the same available to all states.

In many cases it is more cost-effective for states to cooperate on a regional or subregional basis especially in matters relating to surveys, technology development, research, education and training. UNECA could explore such possibilities in consultation with the concerned states and other regional institutions. It is recommended that:

The United Nations Economic Commission for Africa explore, in association with the concerned states, regional/subregional institutions and the relevant NGOs, the feasibility and possibility of strengthening or establishing regional and/or subregional institutions especially in the areas of capacity building including human resources development, technology acquisition and surveys.

Existing machinery at the national level would also need to be strengthened/augmented if the new areas falling under the jurisdiction of coastal states are to be optimally exploited in the context of sustainable development. It is recommended that:

All African coastal states should establish or strengthen the necessary machinery and services for:

- the full and rational exploitation of their fishery resources;
- the exploration and exploitation of their marine mineral and energy resources;
- the development of the maritime transport and communication system;
- the development of coastal areas and the development of tourism;
- the protection and conservation of the marine and coastal environment and ecosystem.

Zones have not only to be established and exploited but have also to be protected against poaching especially in areas such as fishing. Surveillance systems tend to be very expensive and so often beyond the ability of poor, developing states. Regional surveillance systems based on remote sensing techniques have been found to be cost-effective in the South Pacific and the Caribbean. It is recommended that:

The United Nations Economic Commission for Africa examine, in consultation with the concerned states, the feasibility of establishing regional or subregional monitoring surveillance and detection systems utilizing remote sensing devices including those located on planes or helium filled balloons.

Policy Framework

Optimisation of efforts aimed at exploiting marine resources requires a well articulated policy framework that can provide the needed thrust and direction. Efforts in the marine sector have to be integrated and be a part of the national development effort. It is recommended that:

All African states should establish or strengthen their national policy framework in the realms of food, energy and materials so as to give the needed thrust and emphasis on the rational development and optimal utilisation of their marine resources. In particular the policy framework should accord high priority to marine science and technology and the development of the necessary human and institutional infrastructure.

The building up of capacities in the marine sector would require the articulation of plans which, in the context of sustainable development, lay stress on human resources and institutional development. It is recommended that:

All African states augment their capacity to survey, explore and exploit their marine resources by integrating their plans for adequate human resources

and institutional development with their economic and social development plans.

Special Needs of Landlocked States

The United Nations Convention on the Law of the Sea recognises that because of their distances from the oceans and seas and subsequent lack of sea ports, African landlocked states suffer special problems in transit, transport and use of port facilities in coastal states. It is therefore recommended that:

The UNECA undertakes a survey and analysis of institutional arrangements established for dealing with the problems of transit for landlocked states.

It is further recommended that:

The UNECA in collaboration with the IOI organise a seminar for high level policy makers from African landlocked states for the purpose of exposing and sensitising them to various provisions of the 1982 Convention that are of benefit to landlocked states.

Project identification and elaboration

Considerable ground work would be necessary for appropriate projects to be prepared at the regional, subregional and national levels, UNECA in association with IOI and other concerned regional and subregional organisations, intergovernment organisations (IGOs) and non-governmental organisations (NGOs) could organise seminars and workshops to raise awareness and to speed up and augment the process of project formulation. It is recommended that:

The United Nations Economic Commission for Africa (Headquarters and Regional Offices) in consultation with the concerned states and in association with the International Ocean Institute and other concerned organisations hold a series of workshops and/or seminars at regional, subregional and even national levels as a follow-up of this seminar.

Financial Resources

Financial resources have to be mobilized both domestically and externally if African states are to have sustainable development of their marine resources. Resources, to the extent possible, should be mobilized locally as that is the bedrock on which development plans can be sustained. In the case of African states, however, such an effort is bound to be inadequate and, therefore, the inflow of international finance would, to a large extent, have to augment domestic resource mobilisation. In this

connection UNECA can play a significant role. It is recommended that:

The United Nations Economic Commission for Africa convene a meeting of international funding agencies and its other regional and global development partners where regional, subregional and national projects in the areas, inter alia, of coastal zone management, islands development and capacity building in the ocean sector could be presented for funding.

III. RESUME OF DISCUSSIONS

UN Convention on the Law of the Sea: Introduction

This section on the UN Convention on the Law of the Sea was introduced by Hon Joseph Warioba and Prof. Elizabeth Mann Borgese.

With the advances in new technologies and the penetration of the new industrial revolution into the oceans with consequent impacts on economic development, countries started declaring unilateral jurisdiction over the resources of the continental shelf contiguous to their coasts. The Truman declaration of ownership of the natural resources over the continental shelf off the coast of the United States of America is one such example that led to the adoption by the industrialized states of the 1958 Geneva Conventions on the Territorial Sea and Contiguous Zone, on the High Seas, on the Continental Shelf and on the Fishing and Conservation of the living resources of the High Seas. The Second Conference on the Law of the Sea which was held in Geneva two years later, failed to agree on the breadth of the territorial sea as well as the fisheries zone. Unilateral extension of jurisdiction over the Seas continued unabated.

The United Nations Convention on the Law of the Sea is a comprehensive legislation that governs all activities of the sea, which are interrelated and need to be considered as a whole. It finds its origin in the Seabed Committee established in 1968 by the United Nations General Assembly following the issue presented to it by the Maltese Ambassador on the peaceful uses of the seabed and ocean floor beyond national jurisdiction.

Unlike the 1958 Geneva Conventions it is very much inspired, elaborated, ratified and brought into force primarily by the new states of the international system, namely, the developing countries. The maritime regimes established under the Convention are those of Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ), Continental Shelf, Archipelagic States, High Seas, Islands, Enclosed and Semi-Enclosed Seas, Land-locked States and International Straits. The Exclusive Economic Zone, the International Sea-bed area beyond national jurisdiction known as "the Area", Archipelagic waters, International Straits and the rights of Land-locked and Geographically Disadvantaged States are new regimes introduced by the United Nations Convention on the Law of the Sea. In the EEZ the coastal state has sovereign rights to explore, exploit, manage and conserve both living and non-living resources as well as the other jurisdictional rights while other States enjoy the freedom of navigation, overflight and the laying of cables and pipelines. Similar provisions exist in the case of archipelagoes and international straits.

Mineral resources in the sea-bed and sub-soil beyond national jurisdiction are the common heritage of mankind and as such may be exploited on behalf of mankind with due care being given to the interests of developing countries. The

International Sea-Bed Authority was established to administer the resources in the Area. In exploration of the resources therein due consideration should be given to the environment and the area is to be used for peaceful purposes only.

The Convention establishes the legal framework for the prevention of pollution and protection and preservation of the environment. Enforcement mechanisms and dispute settlement procedures are also provided.

Scientific research is basic for all major ocean uses and requires interdisciplinary and international cooperation and these activities are reserved exclusively for peaceful purposes. The consent of coastal states is required for conducting scientific research in the EEZ and on the continental shelf and this can be refused only where the project is connected with resource exploration and exploitation, involves drilling into the continental shelf, construction, operation or use of artificial islands and installations, contains information regarding the nature and objectives of the project which is inaccurate or if the researching state or competent international organization has outstanding obligations to the coastal state from a prior research project.

The Convention provides for mandatory dispute settlement with the exception of disputes relating to sea boundary delimitation, military activities and issues falling under the jurisdiction of the Security Council of the United Nations.

Developing coastal countries face a big challenge in managing their maritime zones. Resource exploration and exploitation, and surveillance and monitoring of the marine areas requires technology, finance and skilled manpower and this makes it necessary for coastal states to seek international, regional and sub-regional cooperation. In a study carried out in nine African states to examine current awareness, ratification and application of the provision on the Law of the Sea the following were the findings:

- Most of the officials were aware of the importance, opportunities and challenges of the provisions of the Law of the Sea Convention to their countries in terms of the new marine zones and the jurisdiction it confers on the states. However the level of awareness in some cases was far from satisfactory.
- Seven out of the nine states had ratified the treaty, one was preparing to do so, while one stated that ratification is not a priority of the state given the problems encountered in part XI of the Convention.
- Most countries have established their maritime zones in accordance with the terms of the Convention and have declared sovereign rights to explore, exploit, manage and conserve the resources within their national jurisdiction. Legal and institutional frameworks are in place in most cases but in some cases there is neither the legal framework nor the

institutional set-up for the mineral and petroleum sectors.

- Boundary demarcation discussions have been commenced with neighbouring coastal states by most of the concerned countries.
- Environmental laws, both sector specific and national, exist in most of the countries while others are in the process of drafting their environmental laws.
- Constraints exist in terms of technology, finance and trained manpower required to develop their marine and non-living resources and to conduct monitoring and surveillance activities. Some states have regional cooperation arrangements with neighbouring states in order to develop common policies and strategies in the development of their living resources, share common facilities for research, training and monitoring of their maritime zones.

Most of the states are attempting to attract foreign capital in marine resource development and have promulgated laws and policies providing for a reasonable rate of return to the foreign investors while protecting the interests of the government and ensuring the maximum benefits from the exploration and exploitation of the marine resources.

The UN Convention on the Law of the Sea-Innovation and Change

In introducing this item Hon. Joseph Warioba explained that the United Nations Convention on the Law of the Sea which was adopted in 1982 brought in new and important innovations in international law. The most important of these were: Exclusive Economic Zone; the concept of sovereign rights of exploration and exploitation in the context of the Exclusive Economic Zone; the Archipelagic states and the concept of Archipelagic waters; the common heritage of mankind; the International Sea Bed Authority; comprehensive, global international environmental law; a new regime for marine scientific research; advanced framework for technological co-operation and development; comprehensive and binding system of peaceful settlement of disputes; and research for peaceful purposes. Besides providing a comprehensive definition and scope of the new innovations the Convention covers the rights and privileges as well as obligations of the member states in their dealings with each other as well as with the international institutions, paying special attention to the needs of developing countries to participate equally in the exploitation and use of sea resources. The International Sea Bed Authority provides a unique institutional concept of Common Heritage of Mankind by combining the interests of the major groups and special interests with those of the weaker developing countries and bringing this to bear on decisions concerning all aspects of sea-bed mining.

These innovations emphasize the change from the old international relationships among states to the new order in which the weaker, smaller developing nations have a bigger say

in the use of marine resources which represent a rich reservoir of largely underutilized resources forming the common heritage of mankind, and are empowered to exercise rights over those areas under exclusive jurisdiction paying due regard to the overall interests of other states. The provisions for settlement of disputes allows for a choice between negotiation and reconciliation as a means of resolving disputes besides introducing other more binding methods through arbitration or the International Tribunal for the Law of the Sea or the International Court of Justice.

Post-UNCLOS developments: The Preparatory Commission, the Secretary-General's Consultations

Resource person and coordinator of this session, His Excellency Hon. Joseph Warioba, gave a comprehensive overview of the activities of the Preparatory Commission for the International Seabed Authority and the International Tribunal for the Law of the Sea, other post-UNCLOS developments and the Secretary General's informal consultations. It was noted that the 1982 UN Conference on the Law of the Sea took two decisions. One was related to the establishment of the Preparatory Commission for the International Seabed Authority and for the International Tribunal for the Law of the Sea. The Preparatory Commission had four Special Commissions dealing with, respectively, land-based producers, the Enterprise, the seabed mining code and for the establishment of the International Tribunal on the Law of the Sea. The Plenary of the Preparatory Commission was assigned the task of implementation of Resolution II of the UN Convention on the Law of the Sea and to deal with other related matters. The Preparatory Commission was required to register the pioneer investors. It also had a training panel and a group of technical experts. Preparatory Commission was also to prepare a plan for exploration of the first mine site of the Enterprise. In addition, the Preparatory Commission had to deal with conflict resolution between pioneer investors such as Japan, France and the Russian Federation in the North Pacific Ocean. This was done within the framework of the Arusha Agreement in 1986.

Within this context, the obligations of the pioneer investors such as payment of registration fees, payment of annual fixed fees and the relinquishment of pioneer areas to the Authority were also described.

In view of the fact that the Convention has been ratified by the requisite number of countries for it to come into force in November 1994, the role of the Preparatory Commission was also explained. In this connection, he mentioned the ongoing informal consultations of the Secretary General on this issue. He noted that the core issues that are being discussed at these consultations are the decision-making process of the future Authority, the Enterprise, the Review Conference, the production policy, transfer of technology and financial aspects.

Prof. E. Mann Borgese in her intervention in this section briefly described the role of the Preparatory Commission and what could be the future role of the Preparatory Commission in view of the UN Convention coming into force. She referred to the so-called "Boat paper" that was circulated at the last session of the Preparatory Commission and she elaborated on the procedural problems related to the functioning of the Council of the future Authority that was inherent in the "Boat paper". She emphasized that the integrity of the Convention must be upheld and its dilution should be avoided.

A question was raised by the participants on the nature of research in the high seas and the capability of the Authority to monitor such research to ensure that it is for peaceful purposes only. This was followed by a question on training. In response, the achievements of the Preparatory Commission in training areas was explained. The role of International Ocean Institute (IOI) and its future plans for setting up training centers in different parts of the world was also elaborated. It was noted that IOI will assist African countries in developing training programs on ocean resources development. In this respect the role of training on the coastal zone management was also emphasized. It was noted that the problem of training should be based on broader perspectives and that capacity building should be focused at the national level in order to produce sectoral specialists such as marine biologists, geologists, economists and others who were multi-disciplinary in attitudes. The importance of high technology in the South was emphasized, because without that the basic problem of poverty alleviation in the South could not be tackled. In this respect, importance of North-South collaborative efforts for developing high technology for the South was suggested. The Executive Secretary of the UNECA expressed ECA's full commitment to training and capacity building in Africa in collaboration with the regional institutions and NGOs such as IOI. He further noted that Africa must develop a technological base for exploring and exploiting both living and non-living resources of the sea and also to ensure Africa's share in the common heritage of the world oceans. He emphasized the need for regional cooperation, the need for a substantive programme of action for Africa and for strategies for African countries in setting up training centers and institutions at national, subregional and regional levels.

UNCLOS and UNCED, and the Restructuring of the United Nations System

Introducing this section, Prof. Jagota stated that in view of the entering into force of the Convention on the Law of the Sea in 1994, it was essential for African member states to plan ahead in preparation for the 21st century, specially in the area of capacity building. He gave a historical account of Ocean Law, starting with the codification of the Law of the Sea in 1958; the preparatory work of the Sea-Bed Authority from 1967 to 1982, leading to the adoption of the Convention in April 1982; Africa's leading role in the development of the concept of the

Exclusive Economic Zone (EEZ) and the entering into force of the Convention with 27 of the 61 ratifying states being African; the various meetings and Conferences that led to the concretization of the concept linking environment to development such as the Bruntland report of the World Commission on Environment and Development (WCED) whose report called "Our Common Future" came out in 1987, and the culmination of these into the Rio World Conference on Environment and Development in June 1992.

The main concern of the Rio Conference was how to promote both environment and development in all their facets, without endangering the interests of future generations and while ensuring sustainable development. Though the Conference did not succeed in adopting a legal Convention, it did adopt a Declaration - the Rio Declaration, incorporating 27 principles, prominent among which are: (a) the sovereign rights of states over their resources, (b) liability and compensation for environmental damage, (c) prevention of relocation of hazardous wastes, (d) the role of youth, women and indigenous peoples, and (e) the common but differentiated responsibilities regarding marine pollution.

The speaker then elaborated on Agenda 21, the most important outcome of the Rio Conference, incorporating 40 chapters and proposing a concrete programme of action in areas of water, health, poverty, technology, land, atmosphere, oceans, training and funding requirements. Chapter 17 of Agenda 21 dealing with the oceans and seas has 7 programme areas to be implemented between 1993 and 1997. In 1997 they will be reviewed. For the African region, issues of capacity building and technology transfer are central, especially in the areas of fisheries, living resources of the sea, and the exploitation of the EEZ. For small island developing states (SIDS), the seventh programme stresses on integrated land sea management. In April/May 1994, a UN Conference on sustainable development of small island developing states in Barbados will look into such issues. Integrated coastal zone management is dealt with in the first programme, and will be taken up at a subsequent meeting which will have before it the report of the November 1993 conference held in the Netherlands called the World Coast Conference.

The problems of ozone layer depletion, leading to the Montreal guidelines adopted in 1985, climatic changes and the increase in sea-level will also be discussed. It was recommended that preventive action was necessary in these areas. The speaker also referred to the Global Environmental Facility (GEF) as a mechanism for funding programmes and projects in the above areas. These funds are expected for the years 1994, 1995 and 1996 for capacity building and technology transfer in the areas of environment and development.

Eventually the speaker spoke on the restructuring of the UN system and the setting up of the new Commission on Sustainable Development (CSD) which is to review and promote Agenda 21. The 53 member Commission first met in June 1993, and is expected to review the implementation of Agenda 21 in 1997. With respect to

ocean affairs, the Division of Ocean Affairs and the Law of the Sea will be the main agency to monitor the activities.

The presentation was followed by questions from delegates of Cape Verde, Algeria, Côte d'Ivoire, Sierra Leone and India. The problem of highly migratory fish stocks in the high seas and the possibility of extending the present EEZ by 50 miles beyond the 200 miles limit, the problem of deep-sea mining and fishing in the high sea, the need for greater South-South cooperation in managing ocean affairs, efforts being made in the context of West Africa where training and technology are the main issues, the problem of limited funding of programmes through GEF, and finally the problem of sea-level rise and threat to islands and coastal states, were raised. The speaker then reiterated his views about the need for a participatory approach, joint ventures and stress on capacity building and technology.

Managerial Implications of the Law of the Sea Convention

Dr. Saigal, who presented the paper in this regard, mentioned that the Law of the Sea Convention only laid down the legal framework within which states got the sovereign rights to explore and exploit the resources in their extended jurisdiction. But to effectively take advantage of this situation, there was the need for states to effectively organise themselves, and this meant management. The managerial implications included: the establishment of an integrated policy harmonised with the overall national goals; flowing from the policy there had to be established sectoral programmes which did not lead to conflictual situations as between one sector and another; and for the implementation of these programmes there had to be an appropriate institutional infrastructure and adequately skilled and trained power.

In this section they would deal with the three programmes which had been circulated, namely, on fisheries, oil and tourism while the other matters would come up in later sections. Dr. Saigal then presented the three programmes and invited comments on them regarding their compatibility with each other.

During the discussion which ensued it was the consensus that the plans were too narrowly drawn up on a sectoral basis without any consideration of their impacts on other sectors; that the data they provided was not sufficient to allow proper evaluation as they gave no data on manpower required, technologies to be acquired etc.; and that the programmes only looked at the economic and financial aspects without any indication of how they would impact on the environment and other societal factors like poverty alleviation, removal of unemployment and impacts on women, youth and indigenous people - matters which were at the heart of the UNCED process.

Institutional Requirements: National Infrastructure and Regional Cooperation

The preamble of the Law of the Sea Convention states that "the problems of the ocean space are closely interrelated" and for this there is a need for fora or a forum capable of considering these closely interrelated problems as a whole. Development and environment issues have to be considered together as an interlinked and interlocking system. This would not be possible with sectorial specialized structures. The need for institutions to deal with the interdisciplinary character of all the major problems facing modern societies and the need for interdisciplinary planning and decision making becomes imperative if sustainable development is to be achieved.

Ocean affairs has been given low priority in national policies and this has to change. Ocean policy has to be integrated with overall national policies and in the formulation of ocean policy not only all departments of government have to participate but also ocean users, specialized international organizations and coastal industries should play an active part. The models of the Dutch, State of Oregon, Hawaiian and the Brazilian approaches to the integrated development of the marine zone were presented to participants. However it was stated that national marine issues need to be considered in a flexible and heuristic manner with the models only being meant to help participants to choose the best method for formulation of policies in an integrated manner.

Integrated ocean use at the national level has its impacts at the regional level, making it possible to influence and effectively integrate development with environment in regional programmes such as the Regional Seas Programme.

The concept of a possible regional model for organizations for cooperation in sustainable development and the establishment of a regional centre for research and development in marine industrial technology was also discussed.

The last step to be taken is the restructuring of the United Nations System. There must be a linkage between states, regional organisations and global organizations. The need for proper linkage between the UN Regional Commissions and the United Nations Commission for Sustainable Development was emphasised as well as the need for the strengthening of linkages between the Law of the Sea Convention and the UNCED declarations.

Sustainable development, to be effective has to be integrated at national, regional and international levels.

A case study on the Sea of Japan was presented by Professor Fuse. Japan initiated moves to establish institutions for regional cooperation. Lesson to be learnt from the exercise is that economic cooperation without a proper institutional framework may lead to economic war and there is a need for proper size of regional market in order to forge such cooperation.

The existing marine institutions and their framework in West African regions as brought out by a survey commissioned by ECA

was presented by Mr. Hoque. Research institutions, training centres and higher learning universities in marine geology, engineering and other sciences were outlined and efforts towards capacity building were elaborated. A list of experts by fields of specialization of the countries covered by the study was also presented.

Comments were made on the shortcomings of Chapter 17 in that it did not comprehensively address ocean problems and the new demands arising out of the United Nations Convention on the Law of the Sea. There is a need for further elaboration of Chapter 17 so that ocean issues are adequately covered. Comments and questions were also raised concerning matters covered by the topic. Capacity building and monitoring was emphasized in relation to management of the national ocean space. It was suggested that ECA convene meetings of African states to emphasise the importance of marine affairs, specially fisheries, to the future development of African economies. It was noted that about 40% of Africa's fishery resources are being illegally exploited every year by others and this was detrimental to African states.

Problem of an appropriate detection system in case of illegal fishing by foreign ships was raised and discussions showed that it is enforcement rather than detection which is difficult. Where the extent and value of resources justify the expense, remote sensing system could be used. Surveillance from aeroplanes is a method used on regional basis in the South Pacific area. Experimentation for cheaper methods of surveillance was suggested by Professor Saigal to be considered by ECA.

Integrating Development and Environmental Concerns; New Economic Theories

The session devoted to this Agenda item was initiated by the Chairman, Judge Abdul G. Koroma. He emphasized the importance of management of the resources of the sea, recalled that African countries have not yet developed the expertise to take advantage of the Law of the Sea Convention. He further noted that old theories of management may not be appropriate to maximize the benefits of the Convention, in particular in the context of an integrated approach.

First speaker, Dr. Quarcoo, drew the attention of the meeting to the fact that while African countries constitute the largest block of countries which have ratified the UNCLOS, this commitment has not been translated into actual policies and action programmes for the management and sustainable development of coastal and marine areas in Africa. One possible explanation is the lack of coastal/marine management systems and the non-incorporation of the marine dimension into national development plans and programmes. His paper examined ways and means of ensuring that issues regarding management and sustainable development of coastal and marine areas are integrated into national development planning processes in the future.

The methodology and practice of national development planning in Africa has evolved through three main phases. The initial phase involved concentration on medium-term (4-5 year) development plans; the intermediate phase focused on short-term adjustment and recovery programmes; while the final and current phase emphasizes national long-term (10-25 year) perspective studies (NLTPS) and plans. Thus integration of the coastal/marine dimension into national development planning in Africa can be best accomplished through the new framework of planning, viz., the NLTPS process.

The NLTPS approach to national development planning follows five main interactive phases: (1) issue identification; (2) environmental analysis; (3) determination of long-term goals and vision; (4) choice of strategy; and (5) preparation of medium and short-term plans. The incorporation of coastal/marine dimension into the NLTPS process could be as follows:

During Phase 1, the main issues and themes of integrated coastal/marine management and development should be identified, highlighted and harmonised with other national aspirations of society. These issues could include: management of valuable ecosystems such as mangrove wetlands; prevention of environmental disasters; preparation of contingency and emergency environmental response plans for natural and human-induced disasters; coordination and integration of sectoral plans and programmes; provision of basic needs of coastal human settlements; conservation and restoration of altered critical habitats; capacity building and human resources development regarding skills, attitudes, knowledge of emergency procedures, and techniques of conflict anticipation, negotiation and resolution.

Phase 2 would involve a multidisciplinary analysis of the cross-sectoral impacts and externalities which may be generated by the sectoral planning schemes of one marine sector on the other. The exercise entails stakeholder analysis of the concerns and preferences of the key actors and their roles as well as SWOT (strengths, weaknesses, opportunities, threats) analysis by contrasting internal strengths and weaknesses against opportunities and threats emanating from the external environment.

During Phase 3, the long-term goal and vision of the future should be established based on construction of alternative scenarios of the future, deciding on a feasible vision and mapping out methods of realizing the vision. Given the UNCED adoption of "sustainable development" as its strategy, a long-term goal and vision for African countries in the 1990s must therefore be inspired by this global commitment. Flowing therefrom, specific development objectives can be determined based on the collective aspirations of the people in individual member States.

Phase 4 deals with development of broad strategies and policies. As the issues on integrated coastal/marine management

identified under Phase 1 represent some of the key development objectives, effective strategies and policies, subject to the environmental analysis, have to be developed including modes of achieving those objectives and thereby the national goal or vision.

During Phase 5, the effective strategies need to be translated into specific medium- and short-term plans, investment programmes and projects, including those of the coastal/marine sector, backed up by specific budget allocations. The medium- and short-term plans should be consistent, hierarchically related and mutually supportive of the long-term strategy.

A coordinating mechanism becomes essential in ensuring that issues relating to the coastal/marine dimension are at centre stage in national development planning. Lessons from such national experiences as the Netherlands, Brazil, Oregon State (USA), Hawaii (USA), Ecuador, Malaysia, the Philippines, etc. indicate some of the main criteria for success. These include: firm commitment to the affairs of coastal/marine areas at the highest political levels through establishment of interministerial or interagency committees; translation of this commitment into willingness and action to ensure adequate budgetary allocation for development programmes and projects related to the marine sector; popular participation and involvement of inputs from the villages, settlements, towns, districts, regions, research centres, the government sector ministries and the private sector; and some demonstration of how the coastal/marine sector can make effective contribution towards attaining some of the broad objectives of national development strategy.

The next speaker under this agenda item, Dr. Max Börlin, presented some of the new economic theories. He began his presentation by recalling that in the course of the seminar three basic problems have been stressed, namely: poverty, ineffective allocation of resources and resource depletion, and environmental aspects such as waste of resources and negative deducted value. Dr. Börlin further emphasized that "the market" did not have solutions to these problems. He then presented some comparative graphics regarding indicators of poverty in Africa (GNP, life expectancy) stating that these indicators were a reflection of the balance of power between South and North. In this regard he noted that the European Union (and industrialized countries) should interact with regional institutions and not with individual countries in order to avoid the unbalanced solutions resulting from bilateral talks.

Concerning the first basic problem, poverty, he presented ten institutional innovations recommended by Prof. P. Streeten to cope with the problem. Among these, he stressed four: producer-consumer commodity agreements on energy and oil prices, establishment of a global environment protection agency, establishment of an international trade organization, and a global anti-monopoly and anti-restrictive practices policy. With respect to the second basic problem, Dr. Börlin presented the

views, alternatives and conclusions of a renowned resource economist, Prof. P.S. Dasgupta. Addressing the third problem, he listed six conditions (Paul Ekins) for the implementation of "sustainable development", of which he emphasized two: enforcement of sustainable harvesting and, concerning non-renewable resources, the practice of what he called the four Rs: repair, reconditioning, re-use, and recycling. The example of the "bath-tub" was provided as a visualization of stock and flow measures, including the leaks, which should be taken into account in macro-economic planning. He noted that the GNP indicator was a flow measure and not a stock measure.

Dr. Börlin concluded his presentation stressing the insufficiency of the market mechanisms vs the new economic theories that do suggest some solutions, and indicated that the new economics should prepare the theories for the concept of Common Heritage of Mankind.

In the discussion that followed the conflict between the new economic theories, in particular those addressing poverty, and the policies of the General Agreement on Trade and Tariffs (GATT) was mentioned. It was also noted that GATT and Rio were two opposite ways of thinking. In this context, it was recalled that GATT was the reality - the results of negotiations North-North - and that the third world needed to act collectively in order to have a place in the negotiations. However, the new economic order based on free market and privatization was inevitably being put in place. The meeting further noted that the countries who dominated the Uruguay Round were not likely to sign the Convention on the Law of the Sea.

Parameters of integrated ocean policy

Dr. Saigal who presented this topic stated that he would deal fully with one aspect of ocean policy, namely, the preparation of a technology acquisition policy since it plays a key role in marine development. In this regard he pointed out that technology acquisition must be based on proper forecasting and vision of the type of society (and needs which the technology will serve) in future as well as assessing its compatibility and sustainability in the culture and norms of the concerned society. There exist well developed methods of carrying out both forecasting and assessment to arrive at a suitable choice from the array of technologies attributed to the first industrial revolution (iron and steel), the second industrial revolution (oil and chemicals), and the new and third industrial revolution (information and intellectual). Stress was laid on the need for developing countries to build up strong engineering capabilities capable of adequately utilising the emerging technologies so as to enable their countries keep abreast of these developments and to exploit them appropriately.

With respect to policy, it was mentioned that the discipline of policy sciences was of recent origin. But most governments have always considered that policy was necessary in order to

organise and direct its resources. Policy is necessary to translate the long term vision into programmes and strategies.

Policy making required a clear statement of objectives to be achieved as well as the definition of the field to be covered both in terms of space and time. Equally important is the policy environment of institutions, manpower and processing systems, all of which are necessary for policy implementation. The policy should also direct attention to the technologies and the manner of their acquisition, bearing in mind that such policy is consistent with other policies.

During the discussion which ensued it was stressed that the stakeholders should be fully consulted so that their needs and concerns are taken care of in the evolution of a technology policy. It was vital to ensure that technology meets the social needs of the population. In view of the multipurpose use of ocean space, there was need for proper integration or coordination of the various policies addressing the exploitation of different marine resources to ensure resolution of conflicts amongst competing demands.

It was recommended that African strategy for acquisition of marine technology should in the short term focus on transfer and use of existing technologies and in the long term build the capacity of human resources and institutions necessary for the acquisition of the new technologies and measures for ensuring that they get absorbed in the societal system. Both considerations were very important measures for ensuring the accumulation of the appropriate technological capabilities in the society. Many channels were available to bring in technology into Africa (joint ventures, foreign direct investment etc) provided the appropriate environment was created to foster these various modes.

Cost-Benefit Analysis - Agenda 21

Prof. Mann Borgese, who presented this issue, referred to Chapter 17 of Agenda 21 which contains seven major programmes which cannot easily be costed individually since the programmes are closely interrelated. The texts from Rio do not contain costs and benefits figures for each of the programmes taken together. The figures were deleted from the final version. Benefits from these programmes are not also quantifiable but some approximations can be obtained from techniques derived from the "willingness to pay" concept. The benefits of clean air or of an aesthetic environment, for instance, can be assessed by these techniques. The cost of the seven programmes of Chapter 17 can be estimated to be about \$64 million per country, out of which around \$7 million would be financed by international contributions. These figures are averages and only order of magnitude figures.

Mobilizing resources for the implementation of the programmes is an issue which deserves utmost attention. Studies

on the Mediterranean have shown that tourists are willing to pay a tax in order to have a cleaner environment. These results should encourage African countries to look at ways to levy taxes on tourists, on plane tickets for instance, in order to realize funds for projects. Other new sources of taxation can also be considered.

African countries should study carefully the texts of the Rio Conference and the terms and conditions of the Global Environment Facility (GEF) in order to take advantage of the funding available. Fisheries management and conservation are priority areas as well as coastal management. These areas can also benefit from the Biodiversity Convention. GEF can also be supplemented by other sources of funding, such as those under examination by the Commission for Sustainable Development.

During discussions the meeting agreed that African countries should design projects partly relying on internal funding and partly on international funding. At the present time it seems that not enough projects have been submitted and that there is a substantial amount of funding available. Projects should also be submitted in a coordinated way. To this effect a coordinator could be appointed in each subregion to promote and coordinate the presentation of projects involving non-polluting and "clean" technologies.

Legislative requirements: Inter-sectoral Integration; Harmonisation

Introducing this subject, Professor Mann Borghese first stated that the Convention on the Law of the Sea should be translated into national laws. This would entail a comprehensive and tedious exercise. Mexico was the first country to embark upon this kind of exercise.

Professor Borghese then described the steps taken by Mexico in drafting its national law of the sea. These steps included collation of all existing municipal ocean laws; the identification of obsolete provisions and gaps; the identification of conflicts between sectors; and finally the identification of conflicts between municipal and international laws.

The Chairman of IOI also mentioned that, before drafting a national law, the concerned country should first ratify the Convention on the Law of the Sea.

She also indicated that there was no universal prescription regarding the framing of a national law on the sea and that member states could use the services of the Division of Ocean Affairs and the Law of the Sea in New York, as well as the Commonwealth Secretariat, in the process of framing their legislation on ocean matters.

Judge Koroma pointed out that with regard to the establishment of national laws on the sea, Africa did not represent a "tabula rasa": thirty eight coastal countries had already their laws.

He was however of the view that African countries needed to improve the quality of their legislation on the sea by updating them and aligning them with the Convention of the Law of the Sea.

The ensuing discussion turned on the delimitation of baselines; joint development zones and the joint management area; the modalities for the establishment of national laws; and the structure of the national laws.

From the discussions, the following ideas emerged:

In view of the forthcoming entry into force of the Convention on the Law of the Sea, there was a need for African countries to harmonize their national legislations on ocean matters with the provisions of the Convention. Two approaches could be contemplated in that framework:

(a) To seek the advice of the UN Division of Ocean Affairs and the Law of the Sea and/or of the Commonwealth Secretariat;

(b) To set up under the auspices of the ECA, OAU, IOI and other relevant organizations, an interdisciplinary committee which will establish a model legislation on the sea and guidelines for the drawing of baselines. The same committee might also examine the issues of joint development zones or joint management areas with regard to the settlement of disputes between two or several countries.

Scientific/Technical Requirements: National Infrastructure and Regional Cooperation

Professor Ruivo introduced this topic by focusing on the scientific developments as they relate to the understanding and exploitation of marine resources. Science, particularly basic science, focused on the methodology to explain the characteristics and behaviour in answer to human curiosity, while applied science tended to be mission oriented. He cautioned that while such a classification was useful, the framers of the Convention intended to focus on the applied aspects, a conceptual framework which could deflect attention from important basic scientific research in marine space.

Historically and until a few years back marine science sought to describe and provide inventories of flora and fauna. However new requirements and trends to provide quantitative appraisal of marine resources, forecast resources and trends have changed the characteristics and modality of marine science and marine research. Individual effort to pursue research has given way to multidisciplinary research teams and networking in

addressing scientific issues. The larger and new scale of research made possible by the use of space technologies to collect data and computer technologies to handle and process data have ushered in very important implications on the sovereignty and proprietary aspects of data on resources within national boundaries. Furthermore research in fisheries resources for example, should have multiplicity of approaches in order to take into account the ill effects of pollution which could have serious impacts on conservation strategies.

Special attention was drawn to the proper management of the coastal zone as it is an important interface between the activities of mankind and the sea while the economic activities therein could have negative aspect on the marine environment. Action was therefore called for from member States to adopt a more comprehensive approach to manage their coastal areas and the marine resources rather than maintain the sectoral approach currently pursued by different ministries and international agencies. Such approach should pursue integrated management of marine resources at national and regional levels and ensure existence of appropriate institutional infrastructure and capabilities. Special action is necessary at the national level to set up policies, build capacities in terms of human resources, institutions and equipment, rationalise institutional regimes and improve the viability and utilization of scientific research in the management of marine resources.

Dr. Saigal focused on technology as a means to utilize knowledge for generating wealth. Science and technology and the legal regimes interface to make it possible to generate wealth. To actualise this possibility, however, there had to be the support of adequate finance and proper management. Technology today had to be viewed not only in terms of capital (hardware) but more importantly in terms of software, skills and organization embodied in skilled manpower. This is an issue calling for special attention of the developing countries especially now when the world is in the midst of the so called third industrial revolution largely based on information and intellectual technology. The developing countries had the basis to stimulate the accumulation of intellectual technology. This development had important implications for African policy makers who have to guide the acquisition of technology in their respective countries.

Dr. Tabet's contribution focused on the need for comprehensive science and oceanographic services. The Convention on the Law of the Sea requires that member States gain a better knowledge of their ocean based resources and the Intergovernmental Oceanographic Commission (IOC) was in a good position to assist member States in formulation and coordination of activities and in the strengthening of their capacities. He outlined the Global Ocean Observation System which would facilitate the collection, management and analysis of data. Finally he drew attention to the need for coastal states to ensure a proper and coordinated programme for the development of the coastal zones.

During the discussion which ensued it was stressed that each country should build its national infrastructure for handling its marine affairs. Such infrastructures could network with existing subregional and regional research and training institutions or centres for marine science and technology advocated in the Convention. With regard to the use of modern technology, it was pointed out information collection using satellites could facilitate the exploration of both living and non living resources, monitoring of illegal exploitation of resources and could even be linked with and benefit the artisanal fishing activities still prevalent in many member States. More and better information exchange and networking with regional and international data banks was necessary to ensure that member States benefit from the vast amount of data available on their resources. Concerns were also expressed about the dangers of toxic waste being illegally deposited in the maritime zones of African countries.

Manpower Requirements

Dr. Saigal presented this theme. According to him, manpower was the critical element in ocean technology on which exploitation of ocean resources depended. For R & D, assessment and forecasting of the state-of-the-art technologies comprising ocean techniques, skilled manpower was the main requirement as present economic growth depends to a large extent on innovation which in turn depends on skilled and trained manpower. Manpower requirements vary from country to country especially with regard to quality of personnel. Trained manpower is needed at every level of ocean activities. Interdisciplinary training needed to be introduced in all countries. Planning for change is most important in a modern enterprise. A broader understanding of the scientific / technological production system will facilitate new learning and adjustment to change.

Long term human resource development and immediate requirements must be identified.

Africa's trained manpower remain abroad primarily due to lack of research facilities, isolation and difficulties in being able to attend scientific meetings. Therefore training should go hand in hand with upgrading of research facilities and the review of the whole educational system.

Countries should place priority on training technicians as they are the ones who have the basic maintenance skills. Engineers were also needed to develop and configure technologies needed to exploit marine resources. Foreign technicians and technologies in marine science would be required in the short-term to fill in the gaps.

African Island States, Ocean Development and Law of the Sea - Case Study: Cape Verde

The representative of Cape Verde reported that his country is an archipelago constituted of ten small islands located off the coast of West Africa. It gained independence in 1975 and has a population of 400,000 inhabitants spread over 4,030 square kilometres.

He indicated that so far, marine affairs in his country fell under the responsibilities of three ministries: Ministry of Foreign Affairs, Ministry of Fisheries and Agriculture, and Ministry of Transport and Equipment. His country had taken steps towards the exercise of sovereignty over its maritime zones. In 1977, it established base lines and defined its Exclusive Economic Zone, it signed the Law of the Sea Convention in 1982, and ratified it in 1987. Pursuant to the provisions of the Convention it redefined its maritime zones to the 12 mile territorial sea, the 24 miles contiguous zone, the 200 mile EEZ, and the Continental Shelf of 200 miles.

In terms of exploitation of sea resources, his country has enacted legislation for the management of ocean and marine affairs.

With respect to fisheries, legislation was passed in 1987 regarding the exploitation and management of tortoises and green lobsters. Cape Verde also has an institute solely devoted to fisheries research and development. Surveillance and protection are considered to be very important but the country has only one boat and a hired plane could hardly do the job. It was therefore important to subject these activities to sub-regional cooperation.

Proposals are in hand to create a data bank with the assistance of EEC and FAO.

In the area of environment, Cape Verde adopted the necessary legislation for addition to the legislation on fisheries and application of the provisions of Agenda 21. However, it was difficult to control and monitor dumping of toxic waste. There was a need to elaborate projects to benefit from the funds made available under GEF for the protection of the environment.

In the field of maritime transport, the country was geographically well located between Europe and America and had two good harbours with a third one under construction.

Cape Verde had pursued regional cooperation with its neighbouring states of Senegal, Guinea and Guinea Bissau, and amicably resolved delimitations of its maritime boundary with Senegal. Furthermore it is a member of the sub-regional Fisheries Commission, and concluded agreements with research institutions in various areas of ocean resources. The country strongly believes in regional cooperation and is keen to participate in cooperative programmes for the management and protection of the marine resources through provisions like the establishment of a regional data bank.

African Land-Locked States and Regional Cooperation; Case Study: Uganda

Mr. Ochan, who presented the case study on Uganda, stressed on the fact that existing customary international law was not very clear on the transit rights of land-locked states; that there were differing interpretations by experts on the existing customary law regarding transit rights of land-locked states; that in any case the debate had now shifted to economic issues from the purely juridical; and that the UN Convention on the Law of the Sea was a revolutionary departure from existing customary and international law in not only giving land-locked states the rights to transit passage but almost making land-locked states coastal states by giving them the rights to: freedoms of the high seas; marine scientific research; participation in the exploitation in the EEZ; transfer of technology; participation in the activities of the Area and to membership in the Council of the International Seabed Authority. Mr. Ochan, drawing on the history of the East African Community, also went on to say that the future of African land-locked states lay in establishing regional cooperative mechanisms.

African Coastal States; Case Study: Tanzania

The case study of Tanzania was presented by H.E. Hon. Joseph Warioba. He gave a detailed account of the resources of the Tanzanian marine and coastal areas, the steps taken to exploit them, what more needed to be done, and the various legal and other steps taken by Tanzania.

The speaker stressed the need for Tanzania setting up an appropriate mechanism for coordinating marine activities, acquiring the necessary technologies and for integrating the marine dimension into Tanzania's developmental strategies.

The African Regional Seas Programme

UNEP is the initiator of the Regional Seas programme which was initiated immediately after the 1972 Stockholm Conference. The idea originated from pollution that occurred in semi-enclosed seas because of lack of mobility of the water body. The first programme was initiated in the Mediterranean Sea which resulted in the adoption of the Barcelona Convention. Due to the fact that pollution comes mainly from land based sources the programme expanded to cover not only enclosed seas but also open seas. This required the cooperation of the coastal states of a given region for protecting the environment. This later on developed into the concept of sustainable development.

The second major change occurred with the idea of involving landlocked States in the programme as pollution of seas originate mainly from land. Through the initiation of UNEP, the Montreal Guideline was adopted governing such activities.

There is now a concept being developed to integrate and coordinate the activities of international organizations as opposed to multiplicity of activities and to take the Regional Seas Programme of UNEP as a model for such integration. The institutional integration should be promoted on national, regional as well as on global basis.

Experiences of West African and the Mediterranean regions were presented. Regional Seas Programmes have adopted action plans but due to lack of finance most of the action plans are not being implemented in West Africa. In the Mediterranean region although the initiative was taken by African states, programmes like oceanographic studies on traffic adopted for the Eastern and Western Mediterranean regions were delayed on the African side due to lack of money. But with funds available now programmes will go ahead.

In conclusion it was stated that there is a wealth of information on the establishment of regional institutions dealing with marine activities but we have to go a long way before proper integration can be achieved.

African Coastal States; Case Study: Ghana

Mr. Martin Menasah, Director of Fisheries of Ghana, presented Ghana's case study. He stated that his country has developed a sophisticated marine fisheries programme since 1950s in four main areas: (a) artisanal, (b) semi-industrial, (c) industrial and (d) tuna. Since the upwelling phenomenon lasts for only three months, intensive fishing activity takes place during those months, and the stocks are very much depleted. Though the management of fisheries resources is very poor, there is possibility of enforcement of monitoring, control and surveillance by the Fisheries Commission by the end of 1994. Their annual production of fish is 300,000 metric tons, of which 90% is from marine resources. Tuna fishing is undertaken through joint-ventures, while the rest is done by local enterprise.

As regards research, Ghana established the Marine Fisheries Research Unit within the fisheries department in 1962. Besides monitoring stocks, research on oceanography, plankton, temperature and oxygen variation is undertaken by the unit. There is close cooperation with the Abidjan based Centre de Recherches Oceanologiques and with ORSTOM of France. Cooperation also exists with Togo and Benin. Research is coordinated by the Ghana National Commission on Oceanography.

With respect to UNCLOS and Agenda 21, Ghana has signed and ratified UNCLOS. The legal department of the Ministry of Foreign Affairs is the focal point. The Maritime Boundaries Limitation Law has been incorporated in their statutes, while the Institute for Coastal Zone Management is yet to be established. The Council for Scientific and Industrial Research (CSIR) organized

a seminar on Agenda 21 together with UNEP in November 1993 in which issues of climate change and biodiversity were covered.

The speaker also mentioned that there are activities in other areas like tourism, port management, transport, which are undertaken by various ministries. As regards the issue of licenses to ships fishing in the high seas and norms and standards to be observed, the Ministry of Fisheries takes care of them. Enforcing the laws, however, is still a problem.

IOMAC and Indian Ocean Commission: Critical Analysis and Options for Africa

H.E. Hon. Joseph Warioba introduced the subject of IOMAC, after the Chairperson, Prof. Mann Borgese had stressed the need for supporting the activities of regional organizations in the area of marine affairs. Dr. Warioba limited his statement to IOMAC.

He said that IOMAC was founded in 1982 and held its first meeting in 1985. Its charter was opened for ratification only in 1990, at a meeting in Arusha, Tanzania. As a regional organization of the Indian Ocean dealing with cooperation in marine affairs, its mandate spread covered both coastal and landlocked countries. Its plan of action includes:

- measures to integrate the marine sector in national development plans
- due regard to the problems of land-locked countries
- measures to acquire and disseminate relevant information
- harmonization and strengthening of cooperation with the states involved
- formulation of marine affairs policy and coordination
- promotion of maritime transport systems
- development and strengthening of institutions
- influencing international organizations to support marine activities in the Indian Ocean

IOMAC emphasizes the role of coordination in the region in the area of policy and management of natural resources, both marine and freshwater. Such coordination is still a major problem as weakness exists even at member states levels where coordinating mechanisms have still to be set-up. The future of IOMAC will depend on the extent of support from member states.

During the discussion that followed, it was brought out that IOI has provided four training programmes to IOMAC countries, which is one of its significant achievements. Since its mandate is too broad, IOMAC is now facing difficulties, as out of the over forty countries who are members, only five, namely Indonesia, Mauritius, Mozambique, Pakistan and Srilanka have

ratified the IOMAC charter. Three more have to ratify before it comes into force, and UNDP, the main funding agency in the past, has stopped all funding till the member States themselves show their commitment by supporting IOMAC. Even the Secretary General had to resign and look for another job as his salary was not being paid.

The Executive Secretary of ECA underlined the need for the support of member states, and said that ECA will study the situation and look into ways of revitalizing IOMAC.

Another participant raised the issue of IOMAC's support to women's programmes, and it was mentioned that women had participated in the training programmes of IOMAC.

Concerning the Indian Ocean Commission (IOC), it was noted that Madagascar, Mauritius, Comoros, Seychelles and Reunion were members. IOC is very active, and the Executive Secretary will be exploring ways to strengthen cooperation between IOMAC, IOC and UNECA.

West African cooperation: Critical analysis

Under this item, the Seminar benefited from contributions from Cape Verde, Gambia and Ghana.

The representative of Cape Verde described the objectives, the activities and the difficulties encountered in the implementation of these activities, by the West African Subregional Commission on Fisheries.

The Commission was established in 1985. Its main objective is to promote cooperation among Cape Verde, Gambia, Guinea, Guinea Bissau and Senegal, in the field of fisheries.

The main body of the Commission is the Conference of Ministers. Then there is the Coordination Committee, and a Permanent Secretariat, which will be based in Dakar (Senegal). Since its inception, the Commission has dealt only with the establishment or organic texts such as the Convention establishing the Commission.

Difficulties encountered were essentially of a financial nature. To conclude, the representative of Cape Verde asked ECA to increase its assistance to the Commission.

In the ensuing debate, the Seminar noted that the structures of the Commission described by the representative of Cape Verde were in the right direction regarding the implementation of the provisions of the Convention on the Law of the Sea. However, these structures were very sectoral (they covered only fisheries). Steps should be taken to broaden their scope, in order to give to these structures a multisectoral dimension.

The ECA Executive Secretary informed the representative of Cape Verde that ECA would spare no efforts to help the West African Subregional Commission on Fisheries strengthen its activities.

The representative of Gambia described the different structures of the subregional organisation covering his state and mentioned that this organisation, since last year, has included environment aspects in its programme and activities. He then mentioned surveillance of the EEZ and in this regard, on the agreement between Gambia and Senegal.

The representative of Ghana briefed the Seminar on the subregional organisation of his area and stated that lack of funds prevented the organisation from correctly implementing its activities.

The Seminar informed the representative of Ghana about funds available within GEF and the IBRD, which could be released by these institutions, provided that concrete projects responding to the standards established by the institutions are submitted and approved.

ANNEX 4

List of Participants of Addis Seminar

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Mr. Wilfred Asombang, PHSD
Mr. Raj Bardouille, PHSD
Mr. S.K.B. Asante, MRAG
Mr. K.C. Wang, MRAG
Mr. S.K. Imbamba, Regional Adviser, MRAG
Mr. Traoré Souleymane, Statistics Division
Mr. G. Jonassen, TACOO
Ms. Kibbesh Wolde Gabriel, TACOO
Mr. P. Chechekin, TCTD
Mr. S. Akande, TCTD
Mr. J. Rajohnson, TCTD
Ms. F. Wege, ATRCW
Ms. Hilary Mwokeabia, SERPD
Mr. Oumar M. Sy, SERPD
Mr. Mohamed El-Egaily, SERPD
Mr. K.J. Sendi, IHSD
Mr. Victor Shingiro, TDFD/ECO
Ms. Elizabeth Woldemariam, TDFD
Mr. Thabit Ahmed, COES
Mr. Samba Jack, Chief, PPCO
Mr. Y. Suliman, SAES/SC/COES

Mr. Solbi Saddik, PADIS

Mr. M. Bongoy, Chief, Transport & Communications Division

ANNEX 5

List of Participants of Small Islands Course

Updated 28.4.94

LIST OF PARTICIPANTS

Coastal Zone Management with a Focus on Small Islands

18 April - 10 June '94

Country	Participants	Contact Nos.
ANTIGUA	Mrs. Candia Marguerite WILLIAMS Conservation Officer II Ministry of Tourism, Culture and Environment Queen Elizabeth Highway ANTIGUA WI	Tel: +1 (809)462 4625 Fax: +1 (809)462 2836 Tlx: 2087 OFDPM A.K.
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	Dr. J.S. MANI Asstistant Professor Ocean Engineering Centre Indian Institute of Technology Madras 600 036 INDIA	Tel: +91 (44) 235 1356 Fax: +91 (44) 235 2545

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Ministry of Foreign Affairs, Planning
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Department of Fisheries
Ministry of Agriculture & Fisheries
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TANZANIA Mr. Salim Rashid ABDULLA
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TANZANIA

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ANNEX 6

Minutes of Course Development Committee

Second Meeting of the Courses Development Committee
held at Barbados
on
29 April, 1994

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Prof. E. Robin South, IOI South Pacific
M.Sc Lorena San Roman, UNA Costa Rica
M.Sc Alexandro Cuttiriez, UNA Costa Rica
Ms. Anita Coady, Editor Across the Oceans
Mr. Seremaia Kalokalo Tugiri, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of Agenda

The circulated agenda was adopted.

Item 2: Consideration and approval of courses proposed to be conducted in 1994

The Committee noted that the following courses were proposed to be conducted in 1994.

Name of Course	Where to be held	Duration	No of participants	Source of funding
1. Coastal Zone Management as a sustainable process	Madras	5 weeks	20	UNDP
2. For Managers, Policy and Project Planners of the Enterprise	Madras	5 weeks	15	Sasakawa Foundation

Name of course	Where to be held	Duration	No. of participants	Source of funding
3. Coastal Zone Management as a sustainable process	Madras	8-10 weeks	20	UNDP
4. Alumni Refresher	Kuala Lumpur	1 week	20-25	Government of Malaysia
5. For Policy Makers	Madras	1 week	20-25	Government of India
6. Customary Tenure Workshop	Suva	2 weeks	20	UNDP, WPFCC and SPREP
7. Coastal Fisheries	Suva	5 weeks	20	UNDP and Sasakawa
8. EEZ-Sustainable Development	Halifax	10 weeks	20	CIDA and others

The Committee noted that courses for Costa Rica and Africa were not included in the above list as their Work Plans had not yet been firmed up and accepted by UNDP.

The Committee noted that IOI Madras had both a 8-10 week and a 5-week programme on coastal zone management. The Committee looked at the 5-week programme as an experimental measure whose success would have to be judged by the extent to which it achieved its objectives. A view as expressed that if the 5-week programme was not to be too much diluted, then plenty of reading materials should be handed out to the participants so that they could complete the learning process later on in their own countries.

The Committee approved the idea of some external evaluation system for the courses.

Item 3 & 4: Follow up on Geneva workshop and reports on course modules prepared

The Committee had before it the course materials from IOI South Pacific and a report on how the course material for the IOI Madras 5-week course was being got ready.

Regarding the course material of IOI South Pacific, the Committee was satisfied with the material, but felt that in view of the plan to network and exchange courses with other centres, the present materials were too strongly focussed on the South Pacific. For purposes of exchange and networking, it would be better to have region-specific sections developed in a manner that are separate from the main course, so that these sections can be readily substituted for other region-specific material.

There was discussion on methodologies employed in course preparation. IOI-Madras is using a team approach and has a considerable number of lectures involved. Summaries of lectures from their Coastal Management course were provided for information. IOI South Pacific, on the other hand, has a much smaller pool to draw from. The Committee was of the view that they would like to wait for the course materials before reaching any conclusions in the matter. Also evaluation of courses should include interchange between centres, and the idea of a pedagogical evaluator to review courses should be tried out.

In discussion of the TRAIN-X system and its applicability to IOI courses, the Committee was of the view that while in general the system has a number of advantages, but disadvantages included the fact that TRAIN-X was too detailed and designed for homogeneous groups, whereas most IOI courses were offered to heterogeneous groups. In addition, it was felt that the Mastery test in its present form was unsuitable for IOI courses. The Committee noted that streamlining and simplification of the TRAIN-X system was under way, and centres were asked to provide UNDP with comments and feed-back so that these could be considered in the simplification process.

The Committee was further of the view that the Distance Learning expertise of USP needed to be transferred to the other centres.

The meeting ended with a vote of thanks to the Chair.



Dr. Krishan Saigal
Executive Director

ANNEX 7

Agreement with National University (UNA), Costa Rica

UNA OFIC.
CONVENIO DE COOPERACION ENTRE LA UNIVERSIDAD NACIONAL Y EL INSTITUTO INTERNACIONAL DE OCEANOS (IOI)

Conste que nosotros Rose Marie Ruiz Bravo, mayor, casada, Licenciada en Química, vecina de La Paulina de Montes de Oca, cédula de identidad No.9-005-486 en calidad de Rectora de la Universidad Nacional nombramiento efectuado mediante Asamblea Universitaria realizada el 26 de junio de 1992, en adelante denominada "UNA" y en calidad de Director General del Instituto Internacional de Oceanos (IOI).

CONSIDERANDO QUE:

1. La UNA y El IOI fundamentan el desarrollo de proyectos académicos de docencia, investigación, extensión, capacitación y difusión.
2. Ambas instituciones disponen de capacidad científica y tecnológica para desarrollar programas conjuntos en áreas afines y de interés común.

ACORDAMOS:

1. Celebrar mediante el presente convenio, nexos formales de colaboración y acción conjunta en el mejoramiento de el uso pacífico de uso de los océanos y sus recursos, su administración y regulación tanto como la protección y conservación del ambiente marino y en temas de interés común en las áreas de docencia, investigación, extensión, capacitación y difusión.
2. Ejecutar la colaboración a que se refiere la Cláusula 1) mediante actividades tales como:
 - a. Desarrollo conjunto de programas en las áreas de docencia, investigación, extensión, capacitación y difusión, bajo la normativa y procedimientos propios que rigen ambas instituciones en especial al desarrollo de programas académicos.
 - b. Intercambio de información y documentación científica y planes de enseñanza.
 - c. Intercambio de personal académico por periodos de corto y mediano plazo, con el objeto de que apoyen actividades de docencia, investigación y extensión de una u otra institución en temas específicos de mutuo interés.

- d. La coordinación y la realización conjunta de cursos y actividades específicas de docencia, así como la ejecución de programas, proyectos y actividades de extensión e investigación, que incluyan la sistematización de metodología común, cuando ello sea necesario para obtener resultados comparables o sea menester para efectuar investigaciones conjuntas.
 - e. Brindar apoyo de su personal académico a través de consultorías específicas, por medio de expertos individuales o misiones técnicas.
 - f. La publicación y difusión de material docente, así como de material científico resultantes de investigaciones conjuntas o que puede ser de mutuo interés.
 - g. Cada institución designará un representante nombrado por la máxima autoridad para que coordine y de seguimiento a todas las actividades derivadas de este convenio. Deberán además hacer entrega de un informe anual de actividades a su designante.
 - h. Otras actividades que las partes decidieran realizar conjuntamente.
3. Este convenio se ejecutará a través de Cartas de Entendimiento, en las cuales se establecerán las modalidades operativas, plazos y consideración financiera a que dé lugar cada acción, las cuales deberán ser firmadas por el máximo representante de cada institución, previa recomendación de las instancias respectivas.
 4. Las instalaciones de investigación, laboratorios, campos experimentales, bibliotecas y centros de documentación de cada institución estarán abiertos a la consulta y uso por parte de los académicos, personal técnico y administrativo de la otra, sin costo alguno cuando se trate de trabajos de interés común y al costo mínimo cuando sean de interés de una sola de las partes, debiendo observarse las disposiciones internas de cada institución, que regulan el uso de instalaciones, bibliotecas y otras dependencias.
 5. La UNA y El IOI se prestarán mutuo apoyo y actuarán conjuntamente o coordinadamente para la consecución de recursos técnicos y financieros adicionales que faciliten el desarrollo de acciones de cooperación objeto del presente acuerdo.

6. La titularidad de la producción intelectual que surgiere al amparo del presente convenio deberá ser regulada en contratos al efecto, comprometiéndose las partes a disponer de ellos en los términos de dichos contratos.

7. El presente convenio de cooperación tendrá una vigencia de cinco años a partir de su firma, prorrogándose a gestión de alguna de las partes por periodos iguales, mayores o menores, dentro de los sesenta días hábiles anteriores a la fecha del vencimiento, además, en cualquier momento, las partes podrán resolverlo. Lo anterior previo informe y evaluación del representante de cada una de las instituciones.

No obstante, e independientemente del motivo de la terminación, los programas, proyectos o actividades que se estén realizando en este momento continuarán hasta la fecha programada y aprobada de conclusión.

En fe de lo anterior, que es de nuestra plena aceptación, firmamos cuatro ejemplares de un mismo tenor y efecto, en la ciudad de Heredia a los 06 días del mes de diciembre de 1993.

Rose Marie Ruíz Bravo
Rectora
UNIVERSIDAD NACIONAL

Director
INTERNATIONAL OCEAN INSTITUTE

TELEFONO: 37-6363 APARTADO 86-3000 HEREDIA

TELEFONO: 37-6363 APARTADO 86-3000 HEREDIA

ANNEX 8

Core Faculty of UNA provided for IOI Costa Rica

May 25, 1994
VA-DI-445-94

Dr. Krishan Saigal
Executive Director
IOI
P.O. Box 3
GZIRA 62R 01
Malta
FAX: 356 (0) 346502

Dear Dr. Saigal:

It was a pleasure to work with you here in Costa Rica and in Barbados.

After some meetings with the different school I can communicate you the organization of IOI in Costa Rica.

It would be a Matrix including the School of Physics-Oceanographic and Coastal Management Laboratory- and the School of Biology in the Faculty of Exact Sciences. Also it would include the School of International Relations and the Master Degree program in Economic Policy of the Faculty of Social Studies.

The people that would be involved is stated in Annex 1. in Annex 2 you have their Curriculum Vitae.

The Vicepresident of Research would supervise all the process of IOI and will link with you directly as well as the President of the University Lic. Rose Marie Ruiz.

I'm enclosing the organigram of UNA and some document of the Schools involved in Annex 3.

In Annex 4, I'm enclosing a draft of the agreement between IOI and UNA, fell free to include anything that you think must be there.

May 25, 1994


VA-DI-445-94

Dr. Krishan Saigal

Page 2

Yesterday I had a meeting with the Viceminister of Foreign Affairs and I will send you soon the draft of the agreement with them. For the agreement they need the legal documents of the Foundation of IOI, authenticated by the consul of Costa Rica in the Netherlands, they need it in english and spanish. As well is needed before that, that the agreement between UNA and IOI will be signed.

In Annex 5 I'm including the Plan of Work of the Project
With warm regards.


M. Sc. Lorena San Román
Vicepresident Research

UNIVERSIDAD NACIONAL
VICE-RECTORIA
DE INVESTIGACION
Heredia, Costa Rica

mvc

cc: Dra. Elizabeth Mann Bourguese, Universidad de Halifax-Canadá
Lic. Rose Marie Ruiz, Rectora
M.A. Jorge Mora, Vicerrector Académico
Lic. Rodrigo Carreras, Ministerio de Relaciones Exteriores
Lic. Walter Fonseca, Ministerio de Relaciones Exteriores

ANEXO 1

UNIDAD MATRIZ

Supervisores

Rose Marie Ruiz	Rectora
Lorena San Román	Vicerrectora de Investigación
Alejandro Gutiérrez	Departamento de Física Laboratorio de Oceanografía y Manejo Costero

Coordinador IOI

Jorge Alfaro	Escuela de Ciencias Biológicas
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Otros miembros

Sandra León	Departamento de Química
Alvaro López	Relaciones Internacionales
Carlos Murillo	Maestría de Política Económica

ANNEX 9

Agreement with CRODT, Senegal

ACCORD

ENTRE

LE CENTRE DE RECHERCHES OcéANOGRAPHIQUES
DE DAKAR-THIAROYE (CRODT) DE L'INSTITUT SENEGALAIS DE
RECHERCHES AGRICOLES (ISRA)

ET

L'INSTITUT INTERNATIONAL DES OcéANS (IIO)

Entendu que l'Institut International des Océans souhaite ouvrir au Sénégal un Centre opérationnel pour la Région ouest-africaine et considérant que :

- les Océans constituent les trois-quarts de la surface de la Terre, et que
- les Océans représentent la plus grande ressource naturelle non encore exploitée de la Planète, et que
- les technologies existent et continuent à être développées en vue d'exploiter ces ressources au profit de l'humanité et de l'ensemble de la planète, et que
- le développement et/ou l'exploitation de ces ressources de façon non durable et déséquilibrée contribueraient certainement à accélérer le dépérissement de la Planète de la capacité de survie de l'humanité, et que
- la recherche et l'éducation touchant tous les secteurs de la société constituent un élément indispensable pour un développement durable et équilibré, et que
- L'institut International des Océans a été créé en 1972 à Malte, pour servir de cadre à la formation, à l'éducation et à la recherche dans tous les secteurs de la société.

CONSCIENT du rôle dominant que joue le Centre de Recherches Océanographiques de Dakar-Thiaroye en ce qui concerne l'éducation, la recherche et la formation dans le secteur des océans.

Le présent accord est conclu entre le Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT) de l'Institut Sénégalais de Recherches Agricoles (ISRA) et l'Institut International des Océans (IIO), qui est une organisation non gouvernementale internationale indépendante établie aux Pays Bas, selon les dispositions qui suivent :

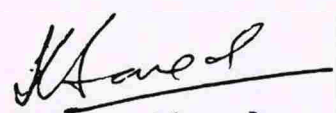
1. L'accord porte sur une période initiale de trois ans, et renouvelable.
2. La collaboration est dénommée : "Centre Opérationnel de l'Institut International des Océans (IIO) au CRODT, Sénégal".
3. L'ISRA (CRODT) mettra à la disposition du Centre Opérationnel de l'IIO des infrastructures adaptées à ses activités internationales ainsi qu'à ses fonctions en matière de formation et de recherche.
4. L'ISRA (CRODT) mettra à sa disposition un espace convenable pour l'enseignement (notamment une salle de conférence pouvant accueillir 20 participants, des moyens informatiques et autres matériels de laboratoire). L'IIO contribuera à l'équipement de cet espace.
5. L'ISRA (CRODT) mettra sa bibliothèque à la disposition du Centre Opérationnel et l'IIO apportera une contribution sous forme de revues, de livres et de matériels de recherche.
6. L'IIO s'efforcera de recourir au personnel enseignant du CRODT moyennant une rémunération, comme il en sera convenu entre l'IIO et l'ISRA (CRODT).
7. L'IIO et l'ISRA (CRODT) entreprendront des projets de recherche communs chaque fois que cela sera possible.
8. L'ISRA (CRODT) fournira une assistance au Centre Opérationnel sous forme de logistique pour organiser l'accueil des participants.
9. L'ISRA (CRODT) mettra à disposition, au titre de son apport, les services d'un Directeur pour diriger le Centre Opérationnel, de même que les services d'appui connexes.

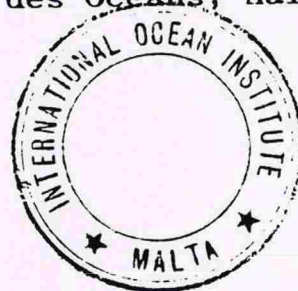
10. L'ISRA (CRODT) établira un réseau et des liaisons avec le CRAT, l'IDEP, l'Université Cheikh Anta DIOP et le CESAG en incluant leurs représentants dans son Conseil consultatif.

11. Pour l'exécution de ce projet, l'IIO, à travers le projet UNDP, mettra à la disposition du CRODT un budget de US \$ 350.000 pour les 30 prochains mois dont US \$ 30.000 pour l'équipement.

Représentant de l'ISRA (CRODT)




Institut International
des Océans, Malte



RECEIVED JAN 03 1995

INTERNATIONAL OCEAN INSTITUTE

REPORT
TO
CANADIAN INTERNATIONAL DEVELOPMENT AGENCY
(CIDA)

DECEMBER 1994

PROJECT: P7990-0893-S 44413

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PROJECT TITLE: Programme Support 1993-95
ORGANISATION: INTERNATIONAL OCEAN INSTITUTE
PROJECT FILE #: P7990 - 0893 - S44413
PERIOD COVERED BY THE REPORT: 01.01.94 to 31.12.94

NARRATIVE REPORT:

During the period under review, the UNDP Project became fully operational in the Madras and Fiji Centres of IOI, a sensitising leaders workshop was held in Addis Ababa in association with the UN Economic Commission for Africa while agreements were entered into with the National University, Costa Rica, the Oceanographic Institute of the Government of Senegal, State Oceanic Administration, China and Yokohama University, Japan to establish IOI Centres there. The IOI also held its annual Pacem in Maribus Conference (PIM XXII) in Madras, India and took the initiative in establishing an Independent Commission for the Oceans and Seas under the leadership of President Mario Soares of Portugal.

Evaluation

A project performance evaluation report (PPER) was prepared by the Executive Director, IOI and subjected to tripartite review by IOI, the centre directors and UNDP at Barbados in April, 1994. The Review Committee noted that:

- the preparatory phase (January 1992 - September 1993) had produced mixed results;
- workplans for IOI Latin America and IOI Africa were delayed;
- the networking objectives had, by and large, been achieved;
- significant progress had been made in attracting non-UNDP financial support;
- there was a growing demand for IOI Centres;
- the evaluation process of IOI regarding courses etc. which was largely internal at present needed to be supplemented by external evaluations;
- there was a slight shortfall in the output of trainee weeks.

The PPER is at Annex 1 and the Minutes of the Review Committee (Item 2) at Annex 2.

Training

The following training programmes were conducted up to December, 1994 in the various centres of IOI:

Name of course	Conducted by whom and when	Revised/New	Participants
Leaders Sensitising Seminar	IOI HQ/UNECA 18 Mar-2 Apr, 1994	New	49
Coastal Zone Management: focus on small islands	IOI Malta 18 Apr - 10 June, 1994	New	18
Coastal zone management as a sustainable process	IOI Madras 27 June-29 July, 1994	New	17
Sustainable Development and Implementation of Chapter 17 of Agenda 21 in the Exclusive Economic Zone	IOI Halifax 6 June - 12 August, 1994	Revised	18
Customary Marine Tenure Workshop	IOI South Pacific 4-8 July, 1994	New	65
For Managers and Planners of the Enterprise	IOI Madras 29 Aug-30 Sept., 1994	Revised A	12
Alumni Refresher and Advanced CZM at Kuala Lumpur, Malaysia	IOI Madras 12-16 Sept., 1994	New	25
Management and Development of Coastal Fisheries	IOI South Pacific 24 Oct-25 Nov., 1994	New	27
Alumni	IOI South Pacific	New	NA

Name of course	Conducted by whom and when	Revised/New	Participants
Coastal Zone Management (9 weeks)	IOI Madras 17 Oct-15 Dec., 1994	Revised C	15
Leaders course at Goa	IOI Madras 25-26 Oct., 1994	New	70

Addis Leadership Seminar

This was attended by 49 participants from 26 African countries. The Seminar was very much appreciated by the participants and led to the demands for 3 more IOI Centres - for English speaking, Portugese speaking and Arabic speaking Africa. IOI would be exploring the feasibility of setting up these Centres in association with UNECA. A report on the programme is at Annex 3 and a list of participants at Annex 4.

Small islands course

This was also a highly successful course and was funded by the Commonwealth Secretariat. It was attended by 18 participants from 11 countries as below:

Antigua (1)
University of the South Pacific (1)
India (2)
Kiribati (1)
Malta (4)
Mauritius (1)
Nigeria (1)
Seychelles (2)
Solomon Islands (2)
St. Lucia (2)
Tanzania (1)

Six participants were women. According to their academic qualifications, the participants were in possession of:

- no University diplomas or degrees (4)
- a Diploma (2)
- a Bachelor's degree (1)
- a Master's degree (8)
- a Doctorate (2).

According to their academic discipline they belonged to:

- Planning (4)
- Oceanography (1)
- Ocean Engineering (1)
- Marine biology/fisheries (7)

- Geography (4)
- Botany (1).

The list of participants is at Annex 5.

Sustainable Development in EEZ - Halifax

The Class B94 Training Programme took place at Dalhousie University from June 6 to August 12, 1994. It was the fourteenth programme to be held at Dalhousie.

There were 21 participants from 21 countries. The course was directed by Dr. S. P. Jagota of India. The faculty was composed of lectures from Dalhousie University and other technical institutions in Nova Scotia, Boston University, representatives of the competent international institutions and U.N. Specialised Agencies, as well as of the private sector.

The course was designed to promote the effective sustainable development and management of the resources and other uses of the Exclusive Economic Zone, bearing in mind the developments at UNCED 1992 and its follow up. The ten-week syllabus included an introduction to oceanography, the Law of the Sea, its relation to UNCED, and its impact on the restructuring of the United Nations system; the management of living and nonliving resources; the management of shipping, ports and harbours; remote sensing; tourism; coastal zone management; national legislation; and regional cooperation and development, with particular emphasis on technology cooperation and co-development. Simulation exercises and numerous field trips complemented the academic programme.

CZM as a sustainable process - Madras

IOI Madras conducted a 5-week programme on CZM as a sustainable process from 27 June to 29 July 1994. It was attended by 18 participants from 7 countries. The materials developed by IOI Madras were tested in the course. While by and large the reading material and pedagogy developed were satisfactory, an independent evaluation conducted by the Executive Director in two sessions, one with the faculty and the other with the participants, did bring out both the strengths and weaknesses of the course. The course syllabus is at Appendix C.

According to the participants of the course:

- they gained broad multidisciplinary knowledge;
- their concept of coastal zone management being only protection of fisheries, coral reefs and mangroves widened to include minerals, nonliving resources and energy as other issues related to sustainability;

- they learnt a lot from interaction among themselves during group discussions and presentation of case studies;
- however they found the course too intense and suggested it be of 6-7 weeks duration.

According to the faculty:

- the receptivity of participants was high but even then some concepts could not be put through;
- there needed to be more interactive lecturing and the use of multimedia technology - slides, overhead projectors etc.;
- some more time was required if the objectives of the course were to be fully attained.

IOI Madras is going to experiment with a 6-7 week CZM course though a 5-week course is considered viable.

Course for Planners and Managers of the Enterprise - Madras

IOI Madras also conducted a 5-week course for the Planners and Managers of the Enterprise from 29th August to 30th September, 1994. There were 12 participants from 5 countries. The course director was Dr. Warioba, former Prime Minister of Tanzania and Chairman Prepcom.

1 week alumni course - Madras

IOI Madras ran a 1-week advanced course for alumni in Kuala Lumpur, Malaysia.

Customary Tenure Workshop - South Pacific

IOI South Pacific conducted a 1-week International Workshop on Traditional Marine Tenure and the Sustainable Management of Marine Resources in Asia and the Pacific from the 4 to 8 July. A total of 65 participants attended from the following 24 countries:

Fiji, Western Samoa, Tonga, Cook Islands, Kiribati, Vanuatu, Solomon Islands, Papua New Guinea, New Caledonia, Palau, Federated States of Micronesia, Marshall Islands, Japan, Philippines, Australia, New Zealand, Canada, Indonesia, Malaysia, Vietnam, Thailand, Norway, United Kingdom.

The workshop report (300 pages) is being published by the International Ocean Institute. The workshop was co-funded by WPFCC and the Government of France. Copy of the workshop

programme is at Appendix B.

Management and Development of Coastal Fisheries - South Pacific

Course is in progress.

Coastal Zone Management (9 weeks) - Madras

Course is in progress.

Course Development

As is clear from the number of courses held during 1994 by the two IOI Centres, IOI is experimenting with courses of differing duration and content and as geared to the varied experiences/seniorities of the participants. IOI has found that by this variation and better information dissemination, demand for IOI courses is going up and the participant selectivity ratio is on the rise.

The variation in course duration has been made possible by the modular approach adopted by IOI through an adapted TRAIN-X approach. The cost of conducting courses has also been going down.

Networking

Institutional Networking is dependent on regular meetings of directors/vice chancellors, information dissemination and programme development. The directors/vice chancellors meetings are attended by representatives of UNDP and have recently been extended to include meetings of the courses development committee (which are to be held back to back with the directors/vice chancellors meeting) so as to cut down on costs.

In the field of information dissemination an alumni directory, a quarterly newsletter and PR brochures have been issued. The directors meetings have been very useful to the development of the project as well as for making the necessary mid-course corrections.

The meetings have also helped in activating both formal and informal networks linking the different centres and the headquarters in a synergistic manner. Besides, there has been division of work in the IOI network so as to build on the differing strengths of the centres and also to link the IOI system with the broader UN and non-UN systems.

For example links have been established by the University of the South Pacific with the Indian Institute of Technology, Madras and the two Universities have entered into a twinning agreement so that a combined B Tech programme would be conducted by the two

Universities. This was made possible by the links that IOI Fiji had with IOI India.

Library Networking

To integrate the knowledge base of the IOI system it was decided to develop software so as to link all the libraries of the collaborating institutions through E-mail. IOI Madras was made responsible for the project and they have come up with an interim system which is being tested by the other centres. The project has linked up IOI Madras and IOI South Pacific and efforts are on to debug the system and thereafter extend it to the other Centres. Details of the system are at Annex 1.

Networking with other institutions

A key element in the IOI strategy is to reinforce existing institutional capabilities through providing active networks for ocean affairs. To this end MOUs have been signed with the United Nations University, Tokyo, with IOC/UNESCO, Paris, the University of Rhode Island and the International Centre for Public Enterprises, Ljubljana. More such MOUs are expected to be signed in 1995.

In addition, the IOI Centres will be joining the TRAIN-SEACOAST network which, in addition to the four IOI Centres at San Jose, Dakar, Madras and Suva will include a centre in Brazil, the University of Wales, the Institute of Marine Sciences, Tanzania and the Songkla University in Bangkok, Thailand.

During October 1994, IOI's China and Japan were established. This would increase IOI's outreach and also enable more funds being mobilised. Both the centres would provide the necessary staff and infrastructure.

Programme Development

In the area of programme development there has been significant advance in attracting new sources of funding: from Japan, Australia, India and the South Pacific. Sasakawa Foundation has funded a programme in Madras; Australian International Development Assistance Bureau (AIDAB) is considering funding a joint programme taken up by IOI South Pacific and the Australian Maritime College, Tasmania; the Government of India has decided to fund two courses -one for policy makers and another for coastal managers - for Indian participants; in the South Pacific, WPFCC and the Government of France have given \$ 33,000 to IOI South Pacific for a workshop on customary tenure; the Gauntlett Foundation is considering funding a five-week programme on CZM for the Black Sea region.

VC's/Directors Meeting

It is necessary to closely monitor the IOI Workplan as it develops and evolves since changes are inevitable with the Workplan covering areas not yet fully developed. So two meetings of the President, Executive Director, and representatives of the operational centres, and of UNDP, were held to monitor the implementation of the centre operational plans, to guide future development, to approve courses and lay down guidelines for the preparation of training modules during 1994.

The main decisions/guidelines emerging from these meetings related, inter alia, to:

- the establishment of mechanisms for proper reporting, monitoring and evaluation of the project
- the manner in which workplans and budgets are to be prepared by each centre
- the laying down of relevant physical targets
- the manner in which IOI was to be projected to donors and the general public
- the raising of non-UNDP funds both globally and locally, including through providing professional services
- the procedure for approving courses/modules.

The minutes of the meetings are at Annexes 2 and 6.

Course Development Committee

Meeting in Barbados

The Committee met in Barbados on 29 April, 1994. The Committee approved 8 courses for 1994 (details at Annex 7). The Committee also reached the following conclusions:

- the training materials prepared by the IOI Centres should not be too region-specific as that would affect interchangeability;
- review of courses by a pedagogical evaluator should be tried out;
- that IOI should be a part of UNDPs global TRAIN-X system as that would considerably augment IOIs resources;
- the TRAIN-X System needed to be streamlined and simplified;

- the Distance Learning expertise of IOI Fiji needed to be transferred to the other Centres.

The Minutes of the Meeting of the Courses Development Committee are at Annex 7.

Meeting in Madras

The Courses Development Committee also met in Madras on 3 and 4 December, 1994. It approved the following courses for 1995.

Centre	Name of course	Duration
Costa Rica	1. Decision makers workshop	2 days
	2. Sea law & ocean policy	2 weeks
	3. Satellite imagery	3 days
	4. Ocean management	2 weeks
India	1. CZM	4 weeks
	2. CZM as a sustainable process	6 weeks
	3. CZM as a sustainable process	6 1/2wks
	4. Advanced alumni -India	1 week
	5. Advanced alumni -Sri Lanka, Mauritius or Malaysia	1 week
Senegal	1. Leadership Workshop	2 weeks
	2. Course on planning and management of coastal zones	8 weeks
South Pacific	1. Resources economics	5 weeks
	2. Coastal fisheries	5 weeks
	3. Ports & shipping	5 weeks
	4. Coralline algae	1 week
	5. Alumni refresher	1 week

The minutes of the meeting is at Annex 8.

Evaluation of Courses and Workplans

Evaluation of the training programmes and workshops is most essential. In any globalisation scheme the programmes have to meet two criteria: they have to have a global applicability while being capable of being adapted to the regional and sub-regional contexts. Flexibility is being introduced through the development of course modules which would enable variety through different course configurations. The courses should also, however, have applicability outside the IOI system. The Courses Development Committee consisting of representatives from the IOI as well as the non-IOI systems approves, evaluates and tests new courses. One such meeting was held on 28 April, 1994 and another on 4 December, 1994. The Executive Director and Honorary President carried out spot evaluations of three new courses in 1993 and 1994. Independent evaluation was carried out of a course in South Pacific in November, 1994.

IOI Latin America

A Cooperation Agreement between IOI and National University (UNA) has been agreed upon (Annex 9) and the UNA will provide the IOI Centre, Costa Rica with a core faculty of 7 persons (details at Annex 10).

The National University of Costa Rica (UNA) has eight faculties and two regional centres. It is 20 years old and has 15,000 students. UNA has, inter alia, faculties in:

- exact and natural sciences including marine biology;
- political economy;
- international relations.

It also has an oceanographic laboratory under the faculty of exact and natural sciences dealing with:

- ocean satellite applications;
- coastal marine pollution;
- coastal risk and threat;
- coastal information system;
- macrographic and sea state service;
- regional oceanographic information system.

Since March 10th, 1993 UNA is in the process of making major changes in its functions including, inter alia,

- reorientation of teaching, research and extension towards integrated, interdisciplinary programmes focused on sustainable development. They will be grouped under themes as per Agenda 21;
- academic integration in teaching, research and extension by consolidating them under one academic vice-president and three directors;
- establishment of a centre for oceanography and coastal management at Puntarenas on the Pacific Ocean. This centre will run programmes relating to ocean satellite applications, marine pollution, coastal information system, mangroves etc;
- introduction of courses on economic policy for sustainable development and on ecological economics.

UNA's functions fit in well with the activities of the UNDP Project. Since UNAs programmes and objectives are in harmony with the Project's objectives that would make for sustainability of the IOI Centre at Costa Rica. Besides UNA and six other universities from Central America are linked together to constitute the Confederation of Central American Universities (CSUCA). UNA is also linked to Toronto University, Canada; Wageningen University, Germany; Utrecht University, Canada; Wageningen University, Germany; Utrecht University, the Netherlands; the University for Peace, Costa Rica; the Earth

Council, Costa Rica; the University of the West Indies etc. This gives to UNA the necessary global outlook so necessary to the Project.

The setting up of IOI Latin America will enable IOI to develop courses in Spanish.

IOI Africa

An agreement has been signed between the IOI and the Oceanographic Research Institution of the Government of Senegal (CRODT) which provides, inter alia for:

- the establishment of a network in Dakar comprising CRODT (the oceanographic research institute of the Government of Senegal), the African Regional Centre for Technology, the University of Senegal, IDEP, and an Institute of Management;
- the provision by CRODT of the space for 20 participants and other infrastructure;
- CRODT providing the services of a Director and supporting staff.

The setting up of IOI Africa in CRODT, Dakar will enable the development of courses in French.

A copy of the agreement with CRODT is at Annex 11.

IOI China

An agreement between IOI and the State Oceanic Administration of the Peoples Republic of China has been entered into to establish IOI China. The MOU is at Annex 12.

IOI Japan

An agreement between IOI and the Yokohama City University has been entered into to establish IOI Japan. The establishment of IOI Japan will enable IOI to raise funds in Japan. The MOU is at Annex 13.

Establishment of an Independent World Commission for the Seas and Oceans.

Considering the basic importance of the world ocean in the development of human society, the maintenance of peace, and the health of the biosphere, IOI has proposed the establishment of an INDEPENDENT WORLD COMMISSION FOR THE SEAS AND OCEANS.

The oceans cover three-fourths of the surface of our planet. They are of crucial importance for the economy/ecology of the 21st century. The new order for the seas and oceans created by the United Nations Convention on the Law of the Sea, 1982, could be model for, and must be part of, a new global order capable of meeting the challenges of the next century.

The Commission's tasks would be:

- . to refocus world attention on the importance of sustainable ocean development and the law of the sea;
- . to monitor the ratification, implementation, and progressive development of the Convention, at national, regional and global levels;
- . to examine whether States, especially developing countries, are able to fulfil their duties, enjoy their rights and generate their benefits under the Convention, to analyze the difficulties they might encounter, and to propose ways and means to overcome them;
- . to monitor the implementation of Chapter 17 of Agenda 21, at national regional, and global levels and to observe the function of the Convention in this process (legal framework; peaceful settlement of disputes; enforcement);
- . to follow the development of regional programmes of cooperation and development in the marine sector and examine how they adjust to the new requirements of integrated ocean management and sustainable development;
- . to examine the role of the Law of the Sea and ocean development in the process of restructuring the United Nations system as a whole for the 21st century and elaborate proposals to strengthen this role.

The Commission would present an interim report to the United Nations General Assembly on the occasion of the 50th anniversary of the United Nations; a final report should be tabled in accordance with the decision taken by the Commission.

The Commission would be composed of not more than 30 eminent persons, both generalists and experts in various aspects of ocean affairs. All geographic regions would be equitably represented on the Commission. There would be 5-6 Vice Presidents who, together with the President, would function as an Executive Committee for the Commission.

The International Ocean Institute, with the appropriate staff complements, would serve as Secretariat for the Commission. With its headquarters in Malta and its operational centres in Malta (Mediterranean), Canada (North Atlantic), India (Indian Ocean), Fiji (South Pacific), Senegal (South Atlantic), Costa Rica (Caribbean), China (North Pacific), and Japan (Pacific, Sea of Japan), each one with its own field of high technical and scientific competence, the IOI is perfectly equipped to assume this function.

The work would be conducted through a series of regional hearings, organised by the Vice Presidents in cooperation with

the IOI operational centres and other appropriate institutions/organisations. These hearings would be followed by plenary meetings of the Commission.

Management

When IOI decided to extend its activities from the two centres it had - Halifax and Malta - to four new centres in Latin America, Africa, Indian Ocean and Oceania, it gave anxious thought to the management system it should adopt. This became even more urgent with the demand by other areas to set up IOI Centres in their regions - Japan, China, Qatar, etc. On the one hand the globalisation of IOI had its plus side by giving it an extended outreach. The flip side, of course, was the need to manage world-wide operations without losing creativity or bureaucratising IOI.

Administratively, both finance and post-modern organisation theory pointed to a decentralised system held together by an information flow network and a light coordinating headquarters. The traditional organisational design of a pyramidal structure with the headquarters "managing and controlling" the "lower echelons" would obviously not only lead to large overheads and stifle creativity but would also be out of step with the post-modern age which favours horizontal and flexible structures.

There were, however, some pitfalls to be avoided in such a design. One was to prevent the identity of IOI from being merged into that of the collaborating institutes. Another was to see that all the programmes, research etc., have the distinct multi-disciplinary and practical policy-oriented approach of IOI with quality not being diluted. Also the accounts, finances etc., had to be maintained in a manner that allowed the presentation of consolidated audited accounts of IOI. It was also necessary to keep administrative and overhead expenses low so that IOI did not price itself out of the market.

Keeping all the above factors in mind, it was decided to:

- decentralise the management system to autonomous operational centres which would be joint ventures between IOI and a collaborating institution (university, oceanographic research centre);
- provide coordination to the system by having representatives of the Centres meet with headquarters once or twice a year to:
 - . establish IOI's policy;
 - . jointly scrutinise the IOI work plan;
 - . jointly decide on courses development and research;
 - . establish an E-mail network.

The system has been in operation for a little over a year, a time too short to evaluate it. But some things have already become evident:

- (i) in the decentralised system the Centres have tended to be more creative and committed;
- (ii) different cultures and styles of functioning are being integrated into IOIs research and training;
- (iii) the "experts" base is being widened as more and more people are being utilised both for lecturing in IOI courses and in preparing course material. In fact in Madras almost 25 trainers have been "trained" locally while in Fiji there are about 10.

Staffing of IOI Centres

The staffing of all centres is uniform to the extent of having at least a director, his secretary and other staff available to the IOI Centre. In addition the Centres provide in-house approx. the following experts for IOI courses and research activities:

	<u>In-house faculty available to IOI</u>
IOI Madras	35
IOI South Pacific	15
IOI Africa	25 (1)
IOI Latin America	7 + 35 (2)
IOI China	NA
IOI Japan	NA

- Notes:**
- (1) CRODT has 15 staff and the other 10 are available from the other institutions, e.g., IDEP, Anta Chiop University etc.
 - (2) Costa Rica has a core faculty of 7 and another 35 available.

In addition to the in-house expertise, the IOI Centres also draw on a lot of outside expertise on a region-wise basis. This is helping to broaden the experts base trained in the IOI methodology of training. This helps to expand and internalise the IOI system in many institutions thus helping expand the expertise of developing countries in this regard.

FINANCIAL REPORT

The revised estimates of income and expenditure for 1994 as revised in July, 1994 were sent to CIDA earlier. Estimated income and expenditure figures as in December 1994 are now being submitted along with the figures of July 1994 (details at Attachment A). The main features are overleaf:

	As in July 1994	Estimates as in December 1994
	\$	\$
Income	3,773,253	3,231,036
Expenditure	3,820,000	3,256,286

The slight fall in income (which is also reflected in lower expenditure) is namely due to the following shortfalls.

Australian IDAB	\$ 136,000
Dutch Government	\$ 54,400
African Dev. Bank	\$ 136,000
UN University	\$ 136,000
Sasakawa Foundation	\$ 149,600

The Summary of 1995 budget of IOI as approved by the Board is at Attachment B (CA\$) and the full budget (US\$) is at Attachment C.

The broad position is as below:

	Estimates 1994 CA\$	Budget 1995 CA\$
Income	3,231,036	4,259,100
Expenditure	3,307,906	4,340,582

The main changes are:

Income

	Estimates 1994 CA\$	Budget CA\$
UNDP (less equipment)	829,600	1,068,552
French Government	-	52,428
Dutch Government	-	54,400
AIDAB	-	115,600
World Commission	-	136,000
Collaborating Institutions	858,976	1,266,704
PIM	544,400	680,000

Expenditure

Training	987,054	1,504,772
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Research	564,808	869,720
World Commission	-	136,000
PIM	544,400	680,000

Of the above, the following are "soft" items as they are not yet confirmed. Of course, if the money is not confirmed, expenditure will go down.

French Government	\$ 52,428
Dutch Government	\$ 54,400
Australian IDAB	\$ 115,600
World Commission	\$ 136,000

Expenditure for 1994 (in CA \$) submitted to CIDA -
P7990-0893-S44413
January-December, 1994

<u>Expenses</u>	Modified Budget for 1994 (July 1994) (\$)	Estimated* Expenditure for 1994 (Dec. 1994) (\$)
1. <u>Infrastructure</u>		
1.1 <u>Headquarters</u>		
Organisation Support	60,000	60,000
Policy Development and International Relations (including Prof. Borgese's salary and travel)	198,000	199,964
1.2 <u>Operational Centres</u>		
Malta	16,000	16,320
Canada-Halifax	140,500	133,641
Costa Rica	69,000	61,064
Fiji	91,000	94,384
India	78,500	74,392
Senegal	74,500	59,160
Total Infrastructure	----- 727,500	----- 698,925
2. <u>Activities</u>		
2.1 <u>Headquarters</u>		
Programme Implementation	338,000	253,044
Research	67,000	32,096
Publications (total)	51,000	24,198
Conferences - PIM		
Seminars	536,000	544,000

US\$ = 1.36 CA \$

* Could change after finalisation of accounts and audit.

		Modified Budget for 1994 (July 1994) (\$)	Estimated Expenditure for 1994 (Dec. 1994) (\$)
2.2 Regional Programmes			
Malta	-Research	-	-
	-Training	124,000	95,200
Halifax	-Research	226,000	180,000
	-Training	226,000	180,000
Costa Rica	-Research	6,500	14,960
	-Training	10,500	-
Fiji	-Research	193,000	194,752
	-Training	481,000	235,990
India	-Research	301,500	308,448
	-Training	431,000	407,048
Senegal	-Research	20,000	14,552
	-Training	107,000	68,816
Total Activities		2,892,500	2,373,064
Total Infrastructure & Activities		3,620,000	3,071,989
Payments relating to previous years		200,000	235,937
Total		3,820,000	3,307,926
Revenue			
U.N.D.P.		885,873	911,200
The Netherlands		54,000	-
African Dev. Bank		134,000	-
Commonwealth Sec.		124,138	125,990
Collaborating institutions		846,344	858,976
India (PIM XXII)		536,000	544,000
Donations		268,000	272,000
Other Sources		599,898	193,870
CIDA		325,000	325,000
Total		3,773,253	3,231,036

Expenditure for 1995 (in CA \$) submitted to CIDA -
P7990-0893-S44413
January-December, 1995

	Estima- tes* of Expenditure 1994 (\$)	Budget/ Work plan for 1995 (\$)
<u>Expenses</u>		
1. <u>Infrastructure</u>		
1.1 <u>Headquarters</u>		
Organisation Support	60,000	60,000
Policy Development and International Relations (including Prof. Borgese's salary and travel)	199,964	201,960
1.2 <u>Operational Centres</u>		
Malta (1993-10 months)	16,320	16,320
Canada-Halifax	133,641	129,588
Costa Rica	61,064	86,360
Fiji	94,384	89,080
India	74,392	70,720
Senegal	59,160	63,920
Total Infrastructure	----- 698,925	----- 717,948
2. <u>Activities</u>		
2.1 <u>Headquarters</u>		
Programme Implementation	253,044	458,520
Research (evaluation)	32,096	47,600
Publications (total)	24,158	32,640
Conferences - PIM	544,000	680,000
China course	-	108,800

US\$ = CAD\$ 1.36

* Could change after finalisation of accounts and audit.

	Estimates* 1994 (\$)	Budget/ Workplan 1995 (\$)
2.2 Regional Programmes		
Malta		
-Research	-	-
-Training	95,200	122,400
Halifax		
-Research	-	-
-Training	180,000	176,800
Costa Rica		
-Research	14,960	251,600
-Training	-	138,720
Fiji		
-Research	194,752	203,320
-Training	235,990	345,644
India		
-Research	308,448	115,600
-Training	407,048	492,728
Senegal		
-Research	14,552	251,600
-Training	68,816	119,680
Total Activities	2,373,064	3,545,652
Total Infrastructure & Activities	3,071,989	4,263,600
Payments relating to previous years	235,937	76,890
Total	3,307,926	4,340,490
Revenue		
U.N.D.P.	911,200	1,150,152
AIDAB	-	157,216
French Government	-	52,428
Commonwealth Sec.	125,990	122,400
Collaborating institutions	858,976	1,266,704
India (PIM XXII)	544,000	-
(PIM XXIII)	-	680,000
Donations	272,000	204,000
Other Sources	193,870	301,960
CIDA	325,000	325,000
Total	3,231,036	4,259,860

PROPOSED INCOME AND EXPENDITURE BUDGET FOR 1995

Summary Statement

	1994 Estimates	1995 Budget
<u>INCOME</u>	US \$	US \$
Grants and other income (schedule A)	2,374,762	3,131,250
Interest received	1,000	1,000
	-----	-----
	<u>2,375,762</u>	<u>3,132,250</u>
	-----	-----
 <u>ORDINARY EXPENDITURE</u>		
		Note 1
1. Establishment - personnel	423,175	453,250
2. Establishment - material	119,420	142,800
3. Publications	17,763	24,000
4. Research	415,300	639,500
5. Training programmes	725,775	1,106,450
6. Conferences, Seminars, Meetings	461,000	690,000
7. External Services	26,200	13,000
	-----	-----
	<u>2,188,633</u>	<u>3,069,000</u>
	-----	-----
 <u>CAPITAL EXPENDITURE</u>		
8. Purchase of equipment }	70,182	66,000
Purchase of furniture }		
	-----	-----
	<u>70,182</u>	<u>66,000</u>
	-----	-----
 TOTAL EXPENDITURE	 <u>2,258,815</u>	 <u>3,135,000</u>
	-----	-----
ANTICIPATED EXCESS OF INCOME OVER EXPENDITURE	116,947	(2,750)
OPERATING DEFICIT END OF 1993/4	173,483	56,538
	-----	-----
OPERATING DEFICIT END OF 1994/5	56,538	59,286

Note 1. Separate Expenditure Budgets for IOI Headquarters and for all the Operational Centres are attached as schedules B to H as follows:

Schedule	B	-	IOI Headquarters (Malta)
	C	-	IOI Halifax
	D	-	IOI Malta
	E	-	IOI Costa Rica
	F	-	IOI India
	G	-	IOI South Pacific
	H	-	IOI Senegal/Africa
	I	-	UNDP Expenditure

INCOME AND EXPENDITURE BUDGET FOR 1995

SCHEDULE A - Grants and other receipts

	1994 Estimates	1995 Budget
	US \$	US \$
Collaborating Institutions (in kind)	631,600	931,400
Commonwealth Secretariat	92,640	90,000
UNDP	610,000	785,700
UNDP Equipment	60,000	60,000
PIM XXII/PIM XXIII Local Committees	400,000	500,000
SASAKAWA Foundation	80,000	80,000
CIDA	242,000	240,000
Donations	200,000	150,000
UN University	-	-
Western Pacific Fisheries Commission	33,222	-
Australian Internl. Dev. Assist Bureau	-	115,600
Dutch Government	-	40,000
African Development Bank	-	-
UNECA	25,300	-
French Government	-	38,550
World Commission Committee	-	100,000
TOTAL	2,374,762	3,131,250

INCOME AND EXPENDITURE BUDGET FOR 1995

SCHEDULE B - Expenditure IOI Headquarters

		1994 Estimates	1995 Budget
EXPENDITURE		US \$	US \$
1.	Establishment (Personnel)		
1.1	Salaries	71,363	100,000
1.2	Allowances	9,000	10,000
1.3	Travel and transport	35,646	30,000
1.4	Accommodation/DSA	-	1,000
1.5	Human Resources Development	506	1,000
1.6	Miscellaneous	400	10,000
		-----	-----
		116,915	152,000
2.	Establishment (Material)		
2.1	Rent (in kind) (1)	6,000	6,000
2.1.1.	Rent	1,000	1,000
2.2	Electricity & Water(in kind)(1)	2,100	2,000
2.2.1.	Water & Electricity	226	400
2.3	Telephone, telefax, telex	19,484	15,000
2.4	Financial charges	3,000	3,000
2.5	Repairs and maintenance-premises	200	500
2.6	Repairs and maintenance-equipment	200	500
2.7	Stationery and postage	5,778	10,000
2.8	Miscellaneous	250	10,000
		-----	-----
		38,238	48,500
3.	Publications		
3.1	Editorial fees		
3.2	Publishing & Printing Charges	3,259	14,000
3.3	Miscellaneous	-	-
		-----	-----
		3,259	14,000
4.	Research	23,600	35,000
5.	Training Programmes Co-ordination		
5.4.	China course	-	80,000
		-----	-----
6.	Conferences, Seminars, Meetings		
6A	PIM XXI/PIMXXIII	400,000	500,000
6B	Mtgs of IOI Dir/V Chanc	60,000	60,000
6C	Mtgs of Board Members/ Planning Council	1,000	30,000
6D	World Commission Meetings	-	100,000
		-----	-----
		461,000	690,000
7.	External Services		
7A	Audit and Accountancy fees	2,700	3,000
7B	Legal fees	18,500	9,000

7C	Other professional services	-	1,000
7D	Library Networking (Consultant)	5,000	-
		<u>26,200</u>	<u>13,000</u>
8.	Capital Expenditure		
8.2	Equipment & furniture	6,182	2,000
8.3	Depreciation	3,000	3,000
		<u>678,394</u>	<u>1,037,500</u>
	TOTAL	678,394	1,037,500

Notes

1. Premises, electricity and water provided by University in kind and also included in income (LM 2000)
2. Quarterly Newsletter and Alumni Directory

INCOME AND EXPENDITURE BUDGET FOR 1995

SCHEDULE C - Expenditure IOI Halifax

	1994 Estimates	1995 Budget
EXPENDITURE		
	US \$	US \$
1. Establishment (Personnel)		
1.1 Salaries	88,101	84,000
1.3 Travel and transport	24,884	23,750
1.6 Miscellaneous	1,000	-
	-----	-----
	113,760	108,750
2. Establishment (Material)		
2.1 Rent in kind	7,752	7,400
2.2 Electricity and Water in kind	7,752	7,400
2.3 Telephone, telefax, telex	7,554	7,300
2.8 Miscellaneous (1)	26,124	24,700
	-----	-----
	49,182	46,800
3. Publications		
3.2 Publishing and Printing Charges	5,504	1,000
	-----	-----
	5,504	1,000
5. Training Programmes		
5B Halifax training prog. B93	132,353	130,000
	-----	-----
8. Capital Expenditure - Depreciation	1,000	1,000
	-----	-----
TOTAL	301,799	287,550
	-----	-----

NOTES

(Rate used US\$ = CAD 1.29 in
1994 and CAD 1.36 in 1995)

1. includes CAD 20,000 debt repayment

INCOME AND EXPENDITURE BUDGET FOR 1995

 SCHEDULE D - Expenditure IOI Malta

		1994 Estimates	1995 Budget
		US \$	US \$
EXPENDITURE			
1. Establishment (Personnel)			
1.1 Salaries	(in kind)	10,000	10,000
		-----	-----
2. Establishment - Material			
2.1 Rent	(in kind)	1,500	1,500
2.2 Electricity and water	(in kind)	500	500
		-----	-----
		2,000	2,000
5. Training Programmes			
5A Coastal Zone Management		70,000	90,000
		-----	-----
	TOTAL	82,000	102,000
		=====	=====

INCOME AND EXPENDITURE BUDGET FOR 1995

SCHEDULE E - Expenditure IOI Costa Rica

		1994 Estimates	1995 Budget
		US \$	US \$
EXPENDITURE			
1.	Establishment (Personnel)		
	1.1 Salaries (in kind)	35,000	35,000
	1.1.a Salaries (UNDP)	-	13,000
	1.2 Travel	5,400	5,000
		-----	-----
		40,400	53,000
2.	Establishment - Material (in kind)	4,500	10,500
		-----	-----
3.	Publications	1,000	3,000
		-----	-----
4.	Research - Course development	11,000	40,000
	Contribution in-kind		145,000

			185,000
5.	Training Programmes		102,000

	Subtotal	56,900	353,500
		-----	-----
CAPITAL EXPENDITURE			
8.	Equipment and Furniture	-	30,000
		-----	-----
	TOTAL	56,900	383,500
		-----	-----

INCOME AND EXPENDITURE BUDGET FOR 1995

 SCHEDULE F - Expenditure IOI India

		1994 Estimates	1995 Budget
		US \$	US \$
EXPENDITURE			
1.	Establishment (Personnel)		
	1.1 Salaries (in kind)	35,000	35,000
	1.2. Travel	5,700	3,000
		<hr/>	<hr/>
		40,700	38,000
2.	Establishment - Material (in kind)	14,000	14,000
		<hr/>	<hr/>
3.	Publications	4,500	4,000
		<hr/>	<hr/>
4.	Research - Course development	51,800	15,000
	Contribution in-kind	175,000	70,000
		(1)	(2)
		<hr/>	<hr/>
		226,800	85,000
5.	Training Programmes	189,300	122,300
	Contribution in-kind	110,000	240,000
		<hr/>	<hr/>
	Subtotal	585,300	503,300
		<hr/>	<hr/>
CAPITAL EXPENDITURE			
8.	Equipment and Furniture	30,000	-
		<hr/>	<hr/>
	TOTAL	615,300	503,300
		<hr/> <hr/>	<hr/> <hr/>

Note 1. \$150,000 is for course development and
\$ 25,000 in trained trainers

Note 2. \$ 45,000 is for course development and
\$ 25,000 is trained trainers

INCOME AND EXPENDITURE BUDGET FOR 1995

SCHEDULE G - Expenditure IOI South Pacific

		1994 Estimates	1995 Budget
		US \$	US \$
EXPENDITURE			
1. Establishment (Personnel)			
1.1 Salaries	(in kind)	36,000	31,000
1.1.a Salaries (UNDP)		20,000	20,000
1.3 Travel		6,400	-
1.4 Accomodation		-	-
		-----	-----
		62,400	51,000
2. Establishment - Material	(in kind)	7,000	14,500
		-----	-----
3. Publications		2,500	1,000
		-----	-----
4. Research - Course development		28,200	34,500
Contribution in-kind		115,000	115,000
		(1)	(2)
		-----	-----
		143,200	149,500
5. Training Programmes		173,522	254,150
7. External services		-----	-----
	Subtotal	388,622	470,150
		-----	-----
CAPITAL EXPENDITURE			
8. Equipment and Furniture		30,000	-
		-----	-----
	TOTAL	418,622	470,150
		-----	-----

Note 1. \$90,000 for course development and
\$25,000 as trained trainers

Note 2. \$ 90,000 for course development and
\$ 25,000 as trained trainers

INCOME AND EXPENDITURE BUDGET FOR 1995

 SCHEDULE H - Expenditure IOI Senegal

		1994 Estimates	1995 Budget
		US \$	US \$
EXPENDITURE			
1.	Establishment (Personnel)		
	1.1 Salaries (in kind)	35,000	35,000
	1.2 Travel	4,000	5,500
		<u>39,000</u>	<u>40,500</u>
2.	Establishment - Material (in kind)	4,500	6,500
		<u>4,500</u>	<u>6,500</u>
3.	Publications	1,000	1,000
		<u>1,000</u>	<u>1,000</u>
4.	Research - Course development	10,700	40,000
	Contribution in kind	-	145,000
			(2)
		<u>10,700</u>	<u>185,000</u>
5.	Training Programmes	50,600	88,000
		(1)	
	Subtotal	<u>105,800</u>	<u>321,000</u>
CAPITAL EXPENDITURE			
8.	Equipment and Furniture	-	30,000
		<u>-</u>	<u>30,000</u>
	TOTAL	<u><u>105,800</u></u>	<u><u>351,000</u></u>

(1) 25,300 contributed by ECA.

(2) \$ 120,000 for course development and
\$ 25,000 as trained trainers.

INCOME AND EXPENDITURE BUDGET FOR 1995

 SCHEDULE I - UNDP Expenditure

Budget 1995 ('000 US \$)

Item	HQ	Costa Rica	India	South Pacific	Africa	Total
1.1 Salaries	-	13.0	-	20.0	-	33.0
1.3 Travel & 1.4 DSA	105.0	5.0	3.0	-	5.5	118.5
3.2 Publishing 3.3 printing & miscellaneous	14.0	3.0	4.0	1.0	1.0	23.0
4. Research course develop. & training of trainers	-	53.0	20.0	45.5	48.0	166.5
5. Training programmes						
* courses	-	73.0	110.0	100.0	70.0	353.0
* Alumni	-	-	5.3	-	-	5.3
* leaders	-	16.0	2.0	7.0	10.0	35.0
7. Capital services- equipment	-	30.0	-	-	30.0	60.0
Total	119.0	193.0	144.3	173.5	164.5	794.3

ANNEXES TO CIDA REPORT
DECEMBER 1994

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Annexes

- Annex 1:** PPER
- Annex 2:** Minutes of Review Committee and of Vice Chancellors/Directors meeting held on 28 and 29 April, 1994
- Annex 3:** Report on programme of Addis Seminar
- Annex 4:** List of participants of Addis Seminar
- Annex 5:** List of participants of small islands course
- Annex 6:** Minutes of Vice Chancellors/Directors meeting held at Madras on 3 and 4 December, 1994
- Annex 7:** Minutes of Course Development Committee meeting held at Barbados on 29 April, 1994
- Annex 8:** Minutes of Courses Development meeting held at Madras on 4 December, 1994
- Annex 9:** Agreement with National University (UNA), Costa Rica
- Annex 10:** Core faculty of UNA provided for IOI Costa Rica
- Annex 11:** Agreement with CRODT, Senegal
- Annex 12:** MOU regarding IOI China
- Annex 13:** MOU regarding IOI Japan.
- Annex 14:** List of participants who attended PIM XXII in Madras, 4-8 December, 1994.
- Annex 15:** List of participants who attended courses in 1994.

ANNEX 1

INTERNATIONAL OCEAN INSTITUTE
UNDP Project Reference GLO/91/G33

Support for Regional Oceans Training Programme

PROJECT PERFORMANCE EVALUATION REPORT
28 January 1992 - 31 March, 1994

INTRODUCTION

The International Ocean Institute (IOI) submitted a project brief to the Global Environmental Facility providing an abbreviated description of a global project conceived in response to the need to train increasing numbers of mid-level civil servants from developing countries in marine resources management consistent with long-term sustainability. This was followed by a full blown project submitted to UNDP/OPS. The project proposed to extend and deepen the training programmes through the establishment of self-sufficient operational centres in Colombia, Fiji, India and Senegal.

The first and essential step in the development programme being to establish formal working relationships with the governments/institutions concerned, UNDP/OPS entered into a contract with IOI in the form of preparatory assistance for \$ 110,000 to secure these agreements and to refine further aspects of the project, such as region-specific training programmes (contract at Annex 1).

The obligations of IOI under the Contract included but were not limited to the following:

- Explore candidate sites for operational centres, discuss with governments, local authorities, regional and local institutions and centres for advanced learning and experts living in the region to confirm that the necessary conditions are present to establish a centre.
- Develop, negotiate, and formalize the agreements with the four host countries on the status, policy, strategy, and funding of each operational centres. These were to be a prerequisite for continuation of funding and activities.
- Develop a strategic plan for the establishment of a new operational centre for each of the planned sites.
- Develop agreements of cooperation and support with regional universities and other institutions of training and research.
- Appoint an operational centre director for each of the four operational centres. The directors to be executive and operating officers of the respective centres.
- Prepare the strategic plan for the establishment of the four new operational centres including (a) appointment of the regional advisory committee, and (b) development of a five-year plan of detailed activities for each centre.
- Finalize the project document, based on the draft dated 6 December 1991.

The outputs were expected to be:

- "agreements with governments of Fiji, India, Senegal and Colombia.
- agreements with a collaborating / cooperative scientific / educational institution in each of these countries.
- composition of centre-specific strategic and operating plans for each proposed operational centre.
- appointment of a centre director in each such operational centre in consultation with the host institution.
- appointment of the initial voluntary members of the operational centre advisory council, involving alumni in the region.
- composition of a global identity / communications strategy focused on funding sources and governments.
- a full and definitive version of the project document based on the draft dated 6 December 1991."

The contract for preparatory assistance was amended on 23 April 1993 (amended contract at Annex 2) in order to achieve a more equitable distribution of funds between the four centres and to redraft the Project document as under:

"a)	Consultancy fees	
	Travel	
	Office and Meeting Expenses	
	Miscellaneous Expenses	60,000
b)	Project Formulation Mission	27,506
c)	Consultative Meeting/Activities	
	i) India IOI Alumni Meeting	12,000
	ii) Meeting of Directors & Rectors	25,000
	iii) Quarterly Newsletter	5,000
d)	Policy Research - Survey of Policy Research Methods	10,000
e)	Submission Research Proposal	5,000

	<u>TOTAL</u>	144,506"

On 21 June, 1993 the contract was again amended to provide \$ 20,000 for the Sardinia workshop by deleting c(iii), d, and e above (amending letter at Annex 3).

During the preparatory period, the IOI had finalised agreements with the governments of Fiji, India and Colombia on the status, policy, strategy and funding of operational centres to be located in Suva, Madras and Bogota. An MOU had also been entered into with IDEP, an institute of UNECA, for establishing an operational centre at Dakar.

Centre directors were appointed for all the four centres and strategic plans developed for their establishment. Plans detailing multi-year activities for each of the four centres were also developed. Agreements with the collaborating institutions, viz., University of South Pacific, Indian Institute of Technology, Tadeo Lozano University and IDEP were also entered into. CVs of all professional people involved with the project were also collected for the Operational centres at Fiji, Madras and Bogota. A meeting of operational centre directors was also held at Malta from 17-18 May, 1993 along with representatives of UNOALOS and UNDP/OPS to refine the final plan (Minutes of the meeting at Annex 4).

On the basis of the above, IOI submitted a revised project document in June 1993. This was finalised after discussions with UNDP/OPS and UNDP/DGIP. A contract for the project for \$2,583,347 was entered into by UNDP/OPS with IOI with effect from 1 September, 1993. Flow of funds to the operational centres in India and the South Pacific started with the signing of the contract while funds for centres in Colombia and Senegal were dependent on approval by UNDP/OPS of their final operating plans (contract at Annex 5).

Project Implementation up to March 1994

The main objectives of the Project Document are to:

- set up four new self-sustaining operational centres in South Pacific, Asia, Africa and Latin America;
- revise and update the existing programmes of IOI, as well as develop new ones, to bring them in line with the latest developments in instruction technologies and for entering into niche areas like courses for planners, policy makers, leaders etc.

To this end the project has two components: Institutional Networking and Training Programmes.

Networking

Institutional Networking is dependent on regular meetings of directors/vice chancellors, information dissemination and programme development. The directors/vice chancellors meetings are attended by representatives of UNDP and have recently been extended to include meetings of the courses development committee (which are to be held back to back with the directors/vice chancellors meeting) so as to cut down on costs.

In the field of information dissemination an alumni directory, a quarterly newsletter and some PR brochures have been issued. The directors meetings have been very useful to the development of the project as would be evident from the minutes appended at Annex 6.

These meetings have helped in activating both formal and informal networks linking the different centres and the headquarters in a synergistic manner. There has been division of work in the network so as to build on the differing strengths of the centres and also to link the IOI system with the broader UN and non-UN systems.

Links have been established by USP with IIT Madras in the sphere of technical training so that a combined B Tech programme would be conducted by the two Universities. This was made possible through the links that IOI Fiji had with IOI India.

Programme Development

In the area of programme development there has been significant advance in attracting new sources of funding: from Japan, Australia, Colombia, India and the South Pacific. Sasakawa Foundation has agreed to fund one programme in Fiji and another in Madras; it will also consider an endowment of \$ 2.5 million; United Nations University has budgeted \$ 50,000 for joint projects with IOI and is considering budgeting \$ 50,000 for scholarships; Australian International Development Assistance Bureau (AIDAB) will fund a joint programme taken up by IOI South Pacific and the Australian Maritime College, Tasmania; the IOI Colombia is raising funds for IOI Colombia thereby releasing UNDP funds for another centre in Latin America (to be located in Costa Rica); the Government of India has decided to fund two courses - one for policy makers and another for coastal managers - for Indian participants; in the South Pacific WPFCC, a regional organisation, is giving \$ 33,000 to IOI South Pacific for a workshop on customary tenure (reports of programme development missions at Annex 7 and 8).

Training Programmes

Training Programmes account for the major funding in the Project Document (over 80%). The main instrumentalities to keep the programme on course are:

- the meetings of the courses development committee
- the provision of adequate course materials
- training of trainers
- proper evaluation to ensure the quality of the courses.

The courses development committee, which includes UNDP representatives, has been doing a good job of keeping the courses on track (minutes at Annex 9). 9 course developers were trained at a workshop held in Geneva from 22-26 November (list of participants at Annex 10). The workshop was conducted by Mr. Michel Couroux of UNCTAD and was attended by Mr. Philip Reynolds of UNDP and Ms. Stella Maris Vallejo of UN. The Executive Director and the Honorary Chairman have also evaluated the two new courses held in Madras and China (reports at Annexes 11 & 12).

During 1993, two trainers (IOI India) and nine course developers (Honorary Chairman, Executive Director, Vice Chancellor IIT Madras, Directors of IOI India and South Pacific, Head of Training IDEP, Senegal and 3 others from Fiji) went through the training of trainers programme. This would provide a very good base for expanding the trainers network of IOI and developing more course developers.

During 1993 the following training programmes were conducted:

Name of Course	Conducted by whom and when		Revised/New
1. Alumni Refresher	IOI Madras	4-7 March	New
2. Leaders Sensitising workshop	IOI Madras	10 December	New
3. Coastal Zone Management as a Sustainable Process	IOI Madras	11 Oct-17 Dec.	Revised C
4. For Managers and Planners of the Enterprise	IOI HQ	04 Oct-05 Nov.	Revised A
5. Leaders Sensitising Workshop	IOI South Pac.	17 Nov.	New

Work plans for Costa Rica and Senegal/Africa

As already mentioned, IOI Colombia has decided to raise its own money so that UNDP funds can be applied to another Latin American operational centre. The first three months of 1994 have been utilised to establish a workplan acceptable to UNDP. A draft workplan has been worked out and is under discussion with the Costa Rican authorities. In the initial stages IOI Costa Rica will conduct programmes developed by the IOI network. From 1995 it should be in a position to conduct programmes in Spanish.

The Work Plan for Senegal has already been submitted to UNDP. IDEP, Dakar, will take some time to organise itself and get equipped with appropriate personnel. In the first instance, therefore, a programme on law of the sea was conducted by IOI Headquarters at Addis Ababa in association with UNECA from 28 March to 2 April, 1994. Soon IDEP, or if not IDEP some other African Institution, should be ready to take over the full responsibility.

The details of work done, along with budget lines, is as under:

Vice Chancellors/Directors/Courses Development Meetings

1.1.2. a. It is necessary to closely monitor the project as it develops and evolves through the life of the project since changes are inevitable with the project covering areas not yet fully developed. So two meetings of the President, Executive Director, and representatives of the operational centres, and of UNDP, were held to monitor the implementation of the centre operational plans, to guide future development, to approve courses and lay down guidelines for the preparation of training modules during 1994 (Annexes 6 and 9).

The main decisions/guidelines emerging from these meetings related, inter alia, to:

- the establishment of mechanisms for proper reporting, monitoring and evaluation of the project
- the manner in which workplans and budgets are to be prepared by each centre
- the laying down of relevant physical targets
- the manner in which IOI was to be projected to donors and the general public
- the raising of non-UNDP funds both globally and locally
- the procedure for approving courses/modules.

Administrative Support - South Pacific

1.1.2. b. The operational centres in the South Pacific and Latin America need administrative support. In South Pacific a coordinator was appointed to assist the Director in day to day work. His CV is at Annex 13.

Library Networking

1.1.2. c. To integrate the knowledge base of the IOI system it was decided to develop software so as to link all the libraries of the collaborating institutions through E-mail. IOI Madras was responsible for the project and they have come up with an interim system which is being tested by the other centres. The project is expected to be completed and in place by July, 1994. Details at Annex 14.

Information Dissemination

1.1.3.a For implementation of the IOI institutional identity program per the strategy already developed, and as per regional programs developed by the operational centres, a number of brochures were brought out in 1993.

1.1.3.b Information was also disseminated by establishing regular links with IOI alumni in India and Malaysia.

The alumni data base was also consolidated and verified while a survey has been made of the IOI alumni's perceptions of the usefulness of IOI programmes.

An "alumni directory" has been prepared and disseminated to all alumni.

A single, dedicated and periodic (quarterly) alumni newsletter, following Issue #1 in November 1992, has been developed and issued in December, 1993.

Programme Development

1.1.4. Development of non-UNDP financial support for operational centres was considered very necessary. A lot of progress was made in 1993 as already described (Annexes 7 and 8).

Output 1.2 - Institutional Links with Associated Institutions

A key element in the IOI strategy is to reinforce existing institutional capabilities through providing active networks for ocean affairs. To this end MOUs have been signed with the United Nations University, Tokyo, with IOC/UNESCO, Paris and the International Centre for Public Enterprises, Ljubljana. More such MOUs are expected to be signed in 1994.

Output 2.1 - Current, Revised and New Programmes.**Development of Research Programme**

2.1.1.a. Policy research on a regional basis is essential if IOI regional centres are to be relevant to the perceived needs of the region. A preliminary survey of research possibilities has been made but more work needs to be done to link them with ongoing regional research. It was decided, therefore that the operational Centres should discuss this matter with other institutions in the region and come up with detailed proposals.

Curriculum Development

2.1.2. Current course programmes need to be adapted and translated for mid-level civil servants, private sector employees and persons from NGOs. The programmes need to take note of the new instructional technologies, especially distance learning, as well as develop instruction material in new concepts like sustainable development, and the impacts of the third industrial revolution, the growing service economy etc. IOI is in the process of developing some new courses for entering into niche areas like courses for planners, advanced courses for those with a fundamental marine knowledge base, coastal management as a sustainable process, special focus on islands and so on.

Course Development

2.1.2.a. In regional and international training programmes a major expense is the cost of bringing trainees to the course. This generally precludes short courses, especially in a regional context, since the costs of travel tend to make the course cost ineffective. The development of self-contained modules which could be used to run the course in sub-regions, would be cost effective. Besides the modules could also be used to configure different types of courses. It has been decided, therefore to develop training modules region-wise in such a manner as to also have global relevance. The development of these modules would in the very process of development also produce regional resource personnel. The selection of modules and approval of courses has been done by a Committee headed by the Honorary President. The modules/courses being developed are as below:

NAME OF COURSE	EXECUTING PARTY
Course for leaders in Africa	IOI Headquarters
Course for decision makers on ocean policy (1 week)	IOI Madras - Prof. V.S.Raju (Centre Dir.)

NAME OF COURSE	EXECUTING PARTY
Course on coastal zone management (5 weeks)	IOI Madras - Prof. V.S.Raju (Centre Dir.)
Management and Development of fisheries	IOI South Pacific - Prof. Robin South (Centre Dir.)
Management Issues in Environmental and Resource Economics	IOI South Pacific - Prof. Robin South (Centre Dir.)

Training of Trainers

2.1.2.b. The participants in IOI training programmes are generally middle level executives involved with ocean policy and organisation of ocean development programmes, environmental issues etc., ocean scientists and engineers and representatives of non-governmental organisations. Their academic background, and professional experience, is varied while the subjects covered in the training programmes are very extensive in scope.

Lecturing in IOI training programmes, is very different from normal sectorally oriented courses and there exists the possibility of a mis-match between the expertise available and the training situation.

The training of trainers scheme was used to orient subject matter/sectoral specialists in how to lecture to a multi-cultural, multi-disciplinary group. Also for developing resource persons in pedagogy and course development techniques based on the TRAIN-X system.

Courses

2.1.3.a. The project provides the seed funding for testing, evaluating and revising the existing training programmes of IOI. It also provides the seed funding for testing, evaluating and revising four new courses, of which the syllabus for two, namely, the islands course and a course for policy makers have already been developed and will be tested in 1994. Two other courses/workshops for decision makers (a 1-week course and 1-day workshop) would also be tested in 1994. Courses relevant to Africa, the Caribbean and Latin America would be developed in 1994 and tested in 1994/1995.

Courses for Alumni

2.1.3.b. The importance of IOI alumni has been highlighted (para 1.1.3.b). Special courses were run for them so as to update their knowledge bases and reinforce their links with IOI. One such programme was run by IOI Madras in March 1993. This would form the base for future programmes.

Workshops for Decision Makers

2.1.3.c. Sensitising of leaders and decision makers is a necessary pre-requisite for the success of the training efforts aimed at mid-level public servants. Workshops to this end were organised in India and Fiji.

Evaluation of Courses and Workshops

2.1.4. Evaluation of the training programmes and workshops is most essential. In any globalisation scheme the programmes have to meet two criteria: they have to have a global applicability while being capable of being adapted to the regional and sub-regional contexts. Flexibility is being introduced through the development of course modules which would enable variety through different course configurations. The courses should also, however, have applicability outside the IOI system. The Courses Development Committee consisting of representatives from the IOI as well as the non-IOI systems would approve, evaluate and test new courses. One such meeting was held in 1993. The Executive Director and Honorary President carried out spot evaluations of two new courses in 1993.

Implementation by IOI's India and South Pacific

The achievements of the two IOI Centres have been given above by budget line. Details may be seen at Annexes 15 and 16.

Evaluation of Performance

The project can be conceived as being in two phases: the preparatory phase from January, 1992 - June, 1993 and the implementation phase from September, 1993 - March, 1994.

The preparatory phase was initially programmed to be completed in a period of six months, that is, by July, 1992. In the event this proved to be based on somewhat optimistic assumptions. Also the project document as submitted in December, 1992 was found to need adjustment as between the centres and this coupled with the fact that a new Executive Director had taken over meant a further delay. This delay was, however, put to good use. During the extended preparatory phase syllabi were developed for courses on:

- coastal zone management as a sustainable process
- coastal zone management with focus on small islands

Also an alumni refresher course was held in Madras, India and this gave opportunity for generating ideas through interaction with IOI alumni, who had not only intimate knowledge of IOI courses but also their relevance to the broader outside world.

The extended preparatory phase, therefore, meant that in the implementation phase the two centres of IOI, viz. India and South Pacific were off and running leading to considerable progress being achieved by these centres in the last seven months in:

- conducting programmes
- training trainers in pedagogy and the methodology of lecturing to a multi-disciplinary multi-cultural group
- initiating the process of developing course modules of relevance to both the IOI and non-IOI systems.

There were delays, however, in establishing the centres in Latin America and Africa from the project funds (IOI Colombia is going to raise its own funds). In Africa, IDEP needed time to organise itself so that it could initiate the process towards attaining sustainability. IOI Costa Rica, however, is well on the way to being established so that ultimately IOI will have two centres in Latin America - one in Colombia and one in Costa Rica. The delay in setting up these centres may, therefore, ultimately prove to be a blessing in disguise.

ANNEX 2

**Third Meeting of Representatives of the
Operational Centres of IOI held at
Barbados
on
28 and 29 April, 1994**

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Prof. E. Robin South, IOI South Pacific
M.Sc Lorena San Roman, UNA Costa Rica
M.Sc Alexandro Cuttiriez, UNA Costa Rica
Ms. Anita Coady, Editor Across the Oceans
Mr. Seremaia Kalokalo Tuqiri, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of Agenda

The circulated agenda was adopted.

**Item 2: Tripartite review of the UNDP Project by IOI/UNDP
(OPS)/UNDP (DGIP) - Project Performance Evaluation
Report or the PPER**

The Committee had before it the Project Performance Evaluation Report (PPER) prepared by the Executive Director, IOI and covering the period 28 January, 1992 to 31 March, 1994. This covered both the Preparatory Phase (28 January, 1992- 31 August, 1993) and the Project Phase (1 September, 1993-31 March, 1994).

The Committee noted that it was required to assess and evaluate the progress of research, policy and training objectives, networking and achievement of Project objectives and outputs.

There was wideranging discussion on all the issues and a number of questions were asked by the UNDP representative especially with regard to the shortfall in courses and outputs compared to what was outlined in the Project Document.

The conclusions and recommendations of the Committee are as below:

Preparatory Phase

It was the view of the Committee that the Preparatory Phase had produced mixed results. While some of the expected outputs like finalising agreements with the host governments and institutions, of appointing centre directors for the four centres etc. had been achieved, the finalised multi-year plans for IOI Latin American

and IOI Africa as finalised had not been to the satisfaction of UNDP. So in the contract entered into between UNDP and IOI, flow of funds to the operational centres in India and South Pacific started from 1 September, 1993 while funds for IOI Latin American and IOI Africa were contingent on UNDP approving their revised work plans.

The Preparatory Phase, which was delayed, however resulted in syllabi being developed for two courses, namely, coastal zone management as a sustainable process and coastal zone management with focus on small islands. These have been thereafter conducted and are in the process of validation.

Workplans for IOI Latin America and IOI Africa

The Committee went into the draft workplan of IOI Costa Rica as presented by the representatives of the Universidad Nacional (UNA) and was of the view that the workplan needed to be firmed up by the Executive Director who was visiting Costa Rica soon especially regarding:

- Spanish course development work, its elements and time scheduling;
- the specific courses proposed to be run by IOI Costa Rica with scheduling year-wise, outputs by trainee-weeks etc.

The Committee also noted that the Executive Director would be visiting Dakar to revise and firm up the Work Plan for IOI Africa so as to lead to sustainability. In case this was not possible, he would explore other candidate sites like Abidjan in the Cote d'Ivoire.

Networking

The Committee noted that the outputs and objectives regarding networking as per the Project Document had, by and large, been achieved. There had been two meetings of directors/vice chancellors, one meeting of the courses development committee, dissemination of an alumni directory, issue of the quarterly newsletter, issue of PR brochures, and the development of software by IOI/IIT Madras by which the libraries of the IOI System can be linked by E-Mail.

The Committee further noted that there had been MOUs/networking arrangements with the University of Rhode Island, ICPE Ljubljana, IOC/UNESCO, Paris and UNU, Tokyo. There had also been twinning between IIT Madras and USP South Pacific regarding grant of B Tech degrees. These outputs are a spin-off of the activities of IOI regarding programme development and were not an expected output as per the Project Document.

Links with UNDP/UNEP

The Committee noted that links with UNDP were both close and interactive. UNDP representatives from headquarters attended the six monthly Directors and VC's meeting while UNDP Res Reps in Fiji, India and Costa Rica were closely involved at the regional level.

The Committee noted the need to link up the Centres with UNEP's Regional Seas Programme and was of the view that steps needed to be taken in this regard.

Non-UNDP financial support

The Committee noted that there had been significant progress in attracting new sources of funding: from Japan, Australia, India, France and some South Pacific organisations. Sasakawa Foundation had funded a programme in China in 1993 and may fund two in 1994 - in Fiji and Madras. The Government of India is funding a course for policy makers and the Government of Malaysia an advanced course for alumni and others. In the South Pacific, WPFCC, a regional organisation and the Government of France are contributing about \$ 50,000 to a customary tenure workshop, while AIDAB is considering funding a course on Ports and Shipping in collaboration with the Australian Maritime College, Tasmania.

The Committee further noted that due to the efforts of the Honorary Chairman of IOI, and UNDP/DGIP the Ocean Resources Programme of the university of South Pacific was likely to get US\$ 10 million from Japan. This would considerably aid IOI South Pacific by augmenting the infrastructure likely to be available to it.

Programme Development

The Committee was informed that there was a growing demand for more IOI Centres. IOI Japan was likely to be in place by the end of 1994 as was the case with IOI China. Both would be locally funded. For the Arabic speaking areas IOI Qatar was in the process of being established with all costs to be met by the Government of Qatar. During the recently concluded leaders workshop in Addis Ababa, there was a demand for three centres for languages other than French, namely, Arabic, Portugese and English. The feasibility for setting up these centres would be explored by IOI in association with UNECA. The initial responses from the Government of Kenya (English centre) and Oporto University (Portugese centre) have been positive.

TRAINING PROGRAMME

The Committee noted that the strategic approach as outlined in the Project Document was to improve the ability of developing countries to manage their ocean resources within the context of

sustainable development. This was to be done by the operational centres serving as vehicles for focusing attention on emerging issues, providing training on the management of the coastal zone and the exclusive economic zone and initiating research programmes to deal with local/regional concerns. This was to be achieved by revising and updating the existing programmes of IOI, as well as developing new ones, to bring them in line with the latest developments in instruction technologies and to developing new courses for planners, policy makers, leaders, IOI alumni and small islands.

The Committee further noted that the main instrumentalities to keep the programme on course are:

- meetings of the courses development committee;
- training of course developers;
- training of trainers;
- evaluation to ensure quality.

Instrumentalities

The Committee noted with satisfaction that the meetings of the courses development committee (which included UNDP representatives) had done a good job of keeping the courses on track. 9 course developers from IOI had been sensitised to the TRAIN-X System in a one week's workshop conducted by Mr. Michel Couroux of UNCTAD and a noted expert on the TRAIN-X System. IOI was also going to be an integral link in the TRAIN SEA COAST System now under development. And during 1993, two trainers (IOI India) went through the training of trainers programme and they along with the 9 course developers would provide a good base for expanding the trainers network of IOI and for linking it with TRAIN SEA COAST.

The Committee was informed by the UNDP representative that a TRAIN-SEA COAST meeting would be held in New York in June and a two-week TRAIN-SEA COAST Workshop for trainers would be held in September. The Committee was of the view that one trainer from each centre should attend the TRAIN-SEA COAST Workshop.

The Committee further noted that the present evaluation system of IOI was composed of three elements, namely,

- feedback from participants;
- feedback from the Course Director and the faculty of the programme;
- internal evaluation by the Honorary Chairman and Executive Director.

The Committee was of the view that the evaluation needed to be supplemented by evaluations by experts external to the IOI System as that would add to the conduct and credibility of the courses. In this context the Committee welcomed the suggestion of the UNDP representative to have an independent evaluation of the Project in early 1995.

Revision of IOI courses and new courses

The Committee noted that the following training programmes were conducted in 1993/1994:

Name of course	Conducted by whom and when	Revised/New	Participants
Alumni Refresher	IOI Madras 4-7 March, 1993	New	23
Coastal Zone Management as a Sustainable Process	IOI Madras 11 Oct-17 Dec., 1993	Revised C	18
For Managers and Planners of the Enterprise	IOI HQ 04 Oct-05 Nov., 1993	Revised A	13
Leaders Sensitising Workshop	IOI South Pac. 17 Nov., 1993	New	18
Leaders Sensitising Seminar	IOI HQ/UNECA 18 Mar-02 April., 1994	New	49

The Committee further noted that the following new courses were to be held in 1994:

- coastal zone management: focus on small islands (IOI Malta) - 18 April-10 June, 1994;
- course for policy makers (IOI Madras) - 1 week

The Committee was informed that the course for planners on EEZ and coastal management would be developed in consultation with IOI Africa and would be conducted in 1994/1995 depending on the scheduling.

Training outputs

The Committee noted that the position regarding projected training outputs and requirements of funds, and actual achievements were as below:

Trainee Outputs and Budgeted Funds - 1993

Centre	Project document (6 mos.)		Actual achievement (4 mos.)	
	Funds budgeted (\$)	Projected Output (trainee weeks)	Funds expended (\$)	Output (trainee weeks)
South Pacific	50,000	25	24,301	13 (1)
Caribbean	50,000	100	-	-
Indian Ocean	76,000	242	71,436	203 (2)
Africa	-	-	-	-

Notes:

- (1) 17 trainees in a one-day seminar (3 t.w.)
1 trainee trained in IOI Madras CZM course for 10 weeks (10 t.w)
- (2) 18 trainees in a 10-week CZM course (180 t.w.)
23 trainees in a 1-week alumni course (23 t.w.)

The Committee noted that the shortfall in trainee output and courses was due to:

- delay of 2 months in starting the project by 2 months;
- cancellation of a leaders programme by IOI Madras due to the untimely death of Chief Minister of Gujrat, a State in India.

The Committee further noted that the funds actually expended were lower than originally budgeted. Also 65 trainee weeks were accounted by the training programme for planners and managers of the Enterprise held in China in October-November, 1993.

Item 3: Workplans, centre-wise for 1995

The Committee had before it the Work Plan for IOI South Pacific for 1995. After considering and reviewing the Work Plan, the Committee recommended that IOI South Pacific augment its course development activity by taking up some more courses for development. The Committee was of the view that all Work Plans for 1995 should be finalised by October 1994 and should give details, inter alia, of name of the course, number of participants, duration of course, where it would be held, percentage overhead, if any, how it made for future self sufficiency and sustainability etc.

The Committee noted that IOI Madras would be submitting its Work Plan for 1995 shortly while the Costa Rica and Africa Work Plans would also be finalised soon.

The Committee also approved the collaboration of IOI South Pacific with the Women and Fisheries Network, an NGO located in Fiji and was of the view that joint research projects with the Women and Fisheries Network could be worked out and submitted for funding to various donors.

Item 4: Development of research programmes

The Committee noted that though a preliminary survey of research possibilities had been made more work needed to be done to link up the IOI research proposals with ongoing regional research so as to avoid duplication. The Committee was of the view that research proposals should be got ready by October, 1994 by all the centres so that they could be considered at its next meeting.

Item 5: Suggestions for consultancies

There was detailed discussion on this issues. The general consensus was that:

- the term "consultancy" was inappropriate and should be replaced by the term "professional services";
- it should be made clear to the host institution that the IOI Centre was not in competition with it.

The Committee came to the following conclusions:

- the term "professional services" to be offered by IOI Centres should be confined to the strengths of IOI in the fields of policy research, policy advice, training of multi-disciplinary and heterogenous groups, sensitisation of policy makers etc.;
- the host institution/government should, as far as possible, be associated in the proposed activity;
- the "professional service" should be harmonised with the host institutes activities so as to be complementary and supplemental and not substitutive.

Item 6: World Commission for the Oceans

The Honorary Chairman informed the Committee of the proposal for a World Commission for the Oceans. The IOI Regional Centres would be expected to act as Secretariats for the World Commission for the Oceans for their respective regions.

The meeting ended with a vote of thanks to the Chair.

Dr. Krishan Saigal
Executive Director

ANNEX 3

**Report of a Regional Leadership Seminar
on Marine Ocean Affairs in Africa**

held at

Addis Ababa, Ethiopia

from

28 March - 2 April, 1994

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INTRODUCTION

The Regional Leadership Seminar on Marine and Ocean Affairs in Africa was the first of its kind to be organised by a United Nations Regional Commission. It was held at the Headquarters of the United Nations Economic Commission for Africa, Addis Ababa, Ethiopia from 28 March to 2 April, 1994.

The participants came from 26 countries (1) and 8 international, intergovernmental and non-governmental organisations (2). In addition 44 members of the Secretariat of the Economic Commission for Africa also participated.

The Seminar on marine and ocean affairs was conceived as being composed of 20 issue areas which fell broadly into 5 themes:

1. United Nations Convention on the Law of the Sea:
 - . historical and political contexts
 - . highlights
 - . UNCLOS, UNCED and the future of the United Nations.
2. Economics and Environment: Sustainable Development of Living and Nonliving Resources:
 - . new economic theories and concepts
 - . managerial implications.
3. Science and Technology:
 - . institutional and managerial implications
 - . regional cooperation.
4. Integrated Ocean Policy:
 - . evolution of an institutional framework
 - . manpower and skill requirements.

- (1). The seminar was attended by representatives from the following 26 countries: Algeria, Angola, Cameroon, Cape Verde, Cote d'Ivoire, Djibouti, Egypt, Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Libyan Arab Jamahiriya, Mauritius, Mozambique, Namibia, Rwanda, Senegal, Sierra Leone, Sudan, Tanzania, Uganda, Zambia, Zimbabwe.
- (2). The following international, intergovernmental and nongovernmental organisations attended the seminar: OAU, League of Arab States, UNESCO, UNDP, UNIDO, UNICEF, IOI and Yokohama City University, Japan.

5. Africa, Law of the Sea and Ocean Development:

- . national, subregional and regional implications
- . future plan of action.

The object of the Seminar was to sensitize African policy makers to the opportunities available to their countries after the coming into force of the United Nations Convention on the Law of the Sea, 1982 with effect from the 16 November, 1994.

The UN Convention on the Law of the Sea extends considerably the area available to African states for surveying and exploiting for natural resources, like food, energy and raw materials. Africa, as a continent, is totally surrounded by seas and oceans. To exploit the vast potential as represented by this huge water body, African states need to build up and/or augment their capacities in the shape of institutions, technology and manpower.

During the seminar discussions it emerged that most African policy makers were aware of the importance, opportunities and challenges posed by the Law of the Sea Convention. However, constraints existed in terms of technology, finance and trained manpower which acted as an inhibiting factor in assessing and exploiting marine resources. The Seminar stressed the need for the development of appropriate scientific and technological infrastructure so as to be able to provide quantitative appraisal of marine resources, forecast future trends and introduce systems for predicting the manner in which the natural and dynamic ocean system behaved.

The Seminar also considered it important to have proper management of the coastal zone, which was an important interface between human uses, land and the sea. The Seminar was of the view that a distinction had to be drawn between "coastal zone management" (CZM) and "coastline management".

The latter, that is, coastline management was only a part of CZM. CZM dealt with the coastal zone the dimensions of which, both parallel and perpendicular to the coastline, needed to be determined site-specifically for each project. Outer landward limits of the coastal zone could be the watershed or climatic boundary while seaward it would extend to the outer limit of the exclusive economic zone (EEZ). In the context of Africa the extension of the land boundary to the watershed would require cooperation between coastal and landlocked states especially in the context of sustainable development and the need to preserve the integrity of the ecosystem. The vast area that such an ecological definition would require may, however, have to be modified on a project by project basis so as to avoid the complexity and problems likely to be posed by multiple systems of governance.

The vast changes that would result in the geopolitical configuration of both coastal and landlocked states due to the coming into force of the Convention on the Law of the Sea had to be matched by appropriate institutional changes at the national, regional and global levels. This would require restructuring not only of the United Nations System, which is under way, but also of the national systems of governance. Besides the restructuring necessary in the United Nations had to be appropriately reflected also at the regional levels - through the appropriate restructuring of the Regional UN Commissions and/or of the Regional Seas Programmes of UNEP.

At the national level, integrated policies needed to be formulated, appropriate legislation adopted and coordinating mechanisms for marine affairs established. This was necessary if the exploration and exploitation of ocean resources, a complex task in the constantly changing, dynamic and three-dimensional marine environment, of ocean resources was to be successfully accomplished.

The question of regional cooperation in resource surveys, technological development, scientific assessment, education and training also merits special attention.

The strategy and programme of action recommended by the Seminar for African States and the manner in which it devoted attention to the above crucial matters is detailed in the following pages.

I. SUMMARY OF OPENING STATEMENTS

The Seminar was opened by Mr. Layashi Yaker, United Nations Under Secretary General and Executive Secretary of ECA. Professor Elizabeth Mann Borgese, Chairman of the International Ocean Institute also made a statement at the opening ceremony which was chaired by Hon. Joseph Warioba, former Prime Minister of Tanzania.

Mr. Layashi Yaker welcomed all participants and pointed out that the UNECA took pride in taking a lead-role in convening and organizing such a seminar in Africa. The organization of this forum, he added, was a testimony to the commitment and determination of the UNECA to assist the African countries to enhance their capacities in the field of ocean affairs for the benefit of their people.

The UNECA Executive Secretary expressed his deep appreciation for the excellent cooperation, collaboration and substantive contribution from the Headquarters of the International Ocean Institute and from its operational centres at Dakar and Halifax. He particularly thanked Professor Elizabeth Mann Borgese, Chairman of IOI, for her special interest, initiative and drive which greatly contributed to the successful organization of the seminar. He also expressed his gratitude to all the UN Agencies, intergovernmental and non-governmental organizations for sending representatives to the seminar. He thanked the invited resource persons who in spite of their busy schedule, had accepted the UNECA invitation to attend the seminar.

Mr. Yaker noted that the timing of the seminar was crucial because of the worldwide recognition of the potential contribution of ocean resources toward poverty alleviation. Besides the United Nations Conference on Environment and Development held in Rio in 1992 had stressed the rational use and development of ocean resources. He further added that the seminar was timely in view of the imminent entry into force of the UN Convention on the Law of the Sea in November this year.

Focusing on Africa, the UNECA Executive Secretary mentioned that the continent was surrounded by oceans and seas, with abundant resources both living and non-living, the development of which required scientific knowledge, technological capacity and management skills. But the African countries, lacking these elements, were not able to exploit these resources which were being exploited by non-African countries.

Speaking about the role of the UNECA in the field of marine affairs, Mr. Yaker indicated that for a period over ten years, the UNECA in collaboration with other UN agencies carried out activities aimed at interpreting the UN Convention on the Law of the Sea, and enhancing the awareness of the opportunities, challenges and benefits of the said Convention.

The UNECA Executive Secretary further noted of the 61 countries, which had so far ratified the Convention, 27 were from Africa.

Finally, the UNECA Executive Secretary cited the objectives of the seminar and pointed out that he expected this seminar to be a spring-board for setting in motion the process of ocean resources development in Africa. The seminar should set clear guidelines for policies and strategies for the development of these resources in Africa and formulate a programme of action for ocean development. He concluded by stating that it was imperative for Africa to develop its capabilities for exploration, optimum exploitation, sustainable development and management of the ocean resources for the benefit of its people. He urged developed countries and the United Nations Agencies to assist the African countries in developing their ocean resources by actively providing them with scientific research, information and other support.

Professor Elizabeth Mann Borgese, Chairman of IOI, thanked Mr. Layashi Yaker for his excellent introduction and for underlining the importance of the issues under consideration. She congratulated the UNECA which according to her, was the first among the United Nations Regional Commissions to seriously consider the development of the potential of ocean resources.

The Chairman of IOI further added that the seminar should be action-oriented and should produce a programme of action for Africa for the development of its ocean resources.

II. STRATEGY AND PROGRAMME OF ACTION

With the sixtieth ratification of the United Nations Convention on the Law of the Sea, in November, 1993, the Convention will enter into force with effect from 16 November, 1994. The Convention enables all coastal states to extend their maritime jurisdiction in the Exclusive Economic Zone up to 200 nautical miles (about 220 miles or 350 kilometres). In this zone, the coastal state has sovereign rights for exploration and exploitation of all resources subject to certain navigational rights and complementary freedoms for other states.

The concept of the Exclusive Economic Zone, which is what the extended jurisdiction is called in the third Law of the Sea, is a concept that was developed by African nations during the preparatory period before the convening of the Third United Nations Conference on the Law of the Sea. The new Law of the Sea also saw significant contributions by African states who, along with other developing countries from Asia and Latin America, negotiated and bargained hard for the compromise package that the new law of the sea represents. But the coming into force of the new law of the sea is only the first step. States have now to organise themselves if the hard-fought advantages achieved are to be converted into benefits for their populations.

As a potentiality, the oceans are vast reservoirs of food, energy, materials and space. To actualise this potential, states need to have a well thought-out and properly articulated strategy, an appropriate legal institutional framework and other infrastructures, the necessary marine science and technology, skilled and well-trained manpower, and the ability to generate adequate financial resources.

In articulating this strategy, states need to keep in view the Abuja Treaty, which was adopted by the Heads of States and governments of the Organization of African Unity in Abuja in 1991, which calls for the economic integration of Africa and the establishment of an African common market. This underlines the need for regional and subregional cooperation in marine affairs and for involving coastal, landlocked, geographically disadvantaged and island states in mutually beneficial and cooperative networks.

Also while the year 1998 is likely to be declared the year of the oceans, in 1996 the Sub-committee on Oceans of the Commission on Sustainable Development will meet. It is necessary at that stage to press for the strengthening of the Regional Commission in integrating and promoting marine matters.

Capacity building has been stressed in the Rio Declaration of 1992 and especially in Chapter 17 of Agenda 21 which stresses the importance to be laid on the Ocean sector. Development of manpower and training is a critical element of capacity building. In this connection the plan of the International Ocean Institute to establish four operational centres for Africa catering to the

English, French, Arabic and Portuguese speaking areas would assist in augmenting the training facilities of African states.

The strategy that African states may like to articulate should include the following essential elements: a properly developed legal infrastructure with its concomitants of establishment of baselines and delimitation of boundaries; a coordinated and integrated institutional system capable of establishing and implementing plans and programmes in the ocean sphere; a well-thought out technology acquisition policy leading within a reasonable period of time to national or regional self-reliance; a human resources development policy which leads to the creation of critical masses of skills at national, subregional and regional levels; a project formulation capacity which enables the states to generate adequate financial resources both domestically and externally.

Legal framework

The new Law of the Sea enables states to extend their national jurisdictions for an exclusive economic zone up to a maximum of 200 nautical miles (350 kilometres). To take advantage of this provision, African states should ratify the Convention and enact legislation to claim maritime zones in accordance with the the Convention. It is therefore recommended that:

All African coastal states, if they have not already done so, should ratify the 1982 Convention and enact laws claiming jurisdiction over maritime zones as provided for in the UN Convention on the Law of the Sea.

African coastal states may need to be helped in drafting such legislation. Worldwide over 100 states have enacted such legislation. This has been collated and published in book form by the UN Office of Ocean Affairs and Law of the Sea. It is recommended that:

The United Nations Economic Commission for Africa (UNECA) should collect all information on existing legislation and thereafter make it available to any African coastal state that requests it. UNECA may also consider setting up working group(s) consisting of legal and other relevant technical experts to draft model legislation based on its data bank of existing national legislation.

In addition to claiming jurisdiction over the extended maritime zones, it is necessary for coastal states to enact suitable legislation/regulations and establish the legal framework in the context of which the extended maritime zones can be explored and exploited by both domestic and foreign entities. Such legislation/regulation should, inter alia, establish user rights and the parameters within which rational exploitation in

the context of sustainable development can take place. It is recommended that:

All African coastal states, if they have not already done so, should establish a legal framework enabling rational utilisation of the extended maritime zones in the context of sustainable development. The United Nations Economic Commission for Africa may also consider collecting all available information on the subject including case studies, if available and dissemination of the information to African states.

African coastal states may need help in developing such legislation/regulations. The UNECA may consider the setting up of working group(s) on a regional/subregional basis and consisting of the relevant experts from the concerned states to draft suitable model legislation/regulations or a set of guidelines. It is recommended that:

The United Nations Economic Commission for Africa consider the setting up of working groups of experts on a regional or subregional basis to draft appropriate model legislation/regulations/guidelines which could be of assistance to the coastal states of the region in establishing the legal framework in which rational exploitation of both living and non-living resources in the context of sustainable development could take place.

The new Law of the Sea provides for the establishment of baselines on the basis of which the coordinates of the extended maritime zones could be determined and deposited with the Secretary General of the United Nations. It is recommended that:

All African coastal states, if they have not already done so, should establish baselines and therefrom establish the coordinates of the extended maritime jurisdictions.

Where states with adjacent or opposite coasts are involved, the coastal state has to establish the boundaries of its maritime zones in consultation and agreement with the concerned coastal and/or island state(s). It was noted in this connection that in the case of disputes arising between states a useful concept that could be applied in solving such disputes would be that of joint development zones and/or joint management zones whereby the area in dispute is jointly developed and/or managed. It is recommended that:

All African coastal states, if they have not already done so, should enter into dialogue with their neighbours so as to establish the boundaries of their maritime zones, keeping in mind the concepts of joint development zones and joint management zones.

It is further recommended that:

The United Nations Economic Commission for Africa collect all material on joint development and management zones, collate it and make it available to all member states.

Institutional System

The exploration and exploitation of resources in the constantly changing, dynamic, and three-dimensional marine environment is a complex task which is made even more difficult by the multiple-use to which ocean space is subjected. The rational and optimum exploitation of marine resources requires therefore a well co-ordinated and integrated institutional system. Studies of such systems around the world suggest that the success of such systems depends crucially on whether the coordinating unit is placed in the highest echelons of government. It is recommended that:

All African states should establish a coordinating mechanism for marine affairs with the coordinating unit being located under either the Prime Minister's office or in the office of the Head of the State.

It is further recommended that:

The United Nations Economic Commission for Africa continue to collect and collate information on existing systems and make the same available to all states.

In many cases it is more cost-effective for states to cooperate on a regional or subregional basis especially in matters relating to surveys, technology development, research, education and training. UNECA could explore such possibilities in consultation with the concerned states and other regional institutions. It is recommended that:

The United Nations Economic Commission for Africa explore, in association with the concerned states, regional/subregional institutions and the relevant NGOs, the feasibility and possibility of strengthening or establishing regional and/or subregional institutions especially in the areas of capacity building including human resources development, technology acquisition and surveys.

Existing machinery at the national level would also need to be strengthened/augmented if the new areas falling under the jurisdiction of coastal states are to be optimally exploited in the context of sustainable development. It is recommended that:

All African coastal states should establish or strengthen the necessary machinery and services for:

- the full and rational exploitation of their fishery resources;
- the exploration and exploitation of their marine mineral and energy resources;
- the development of the maritime transport and communication system;
- the development of coastal areas and the development of tourism;
- the protection and conservation of the marine and coastal environment and ecosystem.

Zones have not only to be established and exploited but have also to be protected against poaching especially in areas such as fishing. Surveillance systems tend to be very expensive and so often beyond the ability of poor, developing states. Regional surveillance systems based on remote sensing techniques have been found to be cost-effective in the South Pacific and the Caribbean. It is recommended that:

The United Nations Economic Commission for Africa examine, in consultation with the concerned states, the feasibility of establishing regional or subregional monitoring surveillance and detection systems utilizing remote sensing devices including those located on planes or helium filled balloons.

Policy Framework

Optimisation of efforts aimed at exploiting marine resources requires a well articulated policy framework that can provide the needed thrust and direction. Efforts in the marine sector have to be integrated and be a part of the national development effort. It is recommended that:

All African states should establish or strengthen their national policy framework in the realms of food, energy and materials so as to give the needed thrust and emphasis on the rational development and optimal utilisation of their marine resources. In particular the policy framework should accord high priority to marine science and technology and the development of the necessary human and institutional infrastructure.

The building up of capacities in the marine sector would require the articulation of plans which, in the context of sustainable development, lay stress on human resources and institutional development. It is recommended that:

All African states augment their capacity to survey, explore and exploit their marine resources by integrating their plans for adequate human resources

and institutional development with their economic and social development plans.

Special Needs of Landlocked States

The United Nations Convention on the Law of the Sea recognises that because of their distances from the oceans and seas and subsequent lack of sea ports, African landlocked states suffer special problems in transit, transport and use of port facilities in coastal states. It is therefore recommended that:

The UNECA undertakes a survey and analysis of institutional arrangements established for dealing with the problems of transit for landlocked states.

It is further recommended that:

The UNECA in collaboration with the IOI organise a seminar for high level policy makers from African landlocked states for the purpose of exposing and sensitising them to various provisions of the 1982 Convention that are of benefit to landlocked states.

Project identification and elaboration

Considerable ground work would be necessary for appropriate projects to be prepared at the regional, subregional and national levels, UNECA in association with IOI and other concerned regional and subregional organisations, intergovernment organisations (IGOs) and non-governmental organisations (NGOs) could organise seminars and workshops to raise awareness and to speed up and augment the process of project formulation. It is recommended that:

The United Nations Economic Commission for Africa (Headquarters and Regional Offices) in consultation with the concerned states and in association with the International Ocean Institute and other concerned organisations hold a series of workshops and/or seminars at regional, subregional and even national levels as a follow-up of this seminar.

Financial Resources

Financial resources have to be mobilized both domestically and externally if African states are to have sustainable development of their marine resources. Resources, to the extent possible, should be mobilized locally as that is the bedrock on which development plans can be sustained. In the case of African states, however, such an effort is bound to be inadequate and, therefore, the inflow of international finance would, to a large extent, have to augment domestic resource mobilisation. In this

connection UNECA can play a significant role. It is recommended that:

The United Nations Economic Commission for Africa convene a meeting of international funding agencies and its other regional and global development partners where regional, subregional and national projects in the areas, inter alia, of coastal zone management, islands development and capacity building in the ocean sector could be presented for funding.

III. RESUME OF DISCUSSIONS

UN Convention on the Law of the Sea: Introduction

This section on the UN Convention on the Law of the Sea was introduced by Hon Joseph Warrioba and Prof. Elizabeth Mann Borgese.

With the advances in new technologies and the penetration of the new industrial revolution into the oceans with consequent impacts on economic development, countries started declaring unilateral jurisdiction over the resources of the continental shelf contiguous to their coasts. The Truman declaration of ownership of the natural resources over the continental shelf off the coast of the United States of America is one such example that led to the adoption by the industrialized states of the 1958 Geneva Conventions on the Territorial Sea and Contiguous Zone, on the High Seas, on the Continental Shelf and on the Fishing and Conservation of the living resources of the High Seas. The Second Conference on the Law of the Sea which was held in Geneva two years later, failed to agree on the breadth of the territorial sea as well as the fisheries zone. Unilateral extension of jurisdiction over the Seas continued unabated.

The United Nations Convention on the Law of the Sea is a comprehensive legislation that governs all activities of the sea, which are interrelated and need to be considered as a whole. It finds its origin in the Seabed Committee established in 1968 by the United Nations General Assembly following the issue presented to it by the Maltese Ambassador on the peaceful uses of the seabed and ocean floor beyond national jurisdiction.

Unlike the 1958 Geneva Conventions it is very much inspired, elaborated, ratified and brought into force primarily by the new states of the international system, namely, the developing countries. The maritime regimes established under the Convention are those of Internal Waters, Territorial Sea, Contiguous Zone, Exclusive Economic Zone (EEZ), Continental Shelf, Archipelagic States, High Seas, Islands, Enclosed and Semi-Enclosed Seas, Land-locked States and International Straits. The Exclusive Economic Zone, the International Sea-bed area beyond national jurisdiction known as "the Area", Archipelagic waters, International Straits and the rights of Land-locked and Geographically Disadvantaged States are new regimes introduced by the United Nations Convention on the Law of the Sea. In the EEZ the coastal state has sovereign rights to explore, exploit, manage and conserve both living and non-living resources as well as the other jurisdictional rights while other States enjoy the freedom of navigation, overflight and the laying of cables and pipelines. Similar provisions exist in the case of archipelagoes and international straits.

Mineral resources in the sea-bed and sub-soil beyond national jurisdiction are the common heritage of mankind and as such may be exploited on behalf of mankind with due care being given to the interests of developing countries. The

International Sea-Bed Authority was established to administer the resources in the Area. In exploration of the resources therein due consideration should be given to the environment and the area is to be used for peaceful purposes only.

The Convention establishes the legal framework for the prevention of pollution and protection and preservation of the environment. Enforcement mechanisms and dispute settlement procedures are also provided.

Scientific research is basic for all major ocean uses and requires interdisciplinary and international cooperation and these activities are reserved exclusively for peaceful purposes. The consent of coastal states is required for conducting scientific research in the EEZ and on the continental shelf and this can be refused only where the project is connected with resource exploration and exploitation, involves drilling into the continental shelf, construction, operation or use of artificial islands and installations, contains information regarding the nature and objectives of the project which is inaccurate or if the researching state or competent international organization has outstanding obligations to the coastal state from a prior research project.

The Convention provides for mandatory dispute settlement with the exception of disputes relating to sea boundary delimitation, military activities and issues falling under the jurisdiction of the Security Council of the United Nations.

Developing coastal countries face a big challenge in managing their maritime zones. Resource exploration and exploitation, and surveillance and monitoring of the marine areas requires technology, finance and skilled manpower and this makes it necessary for coastal states to seek international, regional and sub-regional cooperation. In a study carried out in nine African states to examine current awareness, ratification and application of the provision on the Law of the Sea the following were the findings:

- Most of the officials were aware of the importance, opportunities and challenges of the provisions of the Law of the Sea Convention to their countries in terms of the new marine zones and the jurisdiction it confers on the states. However the level of awareness in some cases was far from satisfactory.
- Seven out of the nine states had ratified the treaty, one was preparing to do so, while one stated that ratification is not a priority of the state given the problems encountered in part XI of the Convention.
- Most countries have established their maritime zones in accordance with the terms of the Convention and have declared sovereign rights to explore, exploit, manage and conserve the resources within their national jurisdiction. Legal and institutional frameworks are in place in most cases but in some cases there is neither the legal framework nor the

- institutional set-up for the mineral and petroleum sectors.
- Boundary demarcation discussions have been commenced with neighbouring coastal states by most of the concerned countries.
 - Environmental laws, both sector specific and national, exist in most of the countries while others are in the process of drafting their environmental laws.
 - Constraints exist in terms of technology, finance and trained manpower required to develop their marine and non-living resources and to conduct monitoring and surveillance activities. Some states have regional cooperation arrangements with neighbouring states in order to develop common policies and strategies in the development of their living resources, share common facilities for research, training and monitoring of their maritime zones.

Most of the states are attempting to attract foreign capital in marine resource development and have promulgated laws and policies providing for a reasonable rate of return to the foreign investors while protecting the interests of the government and ensuring the maximum benefits from the exploration and exploitation of the marine resources.

The UN Convention on the Law of the Sea-Innovation and Change

In introducing this item Hon. Joseph Warioba explained that the United Nations Convention on the Law of the Sea which was adopted in 1982 brought in new and important innovations in international law. The most important of these were: Exclusive Economic Zone; the concept of sovereign rights of exploration and exploitation in the context of the Exclusive Economic Zone; the Archipelagic states and the concept of Archipelagic waters; the common heritage of mankind; the International Sea Bed Authority; comprehensive, global international environmental law; a new regime for marine scientific research; advanced framework for technological co-operation and development; comprehensive and binding system of peaceful settlement of disputes; and research for peaceful purposes. Besides providing a comprehensive definition and scope of the new innovations the Convention covers the rights and privileges as well as obligations of the member states in their dealings with each other as well as with the international institutions, paying special attention to the needs of developing countries to participate equally in the exploitation and use of sea resources. The International Sea Bed Authority provides a unique institutional concept of Common Heritage of Mankind by combining the interests of the major groups and special interests with those of the weaker developing countries and bringing this to bear on decisions concerning all aspects of sea-bed mining.

These innovations emphasize the change from the old international relationships among states to the new order in which the weaker, smaller developing nations have a bigger say

in the use of marine resources which represent a rich reservoir of largely underutilized resources forming the common heritage of mankind, and are empowered to exercise rights over those areas under exclusive jurisdiction paying due regard to the overall interests of other states. The provisions for settlement of disputes allows for a choice between negotiation and reconciliation as a means of resolving disputes besides introducing other more binding methods through arbitration or the International Tribunal for the Law of the Sea or the International Court of Justice.

Post-UNCLOS developments: The Preparatory Commission, the Secretary-General's Consultations

Resource person and coordinator of this session, His Excellency Hon. Joseph Warioba, gave a comprehensive overview of the activities of the Preparatory Commission for the International Seabed Authority and the International Tribunal for the Law of the Sea, other post-UNCLOS developments and the Secretary General's informal consultations. It was noted that the 1982 UN Conference on the Law of the Sea took two decisions. One was related to the establishment of the Preparatory Commission for the International Seabed Authority and for the International Tribunal for the Law of the Sea. The Preparatory Commission had four Special Commissions dealing with, respectively, land-based producers, the Enterprise, the seabed mining code and for the establishment of the International Tribunal on the Law of the Sea. The Plenary of the Preparatory Commission was assigned the task of implementation of Resolution II of the UN Convention on the Law of the Sea and to deal with other related matters. The Preparatory Commission was required to register the pioneer investors. It also had a training panel and a group of technical experts. Preparatory Commission was also to prepare a plan for exploration of the first mine site of the Enterprise. In addition, the Preparatory Commission had to deal with conflict resolution between pioneer investors such as Japan, France and the Russian Federation in the North Pacific Ocean. This was done within the framework of the Arusha Agreement in 1986.

Within this context, the obligations of the pioneer investors such as payment of registration fees, payment of annual fixed fees and the relinquishment of pioneer areas to the Authority were also described.

In view of the fact that the Convention has been ratified by the requisite number of countries for it to come into force in November 1994, the role of the Preparatory Commission was also explained. In this connection, he mentioned the ongoing informal consultations of the Secretary General on this issue. He noted that the core issues that are being discussed at these consultations are the decision-making process of the future Authority, the Enterprise, the Review Conference, the production policy, transfer of technology and financial aspects.

Prof. E. Mann Borgese in her intervention in this section briefly described the role of the Preparatory Commission and what could be the future role of the Preparatory Commission in view of the UN Convention coming into force. She referred to the so-called "Boat paper" that was circulated at the last session of the Preparatory Commission and she elaborated on the procedural problems related to the functioning of the Council of the future Authority that was inherent in the "Boat paper". She emphasized that the integrity of the Convention must be upheld and its dilution should be avoided.

A question was raised by the participants on the nature of research in the high seas and the capability of the Authority to monitor such research to ensure that it is for peaceful purposes only. This was followed by a question on training. In response, the achievements of the Preparatory Commission in training areas was explained. The role of International Ocean Institute (IOI) and its future plans for setting up training centers in different parts of the world was also elaborated. It was noted that IOI will assist African countries in developing training programs on ocean resources development. In this respect the role of training on the coastal zone management was also emphasized. It was noted that the problem of training should be based on broader perspectives and that capacity building should be focused at the national level in order to produce sectoral specialists such as marine biologists, geologists, economists and others who were multi-disciplinary in attitudes. The importance of high technology in the South was emphasized, because without that the basic problem of poverty alleviation in the South could not be tackled. In this respect, importance of North-South collaborative efforts for developing high technology for the South was suggested. The Executive Secretary of the UNECA expressed ECA's full commitment to training and capacity building in Africa in collaboration with the regional institutions and NGOs such as IOI. He further noted that Africa must develop a technological base for exploring and exploiting both living and non-living resources of the sea and also to ensure Africa's share in the common heritage of the world oceans. He emphasized the need for regional cooperation, the need for a substantive programme of action for Africa and for strategies for African countries in setting up training centers and institutions at national, subregional and regional levels.

UNCLOS and UNCED, and the Restructuring of the United Nations System

Introducing this section, Prof. Jagota stated that in view of the entering into force of the Convention on the Law of the Sea in 1994, it was essential for African member states to plan ahead in preparation for the 21st century, specially in the area of capacity building. He gave a historical account of Ocean Law, starting with the codification of the Law of the Sea in 1958; the preparatory work of the Sea-Bed Authority from 1967 to 1982, leading to the adoption of the Convention in April 1982; Africa's leading role in the development of the concept of the

Exclusive Economic Zone (EEZ) and the entering into force of the Convention with 27 of the 61 ratifying states being African; the various meetings and Conferences that led to the concretization of the concept linking environment to development such as the Bruntland report of the World Commission on Environment and Development (WCED) whose report called "Our Common Future" came out in 1987, and the culmination of these into the Rio World Conference on Environment and Development in June 1992.

The main concern of the Rio Conference was how to promote both environment and development in all their facets, without endangering the interests of future generations and while ensuring sustainable development. Though the Conference did not succeed in adopting a legal Convention, it did adopt a Declaration - the Rio Declaration, incorporating 27 principles, prominent among which are: (a) the sovereign rights of states over their resources, (b) liability and compensation for environmental damage, (c) prevention of relocation of hazardous wastes, (d) the role of youth, women and indigenous peoples, and (e) the common but differentiated responsibilities regarding marine pollution.

The speaker then elaborated on Agenda 21, the most important outcome of the Rio Conference, incorporating 40 chapters and proposing a concrete programme of action in areas of water, health, poverty, technology, land, atmosphere, oceans, training and funding requirements. Chapter 17 of Agenda 21 dealing with the oceans and seas has 7 programme areas to be implemented between 1993 and 1997. In 1997 they will be reviewed. For the African region, issues of capacity building and technology transfer are central, especially in the areas of fisheries, living resources of the sea, and the exploitation of the EEZ. For small island developing states (SIDS), the seventh programme stresses on integrated land sea management. In April/May 1994, a UN Conference on sustainable development of small island developing states in Barbados will look into such issues. Integrated coastal zone management is dealt with in the first programme, and will be taken up at a subsequent meeting which will have before it the report of the November 1993 conference held in the Netherlands called the World Coast Conference.

The problems of ozone layer depletion, leading to the Montreal guidelines adopted in 1985, climatic changes and the increase in sea-level will also be discussed. It was recommended that preventive action was necessary in these areas. The speaker also referred to the Global Environmental Facility (GEF) as a mechanism for funding programmes and projects in the above areas. These funds are expected for the years 1994, 1995 and 1996 for capacity building and technology transfer in the areas of environment and development.

Eventually the speaker spoke on the restructuring of the UN system and the setting up of the new Commission on Sustainable Development (CSD) which is to review and promote Agenda 21. The 53 member Commission first met in June 1993, and is expected to review the implementation of Agenda 21 in 1997. With respect to

ocean affairs, the Division of Ocean Affairs and the Law of the Sea will be the main agency to monitor the activities.

The presentation was followed by questions from delegates of Cape Verde, Algeria, Côte d'Ivoire, Sierra Leone and India. The problem of highly migratory fish stocks in the high seas and the possibility of extending the present EEZ by 50 miles beyond the 200 miles limit, the problem of deep-sea mining and fishing in the high sea, the need for greater South-South cooperation in managing ocean affairs, efforts being made in the context of West Africa where training and technology are the main issues, the problem of limited funding of programmes through GEF, and finally the problem of sea-level rise and threat to islands and coastal states, were raised. The speaker then reiterated his views about the need for a participatory approach, joint ventures and stress on capacity building and technology.

Managerial Implications of the Law of the Sea Convention

Dr. Saigal, who presented the paper in this regard, mentioned that the Law of the Sea Convention only laid down the legal framework within which states got the sovereign rights to explore and exploit the resources in their extended jurisdiction. But to effectively take advantage of this situation, there was the need for states to effectively organise themselves, and this meant management. The managerial implications included: the establishment of an integrated policy harmonised with the overall national goals; flowing from the policy there had to be established sectoral programmes which did not lead to conflictual situations as between one sector and another; and for the implementation of these programmes there had to be an appropriate institutional infrastructure and adequately skilled and trained power.

In this section they would deal with the three programmes which had been circulated, namely, on fisheries, oil and tourism while the other matters would come up in later sections. Dr. Saigal then presented the three programmes and invited comments on them regarding their compatibility with each other.

During the discussion which ensued it was the consensus that the plans were too narrowly drawn up on a sectoral basis without any consideration of their impacts on other sectors; that the data they provided was not sufficient to allow proper evaluation as they gave no data on manpower required, technologies to be acquired etc.; and that the programmes only looked at the economic and financial aspects without any indication of how they would impact on the environment and other societal factors like poverty alleviation, removal of unemployment and impacts on women, youth and indigenous people - matters which were at the heart of the UNCED process.

Institutional Requirements: National Infrastructure and Regional Cooperation

The preamble of the Law of the Sea Convention states that "the problems of the ocean space are closely interrelated" and for this there is a need for fora or a forum capable of considering these closely interrelated problems as a whole. Development and environment issues have to be considered together as an interlinked and interlocking system. This would not be possible with sectorial specialized structures. The need for institutions to deal with the interdisciplinary character of all the major problems facing modern societies and the need for interdisciplinary planning and decision making becomes imperative if sustainable development is to be achieved.

Ocean affairs has been given low priority in national policies and this has to change. Ocean policy has to be integrated with overall national policies and in the formulation of ocean policy not only all departments of government have to participate but also ocean users, specialized international organizations and coastal industries should play an active part. The models of the Dutch, State of Oregon, Hawaiian and the Brazilian approaches to the integrated development of the marine zone were presented to participants. However it was stated that national marine issues need to be considered in a flexible and heuristic manner with the models only being meant to help participants to choose the best method for formulation of policies in an integrated manner.

Integrated ocean use at the national level has its impacts at the regional level, making it possible to influence and effectively integrate development with environment in regional programmes such as the Regional Seas Programme.

The concept of a possible regional model for organizations for cooperation in sustainable development and the establishment of a regional centre for research and development in marine industrial technology was also discussed.

The last step to be taken is the restructuring of the United Nations System. There must be a linkage between states, regional organisations and global organizations. The need for proper linkage between the UN Regional Commissions and the United Nations Commission for Sustainable Development was emphasised as well as the need for the strengthening of linkages between the Law of the Sea Convention and the UNCED declarations.

Sustainable development, to be effective has to be integrated at national, regional and international levels.

A case study on the Sea of Japan was presented by Professor Fuse. Japan initiated moves to establish institutions for regional cooperation. Lesson to be learnt from the exercise is that economic cooperation without a proper institutional framework may lead to economic war and there is a need for proper size of regional market in order to forge such cooperation.

The existing marine institutions and their framework in West African regions as brought out by a survey commissioned by ECA

was presented by Mr. Hoque. Research institutions, training centres and higher learning universities in marine geology, engineering and other sciences were outlined and efforts towards capacity building were elaborated. A list of experts by fields of specialization of the countries covered by the study was also presented.

Comments were made on the shortcomings of Chapter 17 in that it did not comprehensively address ocean problems and the new demands arising out of the United Nations Convention on the Law of the Sea. There is a need for further elaboration of Chapter 17 so that ocean issues are adequately covered. Comments and questions were also raised concerning matters covered by the topic. Capacity building and monitoring was emphasized in relation to management of the national ocean space. It was suggested that ECA convene meetings of African states to emphasise the importance of marine affairs, specially fisheries, to the future development of African economies. It was noted that about 40% of Africa's fishery resources are being illegally exploited every year by others and this was detrimental to African states.

Problem of an appropriate detection system in case of illegal fishing by foreign ships was raised and discussions showed that it is enforcement rather than detection which is difficult. Where the extent and value of resources justify the expense, remote sensing system could be used. Surveillance from aeroplanes is a method used on regional basis in the South Pacific area. Experimentation for cheaper methods of surveillance was suggested by Professor Saigal to be considered by ECA.

Integrating Development and Environmental Concerns; New Economic Theories

The session devoted to this Agenda item was initiated by the Chairman, Judge Abdul G. Koroma. He emphasized the importance of management of the resources of the sea, recalled that African countries have not yet developed the expertise to take advantage of the Law of the Sea Convention. He further noted that old theories of management may not be appropriate to maximize the benefits of the Convention, in particular in the context of an integrated approach.

First speaker, Dr. Quarcoo, drew the attention of the meeting to the fact that while African countries constitute the largest block of countries which have ratified the UNCLOS, this commitment has not been translated into actual policies and action programmes for the management and sustainable development of coastal and marine areas in Africa. One possible explanation is the lack of coastal/marine management systems and the non-incorporation of the marine dimension into national development plans and programmes. His paper examined ways and means of ensuring that issues regarding management and sustainable development of coastal and marine areas are integrated into national development planning processes in the future.

The methodology and practice of national development planning in Africa has evolved through three main phases. The initial phase involved concentration on medium-term (4-5 year) development plans; the intermediate phase focused on short-term adjustment and recovery programmes; while the final and current phase emphasizes national long-term (10-25 year) perspective studies (NLTPS) and plans. Thus integration of the coastal/marine dimension into national development planning in Africa can be best accomplished through the new framework of planning, viz., the NLTPS process.

The NLTPS approach to national development planning follows five main interactive phases: (1) issue identification; (2) environmental analysis; (3) determination of long-term goals and vision; (4) choice of strategy; and (5) preparation of medium and short-term plans. The incorporation of coastal/marine dimension into the NLTPS process could be as follows:

During Phase 1, the main issues and themes of integrated coastal/marine management and development should be identified, highlighted and harmonised with other national aspirations of society. These issues could include: management of valuable ecosystems such as mangrove wetlands; prevention of environmental disasters; preparation of contingency and emergency environmental response plans for natural and human-induced disasters; coordination and integration of sectoral plans and programmes; provision of basic needs of coastal human settlements; conservation and restoration of altered critical habitats; capacity building and human resources development regarding skills, attitudes, knowledge of emergency procedures, and techniques of conflict anticipation, negotiation and resolution.

Phase 2 would involve a multidisciplinary analysis of the cross-sectoral impacts and externalities which may be generated by the sectoral planning schemes of one marine sector on the other. The exercise entails stakeholder analysis of the concerns and preferences of the key actors and their roles as well as SWOT (strengths, weaknesses, opportunities, threats) analysis by contrasting internal strengths and weaknesses against opportunities and threats emanating from the external environment.

During Phase 3, the long-term goal and vision of the future should be established based on construction of alternative scenarios of the future, deciding on a feasible vision and mapping out methods of realizing the vision. Given the UNCED adoption of "sustainable development" as its strategy, a long-term goal and vision for African countries in the 1990s must therefore be inspired by this global commitment. Flowing therefrom, specific development objectives can be determined based on the collective aspirations of the people in individual member States.

Phase 4 deals with development of broad strategies and policies. As the issues on integrated coastal/marine management

identified under Phase 1 represent some of the key development objectives, effective strategies and policies, subject to the environmental analysis, have to be developed including modes of achieving those objectives and thereby the national goal or vision.

During Phase 5, the effective strategies need to be translated into specific medium- and short-term plans, investment programmes and projects, including those of the coastal/marine sector, backed up by specific budget allocations. The medium- and short-term plans should be consistent, hierarchically related and mutually supportive of the long-term strategy.

A coordinating mechanism becomes essential in ensuring that issues relating to the coastal/marine dimension are at centre stage in national development planning. Lessons from such national experiences as the Netherlands, Brazil, Oregon State (USA), Hawaii (USA), Ecuador, Malaysia, the Philippines, etc. indicate some of the main criteria for success. These include: firm commitment to the affairs of coastal/marine areas at the highest political levels through establishment of interministerial or interagency committees; translation of this commitment into willingness and action to ensure adequate budgetary allocation for development programmes and projects related to the marine sector; popular participation and involvement of inputs from the villages, settlements, towns, districts, regions, research centres, the government sector ministries and the private sector; and some demonstration of how the coastal/marine sector can make effective contribution towards attaining some of the broad objectives of national development strategy.

The next speaker under this agenda item, Dr. Max Börlin, presented some of the new economic theories. He began his presentation by recalling that in the course of the seminar three basic problems have been stressed, namely: poverty, ineffective allocation of resources and resource depletion, and environmental aspects such as waste of resources and negative deducted value. Dr. Börlin further emphasized that "the market" did not have solutions to these problems. He then presented some comparative graphics regarding indicators of poverty in Africa (GNP, life expectancy) stating that these indicators were a reflection of the balance of power between South and North. In this regard he noted that the European Union (and industrialized countries) should interact with regional institutions and not with individual countries in order to avoid the unbalanced solutions resulting from bilateral talks.

Concerning the first basic problem, poverty, he presented ten institutional innovations recommended by Prof. P. Streeten to cope with the problem. Among these, he stressed four: producer-consumer commodity agreements on energy and oil prices, establishment of a global environment protection agency, establishment of an international trade organization, and a global anti-monopoly and anti-restrictive practices policy. With respect to the second basic problem, Dr. Börlin presented the

views, alternatives and conclusions of a renowned resource economist, Prof. P.S. Dasgupta. Addressing the third problem, he listed six conditions (Paul Ekins) for the implementation of "sustainable development", of which he emphasized two: enforcement of sustainable harvesting and, concerning non-renewable resources, the practice of what he called the four Rs: repair, reconditioning, re-use, and recycling. The example of the "bath-tub" was provided as a visualization of stock and flow measures, including the leaks, which should be taken into account in macro-economic planning. He noted that the GNP indicator was a flow measure and not a stock measure.

Dr. Börlin concluded his presentation stressing the insufficiency of the market mechanisms vs the new economic theories that do suggest some solutions, and indicated that the new economics should prepare the theories for the concept of Common Heritage of Mankind.

In the discussion that followed the conflict between the new economic theories, in particular those addressing poverty, and the policies of the General Agreement on Trade and Tariffs (GATT) was mentioned. It was also noted that GATT and Rio were two opposite ways of thinking. In this context, it was recalled that GATT was the reality - the results of negotiations North-North - and that the third world needed to act collectively in order to have a place in the negotiations. However, the new economic order based on free market and privatization was inevitably being put in place. The meeting further noted that the countries who dominated the Uruguay Round were not likely to sign the Convention on the Law of the Sea.

Parameters of integrated ocean policy

Dr. Saigal who presented this topic stated that he would deal fully with one aspect of ocean policy, namely, the preparation of a technology acquisition policy since it plays a key role in marine development. In this regard he pointed out that technology acquisition must be based on proper forecasting and vision of the type of society (and needs which the technology will serve) in future as well as assessing its compatibility and sustainability in the culture and norms of the concerned society. There exist well developed methods of carrying out both forecasting and assessment to arrive at a suitable choice from the array of technologies attributed to the first industrial revolution (iron and steel), the second industrial revolution (oil and chemicals), and the new and third industrial revolution (information and intellectual). Stress was laid on the need for developing countries to build up strong engineering capabilities capable of adequately utilising the emerging technologies so as to enable their countries keep abreast of these developments and to exploit them appropriately.

With respect to policy, it was mentioned that the discipline of policy sciences was of recent origin. But most governments have always considered that policy was necessary in order to

organise and direct its resources. Policy is necessary to translate the long term vision into programmes and strategies.

Policy making required a clear statement of objectives to be achieved as well as the definition of the field to be covered both in terms of space and time. Equally important is the policy environment of institutions, manpower and processing systems, all of which are necessary for policy implementation. The policy should also direct attention to the technologies and the manner of their acquisition, bearing in mind that such policy is consistent with other policies.

During the discussion which ensued it was stressed that the stakeholders should be fully consulted so that their needs and concerns are taken care of in the evolution of a technology policy. It was vital to ensure that technology meets the social needs of the population. In view of the multipurpose use of ocean space, there was need for proper integration or coordination of the various policies addressing the exploitation of different marine resources to ensure resolution of conflicts amongst competing demands.

It was recommended that African strategy for acquisition of marine technology should in the short term focus on transfer and use of existing technologies and in the long term build the capacity of human resources and institutions necessary for the acquisition of the new technologies and measures for ensuring that they get absorbed in the societal system. Both considerations were very important measures for ensuring the accumulation of the appropriate technological capabilities in the society. Many channels were available to bring in technology into Africa (joint ventures, foreign direct investment etc) provided the appropriate environment was created to foster these various modes.

Cost-Benefit Analysis - Agenda 21

Prof. Mann Borgese, who presented this issue, referred to Chapter 17 of Agenda 21 which contains seven major programmes which cannot easily be costed individually since the programmes are closely interrelated. The texts from Rio do not contain costs and benefits figures for each of the programmes taken together. The figures were deleted from the final version. Benefits from these programmes are not also quantifiable but some approximations can be obtained from techniques derived from the "willingness to pay" concept. The benefits of clean air or of an aesthetic environment, for instance, can be assessed by these techniques. The cost of the seven programmes of Chapter 17 can be estimated to be about \$64 million per country, out of which around \$7 million would be financed by international contributions. These figures are averages and only order of magnitude figures.

Mobilizing resources for the implementation of the programmes is an issue which deserves utmost attention. Studies

on the Mediterranean have shown that tourists are willing to pay a tax in order to have a cleaner environment. These results should encourage African countries to look at ways to levy taxes on tourists, on plane tickets for instance, in order to realize funds for projects. Other new sources of taxation can also be considered.

African countries should study carefully the texts of the Rio Conference and the terms and conditions of the Global Environment Facility (GEF) in order to take advantage of the funding available. Fisheries management and conservation are priority areas as well as coastal management. These areas can also benefit from the Biodiversity Convention. GEF can also be supplemented by other sources of funding, such as those under examination by the Commission for Sustainable Development.

During discussions the meeting agreed that African countries should design projects partly relying on internal funding and partly on international funding. At the present time it seems that not enough projects have been submitted and that there is a substantial amount of funding available. Projects should also be submitted in a coordinated way. To this effect a coordinator could be appointed in each subregion to promote and coordinate the presentation of projects involving non-polluting and "clean" technologies.

Legislative requirements: Inter-sectoral Integration; Harmonisation

Introducing this subject, Professor Mann Borghese first stated that the Convention on the Law of the Sea should be translated into national laws. This would entail a comprehensive and tedious exercise. Mexico was the first country to embark upon this kind of exercise.

Professor Borghese then described the steps taken by Mexico in drafting its national law of the sea. These steps included collation of all existing municipal ocean laws; the identification of obsolete provisions and gaps; the identification of conflicts between sectors; and finally the identification of conflicts between municipal and international laws.

The Chairman of IOI also mentioned that, before drafting a national law, the concerned country should first ratify the Convention on the Law of the Sea.

She also indicated that there was no universal prescription regarding the framing of a national law on the sea and that member states could use the services of the Division of Ocean Affairs and the Law of the Sea in New York, as well as the Commonwealth Secretariat, in the process of framing their legislation on ocean matters.

Judge Koroma pointed out that with regard to the establishment of national laws on the sea, Africa did not represent a "tabula rasa": thirty eight coastal countries had already their laws.

He was however of the view that African countries needed to improve the quality of their legislation on the sea by updating them and aligning them with the Convention of the Law of the Sea.

The ensuing discussion turned on the delimitation of baselines; joint development zones and the joint management area; the modalities for the establishment of national laws; and the structure of the national laws.

From the discussions, the following ideas emerged:

In view of the forthcoming entry into force of the Convention on the Law of the Sea, there was a need for African countries to harmonize their national legislations on ocean matters with the provisions of the Convention. Two approaches could be contemplated in that framework:

(a) To seek the advice of the UN Division of Ocean Affairs and the Law of the Sea and/or of the Commonwealth Secretariat;

(b) To set up under the auspices of the ECA, OAU, IOI and other relevant organizations, an interdisciplinary committee which will establish a model legislation on the sea and guidelines for the drawing of baselines. The same committee might also examine the issues of joint development zones or joint management areas with regard to the settlement of disputes between two or several countries.

Scientific/Technical Requirements: National Infrastructure and Regional Cooperation

Professor Ruivo introduced this topic by focusing on the scientific developments as they relate to the understanding and exploitation of marine resources. Science, particularly basic science, focused on the methodology to explain the characteristics and behaviour in answer to human curiosity, while applied science tended to be mission oriented. He cautioned that while such a classification was useful, the framers of the Convention intended to focus on the applied aspects, a conceptual framework which could deflect attention from important basic scientific research in marine space.

Historically and until a few years back marine science sought to describe and provide inventories of flora and fauna. However new requirements and trends to provide quantitative appraisal of marine resources, forecast resources and trends have changed the characteristics and modality of marine science and marine research. Individual effort to pursue research has given way to multidisciplinary research teams and networking in

addressing scientific issues. The larger and new scale of research made possible by the use of space technologies to collect data and computer technologies to handle and process data have ushered in very important implications on the sovereignty and proprietary aspects of data on resources within national boundaries. Furthermore research in fisheries resources for example, should have multiplicity of approaches in order to take into account the ill effects of pollution which could have serious impacts on conservation strategies.

Special attention was drawn to the proper management of the coastal zone as it is an important interface between the activities of mankind and the sea while the economic activities therein could have negative aspect on the marine environment. Action was therefore called for from member States to adopt a more comprehensive approach to manage their coastal areas and the marine resources rather than maintain the sectoral approach currently pursued by different ministries and international agencies. Such approach should pursue integrated management of marine resources at national and regional levels and ensure existence of appropriate institutional infrastructure and capabilities. Special action is necessary at the national level to set up policies, build capacities in terms of human resources, institutions and equipment, rationalise institutional regimes and improve the viability and utilization of scientific research in the management of marine resources.

Dr. Saigal focused on technology as a means to utilize knowledge for generating wealth. Science and technology and the legal regimes interface to make it possible to generate wealth. To actualise this possibility, however, there had to be the support of adequate finance and proper management. Technology today had to be viewed not only in terms of capital (hardware) but more importantly in terms of software, skills and organization embodied in skilled manpower. This is an issue calling for special attention of the developing countries especially now when the world is in the midst of the so called third industrial revolution largely based on information and intellectual technology. The developing countries had the basis to stimulate the accumulation of intellectual technology. This development had important implications for African policy makers who have to guide the acquisition of technology in their respective countries.

Dr. Tabet's contribution focused on the need for comprehensive science and oceanographic services. The Convention on the Law of the Sea requires that member States gain a better knowledge of their ocean based resources and the Intergovernmental Oceanographic Commission (IOC) was in a good position to assist member States in formulation and coordination of activities and in the strengthening of their capacities. He outlined the Global Ocean Observation System which would facilitate the collection, management and analysis of data. Finally he drew attention to the need for coastal states to ensure a proper and coordinated programme for the development of the coastal zones.

During the discussion which ensued it was stressed that each country should build its national infrastructure for handling its marine affairs. Such infrastructures could network with existing subregional and regional research and training institutions or centres for marine science and technology advocated in the Convention. With regard to the use of modern technology, it was pointed out information collection using satellites could facilitate the exploration of both living and non living resources, monitoring of illegal exploitation of resources and could even be linked with and benefit the artisanal fishing activities still prevalent in many member States. More and better information exchange and networking with regional and international data banks was necessary to ensure that member States benefit from the vast amount of data available on their resources. Concerns were also expressed about the dangers of toxic waste being illegally deposited in the maritime zones of African countries.

Manpower Requirements

Dr. Saigal presented this theme. According to him, manpower was the critical element in ocean technology on which exploitation of ocean resources depended. For R & D, assessment and forecasting of the state-of-the-art technologies comprising ocean techniques, skilled manpower was the main requirement as present economic growth depends to a large extent on innovation which in turn depends on skilled and trained manpower. Manpower requirements vary from country to country especially with regard to quality of personnel. Trained manpower is needed at every level of ocean activities. Interdisciplinary training needed to be introduced in all countries. Planning for change is most important in a modern enterprise. A broader understanding of the scientific / technological production system will facilitate new learning and adjustment to change.

Long term human resource development and immediate requirements must be identified.

Africa's trained manpower remain abroad primarily due to lack of research facilities, isolation and difficulties in being able to attend scientific meetings. Therefore training should go hand in hand with upgrading of research facilities and the review of the whole educational system.

Countries should place priority on training technicians as they are the ones who have the basic maintenance skills. Engineers were also needed to develop and configure technologies needed to exploit marine resources. Foreign technicians and technologies in marine science would be required in the short-term to fill in the gaps.

African Island States, Ocean Development and Law of the Sea - Case Study: Cape Verde

The representative of Cape Verde reported that his country is an archipelago constituted of ten small islands located off the coast of West Africa. It gained independence in 1975 and has a population of 400,000 inhabitants spread over 4,030 square kilometres.

He indicated that so far, marine affairs in his country fell under the responsibilities of three ministries: Ministry of Foreign Affairs, Ministry of Fisheries and Agriculture, and Ministry of Transport and Equipment. His country had taken steps towards the exercise of sovereignty over its maritime zones. In 1977, it established base lines and defined its Exclusive Economic Zone, it signed the Law of the Sea Convention in 1982, and ratified it in 1987. Pursuant to the provisions of the Convention it redefined its maritime zones to the 12 mile territorial sea, the 24 miles contiguous zone, the 200 mile EEZ, and the Continental Shelf of 200 miles.

In terms of exploitation of sea resources, his country has enacted legislation for the management of ocean and marine affairs.

With respect to fisheries, legislation was passed in 1987 regarding the exploitation and management of tortoises and green lobsters. Cape Verde also has an institute solely devoted to fisheries research and development. Surveillance and protection are considered to be very important but the country has only one boat and a hired plane could hardly do the job. It was therefore important to subject these activities to sub-regional cooperation.

Proposals are in hand to create a data bank with the assistance of EEC and FAO.

In the area of environment, Cape Verde adopted the necessary legislation for addition to the legislation on fisheries and application of the provisions of Agenda 21. However, it was difficult to control and monitor dumping of toxic waste. There was a need to elaborate projects to benefit from the funds made available under GEF for the protection of the environment.

In the field of maritime transport, the country was geographically well located between Europe and America and had two good harbours with a third one under construction.

Cape Verde had pursued regional cooperation with its neighbouring states of Senegal, Guinea and Guinea Bissau, and amicably resolved delimitations of its maritime boundary with Senegal. Furthermore it is a member of the sub-regional Fisheries Commission, and concluded agreements with research institutions in various areas of ocean resources. The country strongly believes in regional cooperation and is keen to participate in cooperative programmes for the management and protection of the marine resources through provisions like the establishment of a regional data bank.

African Land-Locked States and Regional Cooperation; Case Study: Uganda

Mr. Ochan, who presented the case study on Uganda, stressed on the fact that existing customary international law was not very clear on the transit rights of land-locked states; that there were differing interpretations by experts on the existing customary law regarding transit rights of land-locked states; that in any case the debate had now shifted to economic issues from the purely juridical; and that the UN Convention on the Law of the Sea was a revolutionary departure from existing customary and international law in not only giving land-locked states the rights to transit passage but almost making land-locked states coastal states by giving them the rights to: freedoms of the high seas; marine scientific research; participation in the exploitation in the EEZ; transfer of technology; participation in the activities of the Area and to membership in the Council of the International Seabed Authority. Mr. Ochan, drawing on the history of the East African Community, also went on to say that the future of African land-locked states lay in establishing regional cooperative mechanisms.

African Coastal States; Case Study: Tanzania

The case study of Tanzania was presented by H.E. Hon. Joseph Warioba. He gave a detailed account of the resources of the Tanzanian marine and coastal areas, the steps taken to exploit them, what more needed to be done, and the various legal and other steps taken by Tanzania.

The speaker stressed the need for Tanzania setting up an appropriate mechanism for coordinating marine activities, acquiring the necessary technologies and for integrating the marine dimension into Tanzania's developmental strategies.

The African Regional Seas Programme

UNEP is the initiator of the Regional Seas programme which was initiated immediately after the 1972 Stockholm Conference. The idea originated from pollution that occurred in semi-enclosed seas because of lack of mobility of the water body. The first programme was initiated in the Mediterranean Sea which resulted in the adoption of the Barcelona Convention. Due to the fact that pollution comes mainly from land based sources the programme expanded to cover not only enclosed seas but also open seas. This required the cooperation of the coastal states of a given region for protecting the environment. This later on developed into the concept of sustainable development.

The second major change occurred with the idea of involving landlocked States in the programme as pollution of seas originate mainly from land. Through the initiation of UNEP, the Montreal Guideline was adopted governing such activities.

There is now a concept being developed to integrate and coordinate the activities of international organizations as opposed to multiplicity of activities and to take the Regional Seas Programme of UNEP as a model for such integration. The institutional integration should be promoted on national, regional as well as on global basis.

Experiences of West African and the Mediterranean regions were presented. Regional Seas Programmes have adopted action plans but due to lack of finance most of the action plans are not being implemented in West Africa. In the Mediterranean region although the initiative was taken by African states, programmes like oceanographic studies on traffic adopted for the Eastern and Western Mediterranean regions were delayed on the African side due to lack of money. But with funds available now programmes will go ahead.

In conclusion it was stated that there is a wealth of information on the establishment of regional institutions dealing with marine activities but we have to go a long way before proper integration can be achieved.

African Coastal States; Case Study: Ghana

Mr. Martin Menasah, Director of Fisheries of Ghana, presented Ghana's case study. He stated that his country has developed a sophisticated marine fisheries programme since 1950s in four main areas: (a) artisanal, (b) semi-industrial, (c) industrial and (d) tuna. Since the upwelling phenomenon lasts for only three months, intensive fishing activity takes place during those months, and the stocks are very much depleted. Though the management of fisheries resources is very poor, there is possibility of enforcement of monitoring, control and surveillance by the Fisheries Commission by the end of 1994. Their annual production of fish is 300,000 metric tons, of which 90% is from marine resources. Tuna fishing is undertaken through joint-ventures, while the rest is done by local enterprise.

As regards research, Ghana established the Marine Fisheries Research Unit within the fisheries department in 1962. Besides monitoring stocks, research on oceanography, plankton, temperature and oxygen variation is undertaken by the unit. There is close cooperation with the Abidjan based Centre de Recherches Oceanologiques and with ORSTOM of France. Cooperation also exists with Togo and Benin. Research is coordinated by the Ghana National Commission on Oceanography.

With respect to UNCLOS and Agenda 21, Ghana has signed and ratified UNCLOS. The legal department of the Ministry of Foreign Affairs is the focal point. The Maritime Boundaries Limitation Law has been incorporated in their statutes, while the Institute for Coastal Zone Management is yet to be established. The Council for Scientific and Industrial Research (CSIR) organized

a seminar on Agenda 21 together with UNEP in November 1993 in which issues of climate change and biodiversity were covered.

The speaker also mentioned that there are activities in other areas like tourism, port management, transport, which are undertaken by various ministries. As regards the issue of licenses to ships fishing in the high seas and norms and standards to be observed, the Ministry of Fisheries takes care of them. Enforcing the laws, however, is still a problem.

IOMAC and Indian Ocean Commission: Critical Analysis and Options for Africa

H.E. Hon. Joseph Warioba introduced the subject of IOMAC, after the Chairperson, Prof. Mann Borgese had stressed the need for supporting the activities of regional organizations in the area of marine affairs. Dr. Warioba limited his statement to IOMAC.

He said that IOMAC was founded in 1982 and held its first meeting in 1985. Its charter was opened for ratification only in 1990, at a meeting in Arusha, Tanzania. As a regional organization of the Indian Ocean dealing with cooperation in marine affairs, its mandate spread covered both coastal and landlocked countries. Its plan of action includes:

- measures to integrate the marine sector in national development plans
- due regard to the problems of land-locked countries
- measures to acquire and disseminate relevant information
- harmonization and strengthening of cooperation with the states involved
- formulation of marine affairs policy and coordination
- promotion of maritime transport systems
- development and strengthening of institutions
- influencing international organizations to support marine activities in the Indian Ocean

IOMAC emphasizes the role of coordination in the region in the area of policy and management of natural resources, both marine and freshwater. Such coordination is still a major problem as weakness exists even at member states levels where coordinating mechanisms have still to be set-up. The future of IOMAC will depend on the extent of support from member states.

During the discussion that followed, it was brought out that IOI has provided four training programmes to IOMAC countries, which is one of its significant achievements. Since its mandate is too broad, IOMAC is now facing difficulties, as out of the over forty countries who are members, only five, namely Indonesia, Mauritius, Mozambique, Pakistan and Srilanka have

ratified the IOMAC charter. Three more have to ratify before it comes into force, and UNDP, the main funding agency in the past, has stopped all funding till the member States themselves show their commitment by supporting IOMAC. Even the Secretary General had to resign and look for another job as his salary was not being paid.

The Executive Secretary of ECA underlined the need for the support of member states, and said that ECA will study the situation and look into ways of revitalizing IOMAC.

Another participant raised the issue of IOMAC's support to women's programmes, and it was mentioned that women had participated in the training programmes of IOMAC.

Concerning the Indian Ocean Commission (IOC), it was noted that Madagascar, Mauritius, Comoros, Seychelles and Reunion were members. IOC is very active, and the Executive Secretary will be exploring ways to strengthen cooperation between IOMAC, IOC and UNECA.

West African cooperation: Critical analysis

Under this item, the Seminar benefited from contributions from Cape Verde, Gambia and Ghana.

The representative of Cape Verde described the objectives, the activities and the difficulties encountered in the implementation of these activities, by the West African Subregional Commission on Fisheries.

The Commission was established in 1985. Its main objective is to promote cooperation among Cape Verde, Gambia, Guinea, Guinea Bissau and Senegal, in the field of fisheries.

The main body of the Commission is the Conference of Ministers. Then there is the Coordination Committee, and a Permanent Secretariat, which will be based in Dakar (Senegal). Since its inception, the Commission has dealt only with the establishment or organic texts such as the Convention establishing the Commission.

Difficulties encountered were essentially of a financial nature. To conclude, the representative of Cape Verde asked ECA to increase its assistance to the Commission.

In the ensuing debate, the Seminar noted that the structures of the Commission described by the representative of Cape Verde were in the right direction regarding the implementation of the provisions of the Convention on the Law of the Sea. However, these structures were very sectoral (they covered only fisheries). Steps should be taken to broaden their scope, in order to give to these structures a multisectoral dimension.

The ECA Executive Secretary informed the representative of Cape Verde that ECA would spare no efforts to help the West African Subregional Commission on Fisheries strengthen its activities.

The representative of Gambia described the different structures of the subregional organisation covering his state and mentioned that this organisation, since last year, has included environment aspects in its programme and activities. He then mentioned surveillance of the EEZ and in this regard, on the agreement between Gambia and Senegal.

The representative of Ghana briefed the Seminar on the subregional organisation of his area and stated that lack of funds prevented the organisation from correctly implementing its activities.

The Seminar informed the representative of Ghana about funds available within GEF and the IBRD, which could be released by these institutions, provided that concrete projects responding to the standards established by the institutions are submitted and approved.

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Updated 28.4.94

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ANNEX 6

**Fourth Meeting of the Representatives
of the Operational Centres of
the
International Ocean Institute
held at Madras
on
3 and 4 December, 1994**

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Dr. Anton Vratasa, Vice President, IOI
Mr. Maxwell Bruce, Acting Chairman, Planning Council, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Ms. S.M. Vallejo, UNDOALOS, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Dr. Hou Wenfeng, IOI China
MSc Lorena San Roman, IOI Costa Rica
MSc Alexandro Guttierrez, IOI Costa Rica
Dr. Tsutomu Fuse, IOI Japan
Dr. Diafara Toure, IOI Senegal
Prof. Robin South, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Also Present:

Ms. Anita Coady, Editor Across the Oceans
Prof. Rajagopalan, IOI Madras
Prof. S.P. Subramanian, IOI Madras
Prof. J.S. Mani, IOI Madras
Ms. Margaret Wood, IOI Halifax
Mr. Seremaia Kalokalo, IOI South Pacific

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of the Agenda

The Agenda as circulated was adopted.

Item 2: Workplan centre-wise for 1995

The Committee had before it the Workplan for IOI including the workplans for Costa Rica, Madras, Senegal and South Pacific.

Presenting the Workplan for IOI, the Executive Director explained that the broad picture regarding inputs and outputs for 1995 was as below.

WORK PLAN 1995

(\$'000)

INPUTS	UNDP/GEF	IOI	
		Non-UNDP funds	In-kind
1. Administrative Support			
. Headquarters	-		292.0
. Centres	33.0		181.5
2. PR Brochures etc.	23.0	30.0	
3. Travel costs			
. Directors meeting		60.0	
. Programme development, research funding, evaluation etc.	118.5	100.0	
4. Course development	129.5		375.0
5. Training of trainers	37.0		100.0
6. Training scholarships	393.3		240.0
		502.5	
Total	734.3	632.5	1,188.5

OUTPUTS	UNDP/GEF	IOI
IOI Costa Rica	145	
IOI India	350	125
IOI South Pacific	155	
IOI Senegal	200	
IOI Halifax		250
IOI Malta		120
IOI China		75
Total	700	570

The dependence on UNDP funds decreased from 47% in 1993 to 38% in 1994 as may be seen from the tables below.

1993

Name of course	Conducted by whom and when	UNDP funding ('000\$/% of total)	Non-UNDP funding ('000\$/as %)	Total funding ('000\$)
Alumni Refresher	IOI Madras 4-7 March, 1993	6.3	-	6.3
Coastal Zone Management as a Sustainable Process	IOI Madras 11 Oct-17 Dec., 1993	67.4	-	67.4
For Managers and Planners of the Enterprise	IOI HQ 04 Oct-05 Nov., 1993	-	90.0- Sasa- kawa Found- ation	90.0
Leaders Sensitising Workshop	IOI South Pac. 17 Nov., 1993	7.9	-	7.9
	Total	80.6/ 47%	90.0/ 53%	170.6

1994

Name of course	Conducted by whom and when	UNDP funding ('000\$/% of total)	Non-UNDP funding ('000\$/as %)	Total funding ('000\$)
Leaders Sensitising Seminar	IOI HQ/UNECA 28 Mar-2 Apr, 1994	25.3	25.3- UNECA	50.6
Coastal Zone Management: focus on small islands	IOI Malta 18 Apr - 10 June, 1994	-	92.4- ComSec	92.4
Coastal zone Management as a Sustainable Process	IOI Madras 27 June-29 July, 1994	40.0*	-	40.0

1994

Name of Course	Conducted by whom and when	UNDP funding ('000\$/% of total)	Non-UNDP funding ('000\$/as %)	Total funding ('000\$)
Sustainable Development Implementation of Chapter 17 of Agenda 21-EEZ	IOI Halifax 6 June - 12 August, 1994	-	132.2-CIDA	132.2
Course for Managers and Planners of the Enterprise	IOI Madras 29 August - 30 September, 1994	-	80.0-Sasakawa	80.0
Traditional Marine Tenure Workshop	IOI South Pacific 3 - 7 October, 1994	27.7	31.2-WPFCC 27.7-Govt. of France	86.6
Advanced Course for Alumni at Kuala Lumpur, Malaysia	IOI Madras 12-16 September, 1994	5.7	10.0-Govt. of Malaysia	15.7
Coralline Algae Course	IOI South Pacific 4 - 8 July, 1994	-	16.0-Govt. of France	16.0
Management and Development of Coastal Fisheries	IOI South Pacific 21 Oct.-26 Nov., 1994	102.5*	-	102.5
Leaders Workshop on Business Opportunities in the Oceans	IOI Madras 25-26 Oct., 1994	1.0	10.0-Govt. of India & NIO	11.0
Coastal Zone Management as a Sustainable Process	IOI Madras 17 Oct.-16 Dec., 1994	57.0*	15/135	* 57.0-UNDP
	Total	259.2/ 38%	424.8/ 62%	684.0

* Provisional figures of expenditure

The Executive Director went on to say that the detailed Workplan was under the consideration of the Committee and both the Centre Directors and he would be happy to clarify any matter arising during the deliberations.

There was a very detailed discussion on the Workplan and the Committee came to the following conclusions.

Networking

The Committee noted that the outputs and objectives regarding networking as per the Project Document had, by and large, been achieved. There had been three meetings of directors/vice chancellors, three meetings of the courses development committee, dissemination of an alumni directory, issue of quarterly newsletters, issue of PR brochures, and the development of software by IOI/IIT Madras by which the libraries of the IOI System can be linked by E-Mail.

The Committee further noted that there had been MOUs/networking arrangements with the University of Rhode Island, ICPE Ljubljana, IOC/UNESCO, Paris and UNU, Tokyo. There had also been twinning between IIT Madras and USP South Pacific regarding grant of B.Tech degrees. These outputs are a spin-off of the activities of IOI regarding programme development. Networking arrangements with the University of Yokohama, Japan and the State Oceanic Administration, People's Republic of China has also been recently finalised.

In view of the fact that IOI had been successful in attracting non-UNDP funding for its courses, the UNDP representative suggested that the Committee may consider reducing the outlay on training scholarships and divert the money saved thereby for funding networking activities. This would enable networking to continue during 1996 when the programmes of IOIs Costa Rica and Senegal would still be under execution.

The Committee welcomed this suggestion and requested the Executive Director to revise the Workplan accordingly.

Links with UNDP/UNEP

The Committee noted that links with UNDP were both close and interactive. UNDP representatives from headquarters attended the six monthly Directors and VC's meeting while UNDP Res Reps in Fiji, India, Dakar and Costa Rica were closely involved at the regional level.

The Committee noted the need to link up the Centres with UNEP's Regional Seas Programme and was of the view that steps needed to be taken in this regard.

Non-UNDP financial support

The Committee noted that there had been significant progress in attracting new sources of funding: from Japan, Australia, India, France and some South Pacific organisations. Sasakawa Foundation had funded a programme in China in 1993 and one in Madras in 1994. The Government of India is funding a course for policy makers and the Government of Malaysia has funded an advanced course for alumni and others. In the South Pacific, WPFCC, a regional organisation and the Government of France contributed about \$ 50,000 to a customary tenure workshop, while AIDAB is considering funding a course on Ports and Shipping in collaboration with the Australian Maritime College, Tasmania.

The Committee further noted that due to the efforts of the Honorary Chairman of IOI, and UNDP/DGIP the Ocean Resources Programme of the university of South Pacific was likely to get US\$ 10 million from Japan. This would considerably aid IOI South Pacific by augmenting the infrastructure likely to be available to it.

Programme Development

The Committee was informed that there was a growing demand for more IOI Centres. IOI Japan and China were already in place. Both are locally funded. For the Arabic speaking areas IOI Qatar was in the process of being established with all costs to be met by the Government of Qatar. During the recently concluded leaders workshop in Addis Ababa, there was a demand for three centres for languages other than French, namely, Arabic, Portugese and English. The feasibility of setting up these centres would be explored by IOI in association with UNECA. The initial responses from the Government of Kenya (English centre) and Oporto University in Portugal, which would be preliminary to the Portugese speaking operational centre in Africa have been positive.

TRAINING PROGRAMME

The Committee noted that the strategic approach as outlined in the Project Document was to improve the ability of developing countries to manage their ocean resources within the context of sustainable development. This was to be done by the operational centres serving as vehicles for focusing attention on emerging issues, providing training on the management of the coastal zone and the exclusive economic zone and by initiating research programmes to deal with local/regional concerns. This was to be achieved by revising and updating the existing programmes of IOI, as well as developing new ones, to bring them in line with the latest developments in instruction technologies and to developing new courses for planners, policy makers, leaders, IOI alumni and small islands.

The Committee further noted that the main instrumentalities to keep the programme on course are:

- meetings of the courses development committee;
- training of course developers;
- training of trainers;
- evaluation to ensure quality.

Instrumentalities

The Committee noted with satisfaction that the meetings of the courses development committee (which included UNDP representatives) had done a good job of keeping the courses on track. 9 course developers from IOI had been sensitised to the TRAIN-X System in a one week's workshop conducted by Mr. Michel Couroux of UNCTAD and a noted expert on the TRAIN-X System. IOI was also going to be an integral link in the TRAIN-SEA COAST System now under development. And during 1993, two trainers (IOI India) went through the training of trainers programme and they along with the 9 course developers would provide a good base for expanding the trainers network of IOI and for linking it with TRAIN-SEA COAST.

The Committee was informed by the UNDP representative that a two-week TRAIN-SEA COAST Workshop for trainers would be held in January. The Committee was of the view that two trainers from each centre (and three from IOI Senegal) should attend the TRAIN-SEA COAST Workshop. One trainer from each centre would be funded by UNDP.

The Committee further noted that the present evaluation system of IOI was composed of three elements, namely,

- feedback from participants;
- feedback from the Course Director and the faculty;
- internal evaluation by the Honorary Chairman and Executive Director.

The Committee was of the view that the evaluation system needed to be supplemented by evaluations by experts external to the IOI System as that would add to the conduct and credibility of the courses. The Committee also requested the Executive Director to submit one complete evaluation report for the consideration of the Committee at its next meeting. In this context the Committee welcomed the suggestion of the UNDP representative to have an independent evaluation of the Project in early 1995.

Training outputs

The Committee noted that the position regarding projected training outputs and requirements of funds as in the Project Document, and actual achievements for 1994 were as below:

Trainee Outputs and Budgeted Funds - 1994**Project document****Actual achievement**

Centre	Funds budgeted (\$)	Likely Output (t.w)	\$ per t.w.	Funds (\$)	Actual Output (t.w.)	\$ per (t.w.)
South Pacific	112,500	146	770	139,084	191	728
India	153,000	500	306	106,400	340	312
Senegal	135,000	240	562	25,300	49	516

Note: t.w. = trainee weeks

The Committee noted that the cost per trainee week was either less (South Pacific and Senegal) or about the same (India) compared to what was projected in the Project Document.

Workplans, centre-wise for 1995

The Committee had before it the Work Plans for IOI Costa Rica, Halifax, India, Senegal and South Pacific for 1995. The Committee noted that the Halifax centre was the only centre doing policy research. After considering and reviewing the Work Plans, the Committee approved all the Workplans subject to IOI Costa Rica revising its course syllabi in line with the decisions of the Courses Development Committee.

Item 3: Research agenda centre-wise

The Committee noted that though a preliminary survey of research possibilities had been made more work needed to be done to link up the IOI research proposals with ongoing regional research so as to avoid duplication. The Committee was of the view that research proposals should be got ready by March, 1995 by all the centres so that they could be considered at its next meeting.

Item 4: Suggestions for professional services

Deferred.

Item 5: Suggestions for funding from second tranche of GEF

Deferred.

Item 6: World Commission for the Oceans

The Honorary Chairman informed the Committee of the proposal for a World Commission for the Oceans. The IOI Regional Centres

would be expected to act as Secretariats for the World Commission for the Oceans for their respective regions. A draft time table was circulated.

Item 7: TRAIN-SEA COAST

There was a very extensive discussion on the proposed TRAIN-SEA COAST System. The Committee came to the following conclusions:

- IOI/TRAIN SEA COAST courses would have to conform to the IOI "philosophy" of multidisciplinary;
- Operational Centres should send their proposals to Headquarters for advice and consent;
- In the meantime, IOI Centres would send persons to the TRAIN SEA COAST workshop in January.

The meeting ended with a vote of thanks to the Chair.



Dr. Krishan Saigal
Executive Director

ANNEX 7

Second Meeting of the Courses Development Committee
held at Barbados
on
29 April, 1994

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Prof. E. Robin South, IOI South Pacific
M.Sc Lorena San Roman, UNA Costa Rica
M.Sc Alexandro Cuttiriez, UNA Costa Rica
Ms. Anita Coady, Editor Across the Oceans
Mr. Seremaia Kalokalo Tuqiri, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of Agenda

The circulated agenda was adopted.

Item 2: Consideration and approval of courses proposed to be conducted in 1994

The Committee noted that the following courses were proposed to be conducted in 1994.

Name of Course	Where to be held	Duration	No of participants	Source of funding
1. Coastal Zone Management as a sustainable process	Madras	5 weeks	20	UNDP
2. For Managers, Policy and Project Planners of the Enterprise	Madras	5 weeks	15	Sasakawa Foundation

Name of course	Where to be held	Duration	No. of participants	Source of funding
3. Coastal Zone Management as a sustainable process	Madras	8-10 weeks	20	UNDP
4. Alumni Refresher	Kuala Lumpur	1 week	20-25	Government of Malaysia
5. For Policy Makers	Madras	1 week	20-25	Government of India
6. Customary Tenure Workshop	Suva	2 weeks	20	UNDP, WPFCC and SPREP
7. Coastal Fisheries	Suva	5 weeks	20	UNDP and Sasakawa
8. EEZ-Sustainable Development	Halifax	10 weeks	20	CIDA and others

The Committee noted that courses for Costa Rica and Africa were not included in the above list as their Work Plans had not yet been firmed up and accepted by UNDP.

The Committee noted that IOI Madras had both a 8-10 week and a 5-week programme on coastal zone management. The Committee looked at the 5-week programme as an experimental measure whose success would have to be judged by the extent to which it achieved its objectives. A view was expressed that if the 5-week programme was not to be too much diluted, then plenty of reading materials should be handed out to the participants so that they could complete the learning process later on in their own countries.

The Committee approved the idea of some external evaluation system for the courses.

Item 3 & 4: Follow up on Geneva workshop and reports on course modules prepared

The Committee had before it the course materials from IOI South Pacific and a report on how the course material for the IOI Madras 5-week course was being got ready.

Regarding the course material of IOI South Pacific, the Committee was satisfied with the material, but felt that in view of the plan to network and exchange courses with other centres, the present materials were too strongly focussed on the South Pacific. For purposes of exchange and networking, it would be better to have region-specific sections developed in a manner that are separate from the main course, so that these sections can be readily substituted for other region-specific material.

There was discussion on methodologies employed in course preparation. IOI-Madras is using a team approach and has a considerable number of lectures involved. Summaries of lectures from their Coastal Management course were provided for information. IOI South Pacific, on the other hand, has a much smaller pool to draw from. The Committee was of the view that they would like to wait for the course materials before reaching any conclusions in the matter. Also evaluation of courses should include interchange between centres, and the idea of a pedagogical evaluator to review courses should be tried out.

In discussion of the TRAIN-X system and its applicability to IOI courses, the Committee was of the view that while in general the system has a number of advantages, but disadvantages included the fact that TRAIN-X was too detailed and designed for homogeneous groups, whereas most IOI courses were offered to heterogeneous groups. In addition, it was felt that the Mastery test in its present form was unsuitable for IOI courses. The Committee noted that streamlining and simplification of the TRAIN-X system was under way, and centres were asked to provide UNDP with comments and feed-back so that these could be considered in the simplification process.

The Committee was further of the view that the Distance Learning expertise of USP needed to be transferred to the other centres.

The meeting ended with a vote of thanks to the Chair.

Dr. Krishan Saigal
Executive Director

ANNEX 8

**Third Meeting of the Courses Development Committee
of the International Ocean Institute
held at Madras
on
3 and 4 December, 1994**

Present:

Prof. Elisabeth Mann Borgese, Honorary Chairman, IOI
Dr. Anton Vratasa, Vice President, IOI
Mr. Maxwell Bruce, Acting Chairman, Planning Council, IOI
Amb. Bhagwat Singh, Governing Board, IOI
Mr. Philip Reynolds, DGIP, UNDP, New York
Ms. S.M. Vallejo, UNDOALOS, New York
Prof. N.V.C. Swamy, IOI Madras
Prof. V.S. Raju, IOI Madras
Dr. Hou Wenfeng, IOI China
MSc Lorena San Roman, IOI Costa Rica
MSc Alexandro Guttierrez, IOI Costa Rica
Dr. Tsutomu Fuse, IOI Japan
Dr. Diafara Toure, IOI Senegal
Prof. Robin South, IOI South Pacific
Dr. Krishan Saigal, Executive Director, IOI

Also Present:

Ms. Anita Coady, Editor Across the Oceans
Prof. Rajagopalan, IOI Madras
Prof. S.P. Subramanian, IOI Madras
Prof. J.S. Mani, IOI Madras
Ms. Margaret Wood, IOI Halifax
Mr. Seremaia Kalokalo, IOI South Pacific

Prof. Elisabeth Mann Borgese took the chair.

Item 1: Adoption of Agenda

The circulated agenda was adopted.

Item 2: Consideration of introduction of a 2-week basic reader for all IOI programmes of 2 weeks duration or more

The Committee noted that there had been a quantum jump in the activities of IOI all over the world through a networking system where a lot of autonomy was being given to the regional centres. Network management is, by its very nature, dependent on information dissemination, the establishment of linkages and the laying down of a strategic policy.

It was in the above context that the Committee considered the proposal that any course with a duration of 2 weeks or more must include a basic multi-disciplinary input as per the circulated 2-week reader (Appendix 1) if it was to be certified as an IOI course.

The Committee deliberated on the proposal at great length and during discussions the following points were made:

- while in principle there was a great deal to be said about integrating the various IOI courses through inclusion of a core syllabus, in implementing the proposal, however, some difficulties may arise in the case of courses of, say three weeks or less;
- there was also the problem of how to include the multidisciplinary philosophy of IOI in courses of less than 2 weeks;
- the time given for case studies (2 sessions) was too short. In this connection it was clarified that the basic reader only laid down a minimum and the centres could give more time to any of the areas mentioned;
- it was noted that IOI Senegal was running the 2-week reader as a full course for 10 days.

After considering all the pros and cons of the issue, the Committee decided that the 2-week core should be considered the highest common denominator and included in every IOI course of 2 weeks or more. However, the time actually devoted to the core reader in a course would vary according to circumstances. Two introductory lectures might suffice, after which the basic reader should be given to the participants for self-study. This would apply, in particular, to courses of two weeks or less. It would be important to train lecturers who could give introductory, broadly interdisciplinary lectures.

Item 3: Consideration and approval of courses proposed to be run in 1995

IOI Madras

The Committee had before it an agenda note submitted by IOI Madras which stated that the following courses were proposed to be conducted by it in 1995.

SI.No.	Name of Course	Duration
1	Coastal Zone Management - India only	4 weeks
2	Coastal Zone Management as a Sustainable Process - regional	7 weeks
3	Coastal Zone Management as a Sustainable Process - regional	8 weeks
4	Course for policy makers - India	1 week
5	Advanced Alumni - India and regional (2 courses)	1 week

In the note IOI Madras explained that they had arrived at the syllabi of the courses proposed for 1995 on the basis of experience gained by them in 1993 and 1994 on courses of 10-, 5- and 9- weeks (really 8-weeks because 1-week was for attending PIM XXII) conducted by them. The break-up of courses input-wise was as below.

INTERNATIONAL OCEAN INSTITUTE, OPERATIONAL CENTRE, INDIA

	Weeks of training programme in units of 1 1/2 hours each					
	10	5	9	4	7	8
INPUTS BY RESOURCE PERSONS						
* Lectures	110	52	76	37	66	75
* Case Studies	5	4	4	5	4	5
* Simulation	5	2	2	2	2	2
Total	120	58	82	44	72	82
INPUTS BY PARTICIPANTS						
* Group discussions, weekly reviews	30	14	30	12	24	28
* Country reports	9	6	7	-	8	8
* Research reports	-	8	7	6	8	8
* Feed back	1	2	2	2	2	2
Total	40	30	46	20	42	46
FIELD VISITS						
Total	40	12	36	6	26	32
Grand total	200	100	160	80	140	160

The breakup of the courses theme-wise is as below.

INTERNATIONAL OCEAN INSTITUTE, OPERATIONAL CENTRE, INDIA
 TRAINING COURSE ON COASTAL ZONE MANAGEMENT (CZM) AS A
 SUSTAINABLE PROCESS

THEME AND TITLE	Weeks of training programme in units of 1 1/2 hours each				
	5	9	4	7	8
0: Introductory lectures on coastal zone management, group discussions and aspects related to spoken communication are organised in the introductory theme	6	6	3	5	5
1: Contemporary concept of development and the law of the sea convention	7	7	8	8	8
2A: The oceans: oceanography, the sea-air interface with emphasis on coastal zone	13	14	7	10	14
2B: Coastal ecology, pollution and environmental impact assessment	13	16	-	12	16
3: Managerial process, structure and strategy: application to coastal zone activities	6	9	6	9	9
4: Management of coastal zone activities - utilization of living resources	8	9	6	6	8
5: Management of coastal zone activities utilization of non-living resources	6	7	5	7	7
6: Infra-structure development of coastal zone and management of ports, harbours, transport network and tourism	7	7	5	9	9
7: Sustainable development of the coastal zone	5	7	4	6	6
TOTAL	58	82	44	72	82

For the year 1995 IOI Madras proposes to repeat a programme of 8-weeks and also to run a programme of 7-weeks which they think could be fitted into the new requirement. At the same time, IOI Madras also proposes to run a 4-week programme for personnel from the States of the Indian Union and this has been done by reducing field visits, inputs by participants and some of the lectures as compared to the 5-week programme. In the introductory lectures, the 2 units devoted in the 5-week course on teaching of English are being eliminated while 23 units are being reduced in theme 2A & 2B because of the jurisdiction of the States of the Indian Union does not cover the total coastal ecology, their jurisdiction being limited by the extent of the territorial sea. The way all the units are divided can be seen in the details of the 4-week course already given in the table above.

Syllabi for the 4, 7 and 8 week courses are at Appendices 2, 3 and 4.

Syllabi for the 1-week policy makers programme and the two 1-week alumni programmes (which will be adapted from the course conducted in Malaysia) are at Appendices 5 and 6. The policy-makers programme has been approved by the Government of India for their senior officers while the alumni courses would be adaptations of the Malaysia programme which had been a great success.

The UNDP representative informed the Committee that in the UNEP concept the coastal zone was taken to be the land area from the watershed to the coast while the sea area was to be up to the limits of national jurisdiction, i.e., up to the outer limits of the Exclusive Economic Zone. GEF came into the picture when a number of countries took up a programme as that would take the programme into the domain of international waters, which was one of the elements of GEF.

The Committee expressed its gratefulness to the representative of UNDP for the information and desired that:

- all Centres should follow the UNEP concept of coastal zone;
- IOI should get in touch with OCA/PAC of UNEP so that IOIs courses could be integrated into various regional seas programmes of UNEP and thus qualify for funding from the second tranche of GEF.

The Committee noted that IOI Madras had gone about developing its syllabi in a systematic way and suggested the programmes next year should be of 7-weeks and 6 1/2 weeks respectively instead of 7- and 8- weeks. The Committee also noted that all the elements of the core syllabus were included in the three programmes.

Subject to the above the Committee approved the proposals of IOI Madras.

IOI South Pacific

The Director IOI South Pacific made an oral presentation and requested approval for the following courses:

SI.No.	Name of course	Duration	When to be held
1	Ports and shipping	5 weeks	June-July, 1995
2	Resource & Environmental Economics	5 weeks	July-August, 1995
3	Coastal Fisheries Management and Development	5 weeks	October-November, 1995
4	Corraline Workshop	1 week	December, 1995
5	Leaders Seminar, Port Moresby, Papua New Guinea	2 days	September, 1995
6	Alumni Refresher Course	1 week	August, 1995

Of the above courses, the course on Ports & Shipping and the Coralline Workshop would not be classified as IOI Courses as they were being funded by other sources (AIDAB and the Government of France). The Committee had no objection to the above programmes being run by IOI South Pacific and raising funds for the same. The Committee requested IOI South Pacific to circulate the course syllabus to all IOI Centres as the other Centres might like to pick up some units/modules of these courses/workshops.

Director IOI South Pacific stated that he had not circulated the course syllabi for the other two courses as they had been circulated at Barbados. The Committee approved the two courses subject to the 2-week basic core reader being included in the syllabi or Director IOI South Pacific approaching the Committee for relaxation in case he felt that was necessary. The syllabi needed to be circulated to all IOI Centres for information.

IOI Senegal

The Committee had before it the syllabus of a 2-week leadership workshop and a 8-week course on planning and management of coastal zones. It was suggested to IOI Senegal by the Committee to collaborate with the UNEP Regional Seas Programme for W. Africa in running its training programmes. The Committee noted that IOI Senegal wanted to send 3 persons to the TRAIN-SEACOAST

Seminar in January 1995 and that UNDP would pay for 1 person, IOI HQ for another and IOI Senegal for the third.

After discussion, the Committee approved the 2-week leadership workshop. The Committee was of the view that the results of the 2-week workshop should be made available to it at its next meeting when it would consider the 8-week course.

IOI Costa Rica

The representatives of IOI Costa Rica wanted some more time to consider the impact of the decision taken by the Committee on the 2-week core reader. They wanted to hold a Seminar where they wanted the representatives of IOI HQ to be present so that a bigger matrix of resource persons could be established for conducting the multidisciplinary courses as required by IOI. In the meantime they wanted the Committee to approve the 2-day leaders workshop. The Committee noted that the 2-day leadership workshop would constitute a good beginning for IOI Costa Rica and approved it.

Item 4: Report of course modules prepared - Madras and South Pacific

IOI Madras

The Committee had before it the following documents:

- Activity Report of the Course Development Group
- Training Course Material, Vol. I
- Training Course Material, Vol. II
- Training Course Material, Vol. III

Introducing the documents, Director IOI Madras said that through the interactions in the Course Development Group and the preparation of lecture and module abstracts IOI Madras had been able to integrate the different lectures thereby reducing overlap. Through feedbacks from the participants and faculty they had also been able to locate deficiencies in the course structure, one such omission in earlier programmes being the management of ecosystems. The Training Course Material represented areas where IOI Madras had strengths and excluded lecture materials where there were lecturers from outside IIT as not much pressure could be put on non-IIT lecturers. For materials not within the strengths of IIT, IOI Madras would depend on other IOI Centres. IOI Madras would welcome comments on the subject matter from other IOI Centres and then would revise the training materials.

The Committee noted that:

- the Course Development Group idea was good and could be considered for adoption by other Centres;
- IOI Madras had been able to eliminate overlap and duplication;
- EEZ management was not included in IOI Madras courses and for this they could integrate material from IOI Halifax and others;
- the training materials of IOI Madras were not in TRAIN-X format.

The Committee requested all Centres to give their comments to IOI Madras, with copy to headquarters, so that the matter could be considered in the next meeting of the Committee.

IOI South Pacific

The Committee had before it the following documents:

- Management and Development of Coastal Fisheries in the Tropics - Module 1: Coastal Fisheries Environment of the Tropics - the Students Manual;
- Coastal Fisheries Environment of the Tropics - Instructor's Manual;
- Management and Development of Coastal Fisheries - Course Manual;

Introducing the subject, Director IOI South Pacific said that all the material was on compact discs and was prepared systematically based on the TRAIN-X methodology. It included matters relatable to fisheries, management strategies and sustainable development. Transparencies were also available.

The Committee noted that:

- the material was prepared in accordance with the TRAIN-X format.
- it included both the students manual and the instructors manual.

Since time was too short to consider the materials, the Committee requested all Centres to send their comments to IOI South Pacific, with copy to headquarters, so that it could be discussed in its next meeting.

Item 5: Consideration of Course Modules Proposed to be Developed: Costa Rica and Senegal

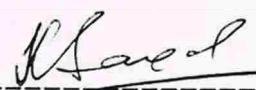
IOI Costa Rica

The representatives of IOI Costa Rica stated that they would put up their proposals in the next meeting.

IOI Senegal

Director IOI Senegal stated that he wanted to adapt the course materials produced by IOI Madras and IOI Senegal in French. This was approved by the Committee.

The Committee concluded its deliberations with a vote of thanks to the Chair.



Dr. Krishan Saigal
Executive Director

WEEK 1:

MONDAY	
Session 1	Opening Ceremony
Session 2	Introduction: CZM, EEZ, sustainable development; the concepts, problems, opportunities and need.
Session 3	The systems approach to CZM and EEZ management: the interactions of the ecosystem, the societal system and the management and governance systems.
Session 4	The UN Convention on the Law of the Sea: <ul style="list-style-type: none"> . background; main features; interests of the developing countries, including landlocked states and small island states;
TUESDAY	
Session 1	The UN Convention on the Law of the Sea: <ul style="list-style-type: none"> . developments in the Law of the Sea: 1983-94, including the outcome of the UN Secretary-General's informal consultations concerning seabed mining, 1990-94; . follow-up of the entry into force of the Convention on 16 November 1994: problems and prospects.
Session 2	UNCED 1992 and follow-up: <ul style="list-style-type: none"> . impact on UNCLOS: sustainable ocean management; Chapter 17 of Agenda 21, and its seven programmes of action; monitoring and review. . developments in, and outcome of, international conferences on fisheries (straddling fish stocks, highly migratory fish stocks), small island developing states (SIDS), coastal zone management, and marine environment protection (1993-95);
Session 3	UNCED 1992 and follow-up: <ul style="list-style-type: none"> . integration of UN system's implementation of Agenda 21 programmes; . regional cooperation and participative approach: role of women, youth, indigenous people, local communities, and NGOs.

Session 4	The changing international system: economically, politically and technologically.
WEDNESDAY	
Session 1	The new industrial revolution and high technology and its impacts on management, economics and society.
Session 2	The new economics including accounting methods for integrating GNP and ecology.
Session 3 & 4	Introduction to oceanography: <ul style="list-style-type: none"> . fundamental importance of scientific research for all sea uses; need to strengthen national capacity; . oceanography (physical, chemical, geological, biological); . coastal oceanography and coastal processes (erosion and sediment transportation);
THURSDAY	
Session 1	Coastal ecosystems: structure and function.
Session 2	Ecological principles: food chains and webs, dynamic processes and linkages between ecosystems (land-sea continuum); critical ecosystems and their vulnerability.
Session 3	Coastal resources: distribution and abundance; nonliving resources - land, water, energy and mineral.
Session 4	Coastal resources: living resources - fisheries, coral, mangrove, wildlife; resource assessment.
FRIDAY	
Session 1	Coastal activities: tourism, fisheries, aquaculture, transport, industry, forestry, mining.
Sessions 2, 3 and 4	Group discussions and/or simulation exercises. Topics: importance of CZM and EEZM for developing countries, problems and opportunities, integration of environment and development.

WEEK 2:

MONDAY	
Session 1	Framework for decision-making for CZM and EEZM: input-output format.
Session 2	Remote sensing: aerial photo interpretation, satellite imagery, software and hardware, applications to CZM/EEZM.
Session 3	Principles of GIS: data structures, collection and standardisation, analysis and modelling, software and hardware, application to CZM/EEZM.
Session 4	Technology assessment: socio-cultural and environmental impacts, technology diffusion and economic impacts of high technology.
TUESDAY	
Session 1	Investment appraisal systems: private and public sector differences.
Session 2	Coastal pollution assessment: types & sources of pollution and their impact on the coastal ecosystem.
Session 3	Policies and Planning: their essential ingredients and interactions; how to arrive at the optimum policy mix.
Session 4	Legislative framework and institutional structures for integrated CZM and EEZM: national, regional global.
WEDNESDAY	
Session 1	Programmes and technologies: management of ports and shipping.
Session 2	Wave, solar and wind energies.
Session 3	Fisheries including aquaculture and genetic engineering.
Session 4	Robotics and mining systems. Risk management.
THURSDAY	
Session 1	Organisational structures for integrated CZM and EEZM: national, regional global.
Session 2	Regulatory measures: zoning and land use systems.
Session 3	Permits and regulatory systems; monitoring and control systems.

Session 4	Legislative requirements: jurisdictional and environment.
FRIDAY Session 1 and 2	Case studies to be developed by participants.
Sessions 3 and 4	Group discussions: generic model for developing countries for effective CZM and EEZM.

Note: All sessions are of 1 and a half hours duration each.

**TRAINING COURSE ON COASTAL ZONE MANAGEMENT (CZM)
AS A SUSTAINABLE PROCESS
- for Administrators in Coastal States in India
03rd April to 28th April 1995 - (4 WEEKS)**

COURSE SYLLABUS

UNIT	TITLE AND SPEAKER
THEME 0: INTRODUCTION	
0.1	Introduction to the course - an overview of the training programme, expected outputs.
0.2, 0.3	Group discussions on different aspects concerning Coastal Zone Management (CZM).
THEME 1: TECHNOLOGICAL CHANGE, SOCIO-ECONOMIC DEVELOPMENT, INTERNATIONAL NEGOTIATIONS AND THE LAW OF THE SEA CONVENTION	
1.1	Impact of the New Industrial Revolution on organizations and management systems.
1.2	The changing concept of development.
1.3, 1.4 1.5, 1.6	UNCLOS, UNCLOS III, UNCED, Rio conference, Chapter 17 of Agenda 21. Protection of marine environment and marine scientific research.
1.7, 1.8	Legislation for and regulation of coastal zone activities in India.
THEME 2: THE LAND-SEA-AIR INTERFACE. OCEANOGRAPHY, COASTAL ZONE, and COASTAL ECOSYSTEMS	
2.1	Physical Oceanography. The sea-air interface. Dynamic elements and their measurement.
2.2	Chemical Oceanography. Chemistry of sea-water and oceanic materials.
2.3	Geological Oceanography. Coastal geomorphology, sediment formation and its characteristics.

- 2.4 Introduction to coastal zone and nearshore phenomena. Erosion, accretion, storm surges and sea level rise.
- 2.5, 2.6 Coastal ecosystems and biodiversity. Species interaction and their impact on the coastal zone.
- 2.7 Coastal aquifers and impacts due to developmental activities.
- 2.8 Natural disasters and mitigation measures in the coastal zone.
- 2.9 Coastal pollution - chemistry, measurement, monitoring and control of pollutants.
- 2.10 Remote Sensing applications to CZM

THEME 3: MANAGERIAL PROCESS, STRUCTURE AND STRATEGY: APPLICATION TO COASTAL ZONE ACTIVITIES

- 3.1 Managerial process. Elements of decision making.
- 3.2 Strategy formulation. Evaluation and assembly of strategy elements.
- 3.3 Financial analysis and investment decision. Techniques for project selection.
- 3.4 Concepts of the systems approach - systems structure and behaviour.
- 3.5 Human resources management. Employment, development, appraisal and human relations.
- 3.6 Management of change. Resistance, barriers, and planning the change process.

THEME 4: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF LIVING RESOURCES

- 4.1 An overview of living resources of the oceans.
- 4.2 Fish resources. Stock assessment methods and models, fisheries technology management strategies, marketing and distribution.
- 4.3, 4.4 Coastal biomass resources. Mangrove swamps, coral reefs, and sea grasses. Protection, conservation and development.
- 4.5 Beneficial and harmful biological elements in the coastal zone and their management.

4.6 Development of mariculture & aquaculture industries.

THEME 5: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF NON-LIVING RESOURCES

- 5.1 An overview of non-living resources of the ocean.
- 5.2 Nearshore minerals - types, location, formation and exploration.
- 5.3 Exploration and exploitation of offshore hydrocarbons.
- 5.4 Ocean Energy: Potential sources, harnessing technologies - An overview.
- 5.5 Case study: 150 Kw wave energy pilot plant off, Thiruvananthapuram.

THEME 6: COASTAL ZONE INFRASTRUCTURE DEVELOPMENT AND MANAGEMENT.

- 6.1 Planning, development and management of ports and harbours. Coastal structures. Port and harbour, intake and marine outfall structures
- 6.2 Case study of a fisheries harbour
- 6.3 Installation and operation of power plants in the coastal zone.
- 6.4 Case study of satellite harbours
- 6.5 Transport networks in the coastal zone. Highways, railways and inland waterways. Potential, development and management of coastal tourism. Impacts on the coastal zone.

THEME 7: SUSTAINABLE DEVELOPMENT OF THE COASTAL ZONE

- 7.1 Economics of sustainable development - concepts, standards and indicators. Industrialization and its impact on the coastal zone.
- 7.2 Land use zoning in the coastal region. Community development activities.
- 7.3 Case study of spirulina
- 7.4 Systems dynamics and computer simulation of coastal zone activities.

TRAINING COURSE ON
"COASTAL ZONE MANAGEMENT (CZM) AS A SUSTAINABLE PROCESS"

12th June to 28th July 1995 - (7 WEEKS)

COURSE SYLLABUS

UNIT	TITLE AND SPEAKER
THEME 0:	INTRODUCTION
0.1	Introduction to the course - an overview of the training programme, expected outputs.
0.2, 0.3	Group discussions on different aspects concerning Coastal Zone Management (CZM).
0.4, 0.5	Spoken communication in interdisciplinary and multicultural groups.
THEME	1: TECHNOLOGICAL CHANGE, SOCIO-ECONOMIC DEVELOPMENT, INTERNATIONAL NEGOTIATIONS AND THE LAW OF THE SEA CONVENTION
1.1	Impact of the New Industrial Revolution on organizations and management systems.
1.2	The changing concept of development.
1.3, 1.4 1.5, 1.6	UNCLOS, UNCLOS III, UNCED, Rio conference, Chapter 17 of Agenda 21.
1.7, 1.8	Legislation for and regulation of coastal zone. ESCAP guidelines. National policies and policy framework of India.

THEME 2: THE OCEANS: OCEANOGRAPHY, THE SEA-AIR INTERFACE WITH EMPHASIS ON COASTAL ZONE

- 2A.1, 2A.2 An overview of physical and dynamic elements of oceanography - impact of advancing technology on oceanographic research
- 2A.3 Behaviour of waves near coasts, wave induced currents, sediment transport and their assessment
- 2A.4 Natural phenomena of coastal erosion and accretion. Measures to counteract their effects, case studies
- 2A.5 Marine instrumentation and data collection for various oceanographic parameters
- 2A.6 The ocean-air interface. Meteorology and its importance for the countries of the Indian Ocean Region
- 2A.7 Introduction to earth science. Profile of the seafloor. Origin of ocean basin and sea water
- 2A.8 Geological Oceanaphy - morphological variations of coastal zone, continental margin and their correlation
- 2A.9 Marine geological processes - formation, types and occurrences of sediments
- 2A.10 Chemical oceanography, chemistry of seawater and ocean floor material

THEME 2B: COASTAL ECOLOGY, POLLUTION AND ENVIRONMENTAL IMPACT ASSESSMENT

- 2B.1 Coastal ecology and coastal ecosystems
- 2B.2 Species interaction with the coasta and their impact on coastal zone
- 2B.3 Coastal pollution - origin, nature and effects of pollutants. oil pollution and combating techniques
- 2B.4 Coastal pollution measurement and control of pollutants with a case study, waste water management with focus on coastal zone

- 2B.5 Environmental impact assessment with reference to coastal zone management
- 2B.6 Development of industries on the coast and their effects on coastal zone - a case study
- 2B.7 Effects of storms and cyclones on coastal zone. Disaster mitigation measures for cyclone/storm prone coastal zone
- 2B.9 Application of remote sensing techniques for coastal zone management
- 2B.10 Importance of data bases and geographic information system (GIS) in planning of coastal zone activities
- 2B.11 Coastal aquifers and the influence of developmental activities on this important resource
- 2B.12 Estuaries and creeks - their importance to coastal zone management

THEME 3: MANAGERIAL PROCESS, STRUCTURE AND STRATEGY: APPLICATION TO COASTAL ZONE ACTIVITIES

- 3.1 Managerial process. Elements of decision making.
- 3.2 Strategy formulation. Evaluation and assembly of strategy elements.
- 3.3 Financial analysis and investment decision. Techniques for project selection.
- 3.4 Concepts of the systems approach - systems structure and behaviour.
- 3.5, 3.6 Human resources management. Employment, development, appraisal and human relations.
- 3.7 Management of change. Resistance, barriers, and planning the change process.
- 3.8, 3.9 Integrated Coastal Zone Management (ICZM) - case studies.

THEME 4: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF LIVING RESOURCES

- 4.1 An overview of living resources of the oceans.
- 4.2 Fish resources. Stock assessment methods and models, fisheries technology, management strategies, marketing and distribution.
- 4.3 Coastal biomass resources. Mangrove swamps, coral reefs, and sea grasses. Protection, conservation and development.
- 4.4 Beneficial and harmful biological elements in the coastal zone and their management.
- 4.5, 4.6 Aquaculture and mariculture industries. Feasibility, planning, development, and commercialization. Social and environmental issues.

THEME 5: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF NON-LIVING RESOURCES

- 5.1 An overview of non-living resources of the ocean.
- 5.2 Nearshore minerals. Types, location, and formation. Exploration and mining. Impact on coastal equilibrium.
- 5.3 Exploration and exploitation of offshore hydrocarbons.
- 5.4 Ocean Energy. Potential sources, harnessing technologies - An overview.
- 5.5, 5.6 Case study: 150 Kw wave energy pilot plant off, Thiruvananthapuram.
- 5.7 Marine chemical and pharmaceutical industries.

THEME 6: COASTAL ZONE INFRASTRUCTURE DEVELOPMENT AND MANAGEMENT.

- 6.1, 6.2 Planning, development and management of ports and harbours. Fisheries and satellite harbours. Computer simulation of port operations.
- 6.3, 6.4
- 6.5 Coastal structures in ports and harbours. Intake and marine outfall structures.
- 6.6 Installation and operation of power plants in the coastal zone.

- 6.7 Transport networks in the coastal zone. Highways, railways and inland waterways.
- 6.8 Potential, development and management of coastal tourism. Social, cultural and environmental impacts on the coastal zone.
- 6.9 Security considerations and operations in the coastal zone.

THEME 7: SUSTAINABLE DEVELOPMENT OF THE COASTAL ZONE

- 7.1, 7.2 Economics of sustainable development - concepts, standards and indicators.
- 7.3 Industrialization and its impact on the coastal zone.
- 7.4 Urbanization and hinterland development. Land use zoning in the coastal region.
- 7.5 Community development activities in the coastal zone.
- 7.6 Systems dynamics and computer simulation of coastal zone activities.

TRAINING COURSE ON

"COASTAL ZONE MANAGEMENT (CZM) AS A SUSTAINABLE PROCESS"

16th october - 8th December 1995 - (8 WEEKS)

COURSE SYLLABUS

UNIT	TITLE AND SPEAKER
THEME 0: INTRODUCTION	
0.1	Introduction to the course - an overview of the training programme. expected outputs.
0.2, 0.3	Group discussions on different aspects concerning Coastal Zone Management (CZM).
0.4, 0.5	Spoken communication in interdisciplinary and multicultural groups.
THEME 1: TECHNOLOGICAL CHANGE, SOCIO-ECONOMIC DEVELOPMENT, INTERNATIONAL NEGOTIATIONS AND THE LAW OF THE SEA CONVENTION	
1.1	Impact of the New Industrial Revolution on organizations and management systems.
1.2	The changing concept of development.
1.3, 1.4 1.5, 1.6	UNCLOS, UNCLOS III, UNCED, Rio conference, Chapter 17 of Agenda 21.
1.7, 1.8	Legislation for and regulation of coastal zone. ESCAP guidelines. National policies and policy framework of India.

THEME 2A: THE OCEANS: OCEANOGRAPHY, THE SEA-AIR INTERFACE WITH EMPHASIS ON COASTAL ZONE

- 2A.1, 2A.2 An overview of physical and dynamic elements of oceanography - impact of advancing technology on oceanographic research
- 2A.3 Behaviour of waves near coasts, wave induced currents, sediment transport and their assessment
- 2A.4, 2A.5 Natural phenomena of coastal erosion and accretion. Measures to counteract their effects, case studies
- 2A.6 Marine instrumentation and data collection for various oceanographic parameters
- 2A.7, 2A.8 The ocean-air interface. Meteorology and its importance for the countries of the Indian Ocean Region
- 2A.9, 2A.10 Introduction to earth science. Profile of the seafloor. Origin of ocean basin and sea water
- 2A.11, 2A.12 Geological Oceanography - morphological variations of coastal zone, continental margin and their correlation
- 2A.13 Marine geological processes - formation, types and occurrences of sediments
- 2A.14 Chemical oceanography, chemistry of seawater and ocean floor material

THEME 2B: COASTAL ECOLOGY, POLLUTION AND ENVIRONMENTAL IMPACT ASSESSMENT

- 2B.1 Coastal ecology and coastal ecosystems
- 2B.2 Species interaction with the coasta and their impact on coastal zone
- 2B.3 Coastal pollution - origin, nature and effects of pollutants, oil pollution and combating techniques
- 2B.4 Coastal pollution measurement and control of pollutants with a case study, waste water management with focus on coastal zone

- 2B.5 Environmental impact assessment with reference to coastal zone management
- 2B.6 Development of industries on the coast and their effects on coastal zone - a case study
- 2B.7 Effects of storms and cyclones on coastal zone. Disaster mitigation measures for cyclone/storm prone coastal zone
- 2B.9. 2B.10 Application of remote sensing techniques for coastal zone management
- 2B.11, 2B.12 Importance of data bases and geographic information system (GIS) in planning of coastal zone activities
- 2B.13. 2B.14 Coastal aquifers and the influence of developmental activities on this important resource
- 2B.15, 2B.16 Estuaries and creeks - their importance to coastal zone management

THEME 3: MANAGERIAL PROCESS, STRUCTURE AND STRATEGY: APPLICATION TO COASTAL ZONE ACTIVITIES

- 3.1 Managerial process. Elements of decision making.
- 3.2 Strategy formulation. Evaluation and assembly of strategy elements.
- 3.3 Financial analysis and investment decision. Techniques for project selection.
- 3.4 Concepts of the systems approach - systems structure and behaviour.
- 3.5, 3.6 Human resources management. Employment, development, appraisal and human relations.
- 3.7 Management of change. Resistance, barriers, and planning the change process.
- 3.8, 3.9 Integrated Coastal Zone Management (ICZM) - case studies.

THEME 4: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF LIVING RESOURCES

- 4.1 An overview of living resources of the oceans.
- 4.2, 4.3 Fish resources. Stock assessment methods and models, fisheries technology, management strategies, marketing and distribution.
- 4.4 Coastal biomass resources. Mangrove swamps, coral reefs, and sea grasses. Protection, conservation and development.
- 4.5, 4.6 Beneficial and harmful biological elements in the coastal zone and their management.
- 4.7, 4.8 Aquaculture and mariculture industries. Feasibility, planning, development, and commercialization. Social and environmental issues.

THEME 5: MANAGEMENT OF COASTAL ZONE ACTIVITIES - UTILIZATION OF NON-LIVING RESOURCES

- 5.1 An overview of non-living resources of the ocean.
- 5.2 Nearshore minerals. Types, location, and formation. Exploration and mining. Impact on coastal equilibrium.
- 5.3 Exploration and exploitation of offshore hydrocarbons.
- 5.4 Ocean Energy. Potential sources, harnessing technologies - An overview.
- 5.5, 5.6 Case study: 150 Kw wave energy pilot plant off, Thiruvananthapuram.
- 5.7 Marine chemical and pharmaceutical industries.

THEME 6: COASTAL ZONE INFRASTRUCTURE DEVELOPMENT AND MANAGEMENT.

- 6.1, 6.2 Planning, development and management of ports and harbours. Fisheries
6.3, 6.4 and satellite harbours. Computer simulation of port operations.
- 6.5 Coastal structures in ports and harbours. Intake and marine outfall structures.
- 6.6 Installation and operation of power plants in the coastal zone.

- 6.7 Transport networks in the coastal zone. Highways, railways and inland waterways.
- 6.8 Potential, development and management of coastal tourism. Social, cultural and environmental impacts on the coastal zone.
- 6.9 Security considerations and operations in the coastal zone.

THEME 7: SUSTAINABLE DEVELOPMENT OF THE COASTAL ZONE

- 7.1, 7.2 Economics of sustainable development - concepts, standards and indicators.
- 7.3 Industrialization and its impact on the coastal zone.
- 7.4 Urbanization and hinterland development. Land use zoning in the coastal region.
- 7.5 Community development activities in the coastal zone.
- 7.6 Systems dynamics and computer simulation of coastal zone activities.

INTERNATIONAL OCEAN INSTITUTE OPERATIONAL CENTRE, INDIA

5-Day Course for Policy Makers on ENVIRONMENTAL POLICY AND MANAGEMENT

I I T MADRAS

COURSE SYLLABUS

DAY 1 - 16 January 1995

- 09.00 to 10.00: Inauguration and Introductions.
- 10.30 to 12.30: Global technological, economic, and political metamorphosis: The increasing international concern for and the crucial nature of environmental issues: Stockholm (1972), UNCLOS III (1973 - 82), Brundtland Commission (1987), UNCED (1992) - Historical developments and their linkages.
- 14.00 to 15.30: The Law of the Sea Convention; the Rio Declaration on environment and development; ecosystems perspective, global 'commons' - policy implications in the context of global environmental issues.
- 15.45 to 17.15: The systems approach: problem identification and definition; systems structure and behaviour; intent structures; influence models; cross-impact analysis.

DAY 2 - 17 January 1995

- 09.00 to 10.30: National environmental issues and the coastal zone: deforestation: pollution of land, water and air; biodiversity; sustainability of renewable and non-renewable resource needs: Coastal Zone Management.
- 10.45 to 12.15: National environmental issues: (contd.)
- 13.45 to 15.15: The changing concept of development: science and technology policies for development; sustainability i.e. equity, economic efficiency, ecosystems integrity; alternative development models; and values.
- 15.30 to 17.00: Down to earth issues - case study 1.

DAY 3 - 18 January 1995

- 09.00 to 10.30: Policy analysis: the multivariate nature of ecosystems, the need for multi-level analysis and planning, coordination in both space and time, need for interagency coordination.
- 10.45 to 12.15: Databases and information systems for policy planning: demographic, economic, geographical, and natural scientific parameters.
- 13.45 to 15.15: The increasing role of women, youth and NGOs in sustainable development: case of coastal fisheries.
- 15.30 to 17.00: Down to earth issues - case study 1 (contd.)

DAY 4 - 19 January 1995

- 09.00 to 10.30: Harmonising of different policies in the coastal zone: tools and methods of arriving at a correct policy-mix.
- 10.45 to 12.15: The new economics of the environment: sustainability, renewable resources, and the service economy.
- 13.45 to 15.15: Environment and the law: legislation, litigation, conflict resolution and disputes settlement (national and international aspects).
- 15.30 to 17.00: Down to earth issues - case study 2.

DAY 5 - 20 January 1995

- 09.00 to 10.30: Down to earth issues - case study 2 (contd.)
- 10.45 to 12.15: Drawing up an environment policy and management framework integrating the legal, scientific, technological, financial, economic, and social parameters in selected coastal zones.
- 13.45 to 15.15: Presentations of group reports and discussions.
- 15.30 to 17.00: Valedictory.

* * * * *

**ADVANCED COURSE
ON
COASTAL ZONE
MANAGEMENT**

12 - 16 SEPTEMBER 1994

Organised By
Secretariat of the National Maritime Council
National Security Council
Malaysia

With The Cooperation Of
International Ocean Institute,
Operational Centre Madras
And
Institute of Diplomacy & Foreign Relations
Malaysia

PROGRAMME

12 SEPTEMBER 1994

(Monday)

- | | | |
|-------------|---|---|
| 0815 - 0845 | - | Registration |
| 0845 - 0930 | - | Welcoming Address by
Director General of IDFR |
| | - | Remarks by Director
International Ocean Institute
Operational Centre Madras |
| | - | Opening Remarks by
Secretary, National Security
Council, Prime Minister's
Department |
| 0930 - 1000 | - | Coffee Break |
| 1000 - 1010 | - | Group Photography |
| 1010 - 1020 | - | Administrative Briefing |
| 1020 - 1245 | - | Law of the Sea
(Dr. S.P. Jagota -
International Ocean
Institute, Halifax) |
| 1245 - 1400 | - | Lunch |
| 1400 - 1630 | - | Law of the Sea
(Discussion) |
| 1630 - 1645 | - | Tea |

13 SEPTEMBER 1994*(Tuesday)*

- 0815 - 1015 - Coastal Zone Management
(Prof. V.S. Raju -
International Ocean
Institute, Madras)
- 1015 - 1045 - Coffee Break
- 1045 - 1245 - Coastal Zone Management
(Discussion)
- 1245 - 1400 - Lunch
- 1400 - 1630 - Development of Mariculture
and Aquaculture Industries
(Prof. Dr. Mohd. Zaki bin
Mohd. Said - Universiti
Pertanian Malaysia)
- 1630 - 1645 - Tea

14 SEPTEMBER 1994*(Wednesday)*

- 0815 - 1015 - Coastal Zone Management
in Malaysia
(Ir. Dr. Hiew Kim Loi - Dept.
of Drainage & Irrigation,
Malaysia)
- 1015 - 1045 - Coffee Break
- 1045 - 1245 - Coastal Zone Management
(Discussion)
- 1245 - 1400 - Lunch
- 1400 - 1630 - Coastal Pollution :
Management and Control
(Prof. C.A. Sastry - Universiti
Malaya)
- 1630 - 1645 - Tea

15 SEPTEMBER 1994

(Thursday)

- 0815 - 1015 - Ocean Energy : Potential Resources & Technologies - An Overview
(Prof. V.S. Raju)
- 1015 - 1045 - Coffee Break
- 1045 - 1245 - Ocean Energy (Discussion)
- 1245 - 1400 - Lunch
- 1400 - 1630 - Panel Discussion :
Statement of the World Coastal Conference 1993 :
Implementation of the Recommendations
Panelists :
Prof. V.S. Raju
~~Dr. Hiew Kim Looi~~
Prof. C.A. Sastry
- 1630 - 1645 - Tea

16 SEPTEMBER 1994

(Friday)

- 0815 - 1015 - Oceanography : Nearshore Phenomenon
(Prof. N.V.C. Swamy - Indian Institute of Technology, Madras)
- 1015 - 1030 - Course Evaluation
- 1030 - 1100 - Coffee Break
- 1100 - 1200 - Summing-up
Course Closing &
Certificate Presentation
- 1200 - 1245 - Lunch

ANNEX 9

CONVENIO DE COOPERACION ENTRE LA UNIVERSIDAD NACIONAL Y EL
INSTITUTO INTERNACIONAL DE OCEANOS (IOI)

Conste que nosotros Rose Marie Ruiz Bravo, mayor, casada,
Licenciada en Química, vecina de La Paulina de Montes de
Oca, cédula de identidad No.9-005-486 en calidad de Rectora
de la Universidad Nacional nombramiento efectuado mediante
Asamblea Universitaria realizada el 26 de junio de 1992, en
adelante denominada "UNA" y, en calidad de Director
General del Instituto Internacional de Oceanos (IOI).

CONSIDERANDO QUE:

1. La UNA y El IOI fundamentan el desarrollo de proyectos académicos de docencia, investigación, extensión, capacitación y difusión.
2. Ambas instituciones disponen de capacidad científica y tecnológica para desarrollar programas conjuntos en áreas afines y de interés común.

ACORDAMOS:

1. Celebrar mediante el presente convenio, nexos formales de colaboración y acción conjunta en el mejoramiento de el uso pacífico de uso de los océanos y sus recursos, su administración y regulación tanto como la protección y conservación del ambiente marino y en temas de interés común en las áreas de docencia, investigación, extensión, capacitación y difusión.
2. Ejecutar la colaboración a que se refiere la Cláusula 1) mediante actividades tales como:
 - a. Desarrollo conjunto de programas en las áreas de docencia, investigación, extensión, capacitación y difusión, bajo la normativa y procedimientos propios que rigen ambas instituciones en especial al desarrollo de programas académicos.
 - b. Intercambio de información y documentación científica y planes de enseñanza.
 - c. Intercambio de personal académico por periodos de corto y mediano plazo, con el objeto de que apoyen actividades de docencia, investigación y extensión de una u otra institución en temas específicos de mutuo interés.

- d. La coordinación y la realización conjunta de cursos y actividades específicas de docencia, así como la ejecución de programas, proyectos y actividades de extensión e investigación, que incluyan la sistematización de metodología común, cuando ello sea necesario para obtener resultados comparables o sea menester para efectuar investigaciones conjuntas.
 - e. Brindar apoyo de su personal académico a través de consultorías específicas, por medio de expertos individuales o misiones técnicas.
 - f. La publicación y difusión de material docente, así como de material científico resultantes de investigaciones conjuntas o que puede ser de mutuo interés.
 - g. Cada institución designará un representante nombrado por la máxima autoridad para que coordine y de seguimiento a todas las actividades derivadas de este convenio. Deberán además hacer entrega de un informe anual de actividades a su designante.
 - h. Otras actividades que las partes decidieran realizar conjuntamente.
3. Este convenio se ejecutará a través de Cartas de Entendimiento, en las cuales se establecerán las modalidades operativas, plazos y consideración financiera a que dé lugar cada acción, las cuales deberán ser firmadas por el máximo representante de cada institución, previa recomendación de las instancias respectivas.
4. Las instalaciones de investigación, laboratorios, campos experimentales, bibliotecas y centros de documentación de cada institución estarán abiertos a la consulta y uso por parte de los académicos, personal técnico y administrativo de la otra, sin costo alguno cuando se trate de trabajos de interés común y al costo mínimo cuando sean de interés de una sola de las partes, debiendo observarse las disposiciones internas de cada institución, que regulan el uso de instalaciones, bibliotecas y otras dependencias.
5. La UNA y El IOI se prestarán mutuo apoyo y actuarán conjuntamente o coordinadamente para la consecución de recursos técnicos y financieros adicionales que faciliten el desarrollo de acciones de cooperación objeto del presente acuerdo.

6. La titularidad de la producción intelectual que surgiere al amparo del presente convenio deberá ser regulada en contratos al efecto, comprometiéndose las partes a disponer de ellos en los términos de dichos contratos.

7. El presente convenio de cooperación tendrá una vigencia de cinco años a partir de su firma, prorrogándose a gestión de alguna de las partes por períodos iguales, mayores o menores, dentro de los sesenta días hábiles anteriores a la fecha del vencimiento, además, en cualquier momento, las partes podrán resolverlo. Lo anterior previo informe y evaluación del representante de cada una de las instituciones.

No obstante, e independientemente del motivo de la terminación, los programas, proyectos o actividades que se estén realizando en este momento continuarán hasta la fecha programada y aprobada de conclusión.

En fe de lo anterior, que es de nuestra plena aceptación, firmamos cuatro ejemplares de un mismo tenor y efecto, en la ciudad de Heredia a los 06 días del mes de diciembre de 1993.

Rose Marie Ruíz Bravo
Rectora
UNIVERSIDAD NACIONAL

Director
INTERNATIONAL OCEAN INSTITUTE

TELEFONO: 37-6363 APARTADO 86-3000 HEREDIA

TELEFONO: 37-6363 APARTADO 86-3000 HEREDIA

ANNEX 10

May 25, 1994
VA-DI-445-94

Dr. Krishan Saigal
Executive Director
IOI
P.O. Box 3
GZIRA 62R 01
Malta
FAX: 356(0) 346502

Dear Dr. Saigal:

It was a pleasure to work with you here in Costa Rica and in Barbados.

After some meetings with the different school I can communicate you the organization of IOI in Costa Rica.

It would be a Matrix including the School of Physics-Oceanographic and Coastal Management Laboratory- and the School of Biology in the Faculty of Exact Sciences. Also it would include the School of International Relations and the Master Degree program in Economic Policy of the Faculty of Social Studies.

The people that would be involved is stated in Annex 1. in Annex 2 you have their Curriculum Vitae.

The Vicepresident of Research would supervise all the process of IOI and will link with you directly as well as the President of the University Lic. Rose Marie Ruiz.

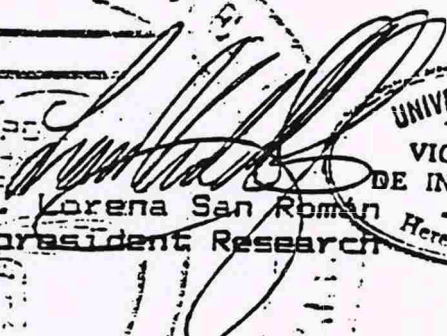
I'm enclosing the organigram of UNA and some document of the Schools involved in Annex 3.

In Annex 4, I'm enclosing a draft of the agreement between IOI and UNA, fell free to include anything that you think must be there.

Yesterday I had a meeting with the Viceminister of Foreign Affairs and I will send you soon the draft of the agreement with them. For the agreement they need the legal documents of the Foundation of IOI, authenticated by the consul of Costa Rica in the Netherlands, they need it in english and spanish. As well is needed before that, that the agreement between UNA and IOI will be signed.

In Annex 5 I'm including the Plan of Work of the Project

With warm regards



M. Sc. Lorena San Roman
Vicepresident Research



UNIVERSIDAD NACIONAL
VICE-RECTORIA
DE INVESTIGACION
Heredia, Costa Rica

mvc
cc: Dra. Elizabeth Mann Bourguese, Universidad de Halifax-Canada
Lic. Rose Marie Ruiz, Rectora
M.A. Jorge Mora, Vicerrector Academico
Lic. Rodrigo Carreras, Ministerio de Relaciones Exteriores
Lic. Walter Fonseca, Ministerio de Relaciones Exteriores

ANEXO 1
UNIDAD MATRIZ

Supervisores

Rosa Marie Ruiz	Rectora
Lorena San Román	Vicerrectora de Investigación
Alejandro Gutiérrez	Departamento de Física Laboratorio de Oceanografía y Manejo Costero

Coordinador IOI

Jorge Alfaro	Escuela de Ciencias Biológicas
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Otros miembros

Sandra León	Departamento de Química
Alvaro López	Relaciones Internacionales
Carlos Murillo	Maestría de Política Económica

ANNEX 11

ACCORD

ENTRE

LE CENTRE DE RECHERCHES OCEANOGRAPHIQUES
DE DAKAR-THIAROYE (CRODT) DE L'INSTITUT SENEGALAIS DE
RECHERCHES AGRICOLES (ISRA)

ET

L'INSTITUT INTERNATIONAL DES OCEANS (IIO)

Entendu que l'Institut International des Océans souhaite ouvrir au Sénégal un Centre opérationnel pour la Région ouest-africaine et considérant que :

- les Océans constituent les trois-quarts de la surface de la Terre, et que
- les Océans représentent la plus grande ressource naturelle non encore exploitée de la Planète, et que
- les technologies existent et continuent à être développées en vue d'exploiter ces ressources au profit de l'humanité et de l'ensemble de la planète, et que
- le développement et/ou l'exploitation de ces ressources de façon non durable et déséquilibrée contribueraient certainement à accélérer le dépérissement de la Planète de la capacité de survie de l'humanité, et que
- la recherche et l'éducation touchant tous les secteurs de la société constituent un élément indispensable pour un développement durable et équilibré, et que
- L'institut International des Océans a été créé en 1972 à Malte, pour servir de cadre à la formation, à l'éducation et à la recherche dans tous les secteurs de la société.

CONSCIENT du rôle dominant que joue le Centre de Recherches Océanographiques de Dakar-Thiaroye en ce qui concerne l'éducation, la recherche et la formation dans le secteur des océans.

Le présent accord est conclu entre le Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT) de l'Institut Sénégalais de Recherches Agricoles (ISRA) et l'Institut International des Océans (IIO), qui est une organisation non gouvernementale internationale indépendante établie aux Pays Bas, selon les dispositions qui suivent :

1. L'accord porte sur une période initiale de trois ans, et renouvelable.
2. La collaboration est dénommée : "Centre Opérationnel de l'Institut International des Océans (IIO) au CRODT, Sénégal".
3. L'ISRA (CRODT) mettra à la disposition du Centre Opérationnel de l'IIO des infrastructures adaptées à ses activités internationales ainsi qu'à ses fonctions en matière de formation et de recherche.
4. L'ISRA (CRODT) mettra à sa disposition un espace convenable pour l'enseignement (notamment une salle de conférence pouvant accueillir 20 participants, des moyens informatiques et autres matériels de laboratoire). L'IIO contribuera à l'équipement de cet espace.
5. L'ISRA (CRODT) mettra sa bibliothèque à la disposition du Centre Opérationnel et l'IIO apportera une contribution sous forme de revues, de livres et de matériels de recherche.
6. L'IIO s'efforcera de recourir au personnel enseignant du CRODT moyennant une rémunération, comme il en sera convenu entre l'IIO et l'ISRA (CRODT).
7. L'IIO et l'ISRA (CRODT) entreprendront des projets de recherche communs chaque fois que cela sera possible.
8. L'ISRA (CRODT) fournira une assistance au Centre Opérationnel sous forme de logistique pour organiser l'accueil des participants.
9. L'ISRA (CRODT) mettra à disposition, au titre de son apport, les services d'un Directeur pour diriger le Centre Opérationnel, de même que les services d'appui connexes.

10. L'ISRA (CRODT) établira un réseau et des liaisons avec le CRAT, l'IDEP, l'Université Cheikh Anta DIOP et le CESAG en incluant leurs représentants dans son Conseil consultatif.

11. Pour l'exécution de ce projet, l'IIO, à travers le projet UNDP, mettra à la disposition du CRODT un budget de US \$ 350.000 pour les 30 prochains mois dont US \$ 30.000 pour l'équipement.

Représentant de l'ISRA (CRODT)



Institut International
des Océans, Malte



ANNEX 12

MEMORANDUM OF UNDERSTANDING

Between

**State Oceanic Administration of the People's Republic of China
and**

International Ocean Institute

on

the Establishment of the IOI-China Operational Center

The State Oceanic Administration (SOA) of the People's Republic of China and The International Ocean Institute (IOI),

Noting that, with the entry into force of the United Nations Convention on the Law of the Sea and the implementation of the decisions of the United Nations Conference on Environment and Development, a new era of ocean governance and marine resource development and conservation is dawning;

Realizing that the international community is now faced with the urgent task of raising public awareness of the importance of the oceans for the well-being of people and the health of the biosphere;

Considering that IOI, a non-governmental research and training institute incorporated under the law of the Kingdom of the Netherlands and headquartered in Malta, has made a great contribution to the promotion of education, training and research to enhance the rational utilization of ocean resources, to enhance the quality of marine management and marine environmental protection and preservation, especially in developing countries;

Considering also that China, as a developing country, has been playing an important role in the West Pacific region in the promotion and development of the regional economy and in improving marine resource utilization and environmental protection; and that SOA has achieved considerable experience in the sustainable development of ocean resources, marine environment protection as well as international deep seabed research and development and Antarctic research;

Reviewing with satisfaction the good cooperation between SOA and IOI in the field of marine affairs, especially the successful conduct of three international marine management training courses co-sponsored by SOA and

IOI and held in China.

In the spirit of mutual understanding and cooperation, the two parties have agreed as follows:

1. An IOI-China Operational Center shall be established in the National Marine Data and Information Service (NMDIS), Tianjin, China.

2. The IOI-China Operational Center will carry out the research and training programs agreed upon by both parties. Such training and research shall cover *inter alia*:

- a. Exclusive economic zone management, including coastal management, and sustainable development;
- b. Deep seabed mining;
- c. Islands resource development and protection;
- d. Management of ports and harbors;
- e. Marine pollution prevention and control;
- f. The advancement of marine science and technology;
- g. National legislation in ocean affairs and building of national infrastructure;
- h. Regional cooperation and development.

3. The training programs of the IOI-China Operational Center shall be broadly interdisciplinary, and promote a spirit of sustainable development, common heritage of mankind, and international cooperation.

4. The governance system of the IOI-China Operational Center shall be composed of an Advisory Committee and an Office:

a. The function of the Advisory Committee shall be to give guidance and advice to the Office. The Advisory Committee shall be composed as follows:

- 1 Representative of SOA, Chairman
- 1 Representative of International Cooperation
Department of SOA

1 Representative of COMRA
1 Representative of IOI
1 Representative of UNDP's Beijing Office
1 Representative of Peking University
The Director of the IOI-China Operational Center, *ex-officio*

- b. The function of the Office shall be to implement the research and training programmes agreed upon by IOI and SOA and recommended by the Advisory Committee. The Office shall be composed as follows:

Director of IOI-China Operational Center (part time)	Appointed by SOA
Coordinator	Appointed by SOA
1 Staff	Appointed by NMDIS

5. SOA will provide all necessary assistance to the IOI-China Operational Center to enable it to carry out its work, including the provision of office space, teaching facilities, logistics support, and facilitating the issuing of visas for foreign participants in the training courses and foreign personnel whose visit is related to the implementation of the programmes of the IOI-China Operational Center.

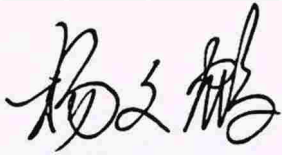
6. IOI will provide the Operational Center with books, reference materials, make use of and compensate NMDIS for its data and information services, and will raise funds for the training programmes conducted by the IOI-China Operational Center in China and abroad.

7. Both parties have agreed to make the IOI-China Operational Center a permanent regional training center. Therefore, both parties have agreed to consider constructing a building for its own permanent home. SOA will be responsible for raising funds within China and IOI will be responsible for raising funds internationally.

8. The training and research programmes in the field of marine affairs co-sponsored by IOI and other institutes in China should be incorporated into the programmes of the IOI-China Operational Center and implemented by the Center in cooperation with the institutes concerned, from the time of the entry into force of this Memorandum.

9. This Memorandum, done in duplicate in English and Chinese languages, both texts being equally authentic, will enter into force on the date of signature and will remain in force for a period of five

years from that date. This Memorandum may be amended and renewed by written agreement between the parties.



For the State Oceanic Administration of
The People's Republic of China



For the International Ocean Institute

Date: 1994.10.13

Date: 13 October 1994.

ANNEX 13

M. O. U. between
the Yokohama City University (YCU)
and
the International Ocean Institute (IOI)

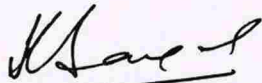
1. The YCU recognises the IOI as an international organization of education, training and research.
2. Both Parties agree to establish the IOI-JAPAN at the YCU as a IOI Operational Center.
3. The YCU will endeavour to cooperate with the IOI-JAPAN in its activities and to provide assistance to the Director of it.
4. The YCU will provide an office and the other appropriate facilities to the IOI-JAPAN for its activities.
5. The IOI will contribute periodicals, books and research materials and the YCU will make available its library facilities to the IOI-JAPAN.
6. Both Parties will negotiate at any time, if it is necessary, on the additional service facilities for IOI-JAPAN and the other mutual cooperation between them.
7. This MOU will remain in force for a period of one year from the date of acceptance and renew under the same terms and conditions if the Parties do not agree otherwise.
8. The originals of the MOU, of which English and Japanese texts are equally authentic.

Accepted on behalf of the Yokohama City
University.

Professor Kenichi Kojima
Dean

Date

Accepted on behalf of the International
Ocean Institute.



Dr. K. Saigal
Director

20 October, 1994

Date

ANNEX 14

PIM XXII CONFERENCE

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